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The Tax Treatment of Tokens: What Does It Betoken?

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Digital tokens have been used to raise substantial amounts of money. But little attention has been paid to the tax consequences surrounding their issuance and sale. There are significant potential tax liabilities lurking in the use of digital tokens. But, because of the anonymity inherent in the blockchain structures used for the issuance of tokens and payments for them, there is a significant question as to whether those tax liabilities will ever be collected.

In the first six months of 2017, digital tokens (hereafter "tokens") were reportedly used by startup companies to raise over $1 billion.[1] These tokens have not been subject to any regulatory review, although the Securities and Exchange Commission has just ruled that some tokens are securities that are subject to United States securities laws.[2] But do they constitute

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[1] Paul Vigna, "Forget an IPO, Coin Offerings Are New Road to Startup Riches," https://www.wsj.com/articles/forget-an-ipo-coin-offerings-are-new-road-to-startup-riches-1499425200 (accessed 7/16/2017) (appeared in the July 8, 2017, print edition of the Wall Street Journal as 'Startups Draw On Coin Offerings.')

[2] Securities and Exchange Commission, Release No. 81207 (July 25, 2017), available at https://www.sec.gov/litigation/investreport/34-81207.pdf (accessed July 26, 2017). The ruling depends on the definition of a security as including an "investment contract" in Section 2(a)(1) of the Securities Act and Section

stock for purposes of the Internal Revenue Code? And how should their issuance be treated for tax purposes?

To answer these questions we must understand what a token is. And since tokens are usually issued through structures that employ blockchain technology, we should first gain a basic understanding of the blockchain.

I. Blockchain technology

The first and best-known use of blockchain technology was in the creation of bitcoins. [3] Almost $80 billion worth of bitcoins are outstanding.[4] They are used for speculation or for purchasing goods and services like traditional forms of currency, although no governmental entity issues that "currency".[5]

If no government issues bitcoins, why are so many people prepared to accept them as a legitimate form of payment? How does someone receiving a bitcoin know that it is not counterfeit? The answer is the blockchain, a structure that was explained in a pseudonymous article that inaugurated the bitcoin structure.[6]

To understand the original blockchain, the bitcoin blockchain, you must understand what a bitcoin is. A bitcoin is not a physical representation of value. It is an electronic representation of value. If this is a difficult concept to grasp, consider how wages are often paid. An employer transfers money from its bank account to the employee's account, withholding amounts for taxes, medical insurance, and retirement savings. The amounts withheld are transferred to the

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3(a)(10) of the Exchange Act. *See* 15 U.S.C. §§ 77b-77c. The SEC release analyzed one particular token and determined that it was "an investment of money in a common enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others."

[3] The text describes in detail the blockchain system behind bitcoins. Many issuers of tokens base their blockchains on a structure developed by the Ethereum Foundation, which also issued a digital currency, ether or ethereum. While there are technical differences between the two systems, the differences that currently exist do not change any of the analysis below. For a more detailed explanation, see Julianne Harm, Josh Obregon, Josh Stubbendick, Ethereum vs. Bitcoin, available at
http://www.economist.com/sites/default/files/creighton_university_kraken_case_study.pdf (accessed July 31, 2017).

[4] As of August 31, 16,536,050 bitcoins had been issued. https://blockchain.info/charts/total-bitcoins (accessed on August 8, 2017). On August 31, a bitcoin's price was quoted at $4,748. See https://blockchain.info for data tables (accessed on September 1, 2017).

[5] Japan does recognize bitcoin as a currency. Garrett Keirns, Japan's Bitcoin Law Goes into Effect Tomorrow, available at https://www.coindesk.com/japan-bitcoin-law-effect-tomorrow/ (accessed on July 27, 2017). The IRS treats cryptocurrencies such as bitcoin like property. Notice 2014-21, 2014-16 I.R.B. 938.

[6] Nakamoto, Satoshi, 2008. "Bitcoin: A Peer-to-peer Electronic Cash System," accessed at https://bitcoin.org/bitcoin.pdf (7/5/17).

accounts of taxing jurisdictions, health insurers, and retirement funds. But, while I called these transfers of "money," in fact, all that happened were notations made in various electronic records maintained by financial institutions. Because no tangible currency is being used, the system relies on the honesty and security of those financial institutions.

Virtual currencies like bitcoin have no items of value backing them and no trusted intermediary for holders to rely on. Their value comes from the public's willingness to use them as a store of value, a willingness that is based on the secure nature of blockchain technology. Systems using blockchain technology create an open ledger or database that can be made available to the public.[7] Unlike bank accounts, these ledgers are not maintained by a single trusted entity. Instead, copies of the ledger are maintained on many computers. The bitcoin ledger lists all the bitcoins that have ever been issued, so anyone from the public can confirm that a bitcoin they are offered exists. The blockchain is a chain of "blocks" of computer code, each of which records all bitcoin transactions that have occurred in a particular time period,[8] with each block linked to the block that preceded it.[9] This structure allows anyone to trace bitcoins back to their original issuance.

This description raises two obvious questions. First, if everything is public, how is the owner of a bitcoin, and only the owner, able to transfer the bitcoin? Second, if no one entity is responsible for keeping the ledger, how can someone offered a bitcoin be sure that the bitcoin won't also be transferred to someone else?

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[7] Blockchains can be private, with restrictions placed on who can access them. See Allison Berke, How Safe Are Blockchains? It Depends, available at https://hbr.org/2017/03/how-safe-are-blockchains-it-depends (accessed on 8/4/17).

[8] 10 minutes, on average, in the case of bitcoins. Gerald P. Dwyer, Blockchain: A Primer (December 30, 2016), available at https://ssrn.com/abstract=2900450 at 4.

[9] To be more precise, the block actually contains a "hash" that is based in part on that period's transactions. A hash is a function that converts a string of symbols almost uniquely into another string of symbols that, as a practical matter, cannot be reconverted back to the original string. For example, the hash function used by bitcoin converts "Mary had a little lamb" into "efe473564cb63a7bf025dd691ef0ae0ac906c03ab408375b9094e326c2ad9a76". Change "lamb" to "limb" and the hash is "fd573e65443e2cc586726dd857ae918b6ccb4063954179ca0f045fea68cb1b5b", a completely different string. You can hash your own strings at http://www.xorbin.com/tools/sha256-hash-calculator. The hash in each block includes the previous block's hash as well as information on the new transactions. For a more complete basic explanation of blockchain technology, see Witte, Jan Hendrik, The Blockchain: A Gentle Introduction (November 2016), available at SSRN: https://ssrn.com/abstract=2887567.

The answer to the first question is that, although anyone with access to the ledger can see that the bitcoin exists, it is protected by a private digital "key"[10] that the owner possesses, and only the person who has this private key can transfer the bitcoin. Moreover, there is no evidence in the bitcoin ledger identifying the owner of the bitcoin—the ledger is maintained anonymously.[11] This means that a bitcoin is like a bearer instrument: if the owner loses the private key, the bitcoin will be available to no one (and one-quarter of all bitcoins probably have already been lost).

But what allows the recipient of a bitcoin in payment to know that the owner has not transferred the bitcoin to someone else also? Here is where the public nature of the blockchain comes into play. Whenever a bitcoin is transferred, a complicated mathematical problem has to be solved in order to confirm the transfer.[12] Those members of the public who work to confirm these transactions are called "miners".[13] The miner who first solves the problem confirms the transaction and is rewarded with a payment—in bitcoins.[14] Since this process does not occur instantly, the transaction may take a few minutes to be confirmed.[15] Once a transaction transferring a bitcoin from A to B is confirmed, the bitcoin can't be transferred again by A.

It should be appreciated that it is the agreement by the community of miners that the blockchain is correct that allows it to function. If two possible chains are put forward for a new block, a consensus develops among the community of miners as to which one to accept.[16] It is

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[10] This is just a string of characters, usually very long. For an example, see http://ospkibook.sourceforge.net/docs/OSPKI-2.4.7/OSPKI-html/sample-key-components.htm (accessed 7/23/2017).

[11] Not all blockchains need be maintained anonymously. See the discussion of the Overstock.com stock issuance below at notes 21-22.

[12] This involves creating a hash of information from the previous block, along with the latest transactions, and one more string of characters (a "nonce") that meets certain criteria. The solution requires picking a nonce so that the resulting hash satisfies the criteria set up by the system. The criterion in the case of bitcoins is that the hash begins with a string of zeros of a certain length. Dwyer, Blockchain: A Primer, supra note 8, at 4-5.

[13] Miners use large banks of computers, running specialized programs, to solve these problems. It has been estimated that bitcoin uses 0.08% of the world's energy consumption. http://digiconomist.net/bitcoin-energy-consumption (accessed 9/1/2017). For a more conservative estimate, see Marc Bevand, Op Ed: Bitcoin Miners Consume A Reasonable Amount of Energy — And It's All Worth It, https://bitcoinmagazine.com/articles/op-ed-bitcoin-miners-consume-reasonable-amount-energy-and-its-all-worth-it/ (accessed 7/26/2017).

[14] That is the way new bitcoins are issued.

[15] This system does not work perfectly. In the nine years since bitcoin was launched, there has been at least one instance where two solutions to a set of these problems moved forward simultaneously creating a "fork" in the bitcoin blockchain. Daniel Taylor, Now that It's Over: The Blockchain FORK explained for regular users, available at https://www.reddit.com/r/Bitcoin/comments/1a51xx/now_that_its_over_the_blockchain_fork_explained/ .

[16] As a result of the time (measured in minutes) that this may take, there is a consensus to wait until six blocks have been added to the blockchain after your transaction's block before treating your own transaction as confirmed. Witte, supra note 9, at 4.

important that many miners participate in the process of confirming transactions, a process that operates by consensus. If the group is too small, it runs the risk of a problem referred to as the "51% problem." A large group of outsiders, constituting a significant percentage of all those monitoring the blockchain (not necessarily 51%[17]), can potentially act in concert to create a bogus blockchain that might funnel bitcoins to them. Thus, an important requirement for any blockchain is that there be a significant number of people who act independently in monitoring the blockchain.

II. Expanded use of blockchain technology

Blockchain technology allows a ledger to be public with no one having the responsibility of attesting that the ledger is maintained correctly, or having the authority to say otherwise. The ability to create a permanent, secure public record of transactions has been seized upon for possible application in other areas. For example, proposals have been made to keep records of VAT collections using blockchain technology.[18] Doing so would make it harder for someone to claim falsely to have made VAT payments to others, collect those amounts from a buyer, and then vanish.[19] Numerous conferences have been held exploring the possible uses of blockchain technology.[20]

One relatively well-developed example of a novel use of blockchain technology is Overstock.com's issuance of stock using blockchain technology.[21] Because the issuing corporation must have a record of who its shareholders are, the Overstock.com blockchain structure operates differently than the bitcoin blockchain. As the S-3 registration statement notes: "The personal identity information necessary to associate a public key representing a given block of digital securities with the owner of those securities will be maintained in a proprietary ledger system that is not exposed to the public." In other words, unlike the bitcoin

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[17] *Id.*

[18] Richard Ainsworth & Musaad Alwuhaibi, The First Real-Time Blockchain VAT: GCC Solves MTIC Fraud," 86 Tax Notes International 695 (May 22, 2017).

[19] This is a major area of VAT fraud. The relative speed with which transactions can be confirmed in a blockchain structure reduces the dangers of such fraud. Artificial intelligence programs have been suggested to identify likely perpetrators of such frauds in a blockchain structure. See Ainsworth & Alwuhaibi, note 18, supra.

[20] Business insider lists 30 of the "world's best blockchain conferences and expos," in North America, Europe, Africa, Asia, and Australia—for the first six months of 2017. http://www.businessinsider.com/blockchain-conferences-2017-1 (accessed July 13, 2017).

[21] The S-3 registration statement can be found at https://www.sec.gov/Archives/edgar/data/1130713/000104746915003890/a2224281zs-3.htm.

blockchain (and the blockchains for the tokens described below), the issuer, Overstock.com, will be able to identify the holders of the securities issued. Consequently, we can understand one of the risk factors mentioned in the registration statement: that the proprietary ledger system might be breached, exposing the identities of those holding the stock to whoever breaches the system.[22] Of course, shareholders of companies that maintain a physical (or digital) stock register run comparable risks.

III. Tokens

The idea of using tokens for raising capital (in an "ICO"—an initial coin offering) has expanded significantly in the past two or three years. As we will see, the rights and powers represented by these tokens are not uniform. As a result, there is no single answer as to how tokens should be treated for tax purposes.

As mentioned before, the SEC has held that, at least in some cases, these tokens are securities.[23] This decision will affect some tokens offered for sale in the United States.[24] It will also affect "exchanges" in the United States which allow owners of tokens to sell them for conventional currencies.

The IRS has ruled on the tax treatment of bitcoin and other virtual currencies. In Notice 2014-21[25] the Service held that such "currencies" are treated like property, so that each transaction using these currencies is a separate taxable event. Because no government issues these currencies, they are not treated under the Code provisions that apply to foreign currencies.[26]

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[22] Further risk factors were described when a Form 8-K for the actual issuance of the stock was filed on December 14, 2016. The 8-K can be accessed through http://investors.overstock.com/phoenix.zhtml?c=131091&p=irol-sec&secCat01.1_rs=91&secCat01.1_rc=10.

[23] See SEC Release No. 81207, note 2, supra.

[24] Note that the SEC has held that purchases made through a website are considered the result of offers of sale subject to United States securities laws if those maintaining the websites do not implement measures that are reasonably designed to guard against sales or the provision of services to U.S. persons. *Interpretation Re: Use of Internet Web Sites To Offer Securities, Solicit Securities Transactions, or Advertise Investment Services Offshore,* Exchange Act Release No. 39779, (March 23, 1998), 63 FR 14806, 14813 (March 27, 1998).

[25] 2014-16 I.R.B. 938.

[26] Sections 985-989.

But little attention has been given to how tokens should be treated for tax purposes. As detailed below, whether the tax law characterizes them as stock affects the way they will be taxed, both to issuers and purchasers.

So what is a token? Tokens are digital assets whose characteristics and rights are conventionally described in a "whitepaper" posted on the issuer's website. Tokens have usually been issued by startup entities to obtain funds to develop their ideas. However, unlike stock offerings, they don't necessarily involve the ceding of any ownership in the entity to the purchasers of the tokens. In most cases, the token allows its holder the future use of whatever service (or property) the issuer will be (or hopes to be) providing. In many cases, the token includes a right to a vote, although what is voted on varies with each token. In many cases, the issuers of tokens promise, implicitly or explicitly, to produce a profit for the tokens' holders.[27]

Although tokens use the same technology as bitcoins, they have different purposes. Bitcoins were created to provide a currency alternative to currencies issued by governmental entities. No one paid the creator of bitcoins to obtain more bitcoins. Tokens are issued to raise capital, with the expectation that whoever buys them will be interested in obtaining whatever service or good the seller furnishes.

Tokens come with many combinations of rights and powers. In some cases, they provide the right to obtain a service in the future at a favorable rate (for example, the infrastructure needed to mine bitcoins), but little more.[28] In other cases, the issuer offers to buy back tokens, to share profits, and to provide limited voting rights.[29]

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[27] The legal rights inherent in each token are only described in the issuer's whitepaper. Since each token itself is merely a digital record in a blockchain, not a stock certificate, there is nothing in the record of the token itself that would reflect those rights.

[28] For example, Giga Watt provides to those who want to mine bitcoin a turnkey operation located in a n area with low energy rates; the tokens, that were offered for sale during a short time period, are the only means of paying for the service; https://cryptonomos.com/wtt/white-paper.pdf is the link to the whitepaper. EncryptoTel promises to provide encrypted communication systems; purchasers of tokens can use the tokens to pay their bills and are promised discounts. http://ico.encryptotel.com/ (accessed July 13, 2017).

[29] {23} For example, Fundyourselfnow is a crowdfunding site whose tokens can be used to invest in projects. 70% of profits will be distributed through a token buyback program. A 60% vote of holders of tokens will halt further funding of a project. https://www.fundyourselfnow.com/ (accessed July 13, 2017). SONM allows people to provide their excess computer power to others who need it; tokens provide "profit rights, voting rights, and payment rights." https://sonm.io/ (accessed July 13, 2017). Tokens like etherium and filecoin are currencies like bitcoin and their holders are treated like the holders of bitcoins under Notice 2014-21.

The SEC release that indicates that some tokens are securities[30] gives a relatively clear description of a reasonably well-defined token, The DAO token.[31] A DAO token grants its holder certain voting and ownership rights. The issuer, The DAO, would earn profits by funding projects. The token holders would then vote either to use the profits for new projects or distribute them to token holders. Purchases of tokens were made through a blockchain, with the result that The DAO would not know the identities of those holding tokens. There was a complicated provision that permitted holders to redeem their tokens in certain circumstances. Projects proposed for funding by The DAO were put to a vote of holders of tokens, and funding would be granted only if a proposal was approved by a majority vote. It was anticipated that tokens could be sold on a secondary market.

IV. Tax Treatment of Tokens—The Issuer

Whether an enterprise operating over the Internet is subject to U.S. tax is a thorny issue that the legal system will likely have to confront in the near future. Currently, the fact that an enterprise can have substantial connections with United States persons over the Internet is not sufficient to subject it to U.S. taxation, although it would normally be subject to tax if it had a permanent establishment in the U.S.[32] Based on their whitepapers, many issuers of tokens have no connection to the United States. Any one that did is likely to reconsider its location if it finds the potential tax burden here greater than in an alternate location.

How are issuers of tokens to be treated, if the tokens are issued by an entity that is subject to U.S. tax? It depends very much on the characteristics of the token that is issued.

A. Tokens with Only a Right to Future Benefits

Some tokens are sold with no power in the holder to compel the seller to repurchase the tokens and with no sharing of profits. Thus, they may be viewed as prepayments for future services. The Supreme Court has held that prepayments for services are taxable.[33] However, the

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[30] Release No. 81207, supra note 2.

[31] DAO stands for "Decentralized Autonomous Organization," a term used to describe a "virtual" organization embodied in computer code and executed on a distributed ledger or blockchain.

[32] I examined some of the issues related to this question in David J. Shakow, "The Taxation of Cloud Computing and Digital Content," 140 Tax Notes 333 (July 22, 2013).

[33] E.g., Schlude v. Commissioner, 372 U.S. 128 (1963). For tokens like etherium and filecoin, the future service is maintaining the blockchain associated with them.

IRS, through a Revenue Procedure, has administratively allowed taxpayers to defer income in respect of prepaid services where the services were expected to be performed in the following taxable year.[34] In the case of payments for contingent services, the Revenue Procedure allows taxpayers to use a statistical basis for including the prepaid amounts in income, or any other method that satisfies the Commissioner that it results in a clear reflection of income.[35] It follows that amounts paid to the issuers for these tokens could be taxed under the rules of Rev. Proc. 2004-34. In other words, all the proceeds of the ICO could be taxable income.

B. Tokens with a Right to Be Redeemed

Some tokens also allow a holder to demand repurchase of the token by the issuer. Although the amounts issuers receive for these tokens may have to be refunded, those amounts are received by their issuers under a "claim of right." Under that doctrine, amounts received by a taxpayer, over which the taxpayer has full dominion, can be included in the taxpayer's income.[36] The doctrine applies even if, at some later point, the taxpayer may be required to return these amounts. This doctrine has been applied in situations where the taxpayer must return the amount received if, at the discretion of the payor, services that had been paid for are not used.[37] For the taxpayer to avoid inclusion of the amounts in income, "the recipient must at least recognize in the year of receipt 'an existing and *fixed* obligation to repay the amount received' and '*make provisions* for repayment.'"[38] This exception does not appear to apply to tokens, since it seems

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[34] Rev. Proc. 2004-34, 2004-1 C.B. 911. The IRS also allows some deferral for prepayments for goods. Treas. Regs. § 1.451-5. For an example of a token allowing the acquisition of goods, see https://www.smithandcrown.com/sale/zrcoin/ (Russian company that will produce zirconium oxide from waste; buyers of the coins will be able to exchange their coins for zirconium oxide).

[35] Id. ¶ 5.02(3)(b). The Revenue Procedure also allows the use of a straight line inclusion, but only where the agreement is for a fixed term. Tokens generally don't have a fixed term.

[36] North American Oil Consolidated v. Burnet, 286 U.S. 417 (1932).

[37] E.g., Cvancara v. Commissioner, T.C. Memo. 2013-20 (school must include tuition in income when services are provided, even if parents may receive a refund if they withdraw their children from the school); Church of Scientology of California v. Commissioner, 83 T.C. 381 (1984) (advance payments for services includable in income although the advance payments are refundable on demand before services are rendered; decision based on claim of right doctrine).

[38] *Hope v. Commissioner,* 55 T.C. 1020, 1030 (1971), affd. 471 F.2d 738 (3d. Cir.), cert. denied 414 U.S. 824 (1973), as quoted and cited in Church of Scientology of California, supra note 35, and *Nordberg v. Commissioner,* 79 T.C. 655, 665 (1982), affd. in an unpublished opinion 720 F.2d 658 (1st Cir. 1983).

that any obligation to make a payment to a holder of a token is merely contingent, and it does not appear that any funds to make such payments are segregated by the issuers of tokens.[39]

Current inclusion of the amounts received for tokens seems particularly appropriate because the issuer usually agrees to buy back the token rather than refunding the purchase price. Although this is often characterized by the issuers as a means of distributing profits to token holders, the reality is that, if the value of the token decreases, the issuer will profit if it can buy the token back at market prices. In the interim, the issuer has unfettered use of the funds received for the tokens.

V, Tax Treatment of Tokens—the Purchaser

Many purchasers of tokens appear to be speculating on the value of the tokens. This is reflected in the fact that the issuers' whitepapers emphasize, to a greater or lesser extent, the possibility that the tokens will increase in value.[40] For those taxpayers, the tokens should be treated like any capital asset, generating capital gain or loss when sold.

If the purchaser plans to use, in its trade or business, the services or goods that can be obtained by transferring the token to the issuer, the transfer of the token in exchange for the services or goods would have two tax consequences.[41] First, the transfer is a disposition of the token for its fair market value. The gain or loss on this disposition would be capital.[42] Second, the expenditure of the fair market value of the token for the services or goods received would be either a deductible expenditure or a capital expenditure, depending on general tax principles.

VI. Tax Treatment of Tokens That Are Equity

As we have seen, tokens may contain other rights besides the right to future services from the issuer. Some tokens embody the rights to some of the future profits of the issuer, and some have a somewhat vague voting right. If those additional rights transform the tokens into stock or a partnership interest, the tax consequences are different.

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[39] If the tokens are taxed when issued, the issuer should get a deduction when they are redeemed. E.g., Church of Scientology of California, supra note 35 ("If petitioner eventually was required to refund the advance payments in a later year, it would then be entitled to a deduction for such amounts"); cf. I.R.C. § 1341.

[40] E.g., the sales pitch for fundyourselfnow, supra note 27, emphasizes that their token buyback program will provide a floor for the price of the tokens and will ensure the price "will steadily increase."

[41] See Robert Keller, The Taxation of Barter Transactions, 67 Minn. L.Rev. 441, 443 (1982).

[42] Arkansas Best Corporation v. Commissioner, 485 U.S. 212 (1988).

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The issuance and redemption of stock by the issuer have no tax consequences to the issuer.[43] However, if tokens are treated as stock, there could be unexpected consequences to their holders. If the holders sell part of their holdings back to the issuers, expecting to get capital gain treatment and basis offset, they may be surprised to find that they have dividend income, with no basis offset. That is because the sale could be treated as a redemption that is essentially equivalent to a dividend. Section 302(b)(1) treats a redemption that is not "essentially equivalent to a dividend" as a sale. When the redeeming shareholder owns a very small percentage of the issuer's stock, the test that emerges from IRS rulings, is that the shareholder will get sale treatment as long as there is some reduction of the shareholder's percentage interest in the corporation, but if there is no reduction at all, the redeeming shareholder will have dividend treatment.[44] It is not clear how the IRS will deal with this test in the case of a corporation that always stands ready to redeem its stock—can each redemption be viewed in isolation, in which case they will all get exchange treatment, or should each redemption be considered along with other redemptions and token purchases at the same time, a test that will be difficult for each holder of a token to apply. Investors in mutual funds faced a comparable problem in fitting redemptions into the tests of section 302, and legislation was deemed necessary to solve that problem.[45]

As a practical matter, token holders may have an out if the issuer has no earnings and profits, in which case basis offset would be available.[46] But token holders whose tokens are treated as stock may face a more serious problem, because the discounts on services that some holders of tokens receive may be treated as distributions from the issuer, like any special benefit received by a shareholder.[47] Since those discounts are a common characteristic of tokens, this could create a significant tax liability for purchasers of tokens.

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[43] IRC § 1032.
[44] Compare Rev. Rul. 76-385, 1976-2 C.B. 92 (reduction from from .0001118% interest to .0001081% interest satisfies § 302(b)(1) test),with Rev. Rul. 81-289, 1981-2 C.B. 82 (dividend treatment if no reduction at all in percentage interest in the redeeming corporation).
[45] IRC § 302(b)(5).
[46] IRC §§ 316(a), 301(c).
[47] "It is beyond question that a constructive dividend can result . . . when a corporation performs services for a shareholder." Boris Bittker and James Eustice, Federal Income Taxation of Corporations & Shareholders ¶ 8.06[4] (Warren, Gorham & Lamont) (hereafter "Bittker & Eustice"). However, the amount of the dividend is often measured by the cost to the corporation, which would generally be small here, rather than the lost profit. Id.

The issuance and redemption of a partnership interest is generally not taxed to the partnership.[48] It is unlikely that issuers of tokens would be considered partnerships for tax purposes. If the issuer of the token is formed as a corporation, the entity can't be treated as a partnership.[49] Moreover, a partnership will be treated as a corporation if it qualifies as a publicly traded partnership.[50] To be treated as a publicly-traded partnership, interests in the entity (that is, the tokens) must be traded on an established securities exchange or be "readily tradable on a secondary market."[51] While I don't know if any tokens are currently traded on an established securities exchange, the exchanges on which tokens are traded may qualify as secondary markets. If an issuer's tokens are not so traded, and if the issuer doesn't choose to be treated as a corporation, it would be treated as a partnership by default if it has any member without limited liability.[52] For this purpose, token holders' liability is limited, since they can lose nothing more than what they paid for their tokens. Thus, although the possibility of partnership treatment seems highly unlikely, any issuer stumbling into that position will be saddled with the task of complying with the complex rules of Subchapter K.

If an issuer is a partnership for tax purposes, it will have to inform its token-holders that they are partners who have income even if they simply hold on to their tokens and don't dispose of them. Moreover, any purchase or sale of a token by the entity could raise issues of shifts of partnership liabilities, which are treated as contributions to and distributions from the partnership,[53] with potential tax consequences.

VII. Is a Token an Interest in the Issuer?

The tax law is prepared to consider as owners those who are not nominally owners. The question of whether or not a position not denominated as such is an ownership interest in an enterprise comes up often in the partnership context. A partnership may be formed by persons who are unaware that they are forming a partnership for tax purposes. Sharing of profits from the activity, even without any control of the enterprise, is an indication that the participation is a

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[48] IRC §§ 721(a) and 731(b).
[49] Treas. Regs. § 301.7701-2(b). This includes those foreign entities treated as corporations. Treas. Regs. § 301.7701-2(b)(8).
[50] IRC § 7704.
[51] IRC § 7704 (b).
[52] Treas. Regs. §§ 1.7701-3(b)(1)(i) (domestic entities), and -3(b)(2)(A) (foreign entities with at least one member without limited liability).
[53] IRC § 752. The possibility of problems arising under IRC § 751 would also have to be considered.

partnership interest.[54] For a corporation, an IRS Field Service Advice[55] quotes a definition of stock as "a permanent interest in the corporation's equity, i.e., its earnings and/or underlying assets." The corporate issuers who promise to share profits with the purchasers of their tokens would seem to have created stock.

The common situation in which an interest must be analyzed to determine whether it is stock is an interest that is nominally debt.[56] Although this is not the case with tokens, it reflects the fact that an item need not be called stock in order to be treated as stock. Characteristics consistent with equity treatment are absence of a certain return and participation in losses. Participation in profits is also generally characteristic of equity, although a debt instrument may share in profits above a fixed return and may be convertible into stock.[57] Holders of tokens do not have a certain return and, in some cases, share in profits. They share in losses because the value of every token reflects the success or failure of the project. Accordingly, at least the tokens that share in the profits of the issuer should be treated as stock.

VIII. Sharing of Some Profits

When a person purchases a token, and the seller promises to share profits with the purchaser, it is not always clear if the reference is to all the profits of the enterprise or just the profits arising from the activities underlying the token. Thus, in considering the extent to which these tokens might be stock because they share in the profits of the seller, it is necessary to determine which profits are to be shared, and to what extent they are to be shared.

If holders of tokens will share in some portion of all the issuer's profits, it would seem as if they are holding an ownership interest. If they have an interest in only some of the issuer's profits, the situation is less clear. One analogy is the "alphabet stock" most famously associated with General Motors' "E" and "H" stock.[58] General Motors issued each of those classes of stock to reflect the profits and losses that were generated by two specific companies that General

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[54] See generally William McKee, William Nelson & Robert Whitmire, Federal Taxation of Partnerships & Partners 3.04[3][a] (Warren, Gorham & Lamont).
[55] FSA 780.
[56] E.g., IRC § 385.
[57] See generally Bittker & Eustice ¶ 4.05[2][b].
[58] For a relatively contemporaneous description of that stock, see Douglas H. Walter & Paul A. Strasen, General Motors Class E and Class H. Common Stock, 64 Taxes 365 (1986).

Motors acquired. Although famously the late Marty Ginsberg advised EDS,[59] the company whose activities were reflected in the Class E stock, that this stock would be treated as stock for tax purposes, and stock of General Motors to boot, the IRS never explicitly blessed this arrangement. Among other things, commentators have questioned whether these shares should be treated as stock of General Motors or whether they should be treated as stock of the underlying company.[60]

Alphabet stock is a form of "tracking stock:" stock to which profits and losses are directed only from certain assets of the corporation. Although the IRS did, perhaps inadvertently, once bless tracking stock in a private ruling,[61] its public position was that it would not rule on the status of such stock.[62] There has also been a lively debate as to whether tracking stock should properly be treated as stock.

Tribune Company v. Commissioner[63] provides a possible analogy for a token that does not share in all the issuer's profits. In *Tribune*, a party to a reorganization received an interest in the acquiring company that allowed it to control a large pot of money nominally in the hands of the acquiring company. If the interest had been ruled stock, the result would have effectively been a tax-free spinoff of the assets in question. The court ruled that it was not stock. Yet, as the leading commentators on corporate tax issues have observed, this interest "did not differ materially from a receipt of preferred stock that is redeemable for cash after a period of time."[64] The court in *Tribune* seemed anxious to avoid allowing this interest to be good consideration for reorganization purposes. Moreover, the court had separated this interest from the full bundle of rights that the taxpayer had received. But it is not easy to see how such a profits interest, standing alone, cannot be considered stock.

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[59] See Sheppard, GM's Class E stock: Tax Planning in Second Gear, 36 Tax Notes 130 (July 13, 1987); Martin D. Ginsburg, Letter to the Editor, 36 Tax Notes 334 (July 20, 1987) (making clear that he advised EDS, not General Motors).
[60] James M. Peasley & David Z. Nirenberg, Aggregation or Bifurcation of Property Interests, __ Tax Notes1355, 1391 (12/12/2011) ("The main concern with tracking stock is whether the stock resembles the tracked subsidiary stock so closely that it should be considered an ownership interest in the stock.").
[61] LTR 8817007
[62] Rev. Proc. 87-59, 1987-43 I.R.B. 23.
[63] 125 T.C. 110 (2005).
[64] Bittker & Eustice ¶ 12.23[1].

A difficulty with any analysis that tries to compare tokens with tracking stock is that the tokens are not formally issued as stock. Instead, in form, most tokens are sold to give the purchaser a right to some service produced by the seller of the token. Nevertheless, the unqualified sharing of profits granted to holders of some tokens would appear to make them stock.

IX. Issuer's Obligations

If the tokens are stock, U.S. issuers have obligations under the tax law. They must report dividends paid to their shareholders[65] and withhold 30% of any dividends paid to a nonresident alien.[66] Moreover, they must withhold at this rate without taking account of any lower rates available through treaties if they do not know to whom they are making their payments,[67] or if they make payments to a Foreign Financial Institution that hasn't complied with the Foreign Account Tax Compliance Act ("FATCA") rules.[68] A withholding agent that fails to withhold is itself liable for amounts it should have withheld.[69]

It does not appear that issuers of tokens have set up their blockchains in a way that would allow them to identify anything about who their holders are. As explained in connection with the Oversock.com stock registration, a blockchain based register can provide for such identification, but it is not the standard form of blockchain. It would appear under the current regulations that the total absence of knowledge about the identity of a recipient will require backup withholding at the fourth lowest rate under section 1(c) of the Code, currently 28%.[70] This rate is slightly less than the maximum 30% rate. However, if token sales were to become a major source of equity funding, Congress might reconsider this position, since the structures, as currently set up, are intentionally created in a way that the corporation does not know the identity of its investors.

If the issuers of tokens are not U.S. entities, the FATCA rules could affect the tax on their investments. Since they cannot identify their owners, any U.S. withholding agent will have to

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[65] IRC § 6042.
[66] IRC § 1441(a).
[67] IRC § 1441(c)(2).
[68] IRC § 1471(a) requires withholding at a 30% rate if a foreign financial institution does not comply with the FATCA rules.
[69] I.R.C. § 1461.
[70] Treas. Regs § 1.1441-1(b)(3)(ii)(B); IRC § 3406(a)(1).

withhold at a 30% rate on any dividend, interest, and similar payments made to entities that issue tokens.[71]

A U.S. entity must also withhold on the *gross proceeds* of the sale of any property "of a type that can produce interest or dividends from sources within the United States."[72] That category includes stock issued by a U.S. corporation, whether or not the issuer even contemplates paying U.S. source dividends on that stock.[73] Thus redemption of tokens that constitute stock, if issued by U.S. corporations, would appear to require withholding of 30% of the gross proceeds where the recipients have not been identified as not subject to that withholding obligation. And that withholding requirement would seem to apply to any exchange in the U.S. which effects sales of tokens treated as stock that are issued by a U.S. corporation.

These rules will create additional costs for investors in U.S.-based activities unless the issuers collect information identifying the owners of tokens and comply with the FATCA rules. The contrast in treatment between U.S. enterprises and those that are not located in the U.S. may discourage startup ventures in the U.S. that plan to raise funds by issuing tokens.

X. Will Anyone Pay These Taxes?

It is well-publicized that the anonymity of digital currencies like bitcoin allows individuals to avoid legal observation.[74] Thus, the discussion of tax liability of those who purchase and sell tokens leaves open the question of whether taxpayers who wish to avoid any tax liability on their gains can be located by the IRS.

As suggested above, to the extent the issuer is a United States entity, it can be required to keep track of its owners, the way overstock.com did. And any exchange located in the United States is potentially subject to IRS summons to reveal its customers.[75] But a taxpayer who

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[71] Temp. Regs. § 1.1471-2T(a); see also Treas. Regs § 1.1474-1(a)(4) (withholding agent's potential liability).
[72] IRC § 1473(1)(A).
[73] Treas. Regs § 1.1473-1(a)(3)(ii)(A).
[74] See, e.g., Simon Usborne, Digital Gold: Why Hackers Love Bitcoin, available at https://www.theguardian.com/technology/2017/may/15/digital-gold-why-hackers-love-bitcoin-ransomware (accessed on 8417).
[75] This happened to the Coinbase exchange. For a recent article on the progress of the IRS summons issued to Coinbase, go to https://www.coindesk.com/14000-coinbase-bitcoin-could-be-affected-irs-tax-summons/ (accessed on 8/4/17).

wishes to avoid detection should have little problem avoiding issuers of tokens and exchanges that are subject to United States jurisdiction.

If an entity or an exchange is not subject to United States jurisdiction, what sanctions might it be subject to? As noted above, it seems that any investment such an entity makes will be subject to 30% withholding, but that is not likely to be much of a burden for these entities, since they have little reason to invest in the United States.

The IRS faced similar problems with hidden foreign bank accounts and investments, and the solution was the FATCA rules.[76] These rules effectively force foreign intermediaries to collect information for the IRS if they are to make any investments for their customers in the United States. This solution was based on the leverage the United States had over the entities through which investments would be made. The United States is the major location for investments in the world, so limitations on investing in the United States had a bite. Not so here. It would be significant if the United States could prevent United States investors from investing in tokens issued by companies that were avoiding their United States tax liability. However, as the analysis above shows, if issuers of tokens are not located in the United States, there is no basis for taxing the issuers who have no United States presence outside of the Internet. Only if the SEC had some basis for asserting jurisdiction over these issuers is there any likelihood that they can be regulated in any way.

If this issue becomes significant enough on a worldwide basis, an approach along the lines of the BEPS project might be developed.[77] Under such an approach, whichever country has jurisdiction over the issuer of a token could assert its authority for the benefit of other taxing jurisdictions. It must be acknowledged, though, that the BEPS project itself has had much time and effort devoted to it, with no broadly applied solutions yet in place.

XI. Conclusion

Tokens have been used to raise substantial amounts of money. The SEC has indicated that it will treat tokens as securities. But little attention appears to have been devoted to the possible tax treatment of tokens. Because tokens usually are issued using the normal blockchain

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[76] IRC §§ 1471-1474.

[77] For information regarding the OECD's BEPS project (BEPS stands for Base Erosion and Profit Shifting), go to http://www.oecd.org/tax/beps/ .

structure like the one employed by bitcoin, issuers probably are unaware of the identity of the owners of the tokens they have issued. Owners that do not self-report, and do not exchange their tokens for regular currencies on an exchange subject to United States jurisdiction, are not likely to be identified by the IRS.

If tokens are not ownership interests in the enterprise, the proceeds of the sale create income for the issuers as prepaid income. If tokens are given enough attributes that would make them ownership interests in the issuer, issuers subject to taxation in the United States may have created serious reporting and withholding tax problems for themselves. However, since many issuers of tokens are located outside the United States, these conclusions may have little effect on them under the current state of the law.