THE IRS CAN SHOW CRYPTOCURRENCY HOLDERS THAT MONEY TALKS THROUGH UPDATED GUIDANCE AND CONDITIONAL FORGIVENESS

*Kyle Lydy, C.P.A.**

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ABSTRACT

IRS Tax Notice 2014-21 was the first IRS issued guidance since the creation of cryptocurrency. This guidance stated that all cryptocurrency transactions are treated as property, meaning that every transaction results in a gain or loss equating to the difference between the price of the crypto at purchase and the price of the sale. However, this guidance failed to acknowledge the multifunctionality of cryptocurrency, and the IRS continues to try and correct the consequences that have come from issuing this incomplete guidance. Although difficult to measure given the lack of access to individuals' tax returns, sources have estimated that as low as 1% of the American population is correctly reporting their cryptocurrency income. In an attempt to curb noncompliance among cryptocurrency holders, the IRS has issued summonses on cryptocurrency intermediaries to try and identify those holders who are not paying their fair share of taxes. While these summonses are a step in the right direction, the IRS must also update its cryptocurrency guidance to better reflect the diversity that exists within the realm of cryptocurrency. There is a perception among holders that cryptocurrency is anonymous, but given the inherently public nature of the electronic ledger known as the blockchain, many forms of cryptocurrency allow holders to be identified. By working with computer scientists, the IRS can track

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* Managing Editor, *Michigan State Law Review*; C.P.A.; J.D., Michigan State University College of Law (2021); M.S., Michigan State University (2015); B.A., Michigan State University (2015). I would like to thank my *Michigan State Law Review* editors for their encouragement and thoughtful suggestions. Thank you to my professors, Carla Reyes and Jon Anibal, for helping me develop this relevant and interesting topic. A special thank you to Amy and David Lydy for their endless support; to Olivia for always being by my side; to D.J. and Christian for being the most caring brothers around; and to Earl Breen for always offering a listening ear. I would also like to thank my grandfather, Joseph Hardig, for sparking my interest in the legal profession and for encouraging me every step of the way.

down noncompliant holders. Furthermore, the complexity of cryptocurrencies creates confusion among crypto holders, and this dilemma can be solved by requiring intermediaries to issue detailed tax forms to all holders engaging in cryptocurrency transactions. As reflected through the 10,000 letters sent to potentially noncompliant crypto holders in July 2019, the IRS is focused on collecting the proper amount of taxes from holders. Through the help of updated guidance, intermediaries, and computer scientists, the IRS has an opportunity to improve cryptocurrency tax compliance.

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INTRODUCTION

Transactions involving physical currency are losing relevance thanks to advances in technology.[1] The availability of the Internet contributed to the creation of digital currencies, and unlike more traditional forms of currency, such as the United States dollar, cryptocurrencies (crypto) often derive their value through supply and demand economics.[2] Regulations that establish a tangible currency's value create the government-backed money called fiat currency; conversely, few governments regulate cryptocurrency.[3] Advances in technology expand payment options for American consumers, and while the majority of Americans still rely on more traditional options like credit cards, digital currency's rise in popularity impacts the payments landscape.[4] Back in early January 2014, nearly five years after its creation, the price of one bitcoin hovered around $900.[5] Bitcoin was still an up-and-coming cryptocurrency at that time, but by December 2017, the price of one bitcoin skyrocketed to over $18,000.[6]

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1. *See Non-Cash Payments Volume*, CAPGEMINI, https://worldpaymentsreport.com/non-cash-payments-volume/ [https://perma.cc/87G8-A994] (last visited May 17, 2021) (finding that global markets continue to report double digit growth periods pertaining to the frequency of non-cash transactions).

2. *See id.* (stating that there were 708.5 billion non-cash transactions in 2019).

3. *See* Misha Tsukerman, *The Block is Hot: A Survey of the State of Bitcoin Regulation and Suggestions for the Future*, 30 BERKELEY TECH. L.J. 1127, 1127 (2015) (describing that unlike the U.S. dollar or the Euro, which are backed by governments, cryptocurrency derives its value from scarcity and holders' trust in the currency).

4. *See* Eddie Mitchell, *How Many People Use Bitcoin in 2021?*, BITCOIN MKT. J. (Nov. 23 2020, 8:00 AM), https://www.bitcoinmarketjournal.com/how-many-people-use-bitcoin/ [https://perma.cc/97BM-U74U] (indicating that Bitcoin's popularity is continuing to grow and is not going away).

5. *See* COINDESK, https://www.coindesk.com/price/bitcoin [https://perma.cc/7XAZ-ZJ6W] (last visited May 17, 2021) (providing a line graph showing Bitcoin's historical price).

6. *See id.* The value of a bitcoin is based upon supply and demand because "Bitcoin doesn't have any backing government or even regulatory body protecting its value or ensuring its legitimate use." Nicholas Godlove, *Regulatory Overview of Virtual Currency*, 10 OKLA. J.L. & TECH. no 1, 2014, at 1, 24.

Bitcoin's popularity continues to soar, and in April 2021, the price of a single bitcoin reached a record high of nearly $65,000.[7]

The volatility of cryptocurrency poses challenges for ensuring that regulations keep up with its growing popularity.[8] For example, up to this point, the Internal Revenue Service (IRS) has issued some guidance on the taxation of cryptocurrency transactions, yet taxpayers are still confused by many of the IRS's positions, which has led to underreported income.[9] Confusion arising from the complexity of technology also contributes to the underreporting problems.[10] The IRS continues to employ new techniques to curb the underreporting issues among cryptocurrency holders.[11] For example, the IRS revised Schedule 1, a tax form detailing a taxpayer's income and adjustments to income, to include a question asking about virtual currency transactions.[12] The Schedule 1 question serves as a screening tool for the IRS because taxpayers affirmatively answering this question should have information about crypto transactions on their tax return;

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7. *See* COINDESK, *supra* note 5 (detailing how a single bitcoin cost $63,346.79 on April 15, 2021).

8. *See* Omri Marian, *Are Cryptocurrencies Super Tax Havens?*, 112 MICH. L. REV. FIRST IMPRESSIONS 38, 39 (2013) (arguing that cryptocurrencies, like offshore bank accounts, offer a prime opportunity for tax evasion, but unlike offshore bank accounts, cryptocurrencies exist independently of financial institutions, meaning that this currency may be even more appealing to those looking to skip out on taxes); *see also* Eric C. Chaffee, *The Heavy Burden of Thin Regulation: Lessons Learned from the SEC's Regulation of Cryptocurrencies*, 70 MERCER L. REV. 615, 628 (2019) (discussing the problems with redundant regulations).

9. *See* Nikhilesh De, *US Lawmakers Ask IRS to Clarify Crypto Tax Rules Around Airdrops, Forks in New Letter*, COINDESK (Dec. 20, 2019, 2:06 PM), https://www.coindesk.com/us-lawmakers-ask-irs-to-clarify-crypto-tax-rules-around-airdrops-forks-in-new-letter [https://perma.cc/YL3B-VHLP] (stating that 2019 IRS guidance still left many cryptocurrency taxation questions unanswered).

10. *See Cryptocurrencies: Last Week Tonight with John Oliver (HBO)*, YOUTUBE, at 00:57 (Mar. 12, 2018), https://www.youtube.com/watch?v=g6iDZspbRMg [https://perma.cc/U6KZ-J6VJ] (quoting John Oliver describing cryptocurrency technology as "everything you don't understand about money combined with everything you don't understand about computers").

11. *See* Allyson Versprille, *Don't Avoid the IRS's Cryptocurrency Letters, Tax Advisers Warn*, BLOOMBERG TAX (Aug. 9, 2019, 4:45 AM), https://news.bloombergtax.com/daily-tax-report/dont-avoid-the-irss-cryptocurrency-letters-tax-advisers-warn [https://perma.cc/8KJR-66KW] (arguing that the more information the IRS can publicize about a given issue, the less effective it will be for people to claim ignorance about that issue).

12. *See* DEPT. OF TREAS. IRS, 1040 (2020) INSTRUCTIONS (Jan. 9, 2020), https://www.irs.gov/instructions/i1040gi#idm139798474441632 [https://perma.cc/P6MM-A7MM] (providing instructions for reporting virtual currency transactions).

otherwise, the return may be flagged for an audit.[13] The IRS employed a similar technique to address underreported offshore bank accounts by requiring taxpayers to indicate whether they had offshore accounts during the given tax year.[14] In addition to updated techniques, the IRS also hopes that the 10,000 letters it sent in July 2019 warning holders of potential underreporting will increase crypto tax compliance.[15]

Unlike tangible money, digital currencies are decentralized, meaning they rely on peer-to-peer transactions rather than third-parties.[16] Whereas governments typically create and assign value to fiat currency, the price agreement between a willing buyer and seller establishes a virtual currency's price.[17] Focusing on the most popular digital currency, capitalization changes the meaning of the term, whereby "bitcoin" is a specific amount of the currency, while "Bitcoin" is the currency's network, or the idea of this cryptocurrency in general.[18] The process known as mining, rather than government

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13. *See* Shehan Chandrasekera, *How the IRS Knows You Owe Crypto Taxes*, FORBES (Jan. 27, 2020, 9:00 AM), https://www.forbes.com/sites/shehanchandrasekera/2020/01/27/how-the-irs-knows-you-owe-crypto-taxes/#3063406d438e [https://perma.cc/ZRB6-9LA4] (stating that by affirmatively answering this Schedule 1 question, the IRS is signaled to check the tax return for reports of cryptocurrency gains and losses).

14. *See* William Baldwin, *Guide to Cryptocurrency Tax Rules*, FORBES (Feb. 9, 2020, 9:52 AM), https://www.forbes.com/sites/baldwin/2020/02/09/guide-to-cryptocurrency-tax-rules/#3e6a07223974 [https://perma.cc/3WJE-RBDL] (stating that the virtual currency question added to Schedule 1 "parallels the [question] that was implemented years ago on offshore investment accounts").

15. *See* Versprille, *supra* note 11 (describing how in July 2019, the IRS sent 10,000 letters to various cryptocurrency holders, urging these holders to correct any previous instances of underreporting).

16. *See* Reuben Grinberg, *Bitcoin: An Innovative Alternative Digital Currency*, 4 HASTINGS SCI. & TECH. L.J. 159, 160 (2012) ("Bitcoin is a digital, decentralized, partially anonymous currency, not backed by any government or other legal entity.").

17. *See* Andrew McElroy, *Bitcoin: Where Does All the Money Go?*, SEEKING ALPHA (Nov. 27, 2017, 12:33 PM), https://seekingalpha.com/article/4127873-bitcoin-where-all-money-go [https://perma.cc/3XP9-RAPV] (comparing a virtual currency transaction to other financial transactions in that both involve a price agreement between a buyer and a seller).

18. *See* Angela Walch, *The Bitcoin Blockchain as Financial Market Infrastructure: A Consideration of Operational Risk*, 18 N.Y.U. J. LEGIS. & PUB. POL'Y 837, 846 n.41 (2015) (stating that a convention has been developed to distinguish between individual bitcoins that are considered currency, whereby the term bitcoin is not capitalized, and Bitcoin, which refers to the Bitcoin network as a whole or the general idea of Bitcoin, whereby the term is capitalized). A similar convention is used to distinguish Ethereum from ether. *See* BITCOIN MAGAZINE, *What Is Ether?*, https://www.ethos.io/what-is-ethereum-gas/ [https://perma.cc/3VDB-

involvement, creates bitcoin.[19] Mining involves using computers to solve complex mathematical equations, which yields a certain amount of bitcoin.[20] Bitcoin holders can then sell this currency in exchange for fiat currency or other types of virtual currency.[21] Given the limited government involvement, the free market determines a bitcoin's price, whereby prices can fluctuate based upon the volume of bitcoin available as well as economic events taking place around the world.[22]

The lack of third-party involvement makes digital currency an attractive option for those who wish to reduce transaction costs or for those who simply want their transaction to remain pseudonymous.[23] Contrary to popular opinion, many cryptocurrencies are not completely anonymous thanks to investigational software like

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KBMX] (last visited May 17, 2021); *see also What Is Bitcoin?*, COINDESK (Jan. 26, 2018), https://www.coindesk.com/learn/bitcoin-101/what-is-bitcoin [https://perma.cc/E8X4-DQHM] (stating that the term Bitcoin can be used to refer to two different concepts: bitcoin as a currency, which is "identified by a string of numbers and letters," and Bitcoin as a network, which functions as a ledger that tracks balances of the bitcoin currency for holders).

19. *See* Luke Fortney, *Bitcoin Mining, Explained*, INVESTOPEDIA (Nov. 6, 2019), https://www.investopedia.com/terms/b/bitcoin-mining.asp [https://perma.cc/FSQ9-VN4T] (comparing the process of mining bitcoin to "a miner striking gold in the ground" given the amount of time and luck required in both processes).

20. *See id.* (stating that not only does mining create bitcoin, but it also serves as a verification process for the transactions on the Bitcoin network). The amount of bitcoin awarded to miners is halved roughly every four years. *See id.*

21. *See* McElroy, *supra* note 17 (stating that the seller has options when it comes to selling their virtual currency).

22. *See id.* (stating that economic events taking place in China may impact the cryptocurrency market in the United States, for example).

23. *See* Grinberg, *supra* note 16, at 160 (suggesting that these characteristics could make Bitcoin a viable form of currency for both merchants and consumers); *see also* ARVIND NARAYANAN ET AL., BITCOIN AND CRYPTOCURRENCY TECHNOLOGIES 139 (2016). There is a distinction between the terms "anonymity" and "pseudonymity." *See id.* Within the realm of cryptocurrencies, anonymity involves the idea that someone's real-world identity cannot be uncovered. *See id.* Conversely, Bitcoin is merely pseudonymous because the block chain is public, meaning that all bitcoin transactions are accessible to the public. *See id.* Note, however, that instead of being linked to a person's real-world identity, such as their actual name, the transactions appearing on the block chain are associated with a bitcoin address, which is merely an alphanumeric code that is used to identify the transaction. *See id.* Holders may also be tracked through a website's use of cookies. *See* Steven Goldfeder, *When the Cookie Meets the Blockchain* (Aug. 17, 2017), https://freedom-to-tinker.com/2017/08/17/when-the-cookie-meets-the-blockchain/ [https://perma.cc/5KEY-PH8J] (stating that websites often leak personally identifying information to third-party trackers); *see also What Are Cookies?*, NORTON (Jan. 18, 2018), https://us.norton.com/internet security-how-to-what-are-cookies.html [https://perma.cc/3B3F-WWCJ] (defining cookies and how they can be used to track website users).

Chainalysis, which helps provide greater transparency to cryptocurrency transactions.[24] Using bitcoin as an example, an electronic ledger referred to as the blockchain reports all bitcoin transaction outputs to a digital ledger.[25] Each unspent transaction output is controlled by a locking script, meaning that bitcoins can only be spent by using the correct private key, which functions as a password.[26] Since the public can view all blockchain transactions, tools like Chainalysis can organize and filter information on the blockchain to reveal the identity of bitcoin holders.[27] While some find the pseudonymity feature attractive, it also creates opportunities for holders to conduct inconspicuous transactions.[28]

Many cryptocurrency holders turn to the online platform Coinbase for storing and conducting transactions with their cryptocurrency.[29] Although there are nearly 5,800 different types of cryptocurrencies, the two most popular types are Bitcoin and Ethereum.[30] Coinbase provides custodial wallet and exchange services

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24. *See Know What Happens on Blockchains*, CHAINALYSIS, https://www.chainalysis.com/company [https://perma.cc/FE7Y-TBE2] (last visited May 17, 2021) (stating that Chainalysis helps to "implement powerful compliance controls for cryptocurrency to sustain its current growth"); *see also* Harsh Agrawal, *What Is a Block/Blockchain Explorer?*, COINSUTRA (Aug. 15, 2020), https://coinsutra.com/blockchain-explorer/ [https://perma.cc/RQ3S-PFR7] ("A blockchain explorer is a browser for the blockchain, similar to how we have browsers like Mozilla or Google Chrome for internet web pages.").

25. *See* Klint Finley & Gregory Barber, *The Wired Guide to the Blockchain*, WIRED (July 9, 2019, 8:00 AM), https://www.wired.com/story/guide-blockchain/ [https://perma.cc/QM9N-PYKW] (stating that transactions on the blockchain are called blocks, which helps explain how the term blockchain was derived); *see also* NARAYANAN ET AL., *supra* note 23, at 52 (describing a bitcoin output as the transfer of the coin to another holder).

26. *See* NARAYANAN ET AL., *supra* note 23, at 55 (detailing how an unspent output transaction is redeemed through script verification).

27. *See Know What Happens on Blockchains*, *supra* note 24 (describing how the main clients of Chainalysis are banks, businesses, and governments, and the company provides these clients with insights into cryptocurrency transactions).

28. *See* Grinberg, *supra* note 16, at 161 (arguing that the privacy of bitcoin transactions opens the door to nefarious activity such as drug sales and tax evasion).

29. *See Buy and Sell Cryptocurrency*, COINBASE, https://www.coinbase.com/ [https://perma.cc/V79K-U8TB] (last visited May 17, 2021) (advertising Coinbase as "the easiest place to buy and sell cryptocurrency").

30. *See* INVESTING.COM, https://www.investing.com/crypto/currencies [https://perma.cc/WCZ3-7YM2] (last visited May 17, 2021); *see also How Many People Own Cryptocurrency*, BITCOIN CASINO TOP, https://icomaking.com/how-many-people-own-cryptocurrency/ [https://perma.cc/D7T3-CDKX] (last visited May 17, 2021) (providing a statistic that demonstrates just how vast the cryptocurrency world is).

for holders, and the majority of these services involve either Bitcoin or Ethereum.[31] Coinbase controls the custodial wallet and stores the holder's private key, which acts like an access code for a given amount of cryptocurrency.[32] Coinbase also provides exchange services, which often involve exchanging cryptocurrency for fiat currency, or for other cryptocurrencies.[33] The platform used for exchanging two different cryptocurrencies, known as Coinbase Pro, is similar to broker–dealers like Morgan Stanley.[34] While Morgan Stanley helps shareholders account for their annual gains and losses through tax form 1099-B, Coinbase does not face such stringent tax reporting requirements.[35]

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31. *See* David Olarinoye, *Coinbase vs Coinbase Pro (Formerly GDAX): A Comparison*, INV. IN BLOCKCHAIN (Oct. 30, 2018), https://www.investinblockchain.com/coinbase-vs-coinbase-pro-gdax/ [https://perma.cc/C4M6-5978] (discussing the differences between Coinbase and Coinbase Pro).

32. *See* Chirag Bhardwaj, *Custodial vs. Non-Custodial Wallets: The Working and Difference Points* (Sept. 18, 2019), https://appinventiv.com/blog/custodial-vs-non-custodial-wallets/ [https://perma.cc/6CCW-3YQJ] (describing how a custodial wallet functions).

33. *See* Olarinoye, *supra* note 31 ("Coinbase has 2 core services: the simplified fiat-to-crypto exchange [Coinbase] for novice retail traders and the advanced trading platform [Coinbase Pro] for professional traders.").

34. *See id.* (stating that Coinbase Pro was formerly called GDAX, which stood for Global Digital Asset Exchange); *see also What Does a Stockbroker Do?*, MASTER OF FIN., https://www.master-of-finance.org/faq/what-does-a-stockbroker-do/ [https://perma.cc/JZ2Q-7S45] (last visited May 17, 2021) ("Brokers are sales agents who trade securities for their clients, earning a commission on each trade."); Clark Sells, *Cryptocurrency Tax Reporting Takes a New Twist with SEC Declaration*, SOVOS (Mar. 12, 2018), https://sovos.com/blog/2018/03/12/cryptocurrency-reporting-takes-new-twist-sec-declaration/ [https://perma.cc/95U9-5F72] (stating that cryptocurrency exchange platforms seeking to limit tax regulations will try to avoid classifying their transactions as securities transactions); Asiff Hirji, *Our Path to Listing SEC-Regulated Crypto Securities*, COINBASE BLOG (June 6, 2018), https://blog.coinbase.com/our-path-to-listing-sec-regulated-crypto-securities-a1724e13bb5a [https://perma.cc/HM26-WMDV] (acknowledging that only some of the available digital assets are subject to SEC oversight); SEC, *Joint Staff Statement on Broker-Dealer Custody of Digital Asset Securities* (July 8, 2019), https://www.sec.gov/news/public-statement/joint-staff-statement-broker-dealer-custody-digital-asset-securities [https://perma.cc/3QNY-P9ZQ] [hereinafter *Joint Staff Statement*] (acknowledging that "digital asset securities and related innovative technologies raise novel and complex regulatory and compliance questions and challenges").

35. *See* MORGAN STANLEY, *2018 Tax Guide*, https://www.morganstanley.com/im/publication/forms/tax/2018-tax-guide.pdf [https://perma.cc/TA4M-B5XM] (last visited May 17, 2021) (stating that all shareholders who sold or exchanged stock resulting in proceeds of $20 or more receive a 1099-B); *see also* Sean Ryan, *Planning Your Crypto Taxes? 1099-K or 1099-B, What Should You Expect From Exchanges?*, NODE40 (Mar. 5, 2019),

In April 2014, the IRS released Notice 2014-21 (the Notice) stating that digital currencies are property for tax purposes.[36] On the surface, the Notice may seem like enough guidance to allow taxpayers to properly account for their digital currency transactions, but the Notice left plenty of tax reporting questions.[37] On October 9, 2019, the IRS released new guidance to provide clarity to some of these gray areas.[38] Specifically, the 2019 guidance addressed whether gross income results from a hard fork or an airdrop.[39] While this new guidance focuses on areas beyond just taxing cryptocurrency transactions, it shows that the IRS is taking steps to ensure increased tax compliance by clearing up previous ambiguities within cryptocurrency regulations.[40]

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https://www.node40.com/2019/03/05/1099K-vs-1099B.html [https://perma.cc/48L2-4DG7] (stating that a 1099-K is issued by entities like credit card companies to report transactions processed for entities like retailers, while a 1099-B is issued from brokers to report proceeds from things like stock transactions); *Tales from the Crypto: Why Tax Reporting for Cryptocurrencies is so Scary*, SOVOS (May 11, 2018), https://sovos.com/blog/2018/05/11/tax-reporting-cryptocurrencies-scary/ [https://perma.cc/2F2F-PTJK] [hereinafter *Tales from the Crypto*] (describing how a 1099-B may be suitable for holders trading one cryptocurrency for another, but stating that unlike brokers, many cryptocurrency exchanges currently are not required to issue form 1099-B); *cf.* COINBASE, *Coinbase Tax Resource Center* (Nov. 20, 2019), https://support.pro.coinbase.com/customer/en/portal/articles/2928251-coinbase-tax-resource-center [https://perma.cc/DP5Q-6X38] (stating that holders engaging in transactions on Coinbase will not receive tax reporting form 1099-K, and holders using Coinbase Pro will only receive this form if they engaged in 200 or more transactions totaling an amount greater than $20,000).

36. *See* I.R.S. Tax Notice 2014-21 (Apr. 14, 2014) (stating that the Notice provides guidance on the taxation of virtual currencies in the form of answers to popular questions).

37. *See id.* (stating that the Notice will not answer all questions, so the IRS requests comments from the public so that future guidance can address such questions).

38. *See* I.R.S. Rev. Rul. 2019-24 (Oct. 9, 2019) (providing clarity to two issues that were left unaddressed in the IRS's 2014 guidance).

39. *See id.* (stating that a hard fork occurs when a cryptocurrency "undergoes a protocol change resulting in a permanent diversion," and an airdrop is "a means of distributing units of a cryptocurrency to the distributed ledger addresses of multiple taxpayers").

40. *See* Laura Davison & Allyson Versprille, *Cryptocurrency Investors Get New IRS Income-Reporting Rules*, BLOOMBERG L. (Oct. 9, 2019, 4:12 PM), https://www.bloomberglaw.com/product/blaw/document/X76TUST4000000?criteria_id=192992b922770f0ad2f981f5a86a161d&searchGuid=112428b7-c33d-4cdd-9901-eb9083563d23&bna_news_filter=bloomberg-law-news [https://perma.cc5956-JLVN] (stating that new guidance comes at a time when tax auditors are placing more effort on examining taxpayers with cryptocurrency investments).

This Comment focuses on the complications that arise when accounting for cryptocurrencies and what the IRS is doing to combat these complications.[41] The IRS must classify cryptocurrencies between a property hybrid and foreign currency to more accurately account for a given transaction, and it must also require intermediaries to provide holders with certain tax documents.[42] Part I of this Comment provides background into the tax implications that result from IRS Notice 2014-21 and discusses the IRS's previously used approach to correct American taxpayers' underreporting of their offshore bank accounts.[43] Part II examines how the sparse cryptocurrency guidance leaves holders unsure of how to accurately report their taxes, and how intermediaries may help to ease the confusion.[44] Finally, Part III analyzes the increased tax compliance that will arise from the IRS providing additional guidance on the taxation of cryptocurrencies, as well as from the implementation of voluntary disclosure programs.[45]

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41. *See* Aaron Hsieh, *The Faceless Coin: Achieving a Modern Tax Policy in the Changing Landscape of Cryptocurrency*, 2019 U. ILL. L. REV. 1079, 1102 (2019) (stating that Notice 2014-21's reporting requirements may be reasonable when the cryptocurrency is held for investment purposes, but that complications arise when taking into account the many uses of cryptocurrencies).

42. *See* Zachary B. Johnson, *I Got 988 Problems but Bitcoin Ain't One: The Current Problems Presented by the Internal Revenue Service's Guidance on Virtual Currency*, 47 U. MEM. L. REV. 633, 656 (stating that determining the tax basis for cryptocurrencies is difficult, especially if holders purchase the currency through many separate transactions); *see also* Wassim Alsindi, *Section 3: Designing TokenSpace: A Conceptual Framework for Cryptographic Asset Taxonomies* (Aug. 10, 2019), https://tokenspace.pubpub.org/pub/pgkp64pi [https://perma.cc/J868-74ZQ] (describing various techniques that can be used to develop subclassifications for cryptocurrencies).

43. *See* I.R.S. Tax Notice 2014–21 (Apr. 14, 2014) (stating that virtual currency is treated as property for taxation purposes, and as such, general property tax principles are applicable to virtual currencies); *see also* Dashiell C. Shapiro, *Cryptocurrency and the Shifting IRS Enforcement Model*, 1 STAN. J. BLOCKCHAIN L. & POL'Y 1, 12 (2018) (stating that when it came to offshore bank accounts, the IRS was willing to work with those taxpayers who quickly corrected their underreporting, but for those taxpayers who pressed their luck believing that they could stay hidden, the IRS took more aggressive measures).

44. *See* Jason Clark & Margaret Ryznar, *Improving Bitcoin Tax Compliance*, U. ILL. L. REV. ONLINE 70, 73 (2019) ("Guidance from the Service in addition to its five-year-old Notice could improve reporting of virtual currency gains, thereby increasing tax revenues overall.").

45. *See* Nathan J. Hochman, *Policing the Wild West of Currency*, L.A. LAW., Nov. 2018, at 14, 18 (suggesting that tax policies can adapt to the changing world of cryptocurrencies).

I. CRYPTOCURRENCY GUIDANCE AND AN INTRODUCTION TO OFFSHORE BANK ACCOUNTS

With the release of the Notice, the IRS sought to answer years of mounting questions about the tax implications of cryptocurrencies.[46] While it recognizes that cryptocurrencies serve many distinct functions, the Notice classifies all cryptocurrency as property for the purposes of taxation.[47] Naturally, after reading about this verdict handed down by the IRS, cryptocurrency holders wondered how the Notice would impact them.[48] The fundamental concept of cryptocurrency taxation is that cryptocurrency gains are calculated by taking the adjusted basis of the currency at the time of its purchase and subtracting that amount from the amount realized at the point of sale.[49]

46. *See* I.R.S. Tax Notice 2014–21.

47. *See id.* (acknowledging how the IRS understands that virtual currency has many purposes, including use as payment for goods and services, as well as for investment purposes, yet the IRS still treats all currencies the same for tax purposes).

48. *See id.* For those interested in the details of Notice 2014–21's impact on cryptocurrency, the Internal Revenue Code states that "[g]ains derived from dealings in property" are included within a taxpayer's gross income. *See* I.R.C. § 61(a)(3) (2018). The code goes on to state that the gain from the sale of property is the excess of the amount realized from the sale over the adjusted basis. *See* I.R.C. § 1001. The amount realized is simply the fair market value of the asset received, plus the amount of cash received if applicable, in exchange for the property sold. *See* I.R.C. § 1001(b). The calculation of the adjusted basis can be subject to a bit more variation, as illustrated in the code, which states that "[t]he basis of property shall be the cost of such property." *See* I.R.C. § 1012. Once the gain or loss is calculated, it is either classified as a capital gain or loss, or an ordinary gain or loss. *See* I.R.S. Tax Notice 2014-21. This distinction is made based upon whether the taxpayer held the currency as a capital asset, which IRS Publication 544 states is "[a]lmost everything you own and use for personal purposes, pleasure, or investment," or as noncapital assets, which are generally things held for business purposes. *See* I.R.S. Pub. No. 544, Cat. No. 15074K (Mar. 16, 2021). Gains and losses involving capital assets are then further classified as either long term, if the property sold was held for longer than one year, or short term, if held for one year or less. *See id*. Long term gains are given preferential tax treatment through lower rates as compared to short term gains. *See id.*

49. *See* I.R.C. § 1001 (2018) (explaining the process of determining the amount and whether this amount should be recognized, of a gain or loss).

A. Limited Guidance Issued Through IRS Notice 2014-21

IRS Notice 2014-21 provided uniform guidance for multifunctional cryptocurrency.[50] Holders using cryptocurrency for investment purposes will often engage in a relatively small number of transactions and are therefore not typically subject to strenuous reporting requirements.[51] Conversely, holders using the currency for daily purchases will face stringent reporting requirements since each transaction will require a gain or loss calculation.[52] Each of these purchasing transactions require the holder to account for his or her adjusted basis—typically the coin's purchase price—along with the amount realized, which equates to the received asset's fair market value at the date of sale.[53] Cryptocurrencies like bitcoin have the potential to serve as a method of payment for consumer goods, but holders may be reluctant to use bitcoin for payment given the reporting requirements that stem from its property classification.[54] Since each

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50. *See* Hsieh, *supra* note 41, at 1102 (stating that cryptocurrency holders using the currency as a means of payment will face more burdensome reporting requirements as compared to those using the currency for investment purposes).

51. *See* Scott A. Wiseman, *Property or Currency? The Tax Dilemma Behind Bitcoin*, 2016 UTAH L. REV. 417, 434 (2016) (stating that holders that utilize the currency for investment purposes will likely hold the currency for longer than one year, and as a result, will not be engaging in a large number of transactions that must be reported to the IRS).

52. *See id.* ("In addition to paying any applicable sales tax, users will realize a capital gain or loss upon purchasing any item.").

53. *See* Kathleen R. Semanski, *Income, from Whatever Exchange, Mine, or Fork Derived: The Basics of U.S. Cryptocurrency Taxation*, BANKING & FIN. SERVS. POL'Y REP. 8, 8 (stating that the adjusted basis and the amount realized is used to calculate the holder's gain or loss on each transaction); *see also* Letter from Annette Nellen, Chair, Am. Inst. of Certified Pub. Acct., to IRS (May 30, 2018) [hereinafter Nellen Letter] (stating that when a holder exchanges virtual currency for goods, that holder will need to track the basis of the currency that was used in the purchase, even if that purchase involved a good with an insignificant cost).

54. *See* Letter from Carol G. Warley, Chair, Fed. Tax Pol'y Comm., Tex. Soc'y of Certified Pub. Accts., to John A. Koskinen, Commissioner, IRS (Sept. 22, 2014) [hereinafter Warley Letter] (arguing that the current guidelines impose burdensome filing requirements for those using the currency in the ordinary course of business). These lengthy filing requirements may make merchants reluctant to accept this form of currency. *See id.*; *see also* Letter from Armando Gomez, Chair, American Bar Association Section of Taxation, to the Honorable John Koskinen, Commissioner, IRS (Mar. 24, 2015) [hereinafter Gomez Letter] (illustrating how under current IRS guidelines, a taxpayer could acquire a virtual currency, and one minute later, use that currency to purchase a good, and given the constantly fluctuating value of cryptocurrencies, that taxpayer may be required to report a gain based off of that transaction).

cryptocurrency gain must be reported to the IRS, holders using cryptocurrencies to purchase something as small as a cup of coffee face reporting requirements.[55]

B. The Broad Classification of Property for All Cryptocurrencies

IRS Notice 2014-21 acknowledges that cryptocurrencies serve distinct purposes, but then it classifies all cryptocurrencies as property.[56] This blanket classification suggests that all cryptocurrency serves the same basic function.[57] However, just as the IRS offers various classifications for different types of property, cryptocurrency can also be differentiated based upon its features.[58]

There are over 5,700 different types of digital assets.[59] These assets can be classified into one of several categories, with each category often containing additional subcategories.[60] Given the multifunctionality of cryptocurrency, entities such as the IRS, the United States Department of the Treasury (the Treasury), the Commodity Futures Trading Commission (CFTC), and the Securities and Exchange Commission (SEC), often classify cryptocurrency differently.[61] While the IRS classifies cryptocurrency as property regardless of the type of transaction in question, other agencies differ

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55. *See* Warley Letter, *supra* note 54, at 3 (arguing that by treating cryptocurrency as property, the IRS is imposing overwhelming reporting requirements on holders).

56. *See* I.R.S. Tax Notice 2014-21 (Apr. 14, 2014).

57. *See* James P. Brennan et al., *The Curious Case of Crypto*, 37 BANKING & FIN. SERVS. POL'Y REP. 8, 11 (2018). Brennan points out that cryptocurrency can be classified on a broad scale as either a coin or a token, depending on the currency's function. *See id.* at 10.

58. *See* I.R.C. §§ 1231, 1245, 1250 (2018). Section 1231 includes property used in trade or business that is held for over a year, including buildings. Section 1231 property is then further broken down between § 1245 and § 1250, and this classification will determine what tax rates the property is subject to.

59. *See* INVESTING.COM, *supra* note 30. This website is updated in real time, but as of May 2021, there were 5,790 cryptocurrencies on the market, and the price of a single bitcoin was trading for around $37,500. *See id.*

60. *See* Brennan et al., *supra* note 57, at 11 (discussing the diversity within the realm of cryptocurrency).

61. *See id.*; *see also* Deidre A. Liedel, *The Taxation of Bitcoin: How the IRS Views Cryptocurrencies*, 66 DRAKE L. REV. 107, 145 (2018) (stating that the IRS decision to treat all cryptocurrencies as property "is contradictory to the view of several other federal stakeholders, including courts and regulatory agencies"); U.S. TREASURY, FIN-2019-G001, FINCEN GUIDANCE (May 9, 2019) (defining money transmission services to include other "value that substitutes for currency").

in their method of classification.[62] For example, the Treasury considers crypto something of value that is a substitute for currency, the CFTC considers it a commodity, and the SEC considers certain types of cryptocurrency—primarily tokens—a security.[63] These differences display the ambiguity built into cryptocurrency classification.[64]

C. The Offshore Bank Account Blueprint and Its Implications on Cryptocurrency

Despite its attempt to clarify all ambiguities within cryptocurrency guidance, the IRS has realized that there are many cryptocurrency holders who have failed to properly account for their transactions.[65] In response to this underreporting, starting in July 2019, the IRS sent letters to taxpayers suspected of misreporting their taxes from cryptocurrency transactions.[66] Instead of adopting a confrontational approach, the IRS has taken a more patient stance by

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62. *See* Brennan et al., *supra* note 57, at 12 (suggesting that cryptocurrencies must be viewed on a case-by-case basis given their different uses).

63. *See id.* (demonstrating how "[c]ryptocurrencies have not been consistently regulated across different regulatory agencies").

64. *See id.* ("[R]egulators are in the precarious situation of deciding whether to isolate, integrate, or regulate the cryptocurrency space.").

65. *See* Hochman, *supra* note 45, at 17 (arguing that the IRS is following a similar tactic to the one it used to combat underreporting involving offshore income). In 2016, the IRS was criticized by the Treasury Inspector General for Tax Administration for failing to take sufficient action to address underreported cryptocurrency gains. *See id.* This underreporting arguably resulted from the vague cryptocurrency guidelines promulgated by the IRS, and to combat the underreporting, there are signs that the IRS will follow a similar approach to the one it took for offshore bank accounts. *See id.* The IRS is adopting the carrot and stick approach to combat the underreporting, whereby the carrot is less severe punishment for holders who opt to voluntarily correct their underreported taxes from prior years, and the stick is the possibility of criminal prosecutions for noncompliance. *See id.* at 18.

66. *See* IRS, *IRS Has Begun Sending Letters to Virtual Currency Owners Advising Them to Pay Back Taxes, File Amended Returns; Part of Agency's Larger Efforts* (July 26, 2019), https://www.irs.gov/newsroom/irs-has-begun-sending-letters-to-virtual-currency-owners-advising-them-to-pay-back-taxes-file-amended-returns-part-of-agencys-larger-efforts [https://perma.cc/39FY-MB6Y]. The IRS sent three variations of this "educational letter," and all letters were designed to encourage taxpayers to properly report their crypto transactions. *See id.* The tone of these letters is relatively understanding, and one of the letters even acknowledges how the taxpayer "may not know the requirements for reporting transactions involving virtual currency." *See* Reporting Virtual Currency Transactions, Letter 6174, Cat. No. 72273Z (July 16, 2019), https://www.irs.gov/pub/notices/letter_6174.pdf [https://perma.cc/K26J-MMKN].

encouraging taxpayers to report the amount of taxes they failed to pay, either intentionally or unintentionally, through voluntary reporting.[67] This approach aligns with the tactic the IRS took when battling noncompliance involving offshore bank accounts.[68] The IRS recognizes that many cryptocurrency holders use third-party intermediaries to assist with crypto transactions, and similar to its approach with foreign banks and governments, the IRS seeks to obtain personally identifying information from intermediaries.[69]

Before releasing the 10,000 letters in July 2019, the IRS used different techniques for collecting information from virtual currency holders.[70] One technique involved serving Coinbase with a John Doe summons aimed at identifying holders who had previously flown under the IRS's radar.[71] This summons allowed the IRS to cast a wide net and uncover the identity of many holders who were previously unknown to the IRS.[72] Cryptocurrency transactions are often considered anonymous, but the IRS chipped away at this notion through summonses.[73] The IRS has used this monitoring technique in

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67. *See* Shapiro, *supra* note 43, at 1 (stating that in recent years, "[t]he IRS has increasingly moved away from a purely punitive system towards one that focuses on customer service, the theory being that a procedurally fair system will increase taxpayer satisfaction and voluntary compliance").

68. *See id.* at 2 (stating that just like it did with offshore bank accounts, the IRS is trying to gather more information about cryptocurrency holders in order to increase reporting compliance among these taxpayers).

69. *See id.* at 13 (stating that the IRS's collection of data, along with the promise of less severe punishment through voluntary reporting, proved successful in the realm of offshore bank accounts, and the IRS will likely adopt this approach for cryptocurrency transactions as well).

70. *See id.* at 12–13 (stating that the IRS engaged in techniques to collect more data on transactions that were once thought to be anonymous in order to uncover the holders who were engaging in tax evasion).

71. *See id.* at 12 (stating that the IRS hoped to receive data documenting who was buying and selling cryptocurrencies from this summons).

72. *See id.* at 17 ("As the IRS begins gathering data on past transactions, it is able to make headway into discovering the identities of individuals behind otherwise anonymous transfers of cryptocurrency."); *see also* Stanley Foodman, *An IRS "John Doe" Summons Is a Powerful Weapon That Can Puncture Attorney-Client Privilege*, JDSUPRA (Nov. 8, 2019), https://www.jdsupra.com/legalnews/an-irs-john-doe-summons-is-a-powerful-50856/ [https://perma.cc/FW5V-8Z29] (detailing how the IRS uses a John Doe summons when "casting a net to locate the names of US Taxpayers otherwise 'unknowable'").

73. *See* Shapiro, *supra* note 43, at 12 (stating that the more data the IRS is able to collect on holders, the better the chances are of taking away the perceived anonymity of cryptocurrencies).

the past with offshore bank accounts, and just like with cryptocurrencies, the ultimate goal was to increase transparency.[74]

Back in the early 2000s, using offshore bank accounts became a popular trend for Americans.[75] While individuals may use foreign bank accounts to serve legitimate purposes, the federal government concerned itself with individuals using these accounts to avoid taxation in the United States.[76] As such, the government engaged in a variety of enforcement efforts to collect the associated back taxes, including the use of voluntary disclosure programs, whereby eligible taxpayers could voluntarily report their delinquent taxes in exchange for less severe punishment.[77] The IRS also served John Doe summonses on credit card companies in an effort to obtain information on the unreported foreign bank accounts.[78] The IRS is currently employing similar tactics to correct cryptocurrency underreporting.[79]

II. A BROAD CLASSIFICATION IN A WORLD OF VERSATILE CRYPTOCURRENCY

The two main types of cryptocurrencies, cryptos and tokens, serve a variety of purposes.[80] The crypto bitcoin primarily acts like a

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74. *See id.* at 14 (arguing that at some point, the IRS will likely impose regulations on cryptocurrency exchanges to better monitor these entities).

75. *See* Hochman, *supra* note 45, at 17 (stating that before 2008, it was alleged that there was $100 billion of underreported U.S. income sitting in bank accounts outside of the U.S.).

76. *See* Leandra Lederman, *The Use of Voluntary Disclosure Initiatives in the Battle Against Offshore Tax Evasion*, 57 VILL. L. REV. 499, 499–500 (2012) (stating that some U.S. taxpayers intentionally take advantage of foreign bank secrecy laws in order to evade taxes, while other taxpayers may simply inadvertently violate U.S. tax law by failing to report ownership of their foreign accounts with a balance of over $10,000 during the year).

77. *See id.* at 500 (stating that the government's efforts were also designed to encourage future compliance with U.S. laws pertaining to foreign bank accounts); *see also id.* at 501 ("Under a voluntary disclosure program, eligible taxpayers report their delinquent taxes in return for reduced penalties, a reduced likelihood of criminal prosecution upon detection of the evasion, or both.").

78. *See id.* at 504 (stating that the IRS engaged in a project which "involved serving 'John Doe' summonses on major credit card companies, such as MasterCard and American Express, seeking records on foreign bank accounts").

79. *Cf. id.* at 517 (stating that the summonses and voluntary disclosure programs were successful in increasing compliance among offshore account holders).

80. The industry differs on the manner in which cryptocurrencies are classified, but in order to maintain focus on the main topics of this Comment, I have opted to use this simplified manner of classification. *See* Brennan et al., *supra* note 57, at 11. Given the various classifications within the world of cryptocurrency,

form of payment.[81] A token, on the other hand, primarily functions as a digital asset that enables holders to invest in particular projects.[82] The token classification is further broken down into subclassifications, such as protocol tokens, which function as forms of compensation, and app tokens, which function within specific decentralized applications.[83] Despite the currency's different classifications and uses, the IRS treats all cryptocurrency as property.[84]

A. Multifunctional Cryptocurrency

In his informational report titled *A Peer-to-Peer Electronic Cash System*, Satoshi Nakamoto, the pseudonym used by Bitcoin's creator, described the plan for creating an electronic payment system.[85] Despite this intended payment functionality, only a small percentage of bitcoin transactions involve the purchase of goods or services.[86]

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difficulties arise when attempting to use a bright-line rule, like what the IRS did through Notice 2014-21. *See id.* at 11–12.

81. *See id.* at 11 (stating that Bitcoin can act as a medium of exchange, but it should be noted that in today's economy, Bitcoin acts primarily as an investment tool).

82. *See id.* (stating that tokens rely on changes in value over time, but still, with certain kinds of tokens, an argument can be made that these too act as mediums of exchange); *see also* Jonathan Rohr & Aaron Wright, *Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets*, 70 HASTINGS L.J. 463, 470, 474 (2019) (differentiating between protocol tokens, which are defined as tokens used "to compensate parties for participation in some activity that contributes to the maintenance of the blockchain and its network," and app tokens, which are used "to coordinate activity related to online services and other collaborative endeavors").

83. *See* Rohr & Wright, *supra* note 82, at 474 ("App tokens differ from protocol tokens in that they are generally created by deploying a smart contract program on the Ethereum network and often serve as access to more centrally controlled online services and networks.").

84. *See* Hochman, *supra* note 45, at 18 (arguing that at some point, the IRS may need to update the guidance it issued in 2014 in order to deal with the growing complexities and changes in the cryptocurrency realm); *see also id.* (noting that maintaining the broad property classification may contribute to "the tidal wave of unreported virtual currency transactions [that] threaten to undermine the foundations of the American tax self-reporting system").

85. *See* Manoj Viswanathan, *Tax Compliance in a Decentralizing Economy*, 34 GA. STATE U.L. REV. 283, 319 (2018) ("Whereas traditional electronic transactions require clearance by some trusted third-party financial institution, the payment infrastructure imagined by Nakamoto distributes the burdens of verification to the network at large, relying on all participants to maintain the integrity of the network's whole.").

86. *See Chainalysis: Only 1.3% of All Bitcoin Transactions in 2019 Were Used to Pay for Goods or Services*, BLOCKCHAIN J. (June 2, 2019), https://blockchainjournal.news/chainalysis-only-1-3-of-all-bitcoin-transactions-in-

Instead, since its creation, the vast majority of bitcoin transactions involve investors seeking to make money by buying low and selling high.[87] This investment strategy comes with tax consequences, and a gain or loss must be calculated by taking the difference between the bitcoin's fair market value at the time of sale and the holder's adjusted basis in the bitcoin at purchase.[88] Given that the majority of bitcoin transactions involve a sale or exchange, there are some justifications for the IRS treating this type of crypto in a manner similar to property.[89] While bitcoin is primarily used for investment purposes, other forms of cryptocurrencies, such as tokens, serve other purposes.[90]

B. Dissecting the Property Classification and an Introduction to Foreign Currency Regulations

When holders store bitcoin in a custodial wallet, they have little control over their cryptocurrency.[91] To qualify as property, an item

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2019-were-used-to-pay-for-goods-or-services/ [https://perma.cc/4KLH-U8W4] (stating that according to Chainalysis, a cryptocurrency research company, only 1.3% of 2019 bitcoin transactions were used to pay for goods and services).

87. *See id.* (stating that despite the fact that more companies are accepting bitcoin as a form of payment, bitcoin holders are focusing on the changes in the currency's exchange rate as they seek to earn profits).

88. *See* IRS, *Frequently Asked Questions on Virtual Currency Transactions* (Dec. 31, 2019) https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions [https://perma.cc/4Q6U-GYHU] (stating that the gain or loss from a sale of virtual currency for real currency equates to the difference between the holder's adjusted basis in the virtual currency and the amount received in exchange for that virtual currency).

89. *See* Adam Chodorow, *Bitcoin and the Definition of Foreign Currency*, 19 FLA. TAX REV. 365, 381 (2016) ("In discussing Notice 2014-21, an IRS spokesman emphasized that Bitcoin is currently used more as an investment vehicle than as currency, implying that the Notice might have come out differently if Bitcoin were predominantly used as a currency.").

90. *See* Stephen O'Neal, *Differences Between Tokens, Coins and Virtual Currencies, Explained*, COINTELEGRAPH (July 29, 2019), https://cointelegraph.com/explained/differences-between-tokens-coins-and-virtual-currencies-explained [https://perma.cc/H2AQ-PMKY] (stating that many tokens are used in decentralized applications, and allow the holder access to the application's function).

91. *See* Shawn Bayern, *Dynamic Common Law and Technological Change: The Classification of Bitcoin*, 71 WASH. & LEE L. REV. 22, 25 (2014) (arguing that some bitcoin investors do not own bitcoin because depending on how the cryptocurrency is held, that investor may lack title, and instead, the investor may merely have a contract right in the bitcoin); *see also* Jamie Redman, *The Difference Between Custodial and Noncustodial Cryptocurrency Services*, BITCOIN.COM (Nov. 29, 2018), https://news.bitcoin.com/the-difference-between-custodial-and-

must bestow certain rights onto the possessor, including an owner's right to occupy or use that property.[92] While common law has adapted to the expansion of technology and intellectual property within the twenty-first century, other forms of law, including the Uniform Commercial Code (UCC), do not account for many of these technological advances.[93] The United States has been eager to regulate virtual currencies, but agencies have often acted independently of one another in creating differing regulations.[94]

Bitcoin holders using intermediaries like Coinbase argue that they lack property rights because their supposed ownership in bitcoin faces the risk of default.[95] While fiat currency in a bank also faces such risk, there are key differences between money held in a bank and bitcoin held in a custodial wallet.[96] For example, banks are highly

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noncustodial-cryptocurrency-services/ [https://perma.cc/9QHU-NU7G] (defining custodial wallet services to include "most exchanges, brokerage services, and platforms that allow you to buy, sell, and store digital assets").

92. *See Property*, BLACK'S LAW DICTIONARY (11th ed. 2019). According to this dictionary, "[i]t is common to describe property as a 'bundle of rights.' These rights include the right to possess and use, the right to exclude, and the right to transfer." *Id.* Further, property is defined as someone's "*exclusive* right of ownership" over a certain item. *See id.* (emphasis added); *see also* Eric D. Chason, *A Tax on the Clones: The Strange Case of Bitcoin Cash*, 39 VA. TAX REV. 1, 5 (2019) (arguing that while Bitcoin shares some attributes similar to property, it serves mostly as a form of recordkeeping instead of giving holders the right to enjoy that bitcoin).

93. *See* Jeanne L. Schroeder, *Bitcoin and the Uniform Commercial Code*, 24 U. MIA. BUS. L. REV. 1, 28 (2016) (stating that the standard of possession within the definition of property is also met through the right of exclusive possession when dealing with intangible property). Note, however, that the UCC does not interpret possession in such a way, and to do so "would affect the over one-hundred places it is used implicitly to mean the fact of physical custody." *Id.*

94. *See* Carla L. Reyes, *Moving Beyond Bitcoin to an Endogenous Theory of Decentralized Ledger Technology Regulation: An Initial Proposal*, 61 VILL. L. REV. 191, 211 (2016) (stating that the United States has implemented regulations without a master plan, and as such, "regulatory bodies, courts and state legislatures have acted independently resulting in a regulatory mishmash of guidance, clarification, extension and ongoing discussion").

95. *See* Bayern, *supra* note 91, at 25. Bayern argues that "there is nothing the investor can do, technologically, to compel the website to return the bitcoins. Similarly, as a matter of law, the investor probably does not 'own' any bitcoins, at least not in the sense of having title to personal property corresponding directly to bitcoins." *Id.*

96. *See id.* at 26; *see also* Katie Szilagyi, *A Bundle of Blockchains? Digitally Disrupting Property Law*, 48 CUMB. L. REV. 9, 17 (2017) (stating that when a holder has a right to a bitcoin, that holder merely has a series of numbers which grants the holder a logical amount of value). No matter how many bitcoins a particular holder has a right to, that holder still only has a series of numbers that grants the holder an

regulated and insured, whereas intermediaries holding bitcoin are less regulated and not insured.[97] The lack of insurance translates to a higher risk of default among custodial wallets as compared to banks, and as such, questions remain about whether bitcoin holders possess property rights when storing cryptocurrency in custodial wallets.[98] Furthermore, a bitcoin transaction can only take place if the holder knows the appropriate private key, which functions like a password.[99] Because Bitcoin lacks a central authority, if holders lose their private key, they cannot recover their bitcoin.[100] Private keys are stored in various ways, including through the use of custodial wallets.[101] The "owner" of the bitcoin does not have a right to the virtual currency, and anyone who knows the private key has access to the bitcoin.[102]

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arbitrarily determined amount of something that is only valuable on the Bitcoin system. *See id.* at 16.

97. *See Buy and Sell Cryptocurrency*, *supra* note 29, https://www.coinbase.com/learn/crypto-basics/what-is-usdc [https://perma.cc/P4Q5-JD4V] (showing that the website helps people to convert cryptocurrency into U.S. dollars); *see also* Bayern, *supra* note 91, at 25 (stating that many holders utilize custodial wallets, in which case that holder has a contractual right rather than a property right).

98. *See* Szilagyi, *supra* note 96, at 10 ("The availability of true digital assets has the potential to destabilize our theoretical constructs of what constitutes property, and correspondingly, property law.").

99. *See* Chason, *supra* note 92, at 6; *see also* NARAYANAN ET AL., *supra* note 23, at 55 (detailing how an output transaction can only be redeemed through a locking script requiring the correct public key, and a signature from the owner of that public key).

100. *See* Chason, *supra* note 92, at 6 (explaining that once a holder loses their private key, any bitcoin associated with that private key is also lost); *see also* Andrew M. Hinkes, *Throw Away the Key, or the Key Holder? Coercive Contempt for Lost or Forgotten Cryptocurrency Private Keys, or Obstinate Holders*, 16 N.W. J. TECH. & INTELL. PROP. 225, 237 (2019). "Private keys generally cannot be recovered if lost or forgotten. Unlike most financial instruments which function through or with the cooperation of an intermediary, there is usually no central entity in control of a cryptoasset system that can replace or restore a lost private key. . . ." *Id.*

101. *See* Harsh Agrawal, *Bitcoin Private Keys: Everything You Need to Know*, COINSUTRA (updated Apr. 1, 2021), https://coinsutra.com/bitcoin-private-key/ [https://perma.cc/VZR2-GW5B] (stating that private keys are held by someone other than the holder when this method of storage is used).

102. *See id.* (stating that if the online service got hacked and private keys were stolen, holders who had their keys stolen would no longer have access to their bitcoin); *see* Andrew Balthazor, *The Bona Fide Acquisition Rule Applied to Cryptocurrency*, 3 GEO. L. TECH. REV. 402, 420 (2019) (stating that if, for example, a private key is printed out on a piece of paper, that key could fall into the wrong hands, thus opening up the possibility of granting access to a given amount of bitcoin to a number of different people); *see also* Hinkes, *supra* note 100, at 238 (discussing how a private key can exist in multiple locations).

Of the 14% of American adults who own cryptocurrency, 6.23% are bitcoin holders, and 3.99% are ether holders.[103] Although bitcoin and ether are both classified under the broad umbrella of cryptocurrencies, they each serve different functions.[104] While many bitcoin transactions share characteristics similar to property transactions, the same is not true on the Ethereum platform.[105] The term Ethereum refers to a network fueled by a cryptocurrency called ether.[106] Ether functions as a form of payment when certain conditions are met within a respective digital contract.[107] Furthermore, Ethereum

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103. *See* INVESTING.COM, *supra* note 30.

104. *See* Brennan et al., *supra* note 57, at 17 ("Parents have a habit of telling kids that 'the world isn't all black and white.' Nowhere is that truer than the world of the crypto-prefix."); *see also* Nathan Reiff, *Bitcoin vs. Etherium: What's the Difference?*, INVESTOPEDIA (June 16, 2020), https://www.investopedia.com/articles/investing/031416/bitcoin-vs-ethereum-driven-different-purposes.asp [https://perma.cc/WEL6-AFA6].

105. *See* Johannes Schmidt et al., *IRS Says Bitcoin to Be Taxed as Gains: New Rule Is Retroactive*, TAX FOUND. (Mar. 28, 2014), https://taxfoundation.org/irs-says-bitcoin-be-taxed-gains-new-rule-retroactive/ [https://perma.cc/SST4-PA9R] (arguing that the cryptocurrency guidance issued by the IRS in 2014 is incorrect because cryptocurrencies take on many different roles, including acting like a currency, a commodity, or a stock).

106. *See* Harsh Agrawal, *Understanding the Difference Between Ethereum and Ether*, COINSUTRA (Sept. 6, 2019), https://coinsutra.com/ethereum-vs-ether/ [https://perma.cc/4SMD-N477] ("Ethereum is a blockchain-based platform and [e]ther is the cryptocurrency" that fuels this platform); *see also* Nathan Reiff, *What Is Ether? Is It the Same as Ethereum?*, INVESTOPEDIA (June 25, 2019), https://www.investopedia.com/tech/what-ether-it-same-ethereum/ [https://perma.cc/DY5V-PYL6] (stating that ether is fuel "for the apps on the decentralized [E]thereum network").

107. *See* Justin Henning, *The Howey Test: Are Crypto–Assets Investment Contracts?*, 27 U. MIA. SCH. L. BUS. L. REV. 51, 58 (2018) (comparing smart contract technology, which is a fundamental component of the Ethereum platform, to an if-then condition). If the condition required by the smart contract occurs, then the person satisfying the condition will be rewarded according to the terms of the contract. *See id.* To execute the digital contracts on the Ethereum platform, a certain amount of computational effort is required, and this effort is measured through a unit called gas. *See* Jake Frankenfield, *Gas (Ethereum)*, INVESTOPEDIA (Oct. 22, 2019), https://www.investopedia.com/terms/g/gas-ethereum.asp [https://perma.cc/RAX3-CE6K]. Ethereum gas is essentially a required fee for execution of a digital contract. *See id*; *see also What Is Ethereum Gas?*, ETHOS, https://www.ethos.io/what-is-ethereum-gas/ [https://perma.cc/7MXC-J25Y] (last visited May 17, 2021) (stating that gas can be purchased with a fraction of an ether token); Harsh Agrawal, *Ether Gas: Limit, Gas Price & Fees (Everything You Need to Know)*, COINSUTRA (Sept. 6, 2019), https://coinsutra.com/ethereum-beginners-guide/ether-gas-limit-price-fees/ [https://perma.cc/SM7E-KNG2] (comparing gas to a transaction fee); Miscellaneous Deductions, I.R.S. Pub. No. 529, Cat. No. 15056O (Oct. 15, 2019) (stating that a fee

serves as a platform to facilitate transactions involving different types of cryptocurrencies.[108] For example, consider a hypothetical where a new online platform was created to provide study outlines to law school students, and the only way to access these outlines was through the use of "LTokens."[109] The creator of the online platform could offer its users a rate of exchange using ether, whereby one ether could be exchanged for 100 LTokens.[110] In fact, the popularity of creating tokens on the Ethereum network led to the development of a standard smart contract, referred to as ERC20, which allows users to issue their own token in a relatively straightforward manner.[111]

Taking the above hypothetical in a slightly different direction, suppose that a smart contract on the Ethereum network merely produces LTokens.[112] Instead of purchasing law school outlines, suppose that the LTokens are sold in exchange for a certain amount of a separate cryptocurrency, such as bitcoin.[113] For example, suppose that 100 LTokens are worth one bitcoin, and an LToken holder decides to make an exchange for bitcoin.[114] The root of this transaction involves exchanging one type of cryptocurrency for another, a concept discussed within IRS foreign currency regulations.[115] The above

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paid to a broker, which is essentially a transaction fee, can no longer be deducted as a miscellaneous itemized deduction).

108. *See* Henning, *supra* note 107, at 59 ("Ethereum allows for other crypto–assets to be built on top of Ethereum."). Essentially, other companies can build applications and launch their own cryptocurrencies using the Ethereum platform. *See id.*

109. *See id.*

110. *See id.*

111. *See* Rohr & Wright, *supra* note 82, at 474 ("The ERC20 smart contract enables its creator to set a supply of tokens, facilitates the transmission and receipt of tokens between parties participating in the Ethereum network, and maintains a record of token holders.").

112. *See* Nathan Reiff, *What Is ERC-20 and What Does It Mean for Ethereum?*, INVESTOPEDIA (June 25, 2019), https://www.investopedia.com/news/what-erc20-and-what-does-it-mean-ethereum/ [https://perma.cc/A2DK-Q7JR] (stating that tokens created on the Ethereum network can be "bought, sold, or traded").

113. *See How to Sell Ethereum: Guide for Beginners*, COINTELEGRAPH, https://cointelegraph.com/ethereum-for-beginners/how-to-sell-ethereum-guide-for-beginners [https://perma.cc/U64A-RE2V] (last visited May 17, 2021) (describing the process by which ether can be sold for other cryptocurrencies, including bitcoin).

114. *See id.* (stating that there are similarities between the process of selling cryptocurrency and exchanging it).

115. *See* Henning, *supra* note 107, at 59 (stating that this type of transaction results in "a crypto–asset built on top of, and utilizing, the Ethereum network").

example shows that certain cryptocurrency transaction components are already covered in tax regulations.[116]

The Internal Revenue Code guides transactions involving foreign currency.[117] Given that American taxpayers are taxed on worldwide income, any gains or losses associated with foreign currency transactions are included in a taxpayer's income.[118] These gains or losses arise from the fact that the spot exchange rate between the American dollar and a different currency fluctuates on a daily basis.[119] Statutory law governing foreign currency gains and losses states that when an American individual makes personal purchases in foreign currency, no gain or loss calculation is necessary for that purchase.[120] However, when a conversion of foreign currency takes place, any gain resulting from the conversion that is $200 or less is not taxable.[121] This *de minimis* provision contained within the foreign currency statute results in fewer taxable transactions.[122]

C. The IRS Fired a Warning Shot Toward All Cryptocurrency Holders

The IRS delivered more than 10,000 letters to individual holders of cryptocurrency to send a message to holders involved in tax evasion, whether this evasion was intentional or not.[123] Recipients of

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116. *See* I.R.C. § 988 (1999) (discussing the IRS's treatment of foreign currency transactions).

117. *See id.*

118. *See* Steven Chung, *Real Taxation of Virtual Commerce*, 28 VA. TAX REV. 733, 763 (2008) (stating that the difference between the dollar value of the foreign currency's spot rate upon receipt and the dollar value of that foreign currency upon disposal equals the taxpayer's foreign currency gain or loss).

119. *See id.* (stating that fluctuating currency values is what brings about reportable gains and losses).

120. *See id.* at 769 (illustrating how Treasury Regulation § 1.988-1(a)(9)(ii) precludes purchases in foreign currency from § 988 reporting requirements). For purposes of I.R.C § 988, personal transaction means a transaction that does not result in a trade or business expense deduction, or an investment producing expense deduction. *See id.*

121. *See* Chung, *supra* note 118, at 769 (showing that § 988(e)(2) excludes such gains from taxable income).

122. *See id.* at 764 (stating that judicial and administrative decisions "have held that for U.S. tax purposes, foreign currency should be treated as being analogous to personal property"). The IRS likely recognized the administrative burdens that these regulations imposed, and thus decided to impose exceptions aimed at easing some of these burdens. *See id.*

123. *See* Rachel McIntosh, *IRS Sends 10,000+ Letters of Warning to Crypto Holders*, FIN. MAGNATES (July 29, 2019), https://www.financemagnates.com/

the letter ranged from small time investors, to the more sophisticated holders who viewed the fluctuating valuation of cryptocurrencies as a prime investment opportunity.[124] The IRS hoped to use the information provided by entities like Coinbase when trying to breach the pseudonymity of cryptocurrencies and had the goal of holding all taxpayers accountable for paying their fair share of taxes.[125] When third-party intermediaries like Coinbase buy or sell crypto, the IRS acquires an avenue for obtaining information about the parties using these intermediaries.[126]

The IRS is implementing measures to ensure that all cryptocurrency holders pay their required taxes.[127] CoinTracker, an online platform that assists holders with calculating their taxes from crypto transactions, estimated that as low as 1% of American holders are accurately reporting their taxes.[128] Cryptocurrencies changed the economy, and given the relative novelty of this type of currency, it will continue to impact the American financial landscape.[129] The IRS

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cryptocurrency/news/irs-sends-10000-letters-of-warning-to-crypto-holders/ [https://perma.cc/YVS5-RDVU] (suggesting that these letters could be the final push to encourage taxpayers to correct their underreported taxes resulting from cryptocurrencies).

124. *See* IRS, *supra* note 66 (stating that all three variations of the letters are designed to help taxpayers understand their cryptocurrency tax obligations, and how to correct any past instances of underreporting).

125. *See* United States v. Coinbase, Inc., No. 17-cv-01431-JSC, 2017 WL 5890052, at *1 (N.D. Cal. Nov. 28, 2017). In this case, the IRS served a summons on Coinbase in an attempt to obtain records pertaining to nearly all users. *See id.*

126. *See* McIntosh, *supra* note 123 (suggesting that the *United States v. Coinbase* case may have allowed the IRS to determine who had underreported taxes pertaining to cryptocurrencies).

127. *See* IRS, *supra* note 66 ("The IRS will remain actively engaged in addressing non-compliance related to virtual currency transactions through a variety of efforts, ranging from taxpayer education to audits to criminal investigations."); *see also* Tanaya Macheel, *CoinTracker Launches Free Crypto Tax Service as IRS Sharpens 'Virtual Currency' Focus*, CHEDDAR (Jan. 21, 2020), https://cheddar.com/media/cointracker-launches-free-crypto-tax-service-as-irs-sharpens-virtual-currency-focus [https://perma.cc/A4G8-72YB] (describing CoinTracker as a free platform that assists holders who do not meet the threshold for receiving form 1099-K).

128. *See* Macheel, *supra* note 127 (stating that the company estimates that less than 100,000 holders are accurately filing their taxes).

129. *See* Bob Mason, *How Blockchain Will Change Our Life, Economy and the World*, FXEMPIRE, https://www.fxempire.com/education/article/how-blockchain-will-change-our-life-economy-and-the-world-449304 [https://perma.cc/X7WY-8MU7] (last visited May 17, 2021) (arguing that blockchain technology offers many advantages to the economy, including its ability to help limit identity theft, provide

is determined to increase tax compliance among those who are not paying their fair share of taxes.[130]

D. The Relationship Between Third-Party Intermediaries and the IRS

While cryptocurrency advocates often tout virtual currency for its pseudonymity, many transactions involve the use of intermediaries that help facilitate transactions.[131] Cryptocurrency transactions can still take place without intermediaries, but even these transactions are not completely anonymous thanks to the foundation of the blockchain.[132] Intermediaries face few reporting regulations, which can impede the free flow of information between the intermediary and the crypto holder.[133] The IRS recognizes that intermediaries possess information that can help increase cryptocurrency tax compliance.[134]

As of mid-2021, the blockchain has recorded nearly 650 billion transactions, so finding an efficient way to access and learn from these transactions is critical for tax reporting purposes.[135] In response to this critical need, software developers created a tool known as a block explorer to assist holders with navigating the expansive blockchain.[136]

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greater transparency as compared to fiat currency, and reduce vote rigging within elections).

130. *See* McIntosh, *supra* note 123 (stating that the IRS has shown signs over the past several years that it is determined to correct underreporting among individuals holding cryptocurrency).

131. *See* Shapiro, *supra* note 43, at 16 ("Eventually, the IRS is likely to implement regulations requiring wholescale information reporting from cryptocurrency exchanges. But for the time being it needs to gather data on past transactions in order to compile sufficient information to piece together large and otherwise anonymous transactions.").

132. *See* Godlove, *supra* note 6, at 8 (stating that every bitcoin transaction is recorded on a public ledger that is published to all other holders, thus forming a chain of transactions known as the blockchain).

133. *See* Shapiro, *supra* note 43, at 20 ("The IRS needs a critical mass of intermediaries and/or individuals to report cryptocurrency trade information, or it is going to have a near-impossible task of making significant headway in its enforcement efforts.").

134. *See* Semanski, *supra* note 53, at 15 (suggesting that Congress will likely continue to pursue third-party intermediaries to gain access to more information pertaining to cryptocurrency holders).

135. *See Total Number of Transactions*, BLOCKCHAIN, https://www.blockchain.com/en/charts/n-transactions-total [https://perma.cc/4CW4-LXVP] (last visited May 17, 2021) (showing that as of May 2021, there were approximately 643,000,000 transactions recorded on Bitcoin's blockchain).

136. *See What Is Block Explorer and How to Use It? Blockchain Explorer Explained*, COINGUIDES, (July 28, 2018), https://coinguides.org/block-explorer/ [https://perma.cc/R5HF-DL78] (comparing a block explorer to a search tool).

All cryptocurrencies that rely on a blockchain also have at least one block explorer that allows holders to search specific transactions on their cryptocurrency's respective blockchain.[137] In addition to the unique block explorers among different cryptos, each individual cryptocurrency may also have numerous block explorers from which to choose.[138] Bitcoin, for example, offers block explorers such as BTC, Block Explorer, and Block Cypher, just to name a few.[139] Essentially, a block explorer serves the same function on a blockchain as a web browser serves on the Internet.[140] Furthermore, just as the primary function of web browsers stays consistent among the different available browsers, so too does the primary function of a block explorer for a given cryptocurrency.[141] As of May 2021, there were more than 300,000 bitcoin transactions occurring on a daily basis, which demonstrates the importance of block explorers and their ability to make blockchain data accessible to all holders.[142]

According to Notice 2014-21, the tax basis of cryptocurrency equals its fair market value at the date of receipt, but the IRS provides little insight into how this value should be calculated or obtained.[143] The fact that cryptocurrency holders may sell groups of this asset purchased at different dates adds to the complexity.[144] Say for example that a holder sells twelve ether on December 31, but that sale involves ether purchased through twelve separate transactions taking place on

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137. *See id.* (stating that "every cryptocurrency that relies on its own blockchain will also have its own block explorer").

138. *See id.* (stating that there can be numerous block explorers for a given type of cryptocurrency).

139. *See id.* (listing the website for each explorer, respectively, as btc.com, blockexplorer.com, and blockcypher.com).

140. *See id.* (comparing block explorers to web browsers).

141. *See id.* (serving as a search mechanism for a given blockchain).

142. *See Total Number of Transactions*, *supra* note 135 (showing that on May 10, 2021, there had been 312,115 bitcoin transactions recorded on the blockchain in the past twenty-four hours).

143. *See* I.R.S. Tax Notice 2014-21 (Apr. 14, 2014).

144. *See* Warley Letter, *supra* note 54 (stating that acquiring cryptocurrency through different batches opens up the possibility of utilizing different cost basis valuation methods, such as "LIFO, FIFO or 'average cost'"). LIFO stands for last in first out, meaning that if two bitcoins were sold, the cost basis would be based upon the two most recently purchased bitcoins. *See* Chizoba Morah, *Weighted Average vs. FIFO vs. LIFO: What's the Difference?*, INVESTOPEDIA (Apr. 9, 2019), https://www.investopedia.com/ask/answers/09/weighted-average-fifo-lilo-accounting.asp [https://perma.cc/DJF7-DMHV]. FIFO stands for first in first out, and the basis is determined from the first bitcoins purchased. *See id.* Average cost, sometimes referred to as weighted average, calculates the cost basis of the cryptocurrency just as the name implies. *See id.*

the first day of each month of the year.[145] In this example, the taxpayer would have to obtain twelve different tax basis valuations to accurately report the gain or loss resulting from this single year-end sale.[146] While online software can help holders calculate their gains and losses from cryptocurrency transactions, the IRS does not regulate this software.[147]

To accurately report their cryptocurrency income for tax purposes, holders must also obtain the fair market value of the cryptocurrency at the heart of the transaction.[148] When exchanging one cryptocurrency for another, challenges arise from calculating the fair market value of the cryptocurrency received.[149] The price of a cryptocurrency at any point in time is relatively subjective, meaning that one taxpayer's valuation may differ substantially from another taxpayer's valuation.[150] While holders can use cryptocurrency exchanges, these exchanges provide different valuations for a given amount of cryptocurrency, but government regulation aims to reduce these inconsistencies among exchanges.[151]

The tax reporting obligations imposed on cryptocurrency intermediaries are works in progress.[152] Congress has enacted

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145. *See* Warley Letter, *supra* note 54 ("[T]he lack of an official valuation source or official regulator creates problems in determining the proper tax value.").

146. *See* Nellen Letter, *supra* note 53 (arguing that sometimes it is impossible for a taxpayer to specifically identify the virtual currency that was used in a given transaction).

147. *See* COINTRACKING, https://cointracking.info/ [https://perma.cc/QSM8-HWEZ] (last visited May 17, 2021).

148. *See* Nellen Letter, *supra* note 53 (stating that holders must identify which virtual currency was used in a specific transaction so as to properly value the transaction's gain or loss); *see also* Elizabeth E. Lambert, *The Internal Revenue Service and Bitcoin: A Taxing Relationship*, 35 VA. TAX REV. 88, 100 (2015) ("[T]he taxpayer is responsible for determining the fair market value of the convertible virtual currency when received.").

149. *See* Lambert, *supra* note 148, at 101 ("[T]axpayers lack an authoritative resource to determine the value of their bitcoins since, unlike stocks, bitcoins are not actively traded on a regulated market.").

150. *See id.* (stating that there are many websites that will provide the value of a cryptocurrency at a specific time, but these valuations usually differ from one another).

151. *See* Kira Egorova, *Crypto Exchanges, Explained*, COINTELEGRAPH (July 10, 2018), https://cointelegraph.com/explained/crypto-exchanges-explained [https://perma.cc/84US-KKZ7] (stating that cryptocurrency exchanges "allow exchanging one cryptocurrency for another, the buying and selling of coins, and the exchange of fiat money into crypto").

152. *See* Stephen T. Middlebrook et al., *Developments in the Law Affecting Electronic Payments and Financial Services*, 74 BUS. LAW. 267, 278 (2019) (stating

legislation, including the Uniform Regulation of Virtual-Currency Businesses Act (URVCBA), to provide some guidelines to intermediaries playing a role in cryptocurrency transactions.[153] These regulations, combined with the various lawsuits filed by agencies against intermediaries over the years, show that Congress continues to impose some tax reporting duties upon the intermediaries.[154] The IRS recognizes that it can obtain valuable information from cryptocurrency intermediaries.[155] At least one intermediary, Coinbase, provides tax reporting form 1099-K to users engaging in transactions over a certain dollar amount, but the IRS hopes to receive more information from intermediaries.[156] Further, given the similarities between intermediaries and brokers in certain transactions, the IRS may decide to impose reporting requirements on intermediaries through existing legislation.[157]

For those holders who stray away from using intermediaries, their transactions are still not completely anonymous.[158] Discovering the true identity of holders operating outside of intermediaries requires, however, more time and effort given the limited information

that given the lack of clarity, these intermediaries are facing litigation involving what information must be provided to the IRS).

153. *See id.* (stating that while there are gaps in the URVCBA, it still provides financial and operational standards for intermediaries within states that have adopted these regulations).

154. *See id.* (stating that the URVCBA imposes a regulatory framework on intermediaries).

155. *See* McIntosh, *supra* note 123 (suggesting that the information collected by the IRS from a summons imposed on Coinbase could have allowed the IRS to determine which taxpayers were not properly accounting for their cryptocurrency gains).

156. *See* DEPT. OF TREAS. IRS, 2019 INSTRUCTIONS FOR FORM 1099-K (Oct. 3, 2018), https://www.irs.gov/pub/irs-pdf/i1099k.pdf [https://perma.cc/KQ3F-7ZST] [hereinafter 1099-K INSTRUCTIONS]; *see also* Wendy Walker, *IRS Cryptocurrency Tax Guidance Fails to Address 1099 Reporting*, SOVOS (Oct. 10, 2019), https://sovos.com/blog/2019/10/10/irs-cryptocurrency-tax-guidance-fails-to-address-1099-reporting/ [https://perma.cc/54EQ-MKRW] (stating that even after the IRS's most recent cryptocurrency guidance, confusion remains regarding the use of tax forms like 1099-B and 1099-K in the realm of crypto).

157. *See* DEP'T. OF THE TREASURY, IRS., 2021 INSTRUCTIONS FOR FORM 1099-B, 1–2 (Nov. 24, 2020), https://www.irs.gov/pub/irs-pdf/i1099b.pdf [https://perma.cc/M5RP-E2UB] [hereinafter 1099-B INSTRUCTIONS] (defining broker as "any person who, in the ordinary course of a trade or business, stands ready to effect sales to be made by others").

158. *See* Godlove, *supra* note 6, at 11 (stating that the blockchain on which cryptocurrency transactions take place is public, and while transactions are not directly associated with a holder's real-world identity, computer scientists are able to trace these transactions back to the actual user).

the IRS has access to in these transactions.[159] To reveal holders' identities, the IRS can target individuals with large amounts of transactions on the blockchain.[160] While tools such as Chainalysis can provide the IRS with information pertaining to holders using third-party intermediaries, it is more difficult to reveal the true identity of holders operating without these intermediaries.[161] There are an unknown number of holders operating without intermediaries, but their identities can still be obtained.[162] All bitcoin transactions take place on a public ledger, so the IRS can use third parties to track down the true identity of nearly all bitcoin holders.[163] While discovering the identity of all bitcoin holders would be time consuming, the IRS may decide to go after a handful of holders with large amounts of

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159. *See id.* (stating that although cryptocurrency addresses appearing on the public ledger are not directly associated with personally identifying information, computer scientists have developed techniques to take the anonymity out of these so-called anonymous platforms).

160. *See* Shapiro, *supra* note 43, at 17 ("[T]he more data the IRS accumulates, the more it might be able to identify transactions that many digital currency users assumed were anonymous.").

161. *See* Jeff John Roberts, *The IRS Has Special Software to Find Bitcoin Tax Cheats*, FORTUNE (Aug. 22, 2017, 10:02 AM), https://fortune.com/2017/08/22/irs-tax-cheats-bitcoin-chainalysis/ [https://perma.cc/YJE3-244P] ("[T]he existence of tools like Chainalysis doesn't mean [B]itcoin users can't be anonymous. Those who wish to keep their identity concealed can do so by maintaining their own wallet and avoiding exchanges that collect customer information.").

162. *See Bitcoin Transactions Aren't as Anonymous as Everyone Hoped*, MIT TECH. REV. (Aug. 23, 2017), https://www.technologyreview.com/s/608716/bitcoin-transactions-arent-as-anonymous-as-everyone-hoped/ [https://perma.cc/P5V6-QKAG] (stating that web trackers and cookies provide websites information about the cryptocurrency holder's identity when that holder conducts a transaction). Information can leak onto the internet, and law enforcement agencies can utilize this leaked information to learn more about the holder that made the transaction. *See id.*; *see also* Rachel Wolfson, *Anti-Human Trafficking Agency Traces Crypto to Fight Modern-Day Slavery*, COINTELEGRAPH (Dec. 20, 2019), https://cointelegraph.com/news/anti-human-trafficking-intelligence-agency-traces-cryptocurrency-to-fight-modern-day-slavery [https://perma.cc/NAB4-L9CS]. A leader in blockchain security formed a partnership with the Anti-Human Trafficking Intelligence Initiative with the purpose of tracing cryptocurrency. *See id.* Given that human traffickers often use cryptocurrency while engaging in this illegal activity, the partnership is designed to reveal the identity of human traffickers. *See id.*

163. *See* Godlove, *supra* note 6, at 11 ("The block chain is public, meaning that it is possible for anyone to see every Bitcoin transaction ever, back to the Genesis block or coinbase transaction."); *see also* NARAYANAN ET AL., *supra* note 23, at 139 ("[L]inking a Bitcoin address to a real-world identity is often easy."). While this process may be easy, given the large number of holders, the idea of tracking down the identity of every single holder would be inefficient for the IRS given the time requirements of undergoing this process. *See id.*

unreported gains in order to make a statement.[164] The 10,000 letters sent to individual holders show that the IRS is serious about increasing tax compliance, and that the IRS is taking action to hold cryptocurrency users accountable.[165]

III. MULTIPLE CRYPTOCURRENCY CLASSIFICATIONS AND ENCOURAGING COOPERATION THROUGH INTERMEDIARIES AND VOLUNTARY REPORTING

Bitcoin should be recognized as something that does not fit squarely into a single classification.[166] This recognition would update existing bitcoin legislation and create new regulations that acknowledge a bitcoin's unique characteristics.[167] The IRS's treatment of bitcoin as property fails to take into consideration all of this virtual currency's features.[168] Cryptocurrencies serve distinct purposes; thus, the IRS's single classification is overly simplistic.[169] The most recent revenue ruling issued by the IRS shows that it seeks to close knowledge gaps among cryptocurrency holders by providing more guidance.[170] The IRS faces a noncompliance issue among cryptocurrency holders, but this noncompliance can be significantly

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164. *See* Roberts, *supra* note 161 (arguing that while there are signs indicating that the IRS is only focusing on the bigger fish for the time being, the use of tools such as Chainalysis indicate that the IRS may soon broaden its focus to include holders who had smaller capital gains from cryptocurrencies); *see also* NARAYANAN ET AL., *supra* note 23, at 147–49 (identifying a number of approaches to associating a given bitcoin address with a holder's real-world identity, but also noting that savvy holders may use certain tricks that make their real-world identity more difficult to discover).

165. *See* McIntosh, *supra* note 123. Holders who accurately report their gains from cryptocurrencies is low, but some of this underreporting may "be attributed to the IRS'[s] lack of clarity . . . on how and when crypto holders should be paying tax on the cryptocurrency." *See id.* That said, the IRS has little sympathy for those who mistakenly file inaccurate tax returns because the IRS is mainly focused on collecting an accurate amount of tax revenue. *See id.*

166. *See* Chason, *supra* note 92, at 5.

167. *See id.* (illustrating how Bitcoin has both similarities and differences with the legal concept of real property, thus classifying Bitcoin as notional property).

168. *See* Brennan et al., *supra* note 57, at 10 (stating that cryptocurrency is a broad category, which includes various types of virtual currencies).

169. *See id.* at 11 ("The term 'cryptocurrency' is a catch-all for three primary types of cryptographic currencies, which range in their economic reality from economic assets to money/cryptocurrencies: settlement coins, platform coins, and tokens.").

170. *See* Rev. Rul. 2019-24, 2019–44 I.R.B. 1004 (addressing two issues that were left unaddressed in the guidance that the IRS issued in 2014).

reduced by providing clear guidance because many holders simply do not know the proper way to report their cryptocurrency transactions.[171] The IRS must issue guidance that differentiates taxation classification based upon the type of cryptocurrency involved in the transaction.[172] Existing legislation can partially guide these classifications, but in order to recognize a cryptocurrency's unique characteristics, the IRS must also develop a hybrid classification.[173]

A. Recognizing the Unique Characteristics of Cryptocurrencies Through Multiple Classifications

For purposes of taxation, the IRS is more focused on the cryptocurrency's actual use rather than its intended use at the time of creation.[174] While Satoshi Nakamoto may have created bitcoin with the intent of serving as an alternative form of currency for purchasing goods and services, in reality, holders primarily use bitcoin for investment purposes.[175] To ensure more accurate accounting, the IRS must classify cryptocurrency with more specificity.[176] Other articles have argued that the underlying transaction should determine the classification, but this can only happen by distinguishing popular cryptocurrencies from one another; otherwise, taxpayers would be

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171. *See* Hsieh, *supra* note 41, at 1107 (stating that many taxpayers are unaware of the tax requirements associated with certain cryptocurrency transactions, and as a result, fail to properly identify the taxable income earned through these transactions).

172. *See id.*

173. *See* Wiseman, *supra* note 51, at 437 (arguing that the unique characteristics of cryptocurrencies have created wrinkles within the IRS's 2014 guidance, therefore, the guidance must be changed to reflect the different uses of the virtual currency); *see also* Chaffee, *supra* note 8, at 628 (arguing that thin regulations may allow entities to rely on existing regulations to fill in any gaps, which is something that the IRS may do in the near future).

174. *See* Wiseman, *supra* note 51, at 424 (stating that Bitcoin can be used for a number of reasons, whereby some people use it for investment purposes, and others use it as a substitution for currency). Upon creation, Nakamoto and other supporters of Bitcoin argued that this currency was superior to other traditional methods of payments given Bitcoin's higher degree of security and lower transaction fees. *See id.* at 418.

175. *See id.* at 429–30 ("Although Bitcoin was designed to be an unregulated, global currency and means of exchange, it is unique because it has recently become a popular investment vehicle.").

176. *See* Hochman, *supra* note 45, at 18 (arguing that instead of maintaining the singular classification of cryptocurrency as property, the IRS must recognize that the world of cryptocurrencies is expanding and adjust tax policies accordingly).

allowed to report dissimilar cryptocurrencies in similar ways.[177] The world of cryptocurrency creates many questions about tax reporting best practices, so the more guidance the IRS can provide, the better.[178] As such, the IRS should classify the most popular types of cryptocurrency in different manners according to the respective crypto's most popular use, while still allowing deviation for those taxpayers who can prove that they used the crypto in a different manner.[179] Under this methodology, the burden of proof falls on the taxpayer to show that they used the respective cryptocurrency in a manner that differed from that crypto's typical use.[180]

1. *Classifying Bitcoin as a Property Hybrid*

Certain bitcoin transactions must be classified as a property hybrid to properly recognize this crypto's unique characteristics.[181] The temptation to fit this unique currency into an existing regulatory framework must be resisted and instead, regulatory entities must create new classifications that properly capture the identity of bitcoin.[182] These new classifications can use parts of existing frameworks, but in reality, bitcoin does not fit squarely into any existing asset classification.[183] While many bitcoin transactions serve

177. *See id.* ("[R]ather than treat[ing] all virtual currency as property, the IRS should consider creating more defined categories that focus on the particular use of the cryptocurrency (e.g., medium of exchange, investment, utility token, etc.)"); Wiseman, *supra* note 51, at 437 (stating that an update to the existing guidance on cryptocurrencies would alleviate inconveniences and hardships imposed by the IRS's broad guidelines whereby all cryptocurrencies are treated the same for tax purposes).

178. *See* Hochman, *supra* note 45, at 18 (stating that the IRS must adapt to advances in technology which serve to expand the cryptocurrency realm by enacting further guidance).

179. *See id.* (arguing that this change has started, and lawmakers are seeking to adapt rules to a time where cryptocurrencies now serve a much more expansive purpose than they did only a short while ago).

180. *See id.* (arguing that the IRS lacks the internal resources to solve the problem of underreported taxes pertaining to cryptocurrencies, so bolstered auditing procedures may help to solve the underreporting issue in a way that does not require hiring more auditors).

181. *See* Brennan et al., *supra* note 57, at 10 (arguing that cryptocurrencies have created gray areas, meaning that each type of virtual currency will not always fit neatly into a pre-existing category).

182. *See id.* (arguing that "categorizing a cryptocurrency as either money or an asset is often onerous and, at a framework level, regularly fruitless").

183. *See* Chaffee, *supra* note 8, at 628 (stating that relying on existing regulations prevents redundant regulation from being promulgated, and the existing

investment purposes, the IRS's property classification still fails to accurately categorize this transaction type.[184] As such, instead of relying on a classification fundamentally defined by having possession of an item, the IRS must create a property hybrid category that recognizes the similarities and differences that bitcoin shares with property.[185] The right to exclude is a fundamental concept of property, but when more than one individual knows a cryptocurrency's access code, the right to exclude begins to dissipate.[186]

The new bitcoin classification must also contain subclassifications that apply depending on the type of transaction the holder conducts.[187] This proposal recognizes that bitcoin is versatile, and the proposal will also expand bitcoin's functionality beyond where it stands today, as a cryptocurrency serving primarily as an investment.[188] For an investment transaction, the tax consequences should be similar to property, although the IRS should refrain from using the term property in order to avoid possession issues.[189] Conversely, when holders use bitcoin for the purchase of goods and services, the transaction should be classified similarly to a transaction involving foreign currency.[190] For both investment and purchase transactions, the IRS must adopt a *de minimis* treatment for gains under a certain dollar threshold so as to decrease the reporting burdens imposed on bitcoin holders.[191] That said, the proposal to classify

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regulation provides benefits because it has already been interpreted by the courts, so many of the gaps in those existing regulations have already been filled).

184. *See* Bayern, *supra* note 91, at 25 (stating that bitcoin holders merely have a contractual right against the operator of the website used to purchase that bitcoin, and this is much different than having possession of that bitcoin).

185. *See id.* (arguing that holders using custodial wallets do not own bitcoin from the standpoint of having title in that bitcoin).

186. *See* Chason, *supra* note 92, at 5 (arguing that bitcoin holders using custodial wallets do not have the right to enjoy their bitcoin).

187. *See* Hochman, *supra* note 45, at 18 (suggesting that the IRS should create subclassifications for cryptocurrencies to determine taxability in a more effective manner).

188. *See id.* (stating that the IRS's current classification of Bitcoin is preventing this cryptocurrency from expanding beyond its current primary use as an investment).

189. *See* Chason, *supra* note 92, at 5 (discussing the differences and similarities between property and Bitcoin).

190. *See* Warley Letter, *supra* note 54 (stating that when virtual currencies function as a currency, it makes sense to treat transactions of these currencies in a similar manner to foreign currency transactions).

191. *See* Clark & Ryznar, *supra* note 44, at 73 (arguing that by including a gain exemption, the IRS will ease the reporting burden for many cryptocurrency holders, and this in turn can lead to increased tax compliance).

purchasing transactions similarly to foreign currency transactions involves a complete classification change, whereas the property hybrid classification for investment transactions can still use components of the IRS's current property classification.[192]

To encourage the development of bitcoin as an alternate form of currency, the IRS must reduce the reporting burdens imposed by taxing bitcoin used for purchases as property.[193] Bitcoin offers distinct advantages, such as low transaction costs, that other methods of payment lack.[194] However, by treating bitcoin used for purchases as property, the IRS discourages this advantageous payment method given the reporting burdens created by the property classification.[195] To resolve this problem, the IRS must adopt the foreign currency classification for bitcoin purchasing transactions.[196] From a United States tax perspective, foreign currency is all non-American currency.[197] Furthermore, foreign currency involves two primary instances of taxation: either when a foreign currency is received from a sale or exchange, or when a change in the exchange rate causes a gain or loss relative to the value of the United States dollar.[198] Taxpayers engaging in the latter transaction must report gains and losses based upon the change in the foreign currency's value between its acquisition and disposition.[199] Through a foreign currency classification for bitcoin purchasing transactions, the IRS can

192. *See* Wiseman, *supra* note 51, at 431 (noting the large differences between the tax treatment of currency and property).

193. *See* Hsieh, *supra* note 41, at 1102 (arguing that the IRS imposes unnecessary burdens by treating purchasing transactions in the same manner as investment transactions).

194. *See* Grinberg, *supra* note 16, at 160 (stating that supporters of Bitcoin believe this currency could be ideal for both consumers and merchants).

195. *See* Johnson, *supra* note 42, at 656 (stating that the property classification discourages merchants from accepting bitcoin as a form of payment).

196. *See* Chodorow, *supra* note 89, at 371 (noting that this *de minimis* exemption excludes personal gains of $200 or less resulting from foreign currency conversions from being reported on a holder's tax return).

197. *See id.* at 370.

198. *See* Wiseman, *supra* note 51, at 432 (stating that U.S. citizens must sometimes pay taxes on gains resulting from fluctuating exchange rates).

199. *See* Chodorow, *supra* note 89, at 370–71 (stating that while in many respects, the taxation of foreign currency is similar to the taxation of property, the foreign currency taxing structure offers instances of preferential tax treatment that the property classification lacks).

capitalize on this classification's *de minimis* exception, and in turn, groom a path for bitcoin's use as more than just an investment tool.[200]

2. *Treating Ether as Foreign Currency and Audit Implications*

Instead of classifying ether as property, the IRS must treat ether, and all cryptos with a similar main function, as foreign currency.[201] The foreign currency fluctuating exchange rate has similarities to transactions taking place on the Ethereum platform.[202] Just as foreign currency transactions involve two different types of currencies, so too do Ethereum transactions.[203] Given the similarities, it makes sense for the IRS to follow a similar tax structure in both cases.[204] By mimicking the structure of foreign currency, the IRS is using part of the well-established tax code as opposed to starting fresh by creating a new tax provision just for cryptocurrencies.[205]

By using existing tax provisions, the IRS can also avoid redundant inquiries by relying on provisions with established interpretation.[206] The treatment of foreign currency is a well-established taxing structure, so when the IRS is inevitably required to interpret a murky situation within the constantly evolving world of cryptocurrency, the IRS can fall back on previous interpretations.[207]

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200. *See* Hsieh, *supra* note 41, at 1102 (arguing that the current reporting requirements imposed by the IRS create burdens for bitcoin holders).

201. *See* Warley Letter, *supra* note 54 (arguing that because a cryptocurrency shares characteristics similar to other forms of currency, "regulations and rulings that already exist[] with respect to foreign currency transactions would present a more sensible approach").

202. *See* Chodorow, *supra* note 89, at 370. Suppose that 100 Euros are purchased for $110, yielding an exchange rate of €1 to $1.1. *See id.* Later, those same 100 Euros are used to purchase an asset, but at the time of purchase, the exchange rate has changed to €1 to $1.2, causing the Euros to now be valued at $120. *See id.* This transaction yields a foreign currency gain of $10. *See id.*

203. *See id.*

204. *See* Chung, *supra* note 118, at 777 (arguing that the taxability of certain virtual currencies should be determined by whether there was a real-world economic gain).

205. *See* Chaffee, *supra* note 8, at 628 (stating that when an area, like cryptocurrency, faces few regulations, this allows regulators to take advantage of regulations that are already in place).

206. *See id.* ("The passage of any new regulation creates questions and concerns about its interpretation and implementation that often have to be litigated to be resolved. If a thin regulatory approach is taken, and existing regulation is used, regulators can harness the power and relative clarity of existing provisions.").

207. *See id.* (stating that existing statutory provisions have been fine-tuned through litigation).

The foreign currency classification would also serve to ease the reporting burden imposed on taxpayers dealing with high volumes of Ethereum transactions.[208] Those who accept ether in exchange for performing a service will often participate in this type of transaction numerous times, and calculating a gain or loss on each of these transactions as required under IRS regulations becomes infeasible.[209] Treating ether as foreign currency would allow taxpayers to forgo the complicated and time consuming task of calculating a gain or loss based upon the highly volatile price of the currency.[210] Furthermore, this classification would allow holders to take advantage of the *de minimis* treatment afforded to foreign currency conversion gains.[211]

Treating ether as a foreign currency also eases the tax accounting burden for holders realizing small capital gains from their cryptocurrency.[212] Some skeptics opposed to the IRS's current cryptocurrency taxing structure argue for a *de minimis* exception—similar to the exception found in foreign currency transactions—when it comes to taxing certain cryptocurrency gains.[213] Gains from single personal transactions involving fluctuations in a foreign currency's exchange rate are not taxed when the gains are $200 or below.[214] This *de minimis* exception will help the IRS in its pursuit of increased tax

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208. *See* Warley Letter, *supra* note 54 ("Although treating virtual currency as property is a reasonable approach for investors, it is the wrong approach for merchants and self-employed individuals who accept or use virtual currencies in the ordinary course of business.").

209. *See* Wiseman, *supra* note 51, at 434 (stating that when a cryptocurrency is used in a similar manner as currency, this has the potential to create a heavy burden on taxpayers through reporting alone).

210. *See id.* at 434–35 (stating that under the current tax system for cryptocurrencies, holders must keep detailed records of all their transactions made during the year that resulted in a gain or loss).

211. *See* Semanski, *supra* note 53, at 15 (stating that IRC § 988, which governs exchanges of nonfunctional foreign currency, contains a clause exempting the reporting of personal use transaction gains resulting from exchange rate fluctuations of $200 or less).

212. *See* Clark & Ryznar, *supra* note 44, at 73.

213. *See id.* (arguing that this *de minimis* exception "would dispose of a huge segment of virtual currency transactions, eliminating the tax compliance issue for many people since smaller transactions would not be subject to taxation"); *see also* Nellen Letter, *supra* note 53 (suggesting an updated question and answer section, consistent with the format of Notice 2014-21, detailing the imposition of a *de minimis* rule similar to the one found in § 988(e)(2)).

214. *See* I.R.C. § 988(e)(2) (stating that no gain will be recognized from exchange rate fluctuations of $200 or less in personal transactions between the time the currency was acquired, and the time it was disposed of).

compliance.[215] Not only will the foreign currency treatment help ease the IRS-imposed heavy accounting burdens on ether holders, but this change also more accurately aligns with the functionality of ether.[216] Transactions on the Ethereum network often involve exchanging one form of cryptocurrency for another; thus, these transactions share many similarities with gains resulting from fluctuations in currency exchange rates.[217]

More taxpayer guidance through specific cryptocurrency classification also results in a more effective and efficient audit process for the IRS.[218] Cryptocurrency transactions that stray from the classifications discussed within IRS guidelines can be flagged during an audit, which will allow the IRS to further investigate if needed.[219] Given the large number of cryptos available today, the IRS cannot possibly set forth guidance that covers the functionality of each crypto.[220] However, of the 14% of Americans adults who own cryptocurrency, 10.22% of the holders possess either bitcoin or ether, with the remaining 3.78% spread out among the nearly 5,800 other types of digital currency.[221] The IRS can never issue an amount of

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215. *See* Hochman, *supra* note 45, at 17. The article points out that "[w]ith millions of virtual currency transactions happening annually, the IRS expected a torrential rainstorm of reporting after 2014. Instead, less than a light drizzle of 1,000 taxpayers reported a virtual currency transaction in 2014 or 2015." *Id.* The 10,000 letters sent by the IRS proves that tax compliance has not increased enough to keep the IRS satisfied. *See* McIntosh, *supra* note 123.

216. *See* Gomez Letter, *supra* note 54 (arguing that without a *de minimis* exception, the burdens associated with reporting a potentially large amount of cryptocurrency gain transactions may overwhelm taxpayers); *see also* Chodorow, *supra* note 89, at 371.

217. *See* Wiseman, *supra* note 51, at 432 (arguing that the IRS could have classified cryptocurrencies in a manner similar to the exchange of one currency for another).

218. *See* Shapiro, *supra* note 43, at 4. Existing IRS guidance leads to questions about "how to obtain information on transactions that are in many ways currently beyond the reach of [the IRS's] information reporting rules, and how to manage resources effectively." *See id.* By enacting more specific guidelines, the IRS is simplifying the process not only for taxpayers, but also for its agents. *See id.*; *see also* Alsindi, *supra* note 42 (describing how TokenSpace aims to specifically classify different types of cryptocurrencies in order to better understand how cryptocurrencies within a given classification are interrelated).

219. *See* Shapiro, *supra* note 43, at 4 (arguing that the IRS is searching for ways to increase cryptocurrency tax compliance given its limited resources).

220. *See id.* at 4, 6 (arguing that the IRS is constrained by its limited resources, and it may need to rely on voluntary reporting by cryptocurrency holders rather than relying on "increasingly aggressive tax law enforcement").

221. *See* INVESTING.COM, *supra* note 30; *How Many People Own Cryptocurrency*, *supra* note 30 (showing that the IRS could issue specific guidelines

guidance that covers each type of cryptocurrency, but by discussing the two types of currency that compose the vast majority of transactions, the IRS increases the likelihood of tax compliance.[222]

B. Creating a Feedback Loop with Intermediaries

The IRS must team up with intermediaries that can help expose pseudonymous crypto transactions.[223] By obtaining summonses on intermediaries like Coinbase, the IRS is taking a page out of the playbook it followed for offshore bank accounts.[224] Cryptocurrency's pseudonymity often helps to draw holders, so some will oppose a relationship between the IRS and intermediaries.[225] That said, the IRS is more concerned with collecting the proper amount of taxes from all taxpayers than appeasing all holders.[226] The average holder who conducts a cryptocurrency transaction is more than likely to interact with an intermediary at some point.[227] By working with intermediaries when possible, the IRS can use the data that intermediaries collect to further deanonymize cryptocurrency transactions.[228]

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on these two types of cryptocurrencies, and the vast majority of cryptocurrencies would be addressed).

222. *See* Hsieh, *supra* note 41, at 1105 (suggesting that Congress is able to narrow the definition of virtual currency and provide separate classifications instead of treating this entire group of currency as property).

223. *See* Wiseman, *supra* note 51, at 436 (stating that if the IRS wants to monitor cryptocurrency transactions, it needs to impose regulations on intermediaries).

224. *See* Shapiro, *supra* note 43, at 19 ("As with the early years of the IRS's Swiss Bank enforcement efforts, 'John Doe' summonses can help set the stage for future IRS enforcement actions.").

225. *See* Tsukerman, *supra* note 3, at 1168 (stating that while taking away the anonymity of bitcoin transactions "may drive away some of Bitcoins' initial users in the libertarian scene, the potential of Bitcoin and the blockchain are too great to be lost in an attempt to accommodate such idiosyncratic beliefs").

226. *See id.* (stating that the benefits derived from taking away the anonymity from bitcoin transactions is far too great to be lost on holders who disagree with this approach).

227. *See* NARAYANAN ET AL., *supra* note 23, at 149 ("In the course of using Bitcoin over a few months or years, most users eventually interact with an exchange or other centralized service provider.").

228. *See* Shapiro, *supra* note 43, at 12 (stating that the IRS must create a feedback loop from the information it obtains from intermediaries, similar to what the IRS did involving foreign bank accounts and the information it received from foreign banks).

1. *Mandating Intermediary Tax Reporting*

Third-party intermediaries, such as Coinbase, should provide its users with tax information in order to ease the tax reporting burdens experienced by cryptocurrency holders.[229] According to its website, Coinbase is used as an online platform to buy, sell, transfer, and store digital currency.[230] One component of the Coinbase platform, referred to as Coinbase Pro, can serve a similar purpose to a broker.[231] In most cases, when a user engages in a sale, brokers like Morgan Stanley are required to issue the user a 1099-B tax form providing purchase and sale information, and the IRS should encourage entities like Coinbase Pro to provide this same information to its users.[232] Cryptocurrency intermediaries often avoid defining their digital assets as securities, but the IRS should discourage this practice when a given digital asset is substantially similar to a security.[233] The SEC acknowledges that the developing cryptocurrency market continues to raise new regulatory questions, but since Coinbase is eager to tout itself as a regulated broker–dealer, Coinbase should be encouraged to issue its users tax reporting information.[234] While entities involved in cryptocurrency transactions face some regulations, the specific obligations imposed on these intermediaries continue to evolve.[235] By requiring

229. *See* Semanski, *supra* note 53, at 15 (stating that other third-party websites, such as CoinTracking, allow users to calculate taxable gains using various accounting methods such as FIFO and LIFO); *see also* COINTRACKING, *supra* note 147 (stating that the website analyzes users' cryptocurrency transactions and generates reports indicating a user's gains and losses, along with reports that indicate proper ways to account for these gains and losses on the user's tax return).

230. *See Buy and Sell Cryptocurrency*, *supra* note 29.

231. *See* Viswanathan, *supra* note 85, at 323 (stating that taxpayers benefit from the regulations imposed on brokers that require the issuance of tax related forms that serve to simplify the tax reporting process).

232. *See* Warley Letter, *supra* note 54; *see also* Viswanathan, *supra* note 85, at 323 (stating that customers utilizing brokers, such as Morgan Stanley, "benefit from standardization with regard to products purchased and other regulatory safeguards").

233. *See* Sells, *supra* note 34 (stating that if intermediaries defined the digital assets involved in their business as securities, these intermediaries would be required to issue holders 1099-Bs).

234. *See* Hirji, *supra* note 34 (stating that in June 2018, Coinbase was "on track to operate a regulated broker-dealer, pending approval by federal authorities"); *see also Joint Staff Statement*, *supra* note 34 (stating that the SEC has been working with intermediaries to develop reasonable and effective regulations).

235. *See* Middlebrook et al., *supra* note 152, at 278. "While it does not address all of the duty issues that may apply to providers of cryptocurrency products and services discussed above, the Uniform Regulation of Virtual-Currency Business Act

intermediaries to provide its users with tax information, the IRS will be heading towards increased tax compliance.[236]

Simplifying the tax reporting process for cryptocurrency holders will lead to increased compliance among this population.[237] Intermediaries like Coinbase provide some holders with a form 1099-K, which helps these holders calculate reportable taxable gains.[238] However, Coinbase only issues this form to holders who engage in frequent cryptocurrency transactions.[239] Lower reporting thresholds and more intuitive forms from intermediaries, along with detailed cryptocurrency classifications, would all help to ensure a simpler tax reporting process.[240]

Form 1099-K reports the *total* gross amount of transactions made to the respective entity during the calendar year.[241] This form should more closely resemble form 1099-B, which shows a breakdown of each individual transaction, along with the applicable gain or loss.[242] The SEC hopes to treat cryptocurrency exchanges like Coinbase Pro similarly to stock brokers, which means that additional tax regulations may be on the horizon for these exchanges.[243] Requiring intermediaries to provide a detailed tax form for every cryptocurrency transaction provides taxpayers with the tools

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('URVCBA') does create a framework for regulating intermediaries engaged in holding, exchanging, or transferring virtual currencies." *Id.*

236. *See id.* at 267, 276 (stating that while the obligations imposed on third-party intermediaries are not well defined, these intermediaries are being exposed to lawsuits, illustrating the need for the issuance of uniform guidelines defining the obligations of cryptocurrency intermediaries).

237. *See* Shapiro, *supra* note 43, at 16 (arguing that eventually, the IRS will likely require third-party intermediaries to provide it with information pertaining to the cryptocurrency holders using the intermediaries' services).

238. *See* Clark & Ryznar, *supra* note 44, at 74 (stating that third-party intermediaries increase tax compliance by providing some cryptocurrency holders with useful tax reporting forms).

239. *See id.* ("Coinbase, the largest [B]itcoin platform, currently issues [f]orm 1099-Ks to a select group of users—those with at least 200 annual transactions totaling at least $20,000 who use Coinbase for business purposes.").

240. *See id.* (arguing that in order to provide the IRS with a more complete picture of the scope of cryptocurrency transactions, intermediaries should be required to provide users with form 1099-K, regardless of the size of the users' transactions).

241. *See* 1099-K INSTRUCTIONS, *supra* note 156, at 4 (stating that intermediaries only need to report the total dollar amount of all reportable transactions for any user requiring a form 1099-K).

242. *See* 1099-B INSTRUCTIONS, *supra* note 157, at 2.

243. *See* Sells, *supra* note 34 (stating that the SEC "plans to deal with cryptocurrencies and the platforms on which they are traded the same way it handles stocks traded on a stock exchange").

necessary to accurately and efficiently report their taxes.[244] While some crypto holders simply oppose paying taxes, other holders are merely confused by the seemingly complex American taxation system, and detailed tax forms will help ease this confusion.[245]

Simplifying tax reporting for cryptocurrency holders through detailed and easy-to-understand tax forms will at least increase compliance among the confused holders.[246] Some skeptics may argue that the availability of free online software like CoinTracker, which helps holders calculate cryptocurrency taxes, makes certain crypto-related tax forms unnecessary given that holders can calculate taxes on their own.[247] In reality, one of the most surefire ways the IRS can increase cryptocurrency tax compliance is by simplifying the tax reporting process.[248] As such, by requiring intermediaries to provide taxpayers with tax forms, the IRS ensures better tax compliance.[249]

Intermediaries must provide a uniform valuation method for holders to ensure consistency.[250] There are numerous online cryptocurrency exchange platforms that allow holders to determine the value of their cryptocurrency, and each exchange offers a different price for a given amount of crypto.[251] The variation among the different exchanges leads to inconsistent tax reporting among

244. *See Tales from the Crypto*, *supra* note 35 (arguing that the IRS has proven that cryptocurrencies are on its radar, and as a result, cryptocurrencies will be subject to regulatory scrutiny).

245. *See* Shapiro, *supra* note 43, at 20–21 (arguing that "many early adopters of cryptocurrency, who are now among some of the wealthiest, are fiercely libertarian and anti-government in their political learnings").

246. *See* Viswanathan, *supra* note 85, at 283 (arguing that the IRS has a history of relying on information provided by intermediaries to ensure tax compliance).

247. *See* Walker, *supra* note 156 (arguing that the IRS must provide guidance that further elaborates on the uses of a 1099-B and 1099-K within the realm of cryptocurrencies).

248. *See id.* (stating it is shocking that the IRS has yet to require intermediaries to issue some sort of form 1099 for cryptocurrency transactions given the success the IRS has witnessed with requiring entities to issue taxpayers forms such as W-2s and 1099-Bs).

249. *See* Viswanathan, *supra* note 85, at 283 (arguing that the taxing system cannot properly function without reliance on centralized intermediaries and the information that these entities provide).

250. *See* Lambert, *supra* note 148, at 102 (suggesting that the IRS could identify at least one online currency converter that holders could use to consistently value their cryptocurrency).

251. *See* Egorova, *supra* note 151 (stating that there is no such thing as a stable or unanimous price for a cryptocurrency such as Bitcoin, and that prices change depending on the purchase and sale activity taking place on a given exchange).

cryptocurrency holders.[252] To combat this inconsistency, the IRS must designate one particular block explorer to serve as the official valuation source of cryptocurrency transactions, thereby ensuring all holders use the same source information.[253] Not only will this consistency reduce taxpayer discretion, but it will also improve the IRS auditing procedures.[254]

2. *Deanonymizing Without Intermediaries*

For holders not using intermediaries, the IRS can still minimize the pseudonymity of these transactions.[255] While the average holder will likely interact with an intermediary at some point, more savvy holders can manage their own cryptocurrency.[256] That said, these savvy holders can still be tracked down in various manners, including through the use of algorithms that use statistical data from transactions with real-world identities.[257] This process can become even more simplistic when holders engage in careless activity.[258] For example, a holder may post their bitcoin access code on a public forum, seeking to obtain donations for a given cause.[259] This action can create a direct link between the holder's real-world identity and their access code, which is valuable information for the IRS.[260] Some crypto experts argue that holders can be convinced to associate their cryptocurrency

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252. *See* Nellen Letter, *supra* note 53 (providing examples of inconsistent prices among various popular exchanges).

253. *See* Agrawal, *supra* note 24 (stating that the use of a block explorer creates "a decentralized honor system," which is something that would be useful in ensuring tax reporting consistency among various holders).

254. *See id.* (stating that a block explorer can be used to gather data about a given number of cryptocurrency transactions).

255. *See* Godlove, *supra* note 6, at 17 (stating that while the identity of bitcoin users may be difficult to directly identify, the blockchain publicizes the raw data associated with bitcoin transactions, and this data may be used to indirectly track down the identity of holders).

256. *See* NARAYANAN ET AL., *supra* note 23, at 149 (acknowledging that while most users will eventually interact with an intermediary, there are still methods for deanonymizing holders who stay away from intermediaries).

257. *See id.* ("History shows that deanonymization algorithms usually improve over time when the data is publicly available, as more researchers study the problem and identify new attack techniques.").

258. *See id.* (listing carelessness as a method for identifying individual holders).

259. *See id.*

260. *See id.* (stating that if an access code is posted online and the holder is not using an anonymity service, this process can deanonymize the applicable transactions).

transactions with pieces of personally identifying information, but this is a naïve approach in isolation given the cryptocurrency community's overall disdain for regulation.[261]

The IRS must continue developing and using tools that help identify so-called anonymous users to show the cryptocurrency community that it cannot hide from the IRS.[262] Even bitcoin, a cryptocurrency with perceived anonymity, involves transactions that take place on the public blockchain.[263] Despite the public aspect of the transactions, difficulty arises when linking individuals to particular transactions that take place without leaving behind identifying information tying the true identity of the holder to their public address.[264] However, by combining techniques such as receiving information from intermediaries and using computer scientist-developed analytic programs, the IRS will be able to further deanonymize the world of cryptocurrency.[265] The blockchain's public nature allows for such deanonymizing strategies.[266]

The IRS must develop and implement strategies to link cryptocurrency addresses to real-world identities for those engaging in large transactions.[267] There are various tools the IRS can use to accomplish this goal, including the use of web trackers and cookies, which are pieces of information that track a website user's information.[268] Web trackers also typically send information to major

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261. *See* Tsukerman, *supra* note 3, at 1168 (stating that holders may be convinced to comply with regulations through a combination of incentives and disincentives).

262. *See* Godlove, *supra* note 6, at 11 (arguing that the vast majority of cryptocurrency users will be identified in the near future thanks to developments by computer scientists seeking to deanonymize these previously anonymous transactions).

263. *See* Grinberg, *supra* note 16, at 179 (stating that statistical techniques can be used on the blockchain to further deanonymize cryptocurrencies).

264. *See id.* (stating that while bitcoin transactions are public information, it may be difficult to tie individuals to a given transaction given the lack of personally identifying information associated with transactions).

265. *See id.* (stating that it may be possible to take away cryptocurrency's anonymity by using a variety of techniques).

266. *See* NARAYANAN ET AL., *supra* note 23, at 149 (stating that algorithms become more accurate and effective over time as more computer scientists are able to analyze the public blockchain data).

267. *See Bitcoin Transactions Aren't as Anonymous as Everyone Hoped*, *supra* note 162 (comparing bitcoin addresses to authors using pseudonyms in that privacy is only maintained so long as that pseudonym is not linked to a real-world identity).

268. *See id.* (stating that trackers, cookies, and other types of information leaks make it possible to link holders to the cryptocurrency transactions that they make);

online platforms such as Google and Facebook, and this information can provide details about a cryptocurrency holder's transaction and browsing history.[269] In some cases, these trackers even leak information pertaining to a holder's personal information, which gives government entities a prime opportunity to uncover the identity of cryptocurrency holders.[270]

C. Encouraging Compliance Through Voluntary Reporting Programs and Power Moves

The IRS must encourage compliance through voluntary reporting programs and must punish those who remain noncompliant after failing to take advantage of this opportunity.[271] The IRS can threaten to track down holders who have failed to properly report their taxes, but identifying each and every noncompliant holder is an unrealistic and inefficient goal.[272] The IRS must convince noncompliant holders to right their wrongs and punish those who do not take advantage of this opportunity.[273]

The IRS should base its cryptocurrency voluntary reporting program off of the previously enacted offshore bank account program.[274] Under this program, the longer the taxpayer waited to accurately report his or her foreign bank accounts, the higher the penalties to which the IRS subjected that taxpayer.[275] Accordingly,

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see also What Are Cookies?, *supra* note 23 (stating that the purpose of cookies is to allow the website to track a user's visits and activities).

269. *See Bitcoin Transactions Aren't as Anonymous as Everyone Hoped*, *supra* note 162 (stating that essentially, websites leak personal information, which can be a useful tool for associating cryptocurrency addresses with real-world identities).

270. *See id.* (stating that when this information leaks onto the web, "governments, law enforcement agencies, and malicious users can readily collect and analyze it").

271. *See* Shapiro, *supra* note 43, at 12 (arguing that the IRS can convince people to come forward and correct their previously unreported cryptocurrency in exchange for lower penalties).

272. *See* Marian, *supra* note 8, at 46 (arguing that identifying cryptocurrency accounts is not a complete solution, "and cannot be used systematically to address the problem").

273. *See* Shapiro, *supra* note 43, at 12 (describing how taxpayers with offshore bank accounts who failed to previously report these accounts faced increasing penalties the longer they waited to properly report).

274. *See id.* (stating that the IRS adopted a position of compromise to those who were willing to cooperate and correct their previous misreporting).

275. *See id.* ("Penalties started at 20% of a taxpayer's largest offshore account balance," then gradually rose until the rate peaked at 50% for those taxpayers who waited too long to get with the program).

taxpayers were encouraged to correct their underreported income sooner rather than later, and this encouragement also benefited the IRS through the principle of time value of money.[276] The IRS's decision to pursue noncompliant offshore bank account holders mostly through a voluntary program rather than criminal prosecutions corresponded to a shift shown by the IRS in recent years.[277] The IRS will continue to shift away from criminal prosecutions and will instead rely on the use of data collection from intermediaries, summonses, and voluntary reporting programs to fight cryptocurrency noncompliance.[278]

Data collection efforts and voluntary reporting programs will not correct all instances of noncompliance, but these actions will certainly bring about improvements.[279] The harsh reality is that sophisticated cryptocurrency holders who wish to remain anonymous may go to extreme lengths to do so, but as software developers continue to introduce technology used to track cryptocurrency transactions, holders are struggling to remain under the radar.[280] Rather than targeting holders focused on remaining anonymous, the IRS must first target the easier to track holders who refuse to cooperate.[281] By pursuing these noncompliant holders, the IRS can send a message emphasizing that cryptocurrency transactions are not completely anonymous, and that actions will be taken to hold noncompliant taxpayers accountable.[282]

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276. *See id.* (describing how as of 2016, the IRS had collected over $10 billion from taxpayers participating in the voluntary reporting program by correcting their previously underreported income pertaining to offshore bank accounts).

277. *See id.* at 14 (stating that instead of building criminal cases against taxpayers, the IRS Criminal Investigation agents have started to focus on new types of enforcement).

278. *See id.* ("[I]nstead of focusing primarily on prosecutions, a large-scale disclosure effort may also be in the works, modeled after the IRS's Offshore Voluntary Disclosure programs.").

279. *See* Gomez Letter, *supra* note 54 (arguing that pursuing tactics such as mandatory reporting requirements for third-party intermediaries may still be difficult to impose given the "difficulty associated with decrypting private keys").

280. *See* Roberts, *supra* note 161 (stating that holders who value anonymity can switch to cryptocurrencies that are more difficult for the IRS to track).

281. *See id.*

282. *See* Godlove, *supra* note 6, at 11 (stating that the blockchain can be used to identify the majority of cryptocurrency holders with a high degree of confidence).

CONCLUSION

Updated cryptocurrency guidance will benefit crypto holders and the IRS itself.[283] By differentiating the taxation of bitcoin and ether, the IRS is recognizing the unique characteristics of each currency, while also providing itself with a more effective audit template.[284] The IRS must take advantage of the information held by intermediaries to create a feedback loop between itself and these third-parties.[285] The blockchain's public ledger is a foundational component of many cryptocurrencies, and the IRS must efficiently employ this public information whenever possible.[286] For cryptocurrency holders conducting transactions without intermediaries, the IRS should exploit the inherently public nature of cryptocurrency transactions by continuing to develop software that can associate public addresses with real-world identities.[287] As cryptocurrencies evolve, so too will the regulations imposed on this currency.[288] Entities like the IRS will continue to update their cryptocurrency guidance, meaning that these suggestions merely serve as a starting point for addressing the IRS's concerns with noncompliant cryptocurrency holders.[289]

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283. *See* Hochman, *supra* note 45, at 17 (stating that the IRS must adapt to the growing and expanding realm of cryptocurrencies, or else run the risk of losing control of this technology).

284. *See* Wiseman, *supra* note 51, at 437 (arguing that the current guidance issued by the IRS is inefficient, and perhaps even impossible to enforce from an audit standpoint given its broadness).

285. *See* Shapiro, *supra* note 43, at 20.

286. *See Know What Happens on Blockchains*, *supra* note 24 (describing techniques used on the blockchain to reveal holders' identities).

287. *See* Grinberg, *supra* note 16, at 179.

288. *See Joint Staff Statement*, *supra* note 34 (describing how regulations must adapt to the changing world of cryptocurrency).

289. *See* I.R.S. Tax Notice 2014-21 (Apr. 14, 2014) (acknowledging that there are still unanswered questions pertaining to the taxation of cryptocurrency).