

Hand Over Your Digital Wallet. Yes, Cryptocurrency Transactions are Taxable.

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Table of Contents

I. General Tax Consequences	1
A. Acquisitions	1
B. Dispositions	2
1. Sales	2
2. Crypto-for-Crypto and Barter Exchanges	3
3. Exchange for Equity	3
4. Gifts and Charitable Contributions	4
5. Compensation	4
II. Initial Coin Offerings	5
A. Utility Tokens	5
1. Token Presales	5
2. Non-U.S. Issuers.....	7
B. Securities Tokens.....	7
III. Tax Considerations Related to Funds and Investors.....	8
A. Investor, Trader or Dealer Status	8
B. U.S. Trade or Business.....	9
C. U.S. taxable investor structuring issues.....	10
1. Structure and Publicly Traded Partnerships.....	10
2. Subscriptions in Kind.....	11
D. Mark-to-Market Regimes	12
1. I.R.C. 475(f).....	12
2. Bitcoin Futures and 1256 Contracts.....	12
E. Identification.....	13
IV. Miscellaneous Topics	14
A. Deductions for Abandonment, Theft and Worthless Securities	14
B. Loans	14
C. Information Reporting.....	15
V. Conclusion	17
Appendix.....	18
Background on Cryptocurrency	18
A. Bitcoin.....	18
1. Summary of Bitcoin Process	20
2. Forks.....	21
B. Tokens and ICOs	21
Non-tax Treatment of Cryptocurrency	21
About the Authors.....	23
Jon P. Brose	23
Brett R. Cotler	23

Cryptocurrencies represent a unique technological and economic innovation. The purpose of this whitepaper is to highlight the tax considerations of investing and trading in cryptocurrency and to highlight where uncertainties lie in the tax law. The authors invite readers who are not familiar with cryptocurrencies, blockchain technology and some related concepts, such as initial coin offerings (“ICOs”), to read the Appendix to this whitepaper. The Appendix provides a high-level summary of what cryptocurrencies are, what blockchain is, what an ICO is, the difference between coins and tokens and the general treatment of cryptocurrencies under U.S. federal securities and commodities laws.

This whitepaper contains four sections. The first section addresses general consequences of acquiring, holding and selling or disposing of cryptocurrencies. The second section discusses the tax considerations related to ICOs. The third section discusses tax considerations related to hedge funds that invest or trade in cryptocurrency. The fourth section addresses some miscellaneous topics, including possible information reporting requirements, crypto loans and certain deductibility issues. For additional information, please see the “About the Authors” included at the end of this whitepaper.

I. General Tax Consequences

The only Internal Revenue Service (“IRS”) guidance to date addressing the tax treatment of cryptocurrencies is Notice 2014-21 (the “Notice”).¹ The Notice pertains only to cryptocurrencies that the IRS describes as “convertible virtual currencies”. The Notice defines a “convertible virtual currency” as a virtual currency (that is, a cryptocurrency) that has an equivalent value in real currency, or that acts as a substitute for real currency. The Notice explicitly mentions Bitcoin as a convertible virtual currency. Because the Notice only applies to cryptocurrencies that have values in real currency, most tokens would not be explicitly covered by the Notice, although the tax principles described in the Notice should apply to tokens. When discussing the tax consequences relating to cryptocurrency, this article will generally mean “convertible virtual currency” (which will also sometimes be called coins). Cryptocurrency will generally not be used to mean tokens, unless specifically stated or unless the context otherwise requires.

Most critically, the Notice states that cryptocurrency is not considered to be a fiat currency, such as the U.S. dollar, the Euro or the Yen. Instead, cryptocurrencies are to be treated as property.² The issues addressed in the Notice flow from that fundamental characterization. In a series of Q&A explanations, the IRS discusses various tax considerations relating to mining, buying, selling, compensating employees and otherwise transacting in cryptocurrency. The IRS makes clear that existing tax law and principles that apply to property transactions that do not involve cryptocurrency should apply to those transactions that do.

This section discusses the general tax considerations involving cryptocurrency transactions relating to (i) acquiring cryptocurrency, whether received through mining efforts, secondary market transactions or compensation, and (ii) the sale, exchange or other disposition of cryptocurrency.

A. Acquisitions

One generally acquires cryptocurrency by mining, by being compensated for providing goods or services or by acquiring coins in a secondary market transaction. In addition, holders of cryptocurrency may receive additional coins (in a new cryptocurrency) in the event of a “hard fork” or an “airdrop”.

As discussed above, certain cryptocurrency transactions, such as Bitcoin transfers, are verified by miners who solve complex math problems and are awarded Bitcoin for successful mining efforts. On other cryptocurrency networks, miners are compensated (in cryptocurrency) by transaction fees paid by the transactors. Accordingly, miners receive cryptocurrency, that is, property, in exchange for providing a service. In addition to miners, an employee or service provider may be paid in cryptocurrency.³ The value of the cryptocurrency as of

¹ Notice 2014-21, 2014-16 I.R.B. 938 (Apr. 14, 2014).

² Id., Q&A No. 1.

³ Notice 2014-21, Q&A 2, 11.

the date of receipt is ordinary income to the miner or other service provider.⁴ That value will also be the holder's tax basis in the cryptocurrency received.⁵

A miner may be considered self-employed if his mining activities rise to the level of a trade or business.⁶ A taxpayer that is engaged in a cryptocurrency mining business may deduct fees and expenses (for example, electricity or home office) incurred in connection with the business.⁷ The cost of computer equipment and software may be claimed as depreciation or amortization deductions.⁸ In addition, the miner would be required to remit estimated income tax and self-employment tax payments to the IRS.

If a miner's activities do not rise to the level of a trade or business, the mining activities may be considered a hobby. Fees and expenses incurred in connection with the mining activities would be deductible as hobby losses to the extent of income derived from the hobby.⁹

A taxpayer may acquire cryptocurrency in a secondary market transaction (that is, by purchase, gift or inheritance). In secondary market transactions, the taxpayer's basis in the cryptocurrency will be equal to the amount paid for such cryptocurrency.¹⁰ If cryptocurrency is received as a gift, the donee's basis in the cryptocurrency will be equal to the lesser of the donor's basis in the cryptocurrency and the fair market value of such currency at the time of transfer, plus any gift tax paid.¹¹ If cryptocurrency is inherited, the taxpayer's basis will be equal to the fair market value of such cryptocurrency as of the date of death of the decedent.¹²

Finally, a holder of a cryptocurrency may receive units of a new type of cryptocurrency in the event of a hard fork or an airdrop because he held units of the prior cryptocurrency. Hard forks and airdrops are similar to corporate split ups and dividends, but hard forks and airdrops are not afforded the same U.S. federal income tax treatment as split ups or dividends, respectively.¹³ The fair market value of the cryptocurrency received in the hard fork or airdrop arguably should be taken into income for U.S. federal income tax purposes. U.S. taxpayers are taxed on income from whatever source derived.¹⁴ Income means an undeniable accession to wealth, which is clearly realized by the taxpayer, over which the taxpayer has complete dominion.¹⁵ Using this definition, courts have found that the discovery of a treasure trove constitutes income.¹⁶ By analogy, coming into receipt of newly issued cryptocurrency as a result of a hard fork or an airdrop may be income.

B. Dispositions

There are several ways a person can dispose of cryptocurrency. A person can sell cryptocurrency for cash, exchange one form of cryptocurrency for another cryptocurrency (a "crypto-for-crypto exchange"), exchange cryptocurrency for other (non-digital) property, contribute cryptocurrency to a company in exchange for equity or give cryptocurrency as a gift or charitable contribution. In addition, an employer could compensate employees in cryptocurrency. This section discusses the tax implications of sales and dispositions of cryptocurrency.

1. Sales

As stated above, the Notice provides that cryptocurrency will be treated as property and not as fiat currency for U.S. federal income tax purposes. Accordingly, a taxpayer will recognize gain or loss when selling or otherwise disposing of cryptocurrency,¹⁷ and such gains or losses will not be foreign currency gains or losses.¹⁸ Rather,

⁴ Notice 2014-21, Q&A No. 3; I.R.C. 83(a).

⁵ Notice 2014-21, Q&A No. 4; Treas. Reg. § 1.83-4(b).

⁶ Notice 2014-21, Q&A 10.

⁷ Id.; I.R.C. § 162(a).

⁸ I.R.C. §§ 167, 197.

⁹ I.R.C. § 183.

¹⁰ I.R.C. § 1012.

¹¹ I.R.C. § 1015(a) and (d).

¹² I.R.C. § 1014.

¹³ See generally, I.R.C. §§ 301 and 355.

¹⁴ I.R.C. § 61.

¹⁵ *Comm. v. Glenshaw Glass Co.*, 348 U.S. 426 (1955).

¹⁶ See *Cesarini v. U.S.*, 296 F.Supp. 3 (N.D. Ohio 1969).

¹⁷ Notice 2014-21, Q&A 7; I.R.C. § 1001.

¹⁸ Notice 2014-21, Q&A 2; see generally, I.R.C. § 988

the character of any gain or loss recognized on the sale, exchange or other disposition of cryptocurrency will turn on whether the cryptocurrency was a capital asset or stock-in-trade in the hands of the taxpayer.¹⁹

If a cryptocurrency is a capital asset, gains or losses will be capital, and the applicable tax rate will depend on the taxpayer's holding period. If the cryptocurrency is inventory, stock-in-trade or otherwise not a capital asset in the hands of the taxpayer, then gain and loss realized on a sale or disposition of cryptocurrency will be ordinary income or loss.

2. Crypto-for-Crypto and Barter Exchanges

In a crypto-for-crypto exchange, Adam exchanges A-Coins for B-Coins from Brad. Until a recent change in law,²⁰ Adam and Brad could exchange property that was held for investment or used in a trade or business and that was of a "like-kind", and such exchange would be tax-free for U.S. federal income tax purposes.²¹ It is possible that the units of one cryptocurrency would have been considered to be of a like-kind to units of another cryptocurrency and therefore that an exchange of such cryptocurrencies would have been tax-free. The Tax Cuts and Jobs Act of 2017 ("TCJA") limits tax-free treatment to exchanges of like-kind real property that is held for investment or used in a trade or business. Therefore, crypto-for-crypto exchanges may be taxable transactions, just as the exchange of any other non-real estate property.²²

Adam will recognize taxable gain or loss equal to the difference between his tax basis in the A-Coins and the fair market value of the B-Coins. Similarly, Brad will recognize taxable gain or loss equal to the difference between his tax basis in the B-Coins and the fair market value of the A-Coins.

Rather than a crypto-for-crypto exchange, cryptocurrency may be exchanged for other property. This will be treated as a barter transaction. Using the above example, Adam uses cryptocurrency to purchase Brad's Mickey Mantle rookie card. Adam will recognize taxable gain or loss equal to the difference between his tax basis in the A-Coins and the fair market value of the Mickey Mantle rookie card. Similarly, Brad will recognize taxable gain or loss equal to the difference between his tax basis Mickey Mantle rookie card and the fair market value of the B-Coins.

In 2017, the Congressional Blockchain Caucus proposed a bill that would exclude up to \$600 of gain from the exchange of cryptocurrency for non-cash property.²³ The bill also would grant authority to the IRS to issue rules relating to reporting. This provision was not included in the TCJA and has not otherwise been enacted into law.

3. Exchange for Equity

A taxpayer may contribute cryptocurrency to a partnership or a corporation in a tax-free exchange for equity interests therein.²⁴ Unless the partnership or the corporation is an investment company (discussed below), the taxpayer will generally not recognize gain or loss on the contribution of the cryptocurrency in exchange for equity interests in the issuer (if the other applicable requirements are met).²⁵ The taxpayer's tax basis in the equity interests received in a tax-free contribution will generally equal his tax basis in the cryptocurrency. The partnership's or corporation's tax basis in the cryptocurrency will be equal to the adjusted basis of the cryptocurrency as of the date of contribution.²⁶

¹⁹ Notice 2014-21, Q&A 7.

²⁰ See Pub. Law 115-97 § 13303, amending I.R.C. § 1031.

²¹ I.R.C. § 1031.

²² Notice 2014-21, Q&A 6. However, see the discussion in Section I.B. for the possibility that a crypto-for-crypto exchange would not be a taxable event.

²³ Proposed Cryptocurrency Tax Fairness Act creating new I.R.C. § 139G.

²⁴ I.R.C. §§ 351, 721.

²⁵ I.R.C. §§ 358, 722.

²⁶ I.R.C. §§ 362, 723.

4. Gifts and Charitable Contributions

A taxpayer may make a gift of cryptocurrency to a friend, relative or charity. The donee's basis in the gifted cryptocurrency will be equal to the lesser of the donor's basis in such cryptocurrency or the fair market value of the gifted cryptocurrency plus any gift tax paid by the donor.²⁷ If the donor gifts property worth more than \$15,000 in any year to a donee (determined on a per year, per donee basis), then the gift will be a taxable gift and reportable to the IRS.²⁸ Donations of cryptocurrency to a charity may be deductible for U.S. federal income tax purposes, and donors should be aware of the requirements relevant to charitable contributions.²⁹

5. Compensation

If an employer compensates employees in cryptocurrency, the employer is obligated to withhold for income and payroll taxes.³⁰ The withheld amounts must be remitted to the IRS in U.S. dollars.³¹ Employers should reduce the amount of cryptocurrency transferred as compensation by the amount of withholding the employer would remit to the IRS (and any applicable state and local taxing authorities).

²⁷ I.R.C. § 1015(a) and (d).

²⁸ I.R.C. § 2501 et seq.

²⁹ I.R.C. § 170.

³⁰ Notice 2014-21, Q&A 11; I.R.C. § 3402.

³¹ I.R.C. § 6315.

II. Initial Coin Offerings

As discussed above, the sale of tokens is typically called an ICO because of its resemblance to an IPO. There are two general kinds of tokens, “utility tokens” and “securities tokens”. Utility tokens are intended to be used on a decentralized, distributed network that delivers to the users of the network a consumptive good or service. That is, when the networks are functional, the tokens will act as currency on those networks whereon users can exchange tokens for goods or services made available by the issuer.

A securities token sometimes has more of the features that would be associated with traditional equity or debt, for example, voting rights, the right to share in profits or the right to receive a specified rate of return. The advantage of offering these in token form is to provide nearly instantaneous trading, clearing and settlement and an indelible chain of title. The classifications of a token as an utility token or a security token and as a security or a commodity often impacts, but is not dispositive of, the U.S. federal income tax consequences of an ICO to the token issuer.

A. Utility Tokens

Assuming that the issuer is a subject to U.S. taxes, the issuance of utility tokens in an ICO would presumably be treated as the sale of property with zero basis. Although utility tokens would not be convertible virtual currency covered by the Notice, it is difficult to see why they too would not be treated as property and subject to the same general rules. Thus, an issuer would generally recognize income upon the sale of the tokens. Essentially, it is like the sale of self-created intangible assets. So, in this respect it is not like an IPO at all, which are usually tax-free.

The heavy tax burden on a token sale probably comes as unpleasant surprise to many issuers (a surprise one hopes they become aware of prior to completing an ICO). Under current law, a corporate issuer subject to U.S. tax would have a 21% U.S. federal tax rate, plus any applicable state and local tax rates. This income may be offset with operating losses incurred in the year of sale (or prior years if carried forward).³² However, the losses generated in such year and previous years may be insufficient to fully offset the income. For instance, many of the expenses of an issuer may be for computers and other technology, and thus may be required to be capitalized.

Many ICOs appear to be undertaken by issuers that are not, or take the position that they are not, subject to U.S. taxation. This may have something to do with the taxes that the U.S. would impose.

1. Token Presales

An issuer often will issue a token that is not yet functional. Indeed, this is the predominant model, since usually the issuer is nothing more than an entity with an idea. The entity needs capital to turn the idea into reality. Although a pre-functional token cannot function on the network, it is often tradeable on a secondary exchange at the time of issuance or shortly thereafter.

It is not clear whether the sale of a pre-functional token would be taxable at the time of transfer. If viewed as the immediate sale of property, it would be.³³ However, if it were viewed as merely the right to receive a functional token when the network becomes operational, it might be viewed as a prepaid forward purchase of a functional token. Forward contracts generally are not taxable until settled (as discussed further below). This may allow an issuer to better manage its tax burden by allowing it to have more net operating loss carryovers by the time it must take the income from the ICO into account (that is, the year that the prepaid forward settles).

³² I.R.C. § 172.

³³ I.R.C. § 1001.

In this regard, it may be helpful to explicitly structure a token presale as a forward purchase. In fact, many token sales are undertaken pursuant to something called a “Simple Agreement for Future Token” or “SAFT”.³⁴ The SAFT is a framework that seeks to navigate federal securities and money-transmitter laws. The SAFT framework is for utility tokens that are not themselves intended to be securities. The SAFT provides investors with the right to fully functional tokens, delivered once the network is created and the tokens are functional. SAFT investors prepay a purchase amount and are entitled to receive an amount of functional tokens based upon the price sold to the public, taking into account a discount. For example, assume that a SAFT investor is entitled to a 5% discount and prepays \$1000. If the price per unit to the public is \$10 per token, the SAFT investor receives 105 tokens ($\$1000/(\$10 \times .95)$).

For securities law purposes, the SAFT is intended to be a security, but the tokens, when functional, are intended not to be securities. Pre-functional tokens would likely be securities. Thus, with a SAFT, an issuer may solicit “accredited investors” to enter into SAFTs and thus obtain working capital, then issue the functional tokens to the broader public in an ICO.³⁵

For tax purposes, the SAFT is intended to be, and ought to be, treated as a forward purchase agreement. Entering into a forward contract is generally understood not to be a sale of property at the time the contract is entered into.³⁶ Rather, a forward contract is considered to be an open transaction until it is settled, disposed of or allowed to lapse.³⁷ A prepayment of a forward contract is typically viewed as a deposit or as akin to the receipt of an option premium, neither of which is a taxable event.³⁸

The IRS has accepted that a prepaid forward contract, if structured correctly, will not cause an immediate taxable event. In a well-known revenue ruling, Rev. Rul. 2003-7, the IRS found that the prepaid amount for appreciated stock was not gross income upon receipt where: (1) the amount of stock to be delivered varied significantly depending on its value on the settlement date, (2) the maximum number of shares to be delivered was pledged, and (3) the taxpayer had the option to cash settle the transaction, deliver all or a portion of the pledged shares to the purchaser or to deliver a different lot of identical shares.

The IRS, however, may attempt in some circumstances to recharacterize a prepaid forward contract as an immediate sale. This usually occurs when the benefits and burdens of the property have effectively been transferred at the time of the contract. For instance, in *Anschutz Co. v. Commissioner*, the Tax Court found a taxable sale upon execution of a prepaid forward contract with similar facts as Rev. Rul. 2003-1 except that the seller/taxpayer lent the pledged shares to the buyer. In addition, two IRS publications found that stock was sold immediately upon the execution of a variable prepaid forward contract where the seller/taxpayer lent the shares to the buyer in a securities lending transaction.³⁹

An issuer that pre-sells functional tokens pursuant to a SAFT should not have a tax recognition event until delivery of the tokens. A token pre-sale differs significantly from the cases where a prepaid forward contract was found to be immediately taxable. Most importantly, the tokens do not even exist at the time the SAFT is entered into (indeed, that’s the whole point). Thus, the tokens cannot be pledged, lent or otherwise transferred on the execution date. And although probably not necessary to achieve forward contract treatment,⁴⁰ the number of tokens to be delivered may vary widely since that is dependent upon the price that the public ultimately pays for the tokens. Accordingly, the general treatment of forward contracts should prevail.

³⁴ The concept of a SAFT is actually being replaced by an “early contribution agreement”. This difference in nomenclature is likely attributable to concerns related to U.S. and/or securities laws, and either agreement should be regarded as a prepaid forward agreement for U.S. federal income tax purposes.

³⁵ The SAFT investors will ultimately receive the tokens at a discount.

³⁶ *Lucas v. North Texas Lumber Co.*, 281 U.S. 11 (1930).

³⁷ See, e.g., *Virginia Iron Coal & Coke Co. v. Comm’r*, 37 BTA 195, aff’d 99 F2d 919 (4th Cir.), cert. denied, 307 U.S. 630 (1938).

³⁸ See, e.g., Rev. Rul. 58-234, 1958-1 CB 279; Rev. Rul. 78-182, 1978-1 CB 265.

³⁹ TAM 200604033 (Oct. 20, 2005); AM 2007-004 (Jan. 24, 2007).

⁴⁰ The variability of delivery was important in Rev. Rul. 2003-7 because I.R.C. § 1259 would have applied to find a constructive sale if the number of shares to be delivered was substantially fixed. I.R.C. § 1259 would not apply to utility tokens because it applies only to stock, debt instruments and partnership interests.

2. Non-U.S. Issuers

As stated above, many ICOs are affected by issuers that are not U.S. persons. If their operations are conducted outside of the United States, they should not be subject to U.S. taxation. Often this is in fact the case. For a variety of reasons, much cryptocurrency activity takes place outside of the United States. One of the reasons is energy. Mining and other cryptocurrency activity takes large amounts of computing power, and therefore large amounts of energy. Certain countries such as Iceland and Russia have numerous cryptocurrency operations because of the low costs of energy. They also have the benefit of cold weather. Running computers generates lots of heat, and cold temperatures allow the computers to be cooled down without expensive air conditioning.

If a foreign issuer did have significant operations in the United States, however, then all or a portion of the proceeds from an ICO would be taxable in the United States to the extent derived from assets used in or held for use in the conduct of a U.S. trade or business or if the activities of a U.S. trade or business were a material factor in the realization of the income.⁴¹ Depending upon the business, perhaps this could be mitigated by locating as many of the operational activities outside of the United States (perhaps in a separate entity) and having management and perhaps marketing and other activities conducted from the United States.

B. Securities Tokens

Securities tokens are tokens that have more of an equity-like flavor, such as the right to share in profits and voting rights. For instance, tokens called DAO Tokens were the subject of an SEC Investigative Report issued on July 25, 2017. This was the Securities and Exchange Commission's ("SEC") first pronouncement on token sales.

DAO Tokens were sold in exchange for Ether, another cryptocurrency (which is also a convertible virtual currency). Purchasers of DAO Tokens were permitted to vote on menu of investments to which it would apply the pooled proceeds of the token sales. The purchasers would then share in the profits from the investments in proportion to their holdings of DAO Tokens. Among other things, the SEC found that the *Howey* Test for an investment contract applies to token investments.

There seems to be a strong argument that a token such as the DAO token should be considered to be equity for tax purposes.⁴² One would have to consider other factors such as the rights of the actual, legal equity of the issuer. In some cases (such as under Delaware law) it may be possible for the tokens to be equity under local law. It may also be possible in some instances to structure a token as a debt instrument. If a token were to be treated as equity or debt, a U.S. issuer would generally be able to effect an ICO without the recognition of income.⁴³

⁴¹ I.R.C. § 864(c)(2).

⁴² See, e.g., Notice 94-47 (analyzing whether an interest in a company was debt or equity).

⁴³ See §§ 721(a) and 1032.

III. Tax Considerations Related to Funds and Investors

According to the Wall Street Journal, in 2017, fund sponsors launched approximately eighty-four (84) hedge funds that trade cryptocurrencies as their predominant strategy (“Crypto Funds”).⁴⁴ In addition, the SEC has announced that it will examine up to 100 Crypto Funds, referencing the rapid growth of Crypto Funds.⁴⁵ As discussed above, the SEC and Commodity Futures Trading Commission (“CFTC”) are still determining which administrative body will regulate cryptocurrency. This creates uncertainty, which is particularly salient to investment funds and their investors, as to the tax treatment of investing in or trading in cryptocurrency. This section initially discusses whether a Crypto Fund would be a dealer in cryptocurrency. Assuming a Crypto Fund is not a dealer in cryptocurrency, Crypto Funds should consider the trade or business, publicly traded partnership, mark-to-market, and specific identification implications of buying and trading cryptocurrency.

A. Investor, Trader or Dealer Status

Different U.S. federal income tax rules apply to investors, traders and dealers.⁴⁶ Generally, dealers are engaged in the trade or business of making a market in an asset class, by being willing to buy or sell such asset at certain prices, seeking to profit from bid-ask spreads.⁴⁷ Dealers generally do not seek to profit from appreciation on investments or short-term market swings. Most investment funds are not dealers.

A Crypto Fund may be a trader in cryptocurrency if its trading activities rise to the level of a trade or business of buying and selling cryptocurrency for its own account.⁴⁸ A Crypto Fund will be a trader if its trading activity is substantial and the fund seeks to profit from short-term swings in the market (rather than long-term appreciation).⁴⁹ In making the determination of whether a taxpayer is a trader, the IRS and courts look at the number of trades, the frequency of trading activity, the total number of trades and portfolio turnover.⁵⁰

Unlike traders, investors are not engaged in a trade or business. An investor purchases securities to profit from interest payments, dividends and capital appreciation over a longer investment horizon.⁵¹ If a Crypto Fund is not a trader in cryptocurrency, it will be an investor.

The trader or investor distinction may be of importance to Crypto Funds that are partnerships for tax purposes. Crypto Funds that are traders in cryptocurrency may be able to make an election to mark-to-market open securities or commodities positions at the end of each year, which may permit netting of short-term capital losses against other income.⁵²

In addition, a Crypto Fund may incur significant transaction fees to clear transactions. Cryptocurrency exchanges often charge transaction fees to transfer cryptocurrencies. In addition to fees charged by a platform, on some cryptocurrency exchanges, people may choose (or may be forced) to pay an additional amount for miners to validate the transaction; this is known as “gassing”. During high volume periods, such as December 2017, CNBC reported that the average fees paid to clear transactions spiked to twenty-eight dollars, with another website reporting total fees as high as fifty-five dollars.⁵³ An actively traded Crypto Fund may have a significant amount of transaction fees, which, along with any management fees, would not be

⁴⁴ See Michaels, D., Crypto-Focused Hedge Funds on SEC’s Radar, Wall Street Journal (March 22, 2018).

⁴⁵ Id.

⁴⁶ See Estate of Yaeger v. Comm., 889 F.2d 29, 33 (2d Cir. 1989), aff’g in part, rev’g in part on another issue and remanding T.C. Memo. 1988-264; King v. Comm., 89 T.C. 445, 458-459 (1987).

⁴⁷ See generally, T.D. 9328 (describing the dealer business model).

⁴⁸ King v. Comm., 89 T.C. at 457-458.

⁴⁹ Mayer v. Comm., T.C. Memo. 1994-209.

⁵⁰ See Fariborz Assaderaghi, et ux., T.C. Memo 2014-33.

⁵¹ Estate of Yaeger, 889 F.2d at 33.

⁵² I.R.C. § 475(f). This is further discussed in Section III.D.

⁵³ <https://bitinfocharts.com/comparison/bitcoin-transactionfees.html>; <https://www.cnbc.com/2017/12/19/big-transactions-fees-are-a-problem-for-bitcoin.html>.

deductible to investors. Investors in a trader Crypto Fund will be able to deduct their respective shares of the fund's expenses (other than interest expense) as business expenses. Investors in Crypto Funds that are investors in cryptocurrency will not be able to deduct their respective shares of the fund's expenses (other than interest expense) for U.S. federal income tax purposes, including for purposes of computing the alternative minimum tax.⁵⁴

B. U.S. Trade or Business

Non-U.S. persons investing in Crypto Funds ("Non-U.S. Investors") typically invest in a foreign corporation formed in the Cayman Islands or another low-tax jurisdiction (an "Offshore Fund"). The Offshore Fund will invest in either an offshore entity that is treated as a partnership for U.S. federal income tax purposes (such as in a master-feeder structure), a domestic limited partnership (such as in a mini-master fund structure), or will invest in portfolio investments, either as a standalone fund or alongside a domestic fund (such as in a side-by-side or parallel fund structure). Non-U.S. Investors generally do not invest in domestic funds.

The main issue relating to Non-U.S. Investors is whether the Offshore Fund's income (or distributive share of income from a master fund) is effectively connected to a U.S. trade or business ("ECI"). If an Offshore Fund's income from buying and selling cryptocurrency is ECI, the Offshore Fund will be subject to U.S. tax on a net income basis, in addition to the branch profits tax. It also will be required to file a U.S. federal income tax return. The same would be true for Non-U.S. Investors in domestic funds.

An Offshore Fund will not be engaged in a U.S. trade or business if its activities consist solely of trading for its own account in: (i) stocks and securities (the "Securities Trading Safe Harbor");⁵⁵ or (ii) in commodities, but only if the commodities are of a kind customarily dealt in on an organized commodity exchange and if the transaction is of a kind customarily consummated at such place (the "Commodities Trading Safe Harbor").⁵⁶

The Treasury regulations for the Securities Trading Safe Harbor interpret the term "securities" narrowly to generally mean debt instruments and rights to purchase debt instruments.⁵⁷ Cryptocurrencies are unlikely to come within the definition of securities for purposes of the Securities Trading Safe Harbor.

The term "commodity" under the Commodities Trading Safe Harbor means a commodity in the ordinary financial sense, including all products traded on commodity exchanges.⁵⁸ The term "commodities" includes the actual commodity and commodity futures contracts.⁵⁹ Therefore, if a cryptocurrency is considered a commodity for this purpose, spot contracts on cryptocurrency (that is, a contract to buy or sell the actual cryptocurrency) should not cause a Non-U.S. Investor to be engaged in a U.S. trade or business. The CFTC has ruled that cryptocurrencies are commodities.⁶⁰ Thus, cryptocurrencies should be commodities for purposes of the Commodities Trade Safe Harbor.

However, buying and selling commodities would only fall within the Commodities Trading Safe Harbor if the commodities are "of a kind customarily dealt in on an organized commodity exchange." This limitation does not require actual consummation on an organized exchange.⁶¹ The IRS has determined that spot and future contracts referencing raw sugar, precious metals, crude oil and foreign currency are sufficiently analogous to commodity transactions that are consummated on an organized exchange.⁶²

Bitcoin futures are currently traded on an organized commodity exchange, and therefore, buying and selling Bitcoin should fall within the Commodities Trading Safe Harbor. Trading other cryptocurrencies may also come within the Commodities Trading Safe Harbor because trading Ethereum, Litecoin or other alternative

⁵⁴ I.R.C. § 67(g), as amended by Public Law 115-97.

⁵⁵ I.R.C. § 864(b)(2)(A).

⁵⁶ I.R.C. § 864(b)(2)(B).

⁵⁷ Treas. Reg. § 1.864-2(c)(2)(i)(c).

⁵⁸ Rev. Rul. 73-158, 1973-1 CB 337.

⁵⁹ *Id.*

⁶⁰ See *In re Coinflip, Inc.*, *supra* note 18.

⁶¹ Priv. Ltr. Rul. 8527041 (Apr. 8 1985).

⁶² *Id.* and Rev. Rul. 73-158, *supra* note 72. See also, *Gillin v. U.S.*, 423 F.2d 309 (Ct. Cl. 1970); Priv. Ltr. Rul. 8236013; Priv. Ltr. Rul. 7743083; Priv. Ltr. Rul. 8813012; Priv. Ltr. Rul. 8850041.

cryptocurrencies may be considered analogous to trading Bitcoin, although here is no certainty that the IRS or a court would agree with this position.

C. U.S. Taxable Investor Structuring Issues

1. Structure and Publicly Traded Partnerships

U.S. taxable investors investing in Crypto Funds typically invest in a U.S. entity that is a partnership for tax purposes, such as a limited partnership or limited liability company (“LLC”). Partnerships are not subject to entity-level tax on net income. Instead, the income is allocated to the owners of the partnership, and the owners take the income into account on their tax returns. Typically, cash distributions not in excess of an investor’s tax basis in the Crypto Fund will not be a taxable distribution. Distributions of property⁶³, such as tokens, will not be a taxable distribution.

However, a Crypto Fund that is structured as a partnership could be taxed as a corporation for U.S. federal income tax purposes if it is “publicly traded partnership” (“PTP”). Corporations are taxed on net income, and distributions to shareholders may be taxable as dividends. It is important that a Crypto Fund for U.S. taxable investors not be taxable as a corporation for U.S. federal income tax purposes.

A Crypto Fund will be a PTP if: the fund’s equity interests are readily tradable on an established or a secondary market (or the substantial equivalent thereof) (“Readily Tradable”);⁶⁴ the Crypto Fund has more 100 partners taking certain attribution rules into account (the “Private Placement Safe Harbor”);⁶⁵ and 10% or more of the income of the Crypto Fund is not “qualifying income” (the “Qualifying Income Test”).⁶⁶ The Private Placement Safe Harbor is not discussed because it should apply to Crypto Funds in the same manner as it applies to other private funds. Thus, this discussion of PTP considerations relevant to Crypto Funds is limited to whether the Crypto Fund’s equity interests are Readily Tradable and whether a Crypto Fund can satisfy the Qualifying Income Test.

A Crypto Fund’s equity interests may be Readily Tradable if the fund offers liquidity rights (for example, redemption and withdrawal rights) on a frequent basis. Generally, tax advisors are comfortable that fund interests are not Readily Tradable where a fund offers no more frequently than quarterly liquidity rights.

Additionally, a Crypto Fund that tokenizes its equity interests and allows investors to trade such tokens may be treated as a PTP. To our knowledge, there has not been a U.S. fund that tokenized its partnership interests on a blockchain. However, if this were the case, it is possible that Crypto Fund investors trading tokens, which represent equity in the Crypto Fund, could be considered a secondary market, and therefore the Crypto Fund’s interests would be considered Readily Tradable. In this case, the Crypto Fund may be considered a PTP and taxed as a corporation.

Even if a Crypto Fund’s equity is considered Readily Tradable, a PTP will not be taxed as a corporation if it satisfies the Qualifying Income Test. To satisfy the Qualifying Income Test, at least 90% of the Crypto Fund’s income must be qualifying income. Qualifying income includes, among other types of income⁶⁷, income or gain from trading commodities and contracts that reference commodities by any partnership if a principal activity of such partnership is the purchase and sale of commodities.⁶⁸ Gains from the sale of capital assets that are held for the production of dividends, interest, rental income or certain income derived from natural resources

⁶³ Property means property other than cash and marketable securities.

⁶⁴ I.R.C. § 7704(a).

⁶⁵ Treas. Reg. § 1.7704-1(h) (partnership interests are not Readily Tradable if the partnership interests were issued in a transaction that was not required to be registered under the Securities Act of 1933 and there are less than 100 partners (taking into account certain attribution rules) during the taxable year of the partnership).

⁶⁶ I.R.C. § 7704(c).

⁶⁷ PTP qualifying income means: dividends, interests, real property rents, gains from the sale of real property, certain income related to natural resources, capital gains from the sale or disposition of a capital asset that is held for the production of the foregoing items of income, and certain income from commodities or futures, forwards and options contracts with respect to commodities. I.R.C. § 7704(d)(1).

⁶⁸ I.R.C. § 7704(d)(1)(G).

is also qualifying income (“Gains from Qualified Income Producing Property”).⁶⁹ It is unclear whether at least 90% of a Crypto Fund’s income will constitute qualifying income.

As discussed above, a Crypto Fund may be able to successfully take the position that its cryptocurrencies are commodities for purposes of the PTP rules. Assuming that cryptocurrencies are commodities for this purpose, if one of the Crypto Fund’s primary activities is trading commodities, then the Crypto Fund should satisfy the Qualifying Income Test.

However, if the cryptocurrencies are not commodities, the Crypto Fund would not likely be able to satisfy the Qualifying Income Test. The sale of cryptocurrencies generally does not give rise to Gains from Qualified Income Producing Property. Therefore, gains from the sale of cryptocurrencies would not be good income for purposes of the Qualifying Income Test.

2. Subscriptions in Kind

Assuming that a Crypto Fund is not a PTP, U.S. taxable investors will either subscribe for fund interests by contributing cash or cryptocurrencies in kind. If investors subscribe for Crypto Fund interests contributing cryptocurrencies in kind, the investor may be required to recognize gain on the contribution⁷⁰ or the Crypto Fund may be required to keep track of and allocate pre-contribution gain or loss to the contributing investor.⁷¹

Contributions of property to a partnership that is an investment partnership and that result in diversification of the contributor’s interests will not be a tax-free contribution. Diversification ordinarily occurs where two or more contributors transfer non-identical assets to a partnership. Different cryptocurrencies are probably non-identical assets. Therefore, contributing cryptocurrencies to a Crypto Fund in exchange for equity interests may not be tax-free if the Crypto Fund is an investment partnership for purposes of tax-free contribution rules.

A Crypto Fund will be an investment partnership for this purpose if more than 80% of the partnership’s assets consist of stocks, securities, debt obligations, options, forwards or futures contracts, notional principal contracts, foreign currency, interests in REITs or RICs, and any asset exchangeable into any of the foregoing asset classes.⁷² This list of asset classes represents traditional financial assets, and it is not entirely clear how cryptocurrencies fit into this paradigm.

A Crypto Fund will be an investment company for purposes of the tax-free contribution rules if it deals exclusively in futures or forward contracts referencing digital assets. Currently, only Bitcoin futures are being written and traded, but the value of SAFTs held by the Crypto Fund may be required to be taken into account for purposes of the tax-free contribution rules. In addition, a Crypto Fund may be considered an investment company for purposes of the tax-free contribution rules if its cryptocurrencies are considered securities for purposes of the tax-free contribution rules.

Even if the Crypto Fund is an investment partnership for purposes of the tax-free contribution rules, the contribution of a diversified portfolio of cryptocurrencies would not result in diversification to the contributor and the contributor would not be required to recognize gain.⁷³ A portfolio is diversified if the securities of a single issuer do not exceed 25% of the total value of the portfolio and the securities of any five (5) issuers do not exceed 50% of the total value of the portfolio.⁷⁴ For this purpose, the term “securities” includes any investment that is treated as a security under the Investment Company Act of 1940 (the “40 Act”).⁷⁵ Therefore, if the cryptocurrencies being contributed are securities under the 40 Act, the contribution of a diversified portfolio to a Crypto Fund should be tax-free. If they are not securities (which most may not be), then this specific diversification test does not apply. However, it might be reasonable to use an analogous concentration test.

⁶⁹ I.R.C. § 7704(d)(1)(A through F).

⁷⁰ I.R.C. § 721(b).

⁷¹ I.R.C. § 704(c).

⁷² I.R.C. § 351(e)(1)(B); Treas. Reg. 1.351-1(c).

⁷³ Treas. Reg. 1.351-1(c)(5).

⁷⁴ I.R.C. § 368(a)(2)(F)(ii).

⁷⁵ Id. at (F)(vii).

Assuming that a Crypto Fund is not an investment partnership for purposes of the tax-free contribution or that an investor has contributed a diversified portfolio of cryptocurrencies, the contribution of property to the Crypto Fund should be tax-free. In this case, the Crypto Fund manager should obtain tax basis information from any investor subscribing in-kind by contributing cryptocurrencies. When the Crypto Fund later disposes of the contributed cryptocurrencies, any pre-contribution gain or loss should be allocated to the contributor of such cryptocurrencies.⁷⁶

D. Mark-to-Market Regimes

1. I.R.C. 475(f)

It is unclear whether a Crypto Fund would be able to make a mark-to-market election under I.R.C. Section 475(f). This section discusses whether Crypto Funds are able to make this election and the circumstances in which the election is beneficial to the fund.

Traders (as opposed to investors) in securities and commodities may elect under I.R.C. Section 475(f) to treat their open securities and commodities positions (other than positions identified as held for investment) as having been sold at the close of any taxable year for each position's fair market value, recognizing gain or loss as ordinary income or loss (the "475(f) election").

For purposes of the 475(f) election, the term "commodity" means personal property of a type that is actively traded.⁷⁷ Actively traded personal property includes any personal property traded on an established financial market.⁷⁸ An interdealer market qualifies as an established financial market for this purpose.⁷⁹ The characteristics of an interdealer market include a "system of general circulation ... that provides a reasonable basis to determine fair market value by disseminating either recent price quotations... of recent transactions."⁸⁰

It is possible that cryptocurrency exchanges (such as Coinbase) can qualify as interdealer quotation systems. Assuming that cryptocurrency exchanges are interdealer quotation systems, cryptocurrencies that are traded on such exchanges may be considered actively traded personal property. Therefore, if, as discussed previously, cryptocurrencies are commodities for tax purposes, Crypto Funds that are traders in cryptocurrencies may be able to elect to mark-to-market their cryptocurrency positions at the end each year.

Funds that have significant mismatches between long- and short-term capital gains or losses or between capital losses and ordinary income may desire to make this election. Due to the volatile nature of cryptocurrency, an actively traded Crypto Fund could have significant short-term capital gains and losses. Making a 475(f) election can provide a tax benefit by allowing the Crypto Fund to offset short-term capital losses against long-term capital gains or ordinary income.

2. Bitcoin Futures and 1256 Contracts

Bitcoin futures are currently being traded on the Chicago Board of Exchange and the Chicago Mercantile Exchange. Bitcoin futures may be regulated futures contracts under Section 1256. Regulated futures contracts that remain open at the end of a taxable year should be marked to market by the contract holder. At the end of a taxable year or when a regulated futures contract position is closed, any gain or loss required to be recognized for U.S. federal income tax purposes is treated as 60% long-term capital gain or loss and 40% short-term capital gain or loss. This tax treatment should apply to Bitcoin futures.

Because a Crypto Fund can take a long or short position on Bitcoin via futures contracts, the fund may have offsetting positions. In such case, losses may be deferred under tax straddle rules.⁸¹ Actively traded personal

⁷⁶ I.R.C. § 704(c).

⁷⁷ I.R.C. § 475(e)(2)(A) (defining commodity for purposes of subsection (f) of I.R.C. § 475 with reference to I.R.C. § 1092(d)(1)).

⁷⁸ Treas. Reg. § 1.1092(d)-1(a).

⁷⁹ Treas. Reg. § 1.1092(d)-1(b)(1)(v).

⁸⁰ Treas. Reg. § 1.1092(d)-1(b)(2)(i).

⁸¹ IRC 1092(a).

property is subject to the straddle rules. As discussed above, cryptocurrencies, and Bitcoin in particular, can be actively traded personal property. Therefore, the straddle rules can apply where a Crypto Fund holds Bitcoin long and shorts Bitcoin via futures.

E. Identification

When selling stocks or bonds, taxpayers may identify which stocks or bonds are being sold.⁸² Under these “adequate identification” rules, a taxpayer is treated as having sold the stock certificates that are delivered to the buyer if it is shown that certificates representing shares of stock from a lot which was purchased or acquired on a certain date or for a certain price were actually delivered.⁸³ If the stock is in the custody of a broker or other agent the taxpayer may, at the time of sale or transfer, specify to the broker or agent the particular stock to be sold or transferred (which then must be confirmed by the broker or agent within a reasonable time).⁸⁴ If an adequate identification is not made according to the foregoing, the taxpayer is treated as having sold the older shares of stock (the so-called “FIFO” method).⁸⁵ The stock identified pursuant to these adequate identification requirements will be considered the stock transferred even though stock certificates from a different lot were actually delivered.⁸⁶

Cryptocurrencies, like stocks and bonds, are fungible. It is unclear, however, whether the adequate identification rules that are available to sales of stocks and bonds would apply to sales of cryptocurrencies. The Tax Court has previously allowed a commodities trader to apply rules similar to the adequate identification rules applicable to stock sales to the disposition of commodities futures contracts.⁸⁷ If this treatment were to extend to cryptocurrency transactions, which may be commodities, a seller may be able to make an adequate identification of which lots of cryptocurrency are sold.

An adequate identification might entail showing the specific coins or tokens transferred. This is generally possible for a person that holds his own private and public keys (and is able to read the blockchain code). For persons that hold cryptocurrencies through a third party (such as Coinbase or Gemini), it should theoretically be possible to specify the cryptocurrency to be transferred, although it does not appear that this service is offered widely at this time. If the stock/bond rules apply, and specific or adequate identification is not or cannot be made, then the FIFO rule would apply.

If the stock/bond rules do not apply, then it seems that specific identification would apply in any case, just as it would to non-fungible property. However, this may not be possible for a person who holds cryptocurrencies through a platform, and even for a direct holder may be difficult (because it would require being able to read the blockchain code). In such a case, the taxpayer should adopt a reasonable method. Presumably FIFO would be considered to be reasonable, although other methods may be as well.

⁸² Treas. Reg. § 1.012-1(c).

⁸³ Id. at (c)(2).

⁸⁴ Id. at (c)(2).

⁸⁵ Id. at (c)(1)(i).

⁸⁶ Treas. Reg. § 1.1012-1(c)(3)

⁸⁷ See *Perlin v. Comm.*, 86 T.C. 388, 430 (1986).

IV. Miscellaneous Topics

A. Deductions for Abandonment, Theft and Worthless Securities

Many people view cryptocurrency as a passing fad or at the very least a bubble. Many blockchain companies will probably fail, and their tokens will become worthless. In addition, many people who lose their private keys cannot access their wallets. Some blockchain companies or cryptocurrency owners may be the victim of hacking and currency owners may lose some or all of their cryptocurrency. Given these risks, taxpayers may be entitled to claim deductions for worthless cryptocurrency or inaccessible property.

First, taxpayers who enter into transactions for profit may deduct losses where the property becomes worthless or the taxpayer intends to abandon the property and makes an overt act of abandonment.⁸⁸ Non-use does not indicate abandonment.⁸⁹ Abandonment must be permanent.⁹⁰ If cryptocurrency becomes inaccessible (due to losing a private key), there would not be an intent to abandon. Further, there is no abandonment where the taxpayer continues efforts to access his digital wallet. An act of abandonment may be shown by writing to the cryptocurrency exchange (or other custodian of the cryptocurrency) indicating you are abandoning your property.

It is also possible that an exchange or blockchain company could be hacked. In addition, anyone with an owner's private key can send cryptocurrency from his digital wallet. As a result, a person that loses coins may claim a loss for theft in the year the theft was discovered.⁹¹

Unlike deductions for abandonment losses or theft, holders of cryptocurrency may not be able to claim a deduction for worthlessness. For U.S. federal income tax purposes, securities that are capital assets and that become worthless are treated as a loss from the sale or exchange of a capital asset.⁹² For this purpose, security means stock, rights to acquire stock, or a debt instrument with interest coupons or that is in registered form. Because the definition of security does not seem to include cryptocurrency, U.S. taxpayers may not be able to claim a loss for worthless securities where cryptocurrency becomes worthless (other than, possible, for certain securities tokens).

B. Loans

When a taxpayer makes a loan in dollars or other government-backed currencies, the repayment of the principal amount of the loan is not subject to tax, to either the buyer or the seller. Interest paid on a loan is subject to inclusion by the lender and possibly deductible by the borrower.⁹³

A loan of cryptocurrency, unlike a loan in fiat currency, would be considered a loan of property. When the principal amount is repaid, it may be considered to be repaid with property different from that which was lent, even if the repayment is made in the same type of cryptocurrency. This is because the actual cryptocurrency lent may have been spent, or because, even if those exact coins were not spent, the particular system may not allow a user to specify particular coins to transfer (as is the case with Bitcoin). This creates an odd situation where the property that a lender gets back in repayment is technically different from the property that was lent, even though it is perfectly fungible.

Is such a loan really a taxable exchange of property? In this regard, it may be helpful to look at the law applicable to securities lending transactions. Section 1058 provides that securities lending will not result in gain (or loss) recognition if certain requirements are met, including that the securities returned be identical to those lent. As discussed previously, most cryptocurrencies would not be considered to be securities and

⁸⁸ I.R.C. § 165(g)(1).

⁸⁹ See, e.g., *Jones Beach Theatre Co.*, T.C. Memo 1966-100; *Walter P. Myers Est.*, T.C. Memo 1981-384.

⁹⁰ Rev. Rul. 2004-58, 2004-1 CB 1043.

⁹¹ I.R.C. § 165(e).

⁹² I.R.C. § 165(g)(1).

⁹³ See generally, I.R.C. § 164.

therefore would not fall under Section 1058. However, there are authorities prior to the enactment of Section 1058 that held that a securities loan was not a taxable event. For instance, two years prior to the enactment of Section 1058, the IRS issued G.C.M. 36948, which held that a securities loan could be a disposition of property but that it would not result in a recognition of gain or loss if the securities returned to the lender did not differ materially from the securities that were borrowed. This was a straightforward application of Treas. Reg. section 1001-1, which provides that no gain or loss will be recognized when property is exchanged for other property that does not differ materially in kind or extent. A 1974 private letter ruling also concluded that the lending of securities was a loan and did not constitute a sale or other disposition of securities.⁹⁴

It would seem perfectly reasonable to conclude that a loan in cryptocurrency that was repaid with the same cryptocurrency is not a taxable event, and should be respected as a loan, on the basis that the property lent and the property used for repayment does not differ in any material way. This may be a more difficult argument if, for instance, a loan were made in Bitcoin and repaid with another coin such as ether. Prior to the TCJA, it may have been possible to argue that such a loan would be sheltered considered to be a like-kind exchange under Section 1031. However, the TCJA limits the application of Section 1031 to real property only. Therefore, such a loan would presumably be taxable upon repayment, to both the lender and seller. It is probable that different cryptocurrencies would be considered materially different, since they each run pursuant to a different set of rules. However, perhaps one could stretch the Section 1001 analysis and take the position that cryptocurrencies that are covered by the Notice, that is, those readily convertible into actual currency, are for practical purposes not materially different.

A quick word should also be said about payments of interest by a borrower. Interest payments should result in a taxable event to the borrower equal to the difference between the borrower's basis and the dollar amount of the value the coins which are transferred as an interest payment. Depending on the nature of the loan, the borrower may or may not also get a deduction for such interest payments.

C. Information Reporting

A U.S. person that holds cryptocurrency outside of the United States should consider filing Form 8938 (Statement of Foreign Financial Assets) or FinCEN Report 114 (Report of Foreign Bank and Financial Accounts (FBAR)). Failure to file either form may subject taxpayers to penalties. While it is not entirely clear that these filing obligations extend to cryptocurrency held in offshore accounts, given the risk of penalties, taxpayers should consider filing these forms protectively.

Form 8938 should be filed by certain U.S. persons that have an interest in specified foreign financial assets over worth more than a specified amount.⁹⁵ Specified foreign financial assets include interest in property transferred in connection with the performance of service (such as mining) and interests in assets held in financial accounts. For this purpose, the term "financial account" includes a "custodial account".⁹⁶ The term "custodial account" means an arrangement for holding a financial instrument or investment, which includes commodity transactions.⁹⁷ Therefore, a digital wallet or offshore account that holds cryptocurrency will most likely constitute a custodial account and a financial account for purposes of Form 8938. If the value exceeds a certain value, then Form 8938 should be filed.

FinCEN Report 114 should be filed by U.S. persons that held financial interests in or had signatory authority over offshore bank, securities or other financial accounts with a value exceeding \$10,000.⁹⁸ If cryptocurrency is determined to be a security, it follows that digital wallets would be securities accounts. Even if cryptocurrency is not determined to be a security, digital wallets are likely to be determined to be a reportable

⁹⁴ Priv. Ltr. Rul. 7409301490A (Sept. 30, 1974).

⁹⁵ I.R.C. § 6038D; Treas. Reg. § 1.6038D-1. For U.S. persons that reside in the U.S., Form 8938 should be filed where the value of foreign financial assets is more than \$50,000 on the last day of the tax year (\$100,000 if married filing joint) or more than \$75,000 at any time during the tax year (\$150,000 if married filing joint). If the filer resides outside the U.S., Form 8938 should be filed where the value of foreign financial assets is more than \$200,000 on the last day of the tax year (\$300,000 if married filing joint) or more than \$400,000 at any time during the tax year (\$600,000 if married filing joint).

⁹⁶ Treas. Reg. §§ 1.6038D-1(a)(6) and 1.1471-5(b)(1)(ii).

⁹⁷ Treas. Reg. § 1.1471-5(b)(3)(ii).

⁹⁸ 31 U.S.C. 5314; 31 C.F.R. 103.24.

financial account because it acts as a store of value for monetary instruments, which is the term used in the statute giving rise to the FBAR filing obligation.⁹⁹

⁹⁹ 31 U.S.C. 5314. See also *Hom*, 45 F. Supp. 3d 175 (N.D. Cal. 2014) (determining that cash balances maintained by offshore online poker websites were not reportable financial accounts but that the account maintained at the intermediary used to fund the poker accounts was a reportable financial account for FBAR purposes).

V. Conclusion

Cryptocurrencies are a new and exciting asset class. They also pose unique challenges for tax practitioners because the underlying technology is so complex that few will have the time or the ability to truly understand the technical details. Thus, tax practitioners will have to analogize to assets that they do understand and do their best to apply existing tax principles to this new technology. The closest analogy is intangible property. However, cryptocurrency is unlike other intangible assets. Intangible assets are contract rights, which are the creation of lawyers. Contracting parties have legally defined, enforceable rights and obligations. Cryptocurrencies are not contracts at all. Cryptocurrencies exist as computer code. There are no rights and obligations to enforce, and nobody to enforce them. Indeed, that's a key feature: to have a system that is self-executing according to certain rules, and where incentives rather than the coercion of a central authority ensure the proper functioning of the system.

The IRS's Notice is helpful, but many questions remain unanswered. The IRS should prioritize guidance in this area to address the tax treatment of exchanging one cryptocurrency for another, in particular in connection with ICOs. In this author's opinion, the IRS should back off from its property treatment in those contexts, and devise rules that allow most such transactions to be tax-free. Ultimately, the IRS should consider treating at least some cryptocurrencies as actual currencies rather than property, particularly if they become popular enough that they are widely used for everyday transactions.

Appendix

Background on Cryptocurrency

Cryptocurrencies are now part of our lexicon. Maybe your friend invested in cryptocurrency and he cannot hide his exuberance or you heard about the latest ICO. Bitcoin, the first and most popular cryptocurrency, has a total value of approximately \$126 billion as of this month. Over the past year, its total value has ranged from well under \$50 billion to almost \$350 billion. The price of a single Bitcoin as of Feb. 17 was \$10,822, but has been as high as \$19,000 within the past 6 months. But what exactly is a cryptocurrency? Is it money? Is it an asset? A computer science technology? A political phenomenon? The answer is probably all of the above, and more.

Going from the philosophical to the prosaic, cryptocurrencies usually refer to either digital “coins” or digital “tokens”. A coin is a general medium of exchange, that is, a substitute for money. A token is not a general medium of exchange, but rather is a digital asset used in connection with decentralized services, applications and communities. Both coins and tokens rely on computer technology commonly known as the “blockchain”.

Like most other forms of economic interaction, cryptocurrencies raise tax considerations. This paper will explore various tax aspects of transacting and investing in cryptocurrencies. After a brief review of the non-tax, regulatory treatment of cryptocurrencies, the general tax considerations relating to cryptocurrencies will be discussed. This paper then takes a look at raising capital with cryptocurrencies through “initial coin offerings”. After that, the tax issues that investors, particularly investment funds, may come across will be analyzed. Finally, the paper concludes with some miscellaneous topics.

First, however, a basic understanding of the blockchain technology will be necessary to grapple with the tax considerations of cryptocurrencies. This paper will attempt to explain blockchain in non-technical, layman’s terms. The easiest way to do that will be to use Bitcoin as a paradigm. Other cryptocurrencies differ in detail from Bitcoin, but operate according to the same general principles.

A. Bitcoin¹⁰⁰

Bitcoin was introduced in 2008 by Satoshi Nakamoto, who may or may not be an actual person (or may be several persons). Bitcoin was almost certainly a reaction to the global financial crisis. Bitcoin’s founder(s) initially envisaged a medium of exchange that does not rely on a central bank or other central authority. That is, it is not fiat currency. Instead, it relies solely on the willingness of the users of the Bitcoin system to accept Bitcoin as payment.¹⁰¹ In this regard, it harkens back in some sense to pre-modern societies that used as currency things such as seashells, jewels or even, in the case of the inhabitants of Micronesia, large, circular stones (which maintained their value even if sitting on the bottom of a lagoon).

However, unlike these examples of pre-modern currency, Bitcoin is not tangible. It is nothing more than the recordation of transactions (that is, transfers of Bitcoin) on a computer software program, maintained by a network of computers (each known as a “node”). A blockchain is a specific way to store data in which each new data element embeds a condensed copy of the prior element, all the way back to the first element. This makes it difficult to alter past data (that is, prior Bitcoin transactions) without leaving traces on the most recent data. The idea is that each transaction is put together with a defined number of other transactions in a data “block”. Each block then is added to the previous block to form a chain of blocks. Thus the term blockchain.

These transactions can be thought of as being recorded on a digital ledger, of which each node has a copy. The two key features of Bitcoin is that it is both decentralized, in the sense that it has no central authority governing it, and distributive, in the sense that all of the participants maintain their own personal copy of the

¹⁰⁰ The articles that served as a basis for this summary of Bitcoin are *What Are Cryptocurrencies*, by Rasheed Sabar, and *How Does the Blockchain Work*, by Michele D’Aliessi.

¹⁰¹ There is a convention of using Bitcoin to denote the Bitcoin system and community and bitcoin to denote the currency itself. This paper will use Bitcoin in all instances and rely on the context instead.

ledger. This is why blockchain is also sometimes known as distributive ledger technology, although we note that you could have a blockchain without a distributed ledger.

Blockchain technology obviates the need for a central authority that everyone trusts. Instead, Bitcoin relies on its nodes to maintain the ledger and record transactions. Since each node has a copy of the ledger, falsifying a transaction would require making a change in each of the ___ copies of the ledger.

But all of the ledgers need to be synchronized somehow, otherwise the ledgers would begin to vary and the system would become useless. Theoretically, each member of the community could verify every transaction and then everyone could agree to append their copy of the ledger accordingly. This would be cumbersome and probably impossible. Bitcoin addresses this in a rather ingenious fashion. Instead of everyone in the user community having to independently verify each transaction, the community relies upon validators. Anyone can become a validator, and validators are paid in Bitcoin.

Validators compete for the right to be the one whose appended ledger is adopted by the community. They do this by attempting to be the first one to solve a cryptographic puzzle (essentially a number-guessing game) after checking a transaction. The first one to solve the puzzle is permitted to broadcast his ledger update to the other validators. The other validators check the solution and if it is correct they will update their ledgers to match his, and the winning validator will earn Bitcoin. Validators are also called “miners” (which will be the term used from here out).

Crucially, the other miners will only accept a ledger update after verifying that the ledger is valid and if the updated ledger is longer than their own ledger. Each change to the ledger can be thought of as adding another “block” of data. The blockchain is structured so that to falsify a transaction, a person would have to solve multiple puzzles in a row to have the longest ledger that would be adopted by the rest of the community. This is because each additional block also contains a reference to the previous blocks. So why isn’t someone likely to be able to do this? The answer is that solving a cryptographic puzzle consumes large amounts of electricity and computing power. Therefore, each attempt to solve a puzzle consumes real-world resources. What is more, because of the number of miners, tremendous resources would have to be amassed to solve multiple puzzles in a row. Even obtaining control of 50% of the computing power of the whole network would give a person only a 50% chance to solve a puzzle before anyone else in the network, and only a 25% chance of solving two puzzles in a row. The idea is that committing fraud would be prohibitively expensive and technologically challenging.

The classic fraud that Bitcoin is intended to prevent is the “double-spending” attack. Various forms of this attack have colorful names such as the “Finney attack”, the “Vector 76 attack” and the “51% attack”. Before getting to that, it is useful to take a step back and understand how a Bitcoin user initiates a transfer of Bitcoin. Each Bitcoin user has a digital wallet. Each digital wallet is protected by a special cryptographic method that uses a unique pair of different but connected keys: a private and a public key. If a message is encrypted with a specific public key, only the owner of the paired private key will be able to decrypt and read the message. Likewise, a message encrypted with a private key will necessitate the use of the paired public key to decrypt it. Thus, if a person wants to transfer Bitcoin, he first needs to broadcast a message to the network that is encrypted with his private key (which only he has access to). Each node in the network can see from whom the transaction request is coming by decrypting the transaction request message with the paired public key from the wallet. When encrypting a transaction request with a private key, a user generates a digital signature. This signature is used by the nodes to double-check and authenticate the transaction. The digital signature is a string of text that is the result of a combination of the transaction request and the private key. Any change to the text of the transaction request message changes the digital signature, so no potential attacker can change the transaction request or alter the amount of Bitcoin subject to the transaction.

So, back to the double-spending attack. In a double-spending attack the attacker tries to transfer the same Bitcoins to different people. For example, assume that A (Adam) sends Bitcoin to B (Brad) in exchange for goods. Brad provides the goods to Adam. However, Adam has mined a block in which Adam has sent the same coins back to himself (possibly through the use of a different digital wallet) as he sent to Brad. If Adam is able to mine that block before the transaction to Brad is confirmed as part of a different block, that block will become part of the chain and the transfer to Brad will effectively be invalidated. However, it is likely that in the

meantime another block would be mined and added to the chain, which would foil Adam's attack. Therefore, Adam might have to find multiple blocks to make his chain (embedded with the fraud) the longest and thus the one accepted by the network. All of this mining by Adam costs resources and has a low probability of success. Thus, it is unlikely to be attempted and even more unlikely to succeed.

In addition, Brad can help himself by waiting for the transaction to be confirmed before providing the goods to Adam. Brad should wait for six new confirmations due to the rule requiring the adoption of the longer ledger and because each new block builds on and references the prior block. This should take about an hour, as there is a new confirmation on Bitcoin approximately every ten minutes. A transaction is more secure the farther back in the chain it is. This may point to some practical issues with using Bitcoin as everyday currency. Imagine waiting an hour to get a cup of coffee in the morning! However, this might be remedied by holding Bitcoin through a third party exchange/custodian, such as Coinbase or Gemini (the common transactions of which are not actually reflected on the blockchain itself).

1. Summary of Bitcoin Process

In summary, the steps in the Bitcoin process are as follows:

Step 1. When someone wants to pay Bitcoins to someone else, he broadcasts the transaction to the community over the internet.

- a) Anyone can broadcast a transaction at any time.
- b) Transactions contain public addresses rather than actual identities.
- c) Due to the physical realities of the internet, broadcasts are not heard by everyone in the same order.

Step 2. Miners pick an unconfirmed transaction that they have heard about and check validity by:

- a) Verifying that the payer authorized it;
- b) Verifying versus their copy of the ledger that the payer has enough Bitcoin to cover the transaction; and
- c) Beginning work on a cryptographic puzzle.

Step 3. The process for adding to the community ledger consists of:

- a) When a miner solves a cryptographic puzzle, that miner:
 - I. Appends his verified transaction and puzzle solution to his copy of the ledger; and
 - II. Broadcasts his updated community ledger to other miners.
- b) Other miners confirm that:
 - I. The first miner's ledger is valid; and
 - II. The first miner's ledger is longer than their own ledger.
- c) If confirmed, the miners then update their ledger copy to match the first miner's and the first miner receives payment in Bitcoin.

Of course, this all happens electronically—no human being is actually going through all these steps.

2. Forks

Each cryptocurrency has its own rules for transactions. The users of a cryptocurrency network must agree on the rules of governance of the network. People being people, they on occasion will disagree about the rules. Bitcoin, for example, has a handful of core developers that can make changes to the code (that is, the computer programming that governs Bitcoin). However, those changes will only be accepted if the miners accept the code changes. If there is a disagreement, the ledger splits (“forks”) and the separate groups follow different rules, with each ledger constituting a different currency going forward. For instance, Litecoin is a cryptocurrency that originated as a fork of Bitcoin and has faster transaction settlement and clearing. Bitcoin Cash is another example of a new currency that forked from Bitcoin.

B. Tokens and ICOs

Tokens are another form of virtual currency. Tokens are not a general medium of exchange, but rather are used to access services on “decentralized applications”, known as “dApps”. These are applications that use the blockchain technology to perform specific functions or run programs that are not owned or controlled by any one person, but rather by the users of the dApp. For example, Facebook could be decentralized and the user data owned by the users themselves instead of by Facebook.

Tokens are typically sold by dApp developers at various stages of dApp development. Developers create a whitepaper pitching the dApp. The dApp relies in some fundamental way on a corresponding token, which represents the right to future use of the dApp. The tokens are almost always sold for a cryptocurrency with a ready cash value, such as Bitcoin or Ethereum. The tokens are typically (though not always) traded on an exchange from their initiation. Because this process resembles an initial public offering, these token offerings are commonly known as “initial coin offerings” or “ICOs”.

Non-tax Treatment of Cryptocurrency

Cryptocurrency may be a security or commodity. If cryptocurrency or tokens are classified as securities or commodities for non-tax purposes, such classification may materially impact the U.S. federal income tax treatment of acquiring, holding and disposing of cryptocurrency and tokens. The term “security” includes, among other types of financial instruments, an investment contract.¹⁰² An instrument is an investment contract if it is described in a four-prong test set forth in *SEC v. Howey*.¹⁰³ The SEC and courts use the analysis set forth in the *Howey* decision and the term “investment contract” to classify instruments as securities where such instruments do not neatly fit within other categories enumerated in the definition of securities.¹⁰⁴

Under *Howey*, an instrument will be an investment contract where there is: (1) an investment of money; (2) in a common enterprise; (3) with an expectation of profits; (4) solely from the efforts of others (the “*Howey* Test”).¹⁰⁵ All four prongs must be met for an instrument to be considered a security.¹⁰⁶ The first prong has been interpreted broadly, and an investment of money need not be in the form of cash.¹⁰⁷ Therefore, an investment of cryptocurrency would be an investment of money for purposes of the *Howey* Test.¹⁰⁸

Courts have applied several tests when analyzing whether a common enterprise exists. Courts have found a common enterprise in the following instances: where multiple investors pool funds and share in the profits

¹⁰² Section 2(a) of the Securities Act of 1933, 15 U.S.C. §§ 77b-77c.

¹⁰³ 328 U.S. 293 (1946), reaff’d by *SEC v. Edwards*, 540 U.S. 398 (2004).

¹⁰⁴ *Golden v. Garafolo*, 678 F.2d 1139, 1144 (2d. Cir. 1982).

¹⁰⁵ *Howey*, 328 U.S. at 298-99.

¹⁰⁶ *Edwards*, 540 U.S. at 390.

¹⁰⁷ *Uselton v. Comm. Lovelace Motor Freight, Inc.*, 940 F.2d 564, 574 (10th Cir. 1991)

¹⁰⁸ SEC Release No. 81207 (July 25, 2017). Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO.

together;¹⁰⁹ where profits of an investor are tied to a promoter;¹¹⁰ and where the success of the investor is tied to, and the investor relies on, the expertise of the promoter.¹¹¹

To determine whether there is an expectation of profits, courts have looked at whether the investor expected to receive “dividends, other periodic payments, or the increased value of the investment.”¹¹² ‘Solely from the efforts of others generally has been interpreted to include the literal meaning of “solely” as well as including significant managerial or other efforts necessary to the success of the investment.’¹¹³

Applying the *Howey* Test to Bitcoin, Bitcoin is probably not a security, although this debate is not settled and the SEC may rule that Bitcoin is a security. There is clearly an investment of money as well as an expectation of profits. Arguably, the profits are not derived solely from the efforts of others. Rather, the value of Bitcoin will rise or fall based primarily on supply and demand. It is unclear how a court or the SEC would analyze the common enterprise factor.

Bitcoin is, however, a commodity. The term “commodity” includes “...any goods or articles, except onions..., and all services, rights, and interest in which contracts for future delivery are presently or in the future dealt in.”¹¹⁴ The definition of a “commodity” is broad.¹¹⁵ The Commodities Future Trading Commission (the “CFTC”) has ruled that cryptocurrencies are commodities under the Commodities Exchange Act.¹¹⁶ In addition, the CFTC has publicly stated that cryptocurrencies, referring to Bitcoin and the like, can be commodities, whereas other tokens may be securities.¹¹⁷

¹⁰⁹ E.g., *Curran v. Merrill Lynch*, 622 F.2d 216 (6th Cir. 1980).

¹¹⁰ E.g., *SEC v. Eurobond Exchange Ltd.*, 13 F.3d 1334 (9th Cir. 1994).

¹¹¹ E.g., *SEC v. Continental Commodities Corp.*, 497 F.2d 516 (5th Cir. 1974).

¹¹² *Edwards*, 540 U.S. at 394.

¹¹³ *SEC v. Glenn W. Turner Enters.*, 474 F.2d 476, 482-83 (9th Cir. 1973); *SEC v. Koscot Interplanetary, Inc.*, 497 F.2d 473 (5th Cir. 1974); but see *Hirsch v. Dupont*, 396 F. Supp. 1214, 1218-20 (S.D.N.Y. 1975) *aff'd*, 553 F.2d 750 (2d Cir. 1977) (indicating that the term “solely” should be construed narrowly and have its literal meaning).

¹¹⁴ Section 1a(4) of the Commodities Exchange Act, 7 U.S.C. 1a(4).

¹¹⁵ *Bd. of Trade of City of Chicago v. SEC*, 677 F.2d 1137, 1142 (7th Cir. 1982).

¹¹⁶ In the Matter of: Coinflip, Inc., d/b/a Derivabit, and Francisco Riordan, CFTC Docket No. 15-29, available at <http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoinfliprorder09172015.pdf>. See also, LabCFTC: a CFTC Primer on Virtual Currencies, October 17, 2017, available at http://www.cftc.gov/idc/groups/public/documents/file/labcftc_primercryptocurrencies100417.pdf.

¹¹⁷ *Id.*

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