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Year-End Tax Topics for Cryptocurrency Investors

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Now is the time for investors in cryptocurrencies to recognize approaching year-end considerations and possible planning opportunities. Potential considerations include: the recent Ethereum "Merge" and the taxation of staking rewards, tax loss planning, and forthcoming information reporting regulations.

Classification of Cryptocurrencies

Background – Cryptocurrencies as Property

Bitcoin, ether, and other cryptocurrencies are essentially digital or virtual currencies that function as a medium of exchange, a unit of account, and/or a store of value. They are all decentralized in the sense that they function by using a "peer-to-peer" model without the need for a central authority or bank. Instead, these cryptocurrencies utilize cryptography to secure and record transactions on a distributed ledger system, i.e., a blockchain. Units of cryptocurrencies are often referred to using different terms, such as coins or tokens.

The proper U.S. federal income tax treatment of transactions involving a given cryptocurrency, as is the case with financial instruments generally, depends on tax classification. And on this front, the IRS has taken the view that cryptocurrencies are to be treated as "property" (and not currency) for U.S. federal income tax purposes.[1] Accordingly, the tax rules applicable to property transactions (and not those

[1] *See* Notice 2014-21, 2014-16 I.R.B. 938; and IRS, Frequently Asked Questions on Virtual Currency Transactions, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions. Technically, the

concerning currencies) apply in the cryptocurrency context. Therefore, one can have a taxable event (and corresponding gain or loss) upon a sale or exchange, or by earning or even spending, a given cryptocurrency.

However, IRS guidance to date does not address what *kind* of property is involved. In some rare instances a given cryptocurrency could be treated as debt instrument[2] or equity.[3] In other cases, the cryptocurrency could be part of a financial derivative. And, depending on the context, could a given cryptocurrency be classified as a commodity, a security, or something else?

Do the investment company rules in section 721(b)[4] and section 351(e), the mark-to-market regime of section 475, the trading safe harbor in section 864(b), the securities lending rules in section 1058, the wash sale rules in section 1091, and the "qualifying income" rules for publicly traded partnership rules in section 7704(d) apply with respect to cryptocurrencies? The answer often depends on whether a given cryptocurrency can be classified as either a security or a commodity for these purposes.

Cryptocurrencies as Securities

The Code unfortunately does not contain a uniform definition of "securities." However, in many instances the definition of a "security" is limited to either stock or debt, and derivatives thereon,[5] meaning that most cryptocurrencies would not constitute "securities" for purposes of the Code provisions referenced above. It should be noted that while some cryptocurrencies may be classified as "securities" for U.S. federal securities law purposes,[6] this classification generally is not controlling for U.S. federal income tax purposes.

Cryptocurrencies as Commodities

As with the term "securities," the Code likewise does not contain a uniform definition of "commodities." In fact, in some instances the definition is circular.[7] That being said, while most cryptocurrencies are unlikely to be classified as securities, certainly some cryptocurrencies *can be* classified as commodities.

The Commodities Future Trading Commission (the "CFTC") views bitcoin and ether as commodities, and historically the IRS has given some deference to the CFTC's views as to what constitutes a

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IRS guidance applies only to virtual currencies that are "convertible," i.e., have an equivalent value in real currency or that act as a substitute for real currency.

2 For example, if there is an unconditional obligation to pay a sum certain at a fixed maturity date, with the ability to enforce payment (i.e., creditor remedies), it may be possible to characterize a given transaction as a loan or debt.

3 For example, with certain initial coin offerings or ICOs, the issued/sold coins represent an equity ownership interest in the issuing entity. In other cases, a coin or token may represent tax ownership of the underlying property; that is, blockchain technology is simply used to enable, track and transfer of ownership of a given asset, such that the coin or token in question is not really a cryptocurrency like bitcoin or ether.

4 Unless otherwise indicated, section references are to the Internal Revenue Code of 1986, as amended (the "Code") or the applicable regulations promulgated pursuant to the Code (the "regulations").

5 *See, e.g.,* sections 165, 351, 354, 368, 475, and 731.

6 *See* SEC v. W.J. Howey Co., 328 U.S. 293 (1946).

7 One example of a circular definition is that set forth in section 475, which states that for purposes of sections 475(e) and (f), the term "commodity" is defined to include any commodity which is actively traded (within the meaning of section 1092(d)(1)).

"commodity" for U.S. federal income tax purposes.[8] In addition, for tax purposes it seems as if one can rely on the ordinary and common meaning of the term "commodity" from a financial point of view, which suggests that one should determine whether the item in question is traded in and listed on a commodities exchange. There is actual trading on both bitcoin and ether, as well as futures and derivatives thereon, on the Chicago Mercantile Exchange ("CME"). Accordingly, while not entirely clear, it appears that both bitcoin and ether likely constitute commodities. Whether cryptocurrencies other than bitcoin and ether also can be classified as commodities is less clear.

It should be noted that for purposes of the commodities trading safe-harbor in section 864(b), however, not only must the cryptocurrency in question be properly classified as a "commodity," but it also must be of a kind customarily dealt in on an "organized commodity exchange" and the transaction must be "of a kind customarily consummated at such place." The applicable regulations exclude goods or merchandise in the ordinary channels of commerce from the term "commodities." Open questions in this regard therefore include: Do only *futures* on bitcoin or ether qualify? Do exchanges other than the CME (such as Coinbase) constitute an "organized commodity exchange"?

Whether any given cryptocurrency constitutes a "commodity" is highly fact dependent and may depend on the particular Code provision involved. As more cryptocurrencies have derivatives that are actually traded on an exchange, the more likely they can be classified as commodities. Given these uncertainties, it would be prudent for investors to discuss the issue with their tax advisers.

Cryptocurrencies as Money or Currency

Again, the IRS is of the view that cryptocurrency is to be classified as property and not as money or currency (legal tender). At the time the IRS stated this view in 2014, however, no cryptocurrency had been adopted as "legal tender" in any jurisdiction, a point explicitly noted by the IRS in its guidance.

However, El Salvador adopted bitcoin as legal tender, and China developed its own cryptocurrency for internal use, the yuan. It is not entirely clear whether bitcoin and perhaps other cryptocurrencies could now be classified as currency or foreign currency, although most taxpayers take the position that cryptocurrencies are a non-currency form of property.

Specific Lot Identification

For taxpayers holding multiple units of a cryptocurrency with different bases and/or holding periods, the tax consequences of a sale, exchange, or other disposition can vary, in some cases quite dramatically, depending on the unit of cryptocurrency sold. To illustrate: assume a taxpayer purchased one bitcoin in 2014 for $300 and one bitcoin in 2021 for $64,000. The taxpayer sells one bitcoin later in 2021 for $40,000. The taxpayer will realize a $39,700 ($40,000 amount realized - $300 basis) long-term capital

[8] *See* Rev. Rul. 73-58, 1973-1 C.B. 337 ("The word 'commodities' is used in section 864(b)(2)(B) of the Code in its ordinary financial sense and includes all products that are traded in and listed on commodity exchanges located in the United States. Furthermore, the word 'commodities' includes the actual commodity and commodity futures contracts.").

gain or a $24,000 ($40,000 amount realized - $64,000 basis) short-term capital loss, depending on which bitcoin is sold.[9]

The IRS indicated in frequently asked questions ("FAQs") that taxpayers owning multiple units of cryptocurrency with different bases or holding periods may choose the units that are deemed to be sold, exchanged, or otherwise disposed of if they specifically identify which unit or units of cryptocurrency are involved in the transaction and substantiate their basis in those units.[10] If a taxpayer chooses to specifically identify the units of cryptocurrency sold, the FAQs indicate that a taxpayer may do so by documenting the specific unit's unique digital identifier or by records showing the transaction information for all units of a specific cryptocurrency held in a single account, wallet, or address.[11] This information must show:

- The date and time each unit was acquired
- The taxpayer's basis and the fair market value of each unit at the time it was acquired
- The date and time each unit was sold, exchanged, or otherwise disposed of, and
- The fair market value of each unit when sold, exchanged, or disposed of, and the amount of money or the value of property received for each unit[12]

If a taxpayer does not specifically identify the specific units of virtual currency that are sold, exchanged, or otherwise disposed of, the FAQs indicate that the units are deemed to be sold in chronological order beginning with the earliest unit of the cryptocurrency purchased or acquired—that is, on a first in, first out ("FIFO") basis.[13] As a best practice, taxpayers should retain a standing lot relief methodology that can be overridden on a one-off basis if desired. A written standing methodology ensures that the taxpayer's intent is clear, and that the units being sold are identified before the disposition occurred.[14]

Although helpful, it is worth noting that the FAQs are not binding on the IRS.[15] However, the specific identification and FIFO rules outlined in the FAQs are very similar to the specific identification rules for

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9 This example and the discussion that follows assumes that the cryptocurrencies are capital assets in the hands of the taxpayer.

10 *See* IRS, Frequently Asked Questions on Virtual Currency Transactions, Q/A 39, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions.

11 *See* IRS, Frequently Asked Questions on Virtual Currency Transactions, Q/A 40, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions.

12 *Id*.

13 *See* IRS, Frequently Asked Questions on Virtual Currency Transactions, Q/A 41, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions.

14 *Cf.* section 1.1012-1(c)(8) ("[A]n adequate identification of stock is made at the time of sale, transfer, delivery, or distribution if the identification is made no later than the earlier of the settlement date or the time for settlement required by Rule 15c6–1 under the Securities Exchange Act of 1934, 17 CFR 240.15c6–1 (or its successor). A standing order or instruction for the specific identification of stock is treated as an adequate identification made at the time of sale, transfer, delivery, or distribution.").

15 The FAQs are not authoritative because they were not published in the Internal Revenue Bulletin. However, a Government Accountability Office report on the FAQs recommended that the Commissioner of Internal Revenue should update the FAQs to include a statement that the FAQs may serve as a source of general information but cannot be relied upon by taxpayers as authoritative given that they are not binding on IRS. The IRS disagreed with this recommendation and, in an August 2020 letter, stated that the "FAQs are

stock and securities, which have also been applied by analogy in the commodity context.[16] As described above, it is possible (and perhaps likely) that (at least some) cryptocurrencies should be characterized as commodities for U.S. federal income tax purposes. Therefore, there may be some level of precedential support for applying the approach described in the FAQs.

Nevertheless, taxpayers making significant investments in cryptocurrencies might consider other potential approaches to determining the tax basis for cryptocurrency sold and best practices to ensure the tax results of their cryptocurrency transactions align with their expectations.

One potential alternative approach would be to determine the basis of the units sold, exchanged, or otherwise disposed of by viewing the blockchain, determining the actual unit sold, and then determining the cost basis of that particular unit.[17] For example, Bitcoin uses an unspent transaction output ("UTXO") model, whereby individual UTXOs of bitcoin may be tracked across the Bitcoin blockchain. Thus, upon disposing of a UTXO, the taxpayer could use the basis of that particular UTXO to determine the gain or loss on the transaction. This approach could be administratively burdensome and would be disadvantageous from a tax planning standpoint because taxpayers typically do not have the ability to control which unit of cryptocurrency is actually sold.[18] It may also not be possible to apply this approach to all cryptocurrencies, particularly cryptocurrencies for which individual units cannot be tracked.

Another potential alternative would be to apply foreign currency rules. Under those rules, the basis of the currency withdrawn from an account is determined under any reasonable method that is consistently applied.[19] The foreign currency regulations provide that FIFO, last-in-first-out ("LIFO"), and pro-rata lot relief methodologies are reasonable; but, a methodology under which the units with the highest basis are consistently withdrawn first is not reasonable.[20] Again, from a tax planning standpoint this approach would be disadvantageous because taxpayers would not be allowed to use a highest-in-first-out ("HIFO") lot relief methodology to minimize gains and maximize losses. The foreign currency approach is arguably contrary to the IRS's position that cryptocurrencies are not currencies.[21] However,

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illustrative of how longstanding tax principles apply to property transactions." The IRS also stated that they the "IRS does not take positions contrary to public FAQs." *See* GAO, Virtual Currencies: Additional Information Reporting and Clarified Guidance Could Improve Tax Compliance, GAO-20-188 (Feb. 12, 2020), https://www.gao.gov/products/gao-20-188.
The IRS has also publicly stated that FAQs satisfy both the reasonable cause defense to tax penalties and can be part of a taxpayer's assertion of substantial authority on a tax return. *See* IR-2021-202 (Oct. 15, 2021), https://www.irs.gov/newsroom/irs-updates-process-for-frequently-asked-questions-on-new-tax-legislation-and-addresses-reliance-concerns. *See also* IRS, General Overview of Taxpayer Reliance on Guidance Published in the Internal Revenue Bulletin and FAQs, https://www.irs.gov/newsroom/general-overview-of-taxpayer-reliance-on-guidance-published-in-the-internal-revenue-bulletin-and-faqs.

16 *See* section 1.1012-1(c); Perlin v. Commissioner, 86 T.C. 388 (1986).

17 *See* section 1012(a).

18 In the case of a hosted wallet, taxpayers generally do not have direct control of their cryptocurrencies because the cryptocurrencies are held by a custodian that stores them on behalf of their beneficial owners, similar to a traditional stock or securities brokerage account. In the case of a non-hosted wallet, the taxpayer will have direct control over their cryptocurrency, but will generally not be able to select the specific units sold because most wallet software uses an algorithm to select the units disposed of.

19 Section 1.988-2(a)(2)(iii)(B)(1).

20 *Id.*

21 *See* Notice 2014-21, 2014-16 I.R.B. 938 (Q&A 1); and Rev. Rul. 2019-24, 2019-44 I.R.B. 1004.

it is possible that the IRS could nevertheless attempt to apply these rules by analogy or, in the case of bitcoin, argue that the rules directly apply because bitcoin is a foreign currency (see discussion above).

Where does this leave us? At a minimum, taxpayers should maintain detailed records to comply with the information requirements described in the FAQs and create a written standing lot relief methodology (e.g., HIFO, LIFO, etc.) that should be maintained in their books and records and supplied to their broker (if possible). Deviations from this standing lot relief methodology (if desired) should be documented in writing prior to the date of disposition. For taxpayers making significant investments in cryptocurrencies, it may be worth going a step further and creating separate wallets or accounts to hold each tranche of cryptocurrency purchased (this is often done with the help of a cryptocurrency exchange). By segregating cryptocurrency into tranches with a uniform basis and holding period, a taxpayer will know for certain the tax consequences of a sale because the basis and holding period of the cryptocurrency sold would be the same under any potential approach.

Lastly, we note that the treatment of many cryptocurrency transactions is currently unclear. For example, it is not entirely clear whether cryptocurrency loans or "Wrapped Bitcoin" minting transactions are taxable exchanges.[22] For taxpayers taking the position that these types of transactions are not taxable, specific identification of the cryptocurrency subject to these arrangements can help limit the potential downside if the IRS takes the position that the particular arrangement constitutes a taxable event.

Cryptocurrency Losses

Tax Loss Harvesting

Taxpayers have long used a strategy commonly described as "tax loss harvesting" to reduce their tax liability by triggering capital losses on depreciated positions to offset gains on other positions. So, for example, a taxpayer may actually sell a financial asset, trigger a tax loss, repurchase the same or similar financial asset and then use the tax loss to offset other investment gains. The recent "crypto winter" makes this strategy especial potent, because many taxpayers find themselves with large unrealized losses that could produce significant tax savings if triggered. Even taxpayers with overall portfolio appreciation may be able to harvest losses by (as noted above) specifically identifying high basis lots of cryptocurrency as being sold.

In the stock and securities context, tax loss harvesting is policed by (among other things) the "wash sale rules," which disallow the loss on the sale of stock or securities if the taxpayer purchases substantially identical stock or securities within the 61-day period beginning 30 days prior to the sale date and ending 30 days after the sale date.[23] Thus, a taxpayer cannot recognize a loss while

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[22] For a detailed discussion of the potential arguments as to why these two types of transactions might not be taxable exchanges, see Tompkins and Raglan, *Cryptocurrency Loans—Taxable or Not?*, Journal of Taxation of Financial Products, Vol. 17, No. 1 (2020), *available at* https://tax.kpmg.us/content/dam/tax/en/pdfs/2020/cryptocurrency-loans-taxation-jofp-q12020.pdf; and Ritter, Tompkins, and Dalbey, *Wrapped Bitcoin—Two Sides of the Same (Bit)coin?*, Journal of Taxation of Financial Products, Vol. 18, No. 2 (2021), *available at* https://tax.kpmg.us/content/dam/tax/en/pdfs/2021/bitcoin-two-sides-jofp-summer-21.pdf.

[23] Section 1091(a); section 1.1091-1(a).

maintaining economic exposure to an investment by, for example, selling depreciated stock and immediately repurchasing the same stock. Under current law, it is not believed that the wash sale rules apply to transactions involving cryptocurrency, because most cryptocurrencies do not constitute stock or securities (as noted above).[24] Also, proposed legislation that would have made cryptocurrency transactions subject to the wash sale rules failed to pass. Thus, cryptocurrency investors seeking to harvest tax losses in 2022 have significantly more flexibility to do so than stock or securities investors.

Although the wash sale rules are probably not a barrier to tax loss harvesting in 2022, they are not the government's only weapon against attempts to generate noneconomic losses. Depending on the circumstances of a particular transaction that appears to result in a loss, the loss may also be disregarded if the transaction does not result in a "bona fide" loss, lacks economic substance, or is a sham.[25] Such concerns could arise if a repurchase of the same or similar financial asset is made immediately after (or before) being sold. Also, even if a loss transaction is respected, taxpayers must also be mindful of other limitations on the use of capital losses, such as the overall limitations on the use of capital losses by corporate and individual taxpayers.[26]

Considerations Regarding Abandonment, Worthlessness, and Theft Losses

In addition to outright sales and exchanges of cryptocurrency, there may be other scenarios in which a tax loss is triggered, such as by abandonment (e.g., sending cryptocurrency to a "burn" address), worthlessness, or even theft.

Very generally, the Code allows a deduction for losses sustained during the tax year that are not compensated by insurance or otherwise.[27] For taxpayers who are individuals, the loss must also fall into at least one of the following categories: (1) it must be incurred in a trade or business, (2) it must be incurred in a transaction entered into for profit, or (3) if not connected with a trade or business or a transaction entered into for profit, it must arise from a fire, storm, shipwreck, or other casualty, or from theft.[28]

In addition, recognition of a tax loss generally requires a closed and completed transaction, fixed by an identifiable event.[29] An actual sale or exchange meets this requirement, in which case a capital loss is

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[24] For a detailed discussion of the reasons why most practitioners believe the wash sale rules do not currently apply to cryptocurrencies, see Tompkins and Kunkel, *Cryptocurrencies and the Definition of a Security for Code Sec. 1091*, Journal of Taxation of Financial Products, Vol. 18, No. 2 (2021), *available at* https://tax.kpmg.us/content/dam/tax/en/pdfs/2021/cryptocurrencies-section-1091-jofp-summer-21.pdf.

[25] *See, e.g.*, Horne v. Commissioner, 5 T.C. 250 (1945) (the court determined that the wash sale rules did not apply, nevertheless denied a deduction for the purported loss on the basis that it was not "real"); Rev. Rul. 77-185, 1977-1 C.B. 48 (loss denied because there was no real change of position in a true economic sense). *See also* section 1.165-1(b).

[26] *See generally* section 1211. Losses in actively traded cryptocurrencies may also be deferred by the staddle rules of section 1092. A detailed discussion of these rules and the other potential limitations on the deduction of cryptocurrency losses are outside the scope of this article.

[27] Section 165(a).

[28] Section 165(c)(1)-(c)(3). Note that per section 165(h)(5), non-federally declared disaster casualty losses arising in tax years beginning after December 31, 2017, and before January 1, 2026, are generally non-deductible under Section 165(c)(3).

[29] Section 1.165-1(b).

triggered.[30] However, when cryptocurrency has become worthless, is abandoned or has been stolen, it appears that there is no sale or exchange.[31] In these situations, the relevant inquiry is whether the loss deduction could constitute a miscellaneous itemized deduction and therefore effectively be non-deductible (at least through tax year 2025).

By way of background, only certain deductions are allowed in computing adjusted gross income (above-the-line deductions), such as those arising in connection with a trade or business.[32] All other deductions are itemized deductions, except for certain specified deductions (including the standard deduction). The election to itemize deductions is made by completing Schedule A to Form 1040.[33]

Generally, miscellaneous itemized deductions for any tax year are allowed only to the extent that the aggregate of the deductions exceed two percent of adjusted gross income. However, for tax years 2018 through 2025, they are non-deductible.[34] Miscellaneous itemized deductions are defined generally as all itemized deductions other than medical and dental expenses, taxes, interest charitable contributions, casualty, and theft losses.[35] Therefore, casualty and theft losses are not miscellaneous itemized deductions.[36] Significantly, there is no specific carve out for abandonment or worthlessness losses, which therefore appear to be miscellaneous itemized deductions. Accordingly, loss deductions attributable to abandonment or worthlessness[37] appear to be effectively non-deductible and therefore valueless for individuals (at least through 2025).[38]

Theft losses, however, do not appear to be miscellaneous itemized deductions. Therefore, if a cryptocurrency theft loss was incurred in connection with a transaction entered into for profit,[39] it likely is deductible as an ordinary loss (in full) so as to offset ordinary income. Very generally, a theft loss is treated as sustained during the tax year in which the taxpayer discovers the loss.[40]

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30 Note that section 165(f) provides that losses from sales or exchanges of capital assets are allowed only to the extent provided in sections 1211 and 1212. Therefore, those losses can offset capital gains (both long-term and short-term), and can offset up to $3,000 per year of an individual's ordinary income. Furthermore, the losses can be carried forward by individuals indefinitely.

31 Section 165(g)(1) provides that if any "security" held as a capital asset becomes worthless during the tax year, the loss is treated as a loss from a sale or exchange, occurring on the last day of the tax year. A similar rule is provided for the abandonment of a "security" in section 1.165-5(i). As noted above, however, most cryptocurrency is not treated as a "security" for this purpose. *See also* section 1.165-2(a) for general authority re abandonment losses.

32 Section 62(a)(1).

33 Section 63(e)(2).

34 Section 67(g).

35 Section 67(b).

36 *See also* section 67(b)(3).

37 It should be noted that it may be unlikely that a given cryptocurrency is truly or wholly worthless. For example, many cryptocurrencies that have lost most of their value (such as Luna) still have *some* value, especially if there is some kind of revival plan. In these situations, a taxpayer may be better off simply selling or exchanging the cryptocurrency so as to trigger a capital loss.

38 If abandonment or worthlessness arises in connection with a trade or business, however, then perhaps the deductions are not miscellaneous itemized deductions and can be taken as "above-the-line" business deductions.

39 As noted above, personal theft losses, covered by section 165(c)(3), are not currently deductible. *See* section 165(h)(5). *See also* section 165(h)(3)(B), which cross-references section 165(c)(3), such that personal casualty losses include theft losses for this purpose.

40 Section 165(e); section 1.165-1(d)(3).

The Ethereum "Merge"

Blockchains use "consensus mechanisms" to update the chain and record the current ownership of various assets on the blockchain. Very generally, there are two main types of consensus mechanism – proof of work ("PoW") and proof of stake ("PoS"). For a variety of reasons, Ethereum transitioned from a PoW consensus mechanism to PoS at roughly 3 a.m. Eastern time on September 15, 2022.[41] This transition is known as "the Merge" because it represents the joining of PoW and PoS chains that were previously operating in parallel to test the new PoS system.

After the Merge, PoW will no longer be employed by Ethereum. For various ideological and economic reasons, certain parties wanted to retain the PoW consensus mechanism and created a PoW Ethereum blockchain known as "ETHPoW" or "ETHW" that diverged from the PoS Ethereum blockchain at 10 a.m. Eastern time on September 15, 2022 (the "Hard Fork").[42]

The Merge and Hard Fork raise a host of tax issues, including (1) how staking rewards earned under the new PoS consensus mechanism should be taxed, (2) whether the transition from PoW to PoS was a taxable event; and (3) whether the creation of the new ETHW chain was a taxable event.[43]

Taxation of Staking Rewards

As a reminder, in a PoS consensus mechanism, "stakers" maintain the integrity of the blockchain by locking up or "staking" the blockchain's native cryptocurrency. In exchange for doing so, the staker receives "staking rewards" paid in additional units or "coins" of the blockchain's native currency. The ability to generate yield in a relatively passive manner (at least in the "delegated" staking scenario) has engendered significant interest from the cryptocurrency and investment communities.

In respect to the taxation of staking rewards, the IRS has not provided any guidance and there are at least two potential characterizations, each with different tax results. One potential characterization is to treat reward tokens are resulting in immediate upfront taxable income upon receipt, as is the case generally with mining.[44] Another characterization is the "self-created property" approach, pursuant to which the validator or staker is viewed as creating rewards tokens.[45] Generally, the creation of property

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41 https://ethereum.org/en/upgrades/merge/.

42 https://ethereumpow.org/. It bears noting that another PoW Ethereum blockchain already exists – Ethereum Classic or "ETC." https://ethereumclassic.org/. This blockchain has different technology and philosophical goals than the main Ethereum network and was created in the aftermath of the infamous "DAO hack." *See The Ethereum Classic Declaration of Independence*, Ethereum Classic Blog (Aug. 12, 2016), https://ethereumclassic.org/blog/2016-08-13-declaration-of-independence/.

43 This discussion that follows will provide an overview of these considerations. For a more comprehensive discussion of these issues and the reasons for the Merge and Hard Fork, see Tompkins, Raglan, and Dalbey, *Current Events Roundup: The New Stock Buyback Excise Tax, ILM 202224010, Deitch v. Commissioner, and the Ethereum Merge*, Journal of Taxation of Financial Products, Vol. 19, No. 3 (2022) (forthcoming).

44 *See* Notice 2014-21, Q/A-8. Note, the self-created property characterization discussed below could also arguably be applied to mining rewards, but in the case of mining this position would be directly contrary to IRS guidance.

45 A detailed discussion of the technical basis for the self-created property characterization can be found in Abraham Sutherland, *Cryptocurrency Economics and the Taxation of Block Rewards*, 165 Tax Notes Federal 749 (Nov. 4, 2019); and Abraham Sutherland, *Cryptocurrency Economics and the Taxation of Block Rewards, Part 2*, 165 Tax Notes Federal 953 (Nov. 11, 2019). For competing views on what constitutes sound tax policy in this respect, including arguments as to the character (i.e., capital versus ordinary) of any gain or

is not itself a taxable event.[46] Applying this self-created property theory, the taxpayers in *Jarrett v. United States,* took the position that staking rewards were not required to be included in taxable income until sold and therefore sought a tax refund.[47] The IRS granted them a refund, but in doing so did not provide any rationale, analysis, or admission of the Jarretts' technical position. The Jarretts rejected the IRS's refund offer and sought a court ruling that would create precedent and prevent the IRS from challenging their position in the future. The case, however, was recently dismissed as moot.[48] Proposed legislation that would address staking rewards taxation, as well as other cryptocurrency tax issues, does not appear to have much likelihood of enactment.[49] Thus, it appears that the current uncertainty on the taxation of staking rewards will continue to linger. The various approaches to staking reward taxation, the ramifications of the different approaches, and the technical support for each approach were previously covered in a recent article, and will not be further discussed here.[50]

Taxability of the Soft Fork[51]

The IRS cryptocurrency FAQs state the following:

> Question: Do I have income when a soft fork of cryptocurrency I own occurs?
>
> Answer: No. A soft fork occurs when a distributed ledger undergoes a protocol change that does not result in a diversion of the ledger and thus does not result in the creation of a new cryptocurrency. Because soft forks do not result in you receiving new cryptocurrency, you will

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loss recognized as a result of staking activities, see Reuven S. Avi-Yonah and Mohanad Salaimi, *A New Framework for Taxing Cryptocurrencies*, 175 Tax Notes Federal 1391 (May 30, 2022); Omri Marian, *Law, Policy, and the Taxation of Block Rewards*, 175 Tax Notes Federal 1493 (June 6, 2022); Reuven S. Avi-Yonah, *A Response to Professor Marian on Cryptocurrency Tax Policy*, 175 Tax Notes Federal 1731 (June 13, 2022); Amanda Parsons, *May I Pay More? Lessons From Jarrett for Blockchain Tax Policy*, 176 Tax Notes Federal 2063 (Sept. 26, 2022); David Forst and Sean McElroy, *Jarrett Is Based on Law, Not 'Blockchain Interests'*, 177 Tax Notes Federal 423 (Oct. 17, 2022); Omri Marian, *Taxation of Staking Rewards Is Based in Law, Not Hyperbole*, 177 Tax Notes Federal 579 (Oct. 24, 2022).

46 *See, e.g.*, section 1.61-4 (farmer recognizes income when crops are sold, not when they are grown); section 1.61-3(a) (miner recognizes income when minerals are sold, not when they are mined).

47 Jarrett v. United States, No. 3:21-cv-00419 (M.D. Tenn. May 26, 2021).

48 *See* Memorandum Granting Motion to Dismiss, Jarrett v. United States, No. 3:21-cv-00419 (M.D. Tenn. Sept. 30, 2022), *available at* https://www.govinfo.gov/content/pkg/USCOURTS-tnmd-3_21-cv-00419/pdf/USCOURTS-tnmd-3_21-cv-00419-0.pdf.

49 *See* Lummis-Gillibrand Responsible Financial Innovation Act, S. 4356, 117th Cong. § 208 (June 7, 2022).

50 *See* Ritter and Tompkins, *Proof of Stake – What's Really at Stake on the Tax Front?*, Journal of Taxation of Financial Products, Vol. 19, No. 1 (2022), *available at* https://tax.kpmg.us/content/dam/tax/en/pdfs/2022/cryptocurrency-proof-of-stake-jotfp-v19-22.pdf.

51 As a technical matter, a "hard fork" is an upgrade that can make previous transactions and blocks either valid or invalid (i.e., it is not backward-compatible). A "soft fork" is an upgrade to the software that is backward-compatible. Under this definition, most of the Ethereum blockchain updates and changes have been hard forks. *See* https://ethereum.org/en/history/.
However, in common parlance, the term "hard fork" generally refers to a situation in which a single blockchain permanently splits and a "soft fork" refers to a situation in which there is no division of the blockchain. Because the IRS appears to have ascribed the common meaning to these terms in its guidance, we will use them in that fashion in the discussion that follows.

> be in the same position you were in prior to the soft fork, meaning that the soft fork will not result in any income to you.[52]

The Merge update did not directly (or immediately) result in a division of the Ethereum blockchain. The Hard Fork occurred shortly after the Merge, but the two events were not part-and-parcel. In fact, it was entirely possible that the Hard Fork might not have occurred.[53] Therefore, the Merge arguably should be classified first as a nontaxable soft fork under the IRS guidance quoted above, followed by the separate Hard Fork.[54]

Taxability of the ETHW Hard Fork

The IRS has ruled that a taxpayer has ordinary income equal to the value of any "new" cryptocurrency received as a result of a hard fork.[55] But the IRS also ruled that a taxpayer does not have gross income as a result of a hard fork of a cryptocurrency the taxpayer owns if the taxpayer does not receive units of a new cryptocurrency.[56] In this regard, the IRS FAQs state:

> Question: One of my cryptocurrencies went through a hard fork but I did not receive any new cryptocurrency. Do I have income?
>
> Answer: A hard fork occurs when a cryptocurrency undergoes a protocol change resulting in a permanent diversion from the legacy distributed ledger. This may result in the creation of a new cryptocurrency on a new distributed ledger in addition to the legacy cryptocurrency on the legacy distributed ledger. If your cryptocurrency went through a hard fork, but you did not receive any new cryptocurrency, whether through an airdrop (a distribution of cryptocurrency to multiple taxpayers' distributed ledger addresses) or some other kind of transfer, you don't have taxable income.[57]
>
> Question: One of my cryptocurrencies went through a hard fork followed by an airdrop and I received new cryptocurrency. Do I have income?

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52 IRS, Frequently Asked Questions on Virtual Currency Transactions, Q/A 30, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions.

53 For example, it was possible that the miners and other parties who wished to remain on a PoW blockchain would migrate to the Ethereum Classic blockchain (which has been in existence since 2015), rather than hard forking the current Ethereum chain.

54 As previously noted, the cryptocurrency FAQs are not authoritative. However, they can be relied upon for penalty protection and reliance would seem to be a reasonable course of action for taxpayers in the absence to any contrary authority. *See supra* note 15. For a discussion of possible alternative positions, see Tompkins, Raglan, and Dalbey, *Current Events Roundup: The New Stock Buyback Excise Tax, ILM 202224010, Deitch v. Commissioner, and the Ethereum Merge*, Journal of Taxation of Financial Products, Vol. 19, No. 3 (2022) (forthcoming).

55 Rev. Rul. 2019-24, 2019-44 I.R.B. 1004; CCA 202114020 (Mar. 22, 2021).

56 Rev. Rul. 2019-24, 2019-44 I.R.B. 1004.

57 IRS, Frequently Asked Questions on Virtual Currency Transactions, Q/A 22, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions.

> Answer: If a hard fork is followed by an airdrop and you receive new cryptocurrency, you will have taxable income in the taxable year you receive that cryptocurrency.[58]

The IRS ruling indicates that dominion and control of the cryptocurrency received in a hard fork is central to determining when the value of the cryptocurrency should be subject to tax.[59] The FAQs also include a dominion and control requirement, stating:

> Question: How do I calculate my income from cryptocurrency I received following a hard fork?
>
> Answer: When you receive cryptocurrency from an airdrop following a hard fork, you will have ordinary income equal to the fair market value of the new cryptocurrency when it is received, which is when the transaction is recorded on the distributed ledger, provided you have dominion and control over the cryptocurrency so that you can transfer, sell, exchange, or otherwise dispose of the cryptocurrency.[60]

The IRS's position on hard forks has been the subject of significant criticism.[61] In this article, we will not seek to challenge the central premise of the IRS's guidance—that hard forks give rise to taxable income equal to the value of the new cryptocurrency received—although we believe that reasonable parties might disagree with this conclusion. Instead, we will focus on the unique tax issues posed by the Hard Fork.

As noted above, the IRS has indicated that the value of the "new" cryptocurrency received is includable in taxable income. The IRS does not explain what types of factors determine which cryptocurrency is "new" and which is the "old" or "legacy" cryptocurrency. One possibility would be to use factors such as the level of transactional activity, support of leading market participants (e.g., stablecoin issuers, exchanges, and the Ethereum Foundation), or largest market capitalization. This would clearly favor treating ETH as the legacy currency and ETHW as the new cryptocurrency. Another possibility, and perhaps a more intuitive reading of the rule, would be treat the cryptocurrency with changes to the underlying code as the "new" cryptocurrency. In this regard, it is significant that the Merge occurred prior to, and distinct from, the Hard Fork. More specifically, immediately prior to the Hard Fork the legacy code was based on a PoS consensus mechanism, and the Hard Fork represented a change

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58 IRS, Frequently Asked Questions on Virtual Currency Transactions, Q/A 23, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions.

59 Rev. Rul. 2019-24, 2019-44 I.R.B. 1004; CCA 202114020 (Apr. 9, 2021).

60 IRS, Frequently Asked Questions on Virtual Currency Transactions, Q/A 24, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions. Also, in FAQ 25, the IRS indicates that the basis of property received in a hard fork is equal to the amount included in income.

61 *See, e.g.*, Stevie D. Conlon, Anna Vayser, and Robert Schwaba, *New IRS Rev. Rul. 2019-24 and a Related FAQ: Not the Bitcoin Tax Guidance Taxpayers Were Looking for*, Journal of Taxation of Financial Products, Vol. 16, No. 4 (2019); *Lawmakers Express Concerns with Cryptocurrency Guidance*, 2020 Tax Notes Today Federal 1–13 (Dec. 20, 2019); Chamberlain, Mock and Kisska-Schulze, *Disappearing Forks and Magical Airdrops*, 165 Tax Notes Federal 791 (Nov. 4, 2019); Jackel, *Individual Raises Issues with Cryptic Cryptocurrency Guidance*, 2019 Tax Notes Today Federal 200–219; Ravichandran and Fiore, *Cryptocurrency Forks: A Response to the IRS's Recent Guidance*, 166 Tax Notes Federal 1261 (Feb. 24, 2020); Stevie D. Conlon, Anna Vayser and Robert Schwaba, *IRS GUIDANCE—CCA 202114020 Clarifies the Tax Treatment of Hard Forks of Virtual Currencies*, Journal of Taxation of Financial Products, Vol. 18, No. 2 (2021).

from this status quo *to* PoW consensus mechanism. The change to the PoS consensus framework occurred only hours earlier on that same day, but we see no compelling reason to disregard this earlier change in light of the distinct nature of that update. Thus, it would appear there are arguments for treating ETHW as the "new" cryptocurrency and assessing any tax based upon ETHW's (lower) value.[62] If instead ETHW is treated as the "old" cryptocurrency, with ETH treated as the new cryptocurrency distributed as part of a hard fork, then tax on the hard fork would be assessed at a much higher value, with that higher value (as noted above) producing ordinary income.

Another aspect of hard fork events that is notably absent from the IRS's previous guidance is the treatment of on-chain assets. Because ETHW's blockchain history is identical to ETH's history, all assets on the Ethereum blockchain at the time of the Hard Fork were duplicated on the ETHW blockchain. Might the value of those assets be includable in taxable income as well? It seems difficult to make a meaningful distinction between the duplication of those assets and the duplication of the ether. Unfortunately, the value of those assets might be extremely difficult to determine in some cases, given the unique characteristics of some assets and the relatively illiquidity of the ETHW chain. For example, if a nonfungible token ("NFT") is duplicated onto the ETHW chain, it may be exceedingly difficult to value that asset.[63] In other cases, the answer might be clearer. For example, many stablecoin issuers have indicated that only the ETH chain will be supported and that taxpayers will not be able to redeem their stablecoins for the underlying assets on the ETHW chain.[64] Thus, it would seem that the stablecoin copies that exist on ETHW should have no value.

A final consideration is whether the Hard Fork will actually give rise to a taxable event for many taxpayers. As noted, the IRS has also ruled that a taxpayer does not have gross income as a result of a hard fork of a cryptocurrency the taxpayer owns if the taxpayer does not receive units of a new cryptocurrency. Many exchanges do not currently support ETHW and it is not clear that they will support that cryptocurrency in the future. For taxpayers using these exchanges, dominion and control will not be obtained until the exchange gives control of ETHW to the taxpayer and any tax event will be deferred until that time.

Information Reporting

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act (commonly referred to as the "Infrastructure Act") into law.[65] The Infrastructure Act authorized the IRS to issue regulations requiring brokers to report on customer sales and transfers of digital assets.[66] Moreover, the Infrastructure Act classifies digital assets as "covered securities" if the assets are acquired on or after January 1, 2023. "Covered securities" are subject to cost basis rules, and brokers would generally be

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62 According to Coin Market Cap, ETH had a value of roughly $1,497.05 and ETHW had a value of $17.45 at the time of the Hard Fork. https://coinmarketcap.com/. The price of ETHW dropped dramatically shortly after the Hard Fork.

63 *See* Matthew Erskine, *Uncertainty in the Valuation of Non-Fungible Tokens*, Forbes, Wealth Management, https://www.forbes.com/sites/matthewerskine/2022/02/02/uncertainty-in-the-valuation-of-non-fungible-tokens.

64 USDC and Ethereum's Upcoming Merge, https://www.circle.com/blog/usdc-and-ethereums-upcoming-merge.

65 Pub. L. No. 117-58.

66 The cryptocurrency tax reporting provisions amend section 6045, which currently governs broker tax reporting, such as for stocks and securities.

required to report not only proceeds from the sale of these assets but also a customer's cost basis in the assets sold, along with information such as gain or loss on the sale and whether the gain or loss is long term or short term. This information is expected to be reported on a Form 1099, similar to the reporting of sales of stocks and securities.

Digital assets for this purpose include not only traditional cryptocurrencies but also "any digital representation of value that is recorded on a cryptographically secured distributed ledger" or any similar technology as may be specified by the IRS. This, for example, would cover NFTs.

These broker tax reporting provisions raised significant concerns among a range of cryptocurrency platforms and service providers. Some were concerned that the definition of broker in the Infrastructure Act was unnecessarily broad as it includes "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person." Could the definition cover non-custodial participants and platforms such as validators or hardware and software wallet providers? Senate debate suggests that the intent may be somewhat narrower. The target appears to be centralized cryptocurrency exchanges, although there are also indications that Treasury is looking at including decentralized exchanges and peer-to-peer marketplaces within the scope of tax information reporting.[67]

As of this writing, the IRS has not issued regulations implementing the new broker tax reporting rules, although the expectation is that some guidance will be provided by the end of the year. What this means for investors for the 2022 tax year is that many brokers and exchanges will likely hold off on providing a Form 1099 to report digital asset sales unless any issued guidance makes it clear that reporting is required for 2022. More, exchanges that may have provided reports on a Form 1099-K as an interim reporting option may also cease providing those forms given the indication that reporting on sales of digital assets would follow a framework similar to the Form 1099-B reporting framework (and also because there has been a decrease in the thresholds for filing of Forms 1099-K for the 2022 tax year).

Some exchanges or brokers may provide a Form 1099-MISC for certain income such as rewards and staking earnings. But for sales of digital assets, both for fiat and in crypto-for-crypto transactions, the taxpayer is charged with monitoring taxable events, proceeds and cost basis. There are numerous "hidden" events that may need to be reported. For example, an investor that purchases an NFT with ETH in effect is selling the amount of ETH necessary to purchase the NFT. The NFT may be transferred from one wallet to another (e.g., minting in one wallet and transferring to another for holding), which would result in a network transaction or "gas" fee. Paying ETH to cover the gas fee may be treated as a taxable disposition of the ETH needed for gas. The investors will likely have to determine all this without having the benefit of relying on a Form 1099 report, though some exchanges and platforms may offer varying levels of tax-relevant information.

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[67] For further discussion, see Ritter, Tompkins and Raglan, *Early signs from Treasury on the scope of digital asset cost basis reporting,* The Tax Adviser, June 2022, *available at* https://editions.thetaxadviser.com/publication/?i=747441&article_id=4271453&view=articleBrowser&ver=html5.

At the same time, the IRS is expecting taxpayers to be more aware of their digital asset transactions. In the draft 2022 Form 1040, the question relating to crypto transactions on the front page of the form has expanded since the prior year. The question now asks whether at any time during 2022 the taxpayer (1) received (as a reward, award or payment for property or services); or (2) sold, exchanged, gifted or otherwise disposed of a digital asset (or financial interest in a digital asset). The prior reference to "virtual currency" has been replaced with the broader definition of digital assets from the Infrastructure Act. NFT transactions are mentioned specifically in the draft instructions to Form 1040, and there is clarity that the IRS expects these transactions to be reported, regardless of any 1099 reporting.

From an investor's perspective, while the timing of broker crypto tax reporting is still uncertain, the reporting regime for crypto assets is in the offing. The Infrastructure Act itself contemplates cost basis monitoring by brokers for digital assets acquired by customers in 2023 with reporting of 2023 tax year transactions in 2024, although brokers are awaiting regulations to implement this. In addition to expected U.S. broker tax reporting rules and guidance on Form 1099 reporting for digital assets, intergovernmental tax information exchanges relating to sales and transfers of digital assets are being set in place as well. The Organisation for Economic Cooperation and Development ("OECD") recently issued its Crypto-Asset Reporting Framework ("CARF") report that provides a blueprint for governments to collect information on sales and exchanges and transfers of digital assets within their jurisdictions and share this information with other tax authorities.

The implementation of information reporting regimes will mean that the IRS will eventually obtain information on an investor's sales of digital assets and any gain or loss on these sales. This would allow it to match against what is reported on Form 1040, much as it currently is able to do with respect to stocks and securities. Since brokers would also be required to furnish customers with a statement of the information filed with the IRS, investors would also be expected to receive tax statements with tax information for inclusion in individual tax returns.

A couple other provisions in the Infrastructure Act are worth noting. First, the Infrastructure Act also requires brokers to provide transfer statements, containing cost basis information, when digital assets are transferred to another broker or exchange or to a non-broker wallet address such as a private wallet.[68] Second, the Infrastructure Act requires businesses that receive digital assets in value exceeding $10,000 to report these payments. This is an amendment of an existing reporting provision[69] that was initially drafted to apply to cash payments.

The impact of these tax information reporting provisions on investors would likely be two-fold. One is the reduction in tax anonymity when it comes to investing in cryptocurrency assets. The second is that tax-relevant information on cryptocurrency asset transactions may become more readily available for

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[68] This would be an amendment to existing section 6045A which provides for reporting on transfers between brokers. A new section 6045A(d) would require reporting for transfers of digital assets to non-broker addresses.

[69] *See* section 6050I.

investors as brokers and cryptocurrency-asset platforms begin to implement some of these tax information reporting rules.[70]

Nevertheless, whether a Form 1099 is received or whether a particular transaction in the end is covered by information reporting rules, the taxpayer's obligations to self-report income with respect to digital assets is broader. Transactions executed via private wallets, such as sale or swap of an NFT on a decentralized marketplace or receiving new cryptocurrency in such a wallet due to the Ethereum merge discussed earlier, may be reportable by an investor even if no Form 1099 is received.

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[70] The IRS priority guidance plan included regulations regarding information reporting on virtual currency under section 6045 even prior to the Infrastructure Act.

