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Bitcoin Taxation: Recommendations to Improve the Understanding and Treatment of Virtual Currency

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I. Executive Summary

A. Purpose

The purpose of this paper is to assess the Internal Revenue Service's (IRS) current tax guidance as it relates to virtual currency, highlighting both positive and negative aspects. Our goals are to provide policymakers with additional information regarding the tax responsibilities associated with bitcoin under this new guidance as well as provide options to aid the IRS in fulfilling its mission of helping America's taxpayers understand and meet their tax responsibilities while simultaneously encouraging innovation in the bitcoin and virtual currency ecosystem.

B. Assessment of Current IRS Guidance

In Notice 2014-21, the IRS classifies bitcoin as property rather than currency. This classification brings some clarity to a situation otherwise open to interpretation. Taxpayers now know that bitcoin gains may qualify for capital gains treatment in some circumstances. However, by declaring every individual bitcoin transaction to be a taxable event, the IRS guidance imposes a substantial accounting burden on taxpayers. Theoretically, each time that a taxpayer uses bitcoin, the taxpayer must calculate whether the transaction results in a gain or loss. This calculation involves knowing the price at which those bitcoins were initially purchased and the value of the product purchased. The taxpayer must also identify precisely the particular bitcoins involved in each transaction. These burdens are likely to discourage the use of bitcoin and the development of virtual currency infrastructure.

C. Recommendations

This paper briefly summarizes two methods by which the IRS can continue to classify bitcoin as property but can minimize the administrative burden on taxpayers. These proposals would allow the IRS to carry out its mission without discouraging innovation in digital currency.

First, the IRS might replicate the foreign currency exemptions currently contained in Section 988 of the Internal Revenue Code (Code).[1] Section 988 minimizes the burden on foreign travelers engaging in certain foreign currency transactions by exempting small gains from tax and reporting requirements.

Second, the IRS might create a de minimus safe harbor for bitcoin transactions. Applying de minimus exemptions to bitcoin transactions would allow taxpayers to engage in small transactions using bitcoin and other crypto-currency technologies without an overly burdensome accounting system. Such an approach could mirror the capitalization regulations under Section 263(a) of the Code. The Section 263(a) regulations authorize two non-statutory exemptions to the capitalization rules: (1) a de minimus safe harbor exemption in certain circumstances for property with a cost not exceeding $5,000; and (2) a deduction for the cost of property that would otherwise be capitalized if such property cost less than $500. This approach is unique in that it would not likely require a statutory mandate from Congress prior to its implementation.

II. An Analysis of Notice 2014-21's Treatment of Bitcoin

A. What is Bitcoin?

Bitcoin is a peer-to-peer system built in 2008 that allows for online payments without a trusted central authority. The technology has aspects of both currency and property and can be used for investment or trade. These aspects have made it unique among other assets when being classified using existing tax codes and regulatory frameworks.

Bitcoin is held by "addresses" that can be grouped into "wallets." The accounting system for bitcoin is unique in that the ledger that keeps track of which "addresses" own which bitcoins are completely public, as are all transactions. This open ledger is referred to as the "blockchain" and is part of what gets technologists excited about the potential for bitcoin to advance the ways in which money, property, and the Internet operate in the future.

Because the IRS in their guidance referred to "digital currency" rather than bitcoin specifically, we will refer to digital currency as a blanket term that covers both bitcoin as well as other cryptographically-based currencies.

B. Current IRS Guidance

In March 2014, the Internal Revenue Service (IRS) issued Notice 2014-21 (Notice)[2] describing how existing general tax principles should be applied to transactions using virtual currency, specifically bitcoin. In doing so, the IRS provided a measure of clarity to individuals who have been using virtual currencies as a method of payment for goods and services or have been holding virtual currencies as an investment. Taxpayers now know, for example, that certain bitcoin gains can qualify for capital gains treatment.

The IRS made two important clarifications in Notice 2014-21. First, the IRS declared that bitcoin is property, not currency. As a result, the tax principles generally applicable to property transactions apply to transactions using virtual currency. Second, the IRS declared that "the use of convertible

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virtual currency to pay for goods or services in a real-world economy transaction, has tax consequences that may result in a tax liability." In other words, every bitcoin transaction may give rise to a taxable event.

The IRS additionally clarified that the Notice applies to bitcoin as an investment (capital asset), bitcoin as a method of employer-employee payment, and bitcoin created through the efforts of bitcoin "miners." Bitcoin miners are individuals or organizations that devote computer processing power to processing bitcoin transactions and solve computer algorithms associated with bitcoin. These miners receive additional bitcoin as payment for their computer processing.

As a result of this clarification, however, the Notice created burdensome reporting and accounting requirements for taxpayers that are likely to inhibit the development of virtual currency-related applications and infrastructure. Given the treatment of bitcoin as property, each time that a taxpayer uses bitcoin, the taxpayer must calculate whether the transaction results in a gain or loss to ensure proper reporting for tax purposes. Additionally, the Notice indicates that this classification would be applied retroactively to transactions taking place prior to March 2014. This paper recommends that policy makers and the IRS consider means of ameliorating these burdens and thereby provide room for innovation within the virtual currency space.

C. Assessment of IRS Guidance

The stated mission of the IRS is to "provide America's taxpayers top quality service by helping them understand and meet their tax responsibilities and enforce the law with integrity and fairness to all.[3]" While Notice 2014-21 does clarify how taxpayers should treat bitcoin transactions, the Notice unnecessarily burdens the use of virtual currency as a means of exchange for goods or services. Additionally, the Notice leaves a number of questions about bitcoin tax treatment unanswered.

D. Unanswered Questions

Questions that remain open to interpretation after Notice 2014-21 include the following:

- *Share identification*: The Notice does not identify what type of accounting structure must be used with virtual currencies. As a result, some users may find it in their best interest to utilize first-in-first-out (FIFO) accounting, while other taxpayers may deem it best to use last-in-first-out (LIFO) accounting. A problem will arise, however, when specific-share identification is required as proof of consistent accounting. Specifically, the two difficulties unique to the virtual currency space are: (1) the lack of specific-share identification in the current incarnation of bitcoin exchanges; and (2) the current inability of virtual currency wallets to specifically identify individual units of virtual currency. Simply put, a bitcoin wallet that receives different bitcoin amounts at different prices will be unable to maintain accurate specific share identification.

- *The availability of Section 1031 Like-Kind Exchanges*: Section 1031 allows taxpayers to defer recognition of gains by exchanging property for other like-kind property. The typical case involves a taxpayer who sells one house only to purchase a second. If the taxpayer elects to use Section 1031, no gain is recognized upon the first sale (although this gain is potentially recognizable when the second home is sold). Section 1031 does not apply to the exchange of different currencies, but since the IRS has categorized bitcoin as property, a question exists as to whether bitcoin might be exchanged for a different crypto-currency also treated as property—arguably "like-kind" under Section 1031.

E. Burdensome Reporting

Notice 2014-21 comes with burdensome reporting and accounting requirements. The Notice declares that every transaction involving virtual currency, no matter how small, constitutes a taxable event where gain or loss must be calculated:

> If the fair market value of property received in exchange for virtual currency exceeds the taxpayer's adjusted basis of the virtual currency, the taxpayer has taxable gain. The taxpayer has a loss if the fair market value of the property received is less than the adjusted basis of the virtual currency.

Most users of virtual currency make hundreds of purchases and currency exchanges a year. If bitcoin users are required to keep track of the cost basis and current fair market value at time of exchange of each bitcoin they own, users may be less likely, if not completely unwilling, to use virtual currency to engage in commerce. Even if the burden could be alleviated by virtual currency technology that could eventually aid bitcoin users in tracking bitcoin transactions, the burden would remain on the taxpayer. The same would be true for foreign currency, and the IRS has recognized that the de minimus tax revenues that might be generated from small currency transactions do not merit taxpayer reporting and accounting (nor IRS auditing).

Improving IRS treatment of bitcoin will lead to greater usage of virtual currencies, in turn leading to the development of apps, protocols, and infrastructure that will allow for a more seamless accounting and tax reporting for users of virtual currency. For example, just five weeks after the IRS released the Notice, Coinbase (a leading bitcoin company) developed and provided an online tool for its users that completes basic cost-basis and gain calculations based on a FIFO accounting structure. While this tool does not yet perfectly allow users to track all necessary accounting related to virtual currency, the quick development of the tool provides an example of the type of automated system that is likely to be developed to aid bitcoin users in accounting and tax reporting. By encouraging the use of virtual currency, the IRS can simultaneously encourage virtual currency companies develop technologies to assist their users in properly reporting transactions as necessary, resulting in increased overall taxpayer compliance.

Conversely, the Catch-22 that results from guidance such as the latest Notice is that in the absence of an environment encourages users to engage in commerce with virtual currencies, the incentives for companies to develop reporting systems are lowered because fewer users will be willing to engage in

commerce using virtual currency. The growth of additional infrastructure and technology around the virtual currency is driven solely by the usage of that virtual currency, and guidance which makes the use of virtual currency unappealing to the average consumer may reduce the likelihood of further technological advancement.

F. Why Encourage Virtual Currency?

Virtual currencies have the potential to impact consumers and corporations in a wide variety of ways, starting with the immediate advantages of reducing transaction costs and permitting instant, safe execution of large transactions without needing a "middleman" bank or credit card company

Virtual currencies generally use a public ledger of transactions and balances to keep track of which accounts own which pieces of virtual currency. Many virtual currencies, including bitcoin, allow metadata to be attached to transactions. With additional technology, it is not difficult to envision a world in which virtual currency protocols are used to not just complete financial transactions, but contractual ones as well.

One technological innovation already being implemented is the "colored coin" concept, in which small bits of virtual currency are modified to represent real-world property. Once the modification has been completed, these representative coins can be traded more freely and accounted for on a peer-to-peer model. The peer-to-peer model replaces the current virtual currency setup, which relies on a centralized issuer who must keep track of the validity and ownership of every piece of property issued.

Multi-signature technology is another example of an innovation that can help both consumers and companies prevent fraud and lower costs. A typical bitcoin address (basically, an account or virtual wallet that controls bitcoin the currency) has only one entity that controls the funds held by that address. "Multi-signature" refers to a bitcoin address whose funds are controlled by a vote among multiple parties. As Jim Harper, general counsel for the Bitcoin Foundation, recently summarized:

> Consumers can have greater control over their "programmable" money even while it is held by a financial services provider. These innovations, and others to come, will tend to make consumer oversight of Bitcoin businesses easier — and government oversight a less important part of the mix. Consumers will be better positioned to do their own monitoring and, in the best case, to enjoy cryptographic proof that they are being properly served.[4]

One simple implementation of this technology is use as an escrow for purchasers of products. In this instance, a purchaser would control one vote of the escrow, a seller would control a second, and the third would be given to an arbiter who would perform the role of financial clearinghouses and credit card companies in the event of a fraud complaint.

The two technologies above are just examples of improvements that are already being developed as a result of the rise of virtual currencies whose ledgers are public and whose code is open-source. Additional potential improvements that can aid both consumers and businesses include allowing financial institutions to not only monitor but display publicly an ongoing or regular audit of assets, bringing financial services to the 10 million US citizens without bank accounts.[5]

By creating a disincentive to using virtual currency in Notice 2014-21, the IRS may deprive consumers of a budding technology that has the potential to save time and money, increase access to banking and liquidity, and reduce the rate of fraud and corporate insolvency.

III. Options to Minimize Overly Burdensome Reporting

A. The Foreign Currency Exemption

One alternative to the IRS' current guidance that would lessen the arduous nature of the reporting requirement outlined in the Notice is to create an exemption for small personal currency gains from virtual currency like the exemption that exists for foreign currency under Section 988. Under Section 988(e), personal currency gains of $200 or less are not taxable. The rationale behind this exclusion is the burdensome nature of reporting small personal currency gains as a result of traveling abroad.

In a like manner, personal gains from bitcoin transactions, *i.e.*, gains that are not associated with a trade or business, but rather ordinary consumer activity, could be exempt from taxation to the extent that such gain did not exceed $200. For example, suppose a consumer purchased a $450 microwave with bitcoin. If the consumer had a basis in the bitcoin of at least $250, no tax would be owed. Such a rule would allow consumers, like foreign travelers, to use bitcoin to routinely purchase small items without worrying about potential tax and reporting obligations. The rules that would otherwise apply to bitcoin purchases used for a trade or business and to personal bitcoin gain over $200 would not be modified by such a rule.

B. The Section 263 Safe Harbor Exemption

A second potential solution to the burdens imposed by Notice 2014-21 would be for the IRS to create a de minimus safe harbor for small bitcoin gains, similar to current capitalization exemptions which allow a business owner to expense (rather than capitalize) certain small purchases under Sections 263(a) and 162(a) of the Code.

Section 263(a) generally requires the capitalization of amounts paid to acquire, produce, or improve tangible property. Such treatment means that business owners may not immediately deduct the entire cost of certain purchased property. Section 162, on the other hand, allows a deduction for all of the ordinary and necessary expenses paid or incurred during the taxable year in carrying on any trade or business. Such expenses include the costs of certain supplies, repairs, and maintenance.

The IRS has issued regulations providing criteria to distinguish between expenditures which must be capitalized and those which may fully be deducted in the taxable year in which they were incurred. In addition, the regulations contain two non-statutory de minimus exemptions from the capitalization requirements of Section 263.

First, a taxpayer who uses an applicable accounting system may rely on a "de minimis safe harbor" to expense or deduct immediately money spent on property which would otherwise be required to be capitalized under Section 263 if the amount paid for such property does not exceed $5,000. Second, a

taxpayer without an approved accounting system may expense or deduct an item (rather than capitalize) if the item costs less than $500. The final regulations also note that the IRS and the Department of the Treasury may "change the safe harbor amount through published guidance."

The IRS and Department of the Treasury could issue similar regulations for bitcoin, providing that—perhaps subject to certain accounting strictures—bitcoin users owe no tax on gains below a certain dollar amount and thus need not track and report every small transaction. *The history and existence of the Section 263 regulations, moreover, suggest that the IRS might implement the proposed exemption without statutory approval.*

IV. Conclusion

The IRS is in the difficult position of adapting the Code to new technologies and financial structures, and this paper seeks to aid in the process by identifying potential issues that may arise under Notice 2014-21. Of particular concern is the stifling effect on virtual currency technology that the Notice's burdensome reporting and accounting requirements may cause. A modified approach that would allow bitcoin commerce and innovation to flourish provides many potential benefits to U.S. businesses and consumers. This paper identifies two possible approaches that would allow bitcoin users to engage in small commercial transactions without incurring burdensome reporting obligations (with minimal tax revenue raised) all while allowing the IRS to capture gains from large business transactions and to collect capital gains taxes on bitcoin held for investment purposes.

Endnotes

1 References to the Code refer to the Internal Revenue Code of 1986, as amended.

2 Notice 2014-21, 2014-16 I.R.B. 938.

3 *The Agency, its Mission and Statutory Authority*, Internal Revenue Service, http://www.irs.gov/uac/The-Agency,-its-Mission-and-Statutory-Authority.

4 Jim Harper, *Consumer Protection in the Bitcoin Era*, American Banker (May 14, 2014), http://www.americanbanker.com/bankthink/consumer-protection-in-the-bitcoin-era-1067434-1.html.

5 *2011 FDIC National Survey of Unbanked and Underbanked Households*, Federal Deposit Insurance Corporation (September 2012), https://www.fdic.gov/householdsurvey/.