



May 30, 2018

Internal Revenue Service
Attn: CC:PA:LPD:PR (Notice 2014-21)
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Re: Updated Comments on [Notice 2014-21](#): Virtual Currency Guidance

Dear Sir or Madam:

The American Institute of CPAs (AICPA) is pleased to submit our updated recommendations on Notice 2014-21, Virtual Currency Guidance.¹ The recommendations were developed by the AICPA Virtual Currency Task Force and approved by the AICPA Tax Executive Committee.

The rapid emergence of virtual currency has generated several new questions on how the tax rules apply to various transactions involving virtual currency and activities and assets related to it. Moreover, the development in the number of types of virtual currencies and the value of these currencies make these questions both timely and relevant to a growing number of taxpayers and tax practitioners.

We recommend the Internal Revenue Service (IRS) release immediate guidance regarding the tax treatment of virtual currency transactions, similar to that of Notice 2014-21 so that authoritative guidance exists. Specifically, we request additional guidance that will address items from the original Notice 2014-21, and new issues that are relevant to the 2017 tax year, such as chain splits, that have arisen subsequent to the release of the original notice.

Our suggested FAQs address the following areas:

1. Expenses of Obtaining Virtual Currency
2. Acceptable Valuation and Documentation
3. Computation of Gains and Losses
4. Need for a *De Minimis* Election
5. Valuation for Charitable Contribution Purposes
6. Virtual Currency Events
7. Virtual Currency Held and Used by a Dealer
8. Traders and Dealers of Virtual Currency

¹ Comments included in this updated letter supersede the initial AICPA comment letter: "[Comments on Notice 2014-21: Virtual Currency Guidance](#)," submitted June 10, 2016.

9. Treatment under Section 1031²
10. Treatment under Section 453
11. Holding Virtual Currency in a Retirement Account
12. Foreign Reporting Requirements for Virtual Currency

Virtual currency transactions, in which taxpayers increasingly engage, add a new layer of complexity to the analysis of a client's reporting requirements. The issuance of clear guidance in this area will provide confidence and clarity to preparers and taxpayers on application of the tax law to virtual currency transactions.

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We appreciate your consideration of these comments. If you would like to discuss these issues further, please feel free to contact Donald Zidik, Chair, AICPA Individual & Self-Employed Tax Technical Resource Panel, at (617) 807-5175 or donald.zidik@marcumllp.com; Amy Wang, Senior Manager – AICPA Tax Policy & Advocacy, at (202) 434-9264 or amy.wang@aicpa-cima.com; or me at (408) 924-3508 or annette.nellen@sjsu.edu.

Sincerely,



Annette Nellen, CPA, CGMA, Esq.
Chair, AICPA Tax Executive Committee

Encl.

cc: The Honorable David J. Kautter, Acting Commissioner, Internal Revenue Service
Mr. Thomas A. Barthold, Chief of Staff, Joint Committee on Taxation

² All section references in this letter are to the Internal Revenue Code of 1986, as amended, or the Treasury regulations promulgated thereunder, unless otherwise specified.

AMERICAN INSTITUTE OF CPAs
Request for Guidance Regarding Virtual Currency
(Notice 2014-21)

1. Expenses of Obtaining Virtual Currency

Overview

Virtual currency is property that exists in electronic form and used as a store of value, as well as to acquire goods and services, as well as other virtual currencies. Users of virtual currency may exchange it for physical money, such as the United States Dollar (USD), or other foreign currencies. Users can also obtain new virtual currency through “mining,” which is the process of having computers compete to solve complex mathematical problems. The individuals with the computers that solve the problems are the “winners” that receive newly mined blocks of virtual currency.

Section 4, Q&A-8 of Notice 2014-21 states that “when a taxpayer successfully ‘mines’ virtual currency, the fair market value of the virtual currency as of the date of receipt is includible in gross income.”³ This language implies that mining is akin to a service activity, rather than a production activity where income is not realized until disposition of the property.⁴ Therefore, it is appropriate to treat the costs of mining virtual currency similar to expenses incurred in providing other services (*i.e.*, expensed as “paid or incurred”).⁵

Suggested FAQ

- Q-1:** Are the costs of acquiring virtual currency through mining or similar activities expensed as incurred, similar to costs incurred for providing other service activities?
- A-1:** Yes. Virtual currency mining or similar activities produce virtual currency treated as ordinary income in the year it is mined and the expenses of mining are deducted as incurred. The matching of income and expenses are consistent with other service activities. Virtual currency mining equipment is capitalized and depreciated like any other property whose useful life extends beyond one year.

2. Acceptable Valuation and Documentation

Overview

Section 4, Q&A-5 of Notice 2014-21 refers to exchange rates established by market supply and

³ See IRS [Notice 2014-21](#), Section 4, Q&A-8.

⁴ IRC section 1001.

⁵ IRC section 162.

demand used to determine the fair market value of virtual currency in USD as of the date of payment or receipt. It also recommends that taxpayers use a “reasonable manner that is consistently applied” to calculate the fair market value of virtual currency. Further guidance and examples are necessary to define “reasonable manner.”

With respect to Bitcoin, there are a few published exchanges and price indexes and the values reported on each exchange and price index at any time of the day are unlikely the same. The following examples demonstrate the variations in value across different exchanges and price indexes at a given date and time.

Bitcoin Values on January 31, 2017

The Bitcoin values as reported on the following virtual currency price indexes: on January 31, 2017 at 4:00 pm (Eastern Time):

- Bitcoin Average \$ 976.67
- Coindesk \$ 967.67
- Google \$ 972.22
- Winkdex \$ 950.75

The Bitcoin values as reported on the following virtual currency exchanges on January 31, 2017 at 4:00 pm (Eastern Time):

- Bitstamp \$ 963.99
- Coinbase \$ 960.05
- Kraken \$ 975.00

Bitcoin Values on June 30, 2017

The Bitcoin values as reported on the following virtual currency price indexes on June 30, 2017 at 4:00 pm (Eastern Time):

- Bitcoin Average \$ 2,458.14
- Coindesk \$ 2,499.98
- Google \$ 2,457.82
- Winkdex \$ 2,502.24

The Bitcoin values as reported on the following virtual currency exchanges on June 30, 2017 at 4:00 pm (Eastern Time):

- Bitstamp \$ 2,465.49
- Coinbase \$ 2,486.09
- Kraken \$ 2,548.00

Suggested FAQs

- Q-2:** Are taxpayers allowed to use an average of different exchanges?
- A-2:** Yes. Taxpayers are allowed to use an average of different exchanges as long as they are consistent in how they calculate the valuation.
- Q-3:** May taxpayers use the average rate for the day to calculate the exchange rate?
- A-3:** Yes. Taxpayers may use the average rate for the day to calculate the exchange rate, provided they are consistent in how they make this determination for every virtual currency transaction.
- Q-4:** May taxpayers rely on virtual currency tax software as a reasonable and consistent method for determining fair value?
- A-4:** Yes. Taxpayers may rely on virtual currency tax software as a reasonable and consistent method for determining fair value if the software is consistently using aggregated price data.
- Q-5:** Are taxpayers allowed to have a combination of transactions using time stamps or dates (without a time stamp) for one virtual currency, or among a group of virtual currencies, and still have this method considered as consistently applied?
- A-5:** Yes. Taxpayers should use time stamps whenever possible and transactions with dates should only have a reasonable and consistent method applied, as outlined in this section. A virtual currency, such as Bitcoin, meets this test in both methods because a combination of time stamps and dates are used.
- Q-6:** May taxpayers use a different method for determining fair value for transactions in each of their virtual currency wallets and exchanges?
- A-6:** Taxpayers should apply the same reasonable and consistent method to all the transactions on a per virtual currency wallet or exchange basis. Taxpayers should use time stamps whenever they are available. Otherwise, the use of a reasonable and consistent method should apply to the transactions. Taxpayers may have one method applied to one wallet and another method applied to another exchange when determining the fair value of all the Bitcoin transactions. Taxpayers using this combination of methods can meet the overall test for reasonable and consistent determination of fair value.
- Q-7:** May taxpayers use a virtual currency price index that aggregates the prices from major exchanges, such as the Coindesk Bitcoin Index (XBP)?
- A-7:** Taxpayers may use a price index provided they are consistent in applying prices for every virtual currency transaction.

3. Computation of Gains and Losses

Overview

A “convertible” virtual currency is a virtual currency that has an equivalent value in real currency, or acts as a substitute for real currency. It usually has a measurable value in real money and what makes it convertible lies in its ability to exchange for real currency based on its determinable value in the market. The most popular form of convertible virtual currency is Bitcoin.

The treatment of convertible virtual currency as non-cash property signifies that any time virtual currency is used to acquire goods or services, a barter transaction takes place and parties need to know the fair market value (FMV) of the currency on that day. The party exchanging the virtual currency for goods or services will need to track the basis of his or her currency to determine whether a gain or loss has occurred and whether it is a short-term or long-term transaction. This determination involves a significant amount of recordkeeping even if the transaction is valued at under \$10.

Currently, there are no alternative tracking methods provided for such transactions other than for securities under Treas. Reg. § 1.1012-1(c) (*e.g.*, first in first out (FIFO)). Therefore, taxpayers are required to specifically identify which virtual currency lot was used for each transaction in order to properly determine the gain or loss for that particular transaction. In many cases, it is impossible for a taxpayer to track which specific virtual currency was used for a particular transaction.

The IRS should allow FIFO treatment under section 1012 as an election and/or option. It is not always practical to perform the tracking process for specific identification. However, although specific identification can present a tracking challenge for taxpayers, it is imperative that the IRS allow this method. Specific identification is needed in order to provide a mechanism to address a double capital gain paradox that can arise due to the fact that some virtual currencies can only exchange for other virtual currencies (and not for USDs). It is unfair for taxpayers to incur gain from a series of related sales that exceed the ultimate transaction proceeds (as explained in the Bitcoin conduit problem in Appendix A).

Suggested FAQ

- Q-8:** May a taxpayer choose either the specific identification method or the FIFO method as the accounting method for computing capital gains and losses?
- A-8:** Yes. The taxpayer may choose either specific identification or FIFO as long as the method is consistently applied from year to year.

4. Need for a *De Minimis* Election

Overview

Some taxpayers may only have a minimal amount of virtual currency that is designated for making small purchases (such as buying coffee). Tracking the basis and FMV of the virtual currency for each of these small purchases is time consuming, burdensome, and will yield a *de minimis* amount of gain or loss.⁶ A binding election applicable for a specified amount of virtual currency is beneficial to taxpayers.

Currently, section 988(e)(2) allows for an exclusion of up to \$200 per transaction for foreign currency exchange rate gain, if derived from a personal transaction. The same exclusion should apply to virtual currencies even though they are considered property rather than foreign currency.

Suggested FAQ

- Q-9:** May individuals use a *de minimis* rule for virtual currency similar to the section 988(e)(2) exclusion of up to \$200 per transaction for foreign currency exchange rate gain?
- A-9:** Yes. Individuals may use a *de minimis* rule, similar to section the 988(e)(2) exclusion, for virtual currency transactions to alleviate the burden or recordkeeping for individuals who use virtual currency as a medium of exchange. This *de minimis* rule allows taxpayers to exclude transactions resulting in \$200 or less of gain.

5. Valuation for Charitable Contribution Purposes

Overview

A charitable contribution of property with a value in excess of \$5,000 requires a qualified appraisal from a qualified appraiser. Exceptions exist for “readily valued property” such as publicly traded securities. The rationale is that the prices for these publicly traded stocks are available on established exchanges, thus not requiring a qualified appraisal. The same is true for most, if not all, types of virtual currencies. That is, various exchanges publish the value of the currency on any given day. Thus, a taxpayer donating virtual currency worth more than \$5,000 should not have the requirement to obtain a qualified appraisal, provided the donor documents the transfer under the usual section 170(f) rules and maintains proof of the value of the virtual currency on at least two established exchanges on the date of the donation. This use of at least two exchanges recognizes that unlike publicly-traded stock, which has a single price, the value of virtual currency can vary slightly among different published exchanges. In addition, the use of at least two exchanges provides support that the donated currency is widely recognized.

⁶ See [Senate Committee on Finance and House Ways and Means letter](#) from Senator Hatch and Congressmen Brady and Buchanan, to the IRS Commissioner, suggesting that the IRS provide a *de minimis* rule to remove practical barriers to transactional use of virtual currencies, dated May 17, 2017.

Suggested FAQ

Q-10: Is a charitable contribution of virtual currency valued in excess of \$5,000 treated the same as contributions of publicly traded stock which do not require a qualified appraisal?

A-10: Yes. Virtual currencies that have a readily determinable market value on at least two commonly used exchanges are treated similar to contributions of publicly traded stock under section 170(f) and do not require a qualified appraisal. The taxpayer must document, and calculate the average of, the fair market value on at least two exchanges (at the date and time of the contribution) and the basis of the virtual currency contributed.

6. Virtual Currency Events

Overview

Price discovery is an important concept affecting how taxation is applied to virtual currencies (see Appendix B). Price discovery refers to the act of determining the proper price of a security, commodity, or good or service by studying market supply and demand and other factors associated with transactions. Virtual currency events including chain splits, airdrops and giveaways are subject to price discovery and therefore, create a unique challenge in determining a USD translation for virtual currencies that newly come into existence.

A chain split occurs when one blockchain splits into two separate virtual currencies. An airdrop is a distribution of new virtual currency tokens, on a pro-rata basis, to existing holders of a particular virtual currency based on a snapshot of the owners' balances at a specific point in time. Unlike an airdrop event where tokens are distributed pro-rata, a giveaway event occurs when a fixed amount of virtual currency is given to a taxpayer for creating an account on a related wallet.

Existing virtual currencies with a long track record are traded on multiple exchanges and likely have significant trading volume, thus yielding sufficient data for USD translations and the determination of fair value. This same data is not available when virtual currencies come into existence at time zero, which is the moment in time that the price discovery process begins. By definition, the USD translation for virtual currencies happens at the exact second a transaction takes place (as if there was a transaction time stamp post price discovery). When this method is applied to chain splits, airdrops, and giveaways, the price discovery at time zero – the exact second of the transaction—is \$0, in theory. The price discovery process begins when the virtual currency is listed on an exchange and the trading process begins to produce price history. Price discovery may start on the same day as the virtual currency event. However, in many cases, price discovery and exchange listings do not take place for several days because virtual wallet software and exchanges must upgrade their technology and system rules to make it compatible with the new virtual currency, particularly in the event of a chain split. (See Appendix C for a detailed explanation.)

Regardless of whether a virtual currency transaction is considered ordinary income or whether any basis requires allocation, price discovery results in a zero value. If the transaction in question

would have otherwise been considered ordinary income,⁷ the amount received as zero value also becomes the basis in that virtual currency and the beginning of the holding period becomes the date coinciding with that value.

Virtual currency resulting from chain splits are property that are unsolicited by the taxpayer. Nothing compels individuals to claim these coins and normally, most individuals take no action at all until the risks associated with the chain split and its new coins are evaluated and mitigated. When a taxpayer makes the decision to take action by exercising authority, dominion, and control over a virtual currency, then the taxpayer acquires access to his/her chain split coins. In regards to Bitcoin, a taxpayer could exercise dominion by recognizing income upon performance of the coin splitting action.

Example:

A taxpayer may use a splitter tool to split the original Bitcoin into Bitcoin (BTC) and Bitcoin Cash (BCH), two separate virtual currencies. Taxpayer A may exercise dominion and control within days after the split when BCH is valued at \$400 while Taxpayer B may exercise dominion of control months later when BCH is valued at \$2,000. This scenario demonstrates the wide variation in potentially recognizable income.

Attempting to create a mechanism or a set of rules for price discovery or price allocation, which can only take place at a moment in time after the transaction occurs, would create an undue burden for taxpayers and result in an unlimited number of approaches, inconsistently applied. Taxpayers could apply a range of reasonable approaches to determine a USD fair value for chain splits, airdrops, and giveaways. However, they should have consistent application from one virtual currency to the next as these practices can give rise to possible manipulation. An election similar to what is allowed under section 83(b) (see Appendix D for sample draft election) would offer taxpayers some flexibility while providing a method for consistent application with new virtual currency events.

The FAQs below address the following virtual currency events:

- a. Chain Splits
- b. Airdrops
- c. Giveaways
- d. Token Swaps
- e. Staking

a. Chain Splits

Blockchains are subject to soft forks, hard forks, and chain splits. A soft fork is a change of the blockchain rules that creates blocks still recognized as valid by the old software, even though the rules are changed. A hard fork is a major change in the blockchain protocol rules

⁷ IRC section 1222 requires sale or exchange of a capital asset in order to generate capital gain or capital loss.

where the software validating according to the old rules will see any blocks produced according to the new rules as invalid.⁸ Every chain split results from a soft or hard fork. Both soft and hard forks create a split, but a hard fork is meant to create two separate blockchains while a soft fork results in only one. Also, with virtual currency forks, there is a “snapshot,” which includes the date when the fork occurs and a specific block number where the virtual currency separated.

On August 1, 2017, a chain split occurred within the Bitcoin network system that resulted in two versions of the Bitcoin blockchain and two separate virtual currencies, both of which share the identical parts of the blockchain prior to the August 1, 2017 split. Taxpayers who held Bitcoin (BTC) before the split on August 1 automatically received one equivalent unit of Bitcoin Cash (BCH) for each unit of Bitcoin (BTC), resulting in a separate financial instrument that possesses a liquid market value.

BTC and BCH are initially a conjoined virtual currency until they are split via a splitting tool—where a wallet feature or an exchange splits them on behalf of the owner/customer. An action must take place to separate a conjoined virtual currency into two. If the taxpayer controls the private key, then BTC and BCH remain conjoined as BTC-BCH until the taxpayer takes action to separate them.

A private key is a long number that allows an owner to spend his/her virtual currency. Owners of virtual currencies can keep private keys on computer files. Generally, an owner could also print the key on paper and store it in a secure location (*e.g.*, a safe).

If the taxpayer does not control the private key, which is the case when virtual currency is held on a centralized exchange, then the BTC-BCH remain conjoined until, and/or if, the third party exchange separates them. Therefore, two blockchains are permanently conjoined until a taxpayer or an exchange takes action to split it into two separate virtual currencies.

The sequential stages of a full chain split are as follows:

1. BTC: One virtual currency.
2. A fork occurs, resulting in a chain split.
3. BTC-BCH: One conjoined virtual currency, where the original blockchain now has two branches.
4. Splitting action takes place.
5. BTC and BCH: Two separate virtual currencies.

The price discovery and fair value of BCH at the time of the chain split is zero. The taxpayer’s basis in BTC is not allocated and the basis in BCH becomes zero.

⁸ See article: “[The Differences Between A Hard Fork, A Soft Fork, And A Chain Split, And What They Mean For The Future Bitcoin](#),” by John Light, dated September 25, 2017.

b. Airdrops

An airdrop is a pro-rata distribution of a new virtual currency based on a snapshot of the virtual currency address balances of an existing blockchain at a specific point in time. The snapshot and the distribution dates (two different points in time) are communicated in advance. Therefore, taxpayers may purchase one virtual currency that entitles them to another via airdrop.

Example:

In 2016, NXT holders were entitled to 0.5 Ardor (ARDR) for every NXT token. If the taxpayer had 24,000 NXT, they received 12,000 ARDR after an NXT blockchain snapshot was completed. However, the taxpayer must have held NXT in the NXT client (wallet) and not on an exchange. The NXT client is "transparent" with the NXT blockchain, which allows a snapshot of every NXT address containing that specific type of virtual currency. The airdrop is completely independent of the NXT blockchain. The ARDR token is compatible with the NXT client and the pro-rata amount of new ARDR automatically appeared in a user's wallet on the distribution date.

c. Giveaways

A giveaway occurs when a fixed amount of virtual currency is given to a taxpayer for creating an account (and related wallet) and verifying their identity via Facebook, for example. The identity verification prevents the creation of multiple accounts for the same person and thus, gaming of the system. The giveaway lasts for a period of time (*e.g.*, 30 days) or when a certain amount of tokens are claimed.

Example:

Stellar launched in 2014 and in May of 2017, Stellar gave away 500 Lumens, their native virtual currency, to anyone who created an online account (wallet). The giveaway is not based on owning any other virtual currencies and the act of "signing up" and creating an account entitles the taxpayer to the free tokens. This giveaway process is distinctly different from an airdrop, where a taxpayer must own another virtual currency at a specific point in time and the amount of tokens received by the taxpayer is pro-rata based on a blockchain snapshot.

Suggested FAQs

Q-11: Are virtual currency airdrops considered ordinary income?

A-11: Yes. Virtual currencies received from airdrops are akin to a bonus or a free prize. Taxpayers should include the amount as ordinary income based on the fair value of the token on the date of receipt. The income recognized becomes the basis in the virtual currency. The holding period begins on the date of distribution and is the first day of the holding period.

- Q-12:** How do taxpayers report virtual currency events, including chain splits, airdrops, giveaways, or other similar activities?
- A-12:** Within 30 days of the event, taxpayers may report the event by making an “Election to Include a Virtual Currency Event as Ordinary Income in Year of Transfer,” similar (but not subject) to the process for making an election under section 83(b). If the virtual currency is a capital asset in the hands of the taxpayer, future disposition of the asset will generate a capital gain or loss and the income reported becomes the basis in the virtual currency. (See Appendix D.)
- Q-13:** How should taxpayers report the Bitcoin split that occurred in August of 2017?
- A-13:** Taxpayers have the option to report events as they deem appropriate. However, if they choose to make an “Election to Include a Virtual Currency Event as Ordinary Income in Year of Transfer,” the IRS will not challenge that method of treatment for 2017. Specifically, a taxpayer makes the election that states they received Bitcoin Cash in the August 2017 split event and the currency has zero basis. A taxpayer should file this election with the 2017 tax return by the extended due date.
- Q-14:** How is a virtual currency event (*e.g.*, chain splits, air drops, giveaways, etc.) reported when a taxpayer does not make an “Election to Include a Virtual Currency Event as Ordinary Income in Year of Transfer?”
- A-14:** If a taxpayer does not make the election, then the virtual currency event is reported as ordinary income when a taxpayer later disposes of the virtual currency received in a prior event (where the election was not made).
- Q-15:** Prior to the effective date of IRS guidance on the taxation of virtual currency events, how should taxpayers report these events (*e.g.*, chain splits, air drops, giveaways, etc.)?
- A-15:** Taxpayers may make the “Election to Include a Virtual Currency Event as Ordinary Income in Year of Transfer,” within 60 days of the release of IRS guidance on this issue.
- Q-16:** May a taxpayer make the “Election to Include a Virtual Currency Event as Ordinary Income in Year of Transfer” if a third party virtual currency exchange issues the chain split coins, BCH for example, on a date after the virtual currency event happened?
- A-16:** Yes. Within 30 days of the event, taxpayers may report the event by making an “Election to Include a Virtual Currency Event as Ordinary Income in Year of Transfer.”

d. Token Swaps

A token swap occurs when the developers of a virtual currency decide to move to a new or existing cryptographic protocol, thus requiring virtual currency holders to move their tokens from an existing wallet to a new wallet supported by the new protocol. During this process,

the old blockchain is abandoned in favor of a new and different blockchain. The developers provide a special token swap virtual currency address to facilitate the swap offered for a specified period of time. After this period of time, owners may no longer swap the tokens and they become worthless. The original virtual currency is “burned” or destroyed when it is sent to the swap address and a new version of the currency is sent to the new virtual currency address provided by the taxpayer.

For example, Storj, a file sharing project, originally issued its SCJX token on the Counterparty protocol and moved to the Ethereum protocol, renaming the token to STORJ. Taxpayers had to burn their SCJX for STORJ on a 1:1 ratio basis. The swap is a maintenance activity; therefore, the taxpayer would simply use the basis in the old tokens as the basis for the new tokens. In the case where a swap is other than a 1:1 ratio, the basis is allocated on a pro-rata basis with the same total USD amount. If taxpayers fail to make the swap within the specified expiration window and results in worthless virtual currency, they should account for this transaction by reporting it in the same way a worthless security or other investments are reported.

Suggested FAQs

Q-17: Are token swaps considered a taxable event?

A-17: No. When one virtual currency is burned in exchange for another virtual currency (as required when the developers of one cryptographic protocol and/or blockchain decide to adopt a new and different cryptographic protocol and/or blockchain), the basis and holding period of the original virtual currency is applied to the new virtual currency version. If the swap is other than a 1:1 basis, the total value of the original virtual currency is divided by the number of new tokens received.

Q-18: If a taxpayer fails to execute a token swap within the specified time frame and the tokens are no longer eligible to swap, is this occurrence considered the same as a worthless security under section 165(g)?

A-18: Yes. Taxpayers should report virtual currencies that become worthless on Form 8949, *Sales and Other Dispositions of Capital Assets*, thus applying the same methodology used for worthless securities.

e. Staking

Staking is participating in the security of a “proof of stake” based cryptographic algorithm-blockchain. This participation occurs when an individual owns a virtual currency with the expectation of receiving a probabilistic reward of the same virtual currency. The taxpayer must complete an act of staking to receive the reward because it does not happen automatically. The more virtual currency a taxpayer stakes, the higher the reward.

Unlike “proof of work,” where the algorithm rewards miners who solve mathematical problems to create new blocks, proof of stake occurs when the creator of a new block is chosen in a deterministic way, depending on their wealth or “stake.”

Virtual currency received from staking is treated as ordinary income in the same manner Bitcoin mining rewards are treated as ordinary income for proof of work based mining rewards. Proof of stake and proof of work are the principal algorithms for securing virtual currency networks. However, there are many other versions available, including hybrid versions. Therefore, any act of participating in the securing of virtual currency, with the expectation of virtual currency as a reward, should receive ordinary income taxation treatment.

Suggested FAQ

Q-19: Is virtual currency staking considered ordinary income from services, the same treatment applied to virtual currency mining?

A-19: Yes. Staking is akin to virtual currency mining and treated as ordinary income. The income recognized becomes the basis in the virtual currency and the holding period begins on the date the staking rewards are received. Expenses, if any related to staking, are deducted as ordinary expenses and expensed as incurred.

7. Virtual Currency Held and Used by a Dealer

Overview

When a business buys and sells virtual currency to/from customers, its character becomes inventory similar to other goods held for sale.

Suggested FAQs

Q-20: If a dealer is in the business of buying and selling virtual currencies to customers, what is the character of the virtual currency in the hands of the taxpayer?

A-20: Virtual currency is property and its character is considered inventory when a dealer buys and sells virtual currencies to customers in the ordinary course of business. The sale of virtual currency is ordinary income and the inventory sold becomes the cost of goods sold. This type of business is a virtual currency exchange or a dealer. A virtual currency dealer can also have virtual currency held as property with related capital gain and loss calculations when it is used to pay for goods and services outside of the business context. (See additional details in section below on the treatment of “Dealers and Traders of Virtual Currency.”)

Q-21: Do the uniform capitalization rules of section 263A apply to a virtual currency exchange?

A-21: Yes. Personal property acquired for resale includes both tangible and intangible property considered inventory for sale to customers in the ordinary course of business. Virtual

currency is intangible personal property and a virtual currency exchange is subject to the rules of section 263A (other than for small taxpayers excepted from section 263A).

8. Traders and Dealers of Virtual Currency

Overview

Taxpayers considered dealers and traders who engage in buying and selling securities in the ordinary course of business to customers may make a “mark-to-market” election under section 475. This election recognizes ordinary gains or losses on the deemed sales involved in the mark-to-market process. The securities holdings on the last day of the year are deemed as sold for their fair market value resulting in both ordinary income and ordinary expenses the same as for any other trade or business. Taxpayers who trade virtual currencies perform this activity on virtual currency exchanges that contain all the robust trading features available on trading platforms for securities and commodities, including the same level of liquidity. In this context, virtual currencies are akin to securities and commodities. This particular issue is also under consideration by the Commodity Futures Trading Commission.⁹

Suggested FAQ

Q-22: May taxpayers who trade virtual currency elect the mark-to-market rules under section 475 if they otherwise qualify as a dealer or trader?

A-22: Yes. The nature of virtual currency trading is akin to dealers and traders of securities and commodities and a taxpayer may elect mark-to-market treatment. The taxpayer must otherwise qualify as a dealer or trader in order to make the election.

9. Treatment Under Section 1031

Overview

Section 4, Q&A-1 of Notice 2014-21 states that “general tax principles applicable to property transactions apply to transactions using virtual currency,” which is guidance that is generally helpful in determining the tax consequences of most virtual currency transactions. Thus, section 1031 treatment should apply for exchanges entered into before 2018.

A holder of virtual currency who uses it to acquire a different virtual currency with only the two parties involved has engaged in a simultaneous swap. If the currencies are held for use in a business or for investment purposes and determined to meet the definition of like-kind, section 1031 applies to defer any realized gain or loss.

⁹ Testimony of Commissioner Mark Wetjen before the U.S. House Committee on Agriculture Subcommittee on Commodity Exchanges, Energy, and Credit Subcommittee, April 14, 2015; <http://www.cftc.gov/PressRoom/SpeechesTestimony/opawetjen-12>. Also, see Nermin Hajdarbegovic, “Commissioner Claims CFTC Can Intervene in Bitcoin Markets,” CoinDesk, Nov. 18, 2014; <http://www.coindesk.com/commissioner-claims-cftc-can-intervene-Bitcoin-markets/>.

Suggested FAQ

Q-23: Does section 1031 apply to an exchange of virtual currency held for investment or business (other than dealer property)?¹⁰

A-23: Yes. Notice 2014-21 provides that virtual currency is treated as property. Thus, if the property is held for investment or business (not dealer property), and all requirements of section 1031 are satisfied, like-kind exchange treatment applies if the exchange occurs before 2018.

Note:

Taxpayers need guidance in order to properly interpret and apply the rules and regulations in this area. Guidance on the relevant factors to determine if two virtual currencies are like-kind is necessary, along with guidance on whether any of the existing section 1031 rules apply differently given the various types of virtual currencies, how they are held, and how taxpayers can transfer them.

10. Treatment Under Section 453

Overview

Notice 2014-21 provides that virtual currency is treated as property. Therefore, where a taxpayer disposes of virtual currency with at least one payment received after the close of the tax year of the disposition, the installment method of section 453 applies. The installment method would not apply if the currency is held as dealer property or inventory, or the owner elects not to have the method apply.

Suggested FAQ

Q-24: Does the installment method in section 453 apply to virtual currencies?

A-24: Yes. The installment method applies to virtual currencies that are not dealer property or inventory and requires reporting on Form 6252, *Installment Sale Income*. If the taxpayer elects out of the installment method treatment, this method would not apply.

11. Holding Virtual Currency in a Retirement Account

Overview

The prevalence of virtual currency as an investment vehicle leads to consideration of holding it in retirement funds.

¹⁰ Public Law 115-97 (12/22/17), Sec. 13303, changes section 1031 to apply only to exchanges of real property, effective for exchanges completed after December 31, 2017. However, guidance is still required under section 1031 for virtual currency exchanges that occurred before the effective date of this change.

Suggested FAQ

Q-25: May taxpayers hold virtual currencies in an IRA or similar retirement savings account?

A-25: Yes. Virtual currency is considered property and taxpayers may hold it in an IRA if all other IRA requirements are satisfied.

Note:

Taxpayers need guidance on whether other types of retirement accounts, if any, can hold virtual currencies. The IRS should also provide guidance on what special documentation rules or requirements apply given the decentralized nature of virtual currencies and the various ways these currencies are held and transferred.

12. Foreign Reporting Requirements for Virtual Currency

Overview

Taxpayers need specific guidance on foreign reporting requirements for virtual currency. An IRS analyst for the Small Business/Self-Employed Division (SBSE) stated, in June of 2014, that virtual currency accounts were not reportable on the Form 114, *Report of Foreign Bank and Financial Accounts* (FBAR), for tax years ended 2014.¹¹ However, no guidance was provided in regards to future tax years. Some virtual currencies are traded on centralized exchanges that operate in jurisdictions outside the United States. The exchanges are either a pure virtual currency exchange or a virtual currency exchange which allows virtual currencies to exchange into fiat currencies. These foreign virtual currency exchanges have custody of customers' virtual currencies and an exchange failure results in the loss of customer funds. In addition, taxpayers do not control their funds on a centralized exchange the same way they control funds in any other traditional financial institution. Both of the centralized exchanges mentioned above are similar to a Foreign Financial Institution (FFI) because they behave in the same manner. Therefore, taxpayers should report the value of virtual currencies and fiat currencies held at those exchanges if they meet the necessary threshold.

Conversely, when a taxpayer owns, controls and is in possession of a private key for a virtual currency wallet, they have 100% custody and control over all of the virtual currencies held in that wallet. If the taxpayer loses the private key, they lose all of their funds. This concept is akin to the taxpayer holding cash, gold, or any other asset in their personal possession. When the taxpayer owns, controls, and is in possession of the private key, the virtual currency resides in the country of the taxpayer's residence. In the case of a U.S. resident, the virtual currency by definition resides in the U.S. There is no Foreign Financial Institution (FFI) or financial institution of any kind because the taxpayers maintain possession similar to cash or gold. The same principles apply to both the FBAR and the Foreign Account Tax Compliance Act (FATCA).

¹¹ Rod Lundquist, a senior program analyst for the IRS Small Business/Self-Employed Division, [stated](#) on an IRS webinar that taxpayers did not have to report Bitcoin on the FinCEN Form 114, *Report of Foreign Bank and Financial Accounts* (FBAR), for the 2014 filing season.

Suggested FAQs

- Q-26:** Are taxpayers who hold virtual currencies and/or fiat currencies, on centralized virtual currency exchanges operating in a jurisdiction other than the U.S., required to report the value of the virtual currencies if the reporting threshold is met for both FBAR and FATCA compliance?
- A-26:** Yes. The value of virtual currencies should aggregate with fiat currencies and any other assets required for reporting under both FBAR and FATCA if their respective reporting thresholds are met.
- Q-27:** Are virtual currency wallets where taxpayers own, control, and are in possession of private keys for their own virtual currency wallets considered a Foreign Financial Institution for purposes of both FBAR and FATCA compliance?
- A-27:** No. Virtual currency wallets are owned and controlled by the taxpayer when in possession of the private key for that particular wallet. In this case, the virtual currency is considered cash which resides wherever the taxpayer resides and is therefore not considered a Foreign Financial Institution or subject to either FBAR or FATCA compliance.

Note:

IRS and Treasury should provide guidance on whether virtual currency accounts may become reportable on the Form 114, *Report of Foreign Bank and Financial Accounts*, in future tax years. Guidance should also explain whether there are circumstances that may alter virtual currency accounts into foreign financial assets under section 6038D, and therefore require reporting on Form 8938, *Statement of Specified Foreign Financial Assets*. Additionally, guidance should provide whether additional reporting obligations exist under the FATCA or whether there are other requirements for money services businesses (MSB) that exchange virtual currency. For example, would the IRS consider this exchange a financial institution activity?

APPENDIX

A) Bitcoin as a Conduit for Selling Virtual Currency for USD (A Double Capital Gain Paradox):

There are over 1,600 types of virtual currencies. Only a small number of these virtual currencies, including Bitcoin (BTC), Ethereum (ETH), and Litecoin (LTC), are considered “base currencies.” Buyers can use cash to purchase base currencies and sell these currencies in exchange for cash.

Most of the other types of virtual currencies available, however, are “altcoins,” which are the alternative cryptocurrencies launched after the success of Bitcoin. Unlike base currencies, altcoins are not quoted in a domestic currency. Therefore, users cannot purchase altcoins directly with cash and must use trading pairs to exchange altcoins back into a base currency or another altcoin. A trading pair describes the available trade link between one type of cryptocurrency and another. For example, Bitcoin (BTC) and Ethereum (ETH), are trading pairs because owners can sell one directly for the other. Currency pairs are illustrated as: “BTC/ETH,” a ratio of the three letter abbreviation of the currencies involved.

Most virtual currencies are not trading pairs. For example, when a taxpayer wants to sell NXT, a form of cryptocurrency, they must sell it on an exchange such as Poloniex for Bitcoin. Then, the taxpayer would send the Bitcoin to another exchange such as Coinbase to sell it for the USD (Poloniex et al are pure virtual currency exchanges with no fiat exchanges).¹²

Bitcoin is required as a temporary conduit to facilitate the sale of NXT because there is no NXT/USD trading pair. If there was a direct NXT/USD trading pair, then the taxpayer would not need to use Bitcoin as the trading conduit.

Example A:

If a taxpayer sold \$10,000 worth of NXT with a \$1,000 basis, the taxpayer has a \$9,000 gain. When Bitcoin is used as a conduit, the \$10,000 worth of NXT is then sold for \$10,000 of Bitcoin. If the taxpayer used FIFO and had a basis of \$2,000 in the Bitcoin, then the sale of the \$10,000 of Bitcoin results in an \$8,000 gain when he/she sells the Bitcoin for USD. This transaction triggers a \$9,000 gain for the sale of NXT and an \$8,000 gain for the sale of Bitcoin, and thus a \$17,000 total gain when the original sale proceeds were only \$10,000.

Example B:

In Example A, if a taxpayer used specific identification, they could match the purchase of the Bitcoin (from the sale of NXT) to the sale of Bitcoin for USD at time zero, or in practical terms, within about an hour. The market fluctuation of Bitcoin in a one-hour

¹² Fiat money is currency that a government has declared as legal tender, but it is not backed by a physical commodity. The value of fiat money is derived from the relationship between supply and demand rather than the value of the material used to produce the money.

period would result in a gain of approximately \$0 for Bitcoin instead of \$8,000. The gain from the sale of NXT would remain as \$9,000.

The Binance exchange screenshot below shows two trading pairs for TRON (TRX), a virtual currency. Users can only trade TRON on this exchange with Bitcoin (BTC) or Ethereum (ETH). A taxpayer seeking to trade TRX for USD currency would have to trade it for BTC or ETH, move the BTC or ETH to a different exchange, like Coinbase, and then sell the BTC or ETH for USD. This process results in two capital gains calculations with the possibility of a total gain larger than the original sales proceeds - the double capital gains paradox.

The screenshot shows the Binance website interface. At the top, there is a navigation bar with the Binance logo and links for Exchange, Labs, LaunchPad, Funds, Orders, Join Us, Support, News, and a user profile icon. Below the navigation bar is a warning message: "Do not disclose Password, Google Authentication codes and SMS to anyone, including Binance support." The main content area is titled "Deposits & Withdrawals" and includes a search bar with "Tron" entered and a "Hide small assets" checkbox. On the right, it shows the "Estimated Value: 0.01912250 BTC / \$253.61" and "24h Withdrawal Limit: 2BTC In Use: 0BTC". A table lists the TRX asset with columns for Coin, Name, Total Balance, Available Balance, In Order, and BTC Value. The TRX entry shows zero values for all these columns. To the right of the table are buttons for "Deposit", "Withdrawal", and "Trade". A dropdown menu is open under the "Trade" button, showing options for "TRX/BTC" and "TRX/ETH".

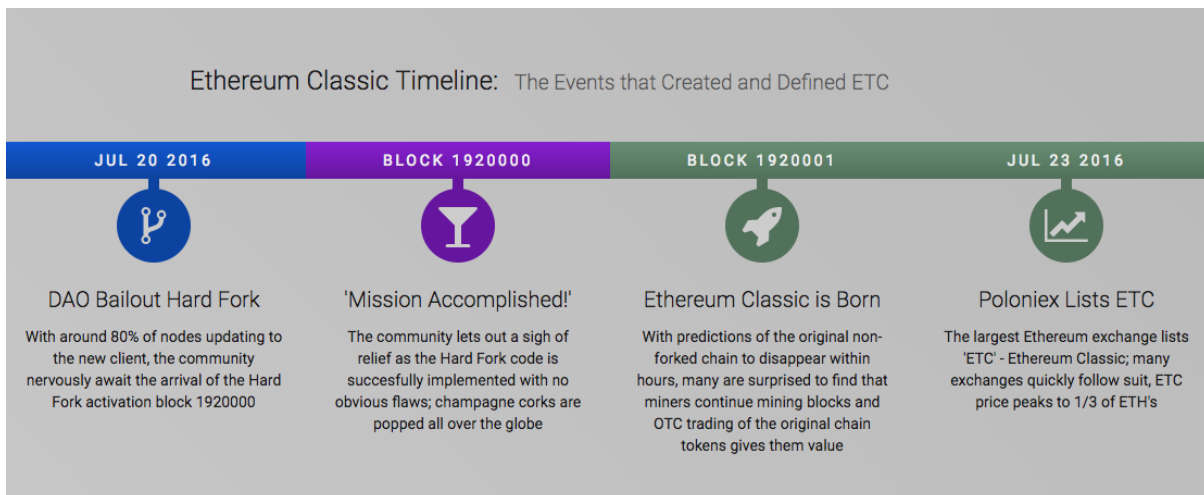
B) Bitcoin Cash (BCH) Price Discovery:

The Bitcoin blockchain forked on August 1, 2017. Per the screenshot below, price discovery occurred on July 24, 2017 because BCH was traded as a “futures token” prior to the actual chain split action. The price charts of the futures token and the actual BCH virtual currency post-August 1, 2017 split are combined as if the two tokens were one event. This process is not evident from the chart below unless you know the transactional history. Therefore, in this rare and unusual circumstance, a price discovery takes place near time zero. There are no reasonable and consistent applications to determine the time zero price discovery. Additionally, the creation of a new virtual currency, albeit related as kin to the original virtual currency, should have a zero basis. For additional information, see [Bitcoin Cash Charts](https://coinmarketcap.com/currencies/Bitcoin-cash/) provided by CoinMarketCap at <https://coinmarketcap.com/currencies/Bitcoin-cash/> (and provided below).



C) Ethereum Classic (ETC) Chain Split Example:

1. The Ethereum Community initiated a hard fork on 7-20-16 to solve the \$55M DAO hack but unexpectedly some miners continued mining blocks of the original code resulting in a chain split into Ethereum (ETH) and [Ethereum Classic](#) (ETC) and two virtual currencies with ETC being the new virtual currency.



- The Ethereum Classic (ETC) chart shows the first price discovery on 7-24-17 on Coinmarketcap, the most widely used cryptocurrency market capitalization website, which is four days after the chain split. In addition, ETC was listed on Poloniex, one of the most widely used virtual currency exchanges, on 7-23-17 three days after the chain split. Therefore, the price of [ETC](#) at the time of the chain split on 7-20-16 is zero because price discovery did not happen until at least 3 days later.



D) Election to Include a Virtual Currency Event as Ordinary Income in Year of Transfer:

The sample election below is based on list of requirements included in Treas. Reg. § 1.83-2(e). See [Rev. Proc. 2012-29](#), page 9 for a sample election under section 83(b): <https://www.irs.gov/pub/irs-drop/rp-12-29.pdf>.

Election to Include a Virtual Currency Event as Ordinary Income in Year of Transfer

The undersigned taxpayer hereby elects, pursuant to [IRS Guidance on Virtual Currency], to include in ordinary income the fair market value of the virtual currency described below.

1. The name, taxpayer identification number, address of the undersigned, and the taxable year for which this election is being made are:

TAXPAYER'S NAME: _____
SOCIAL SECURITY NUMBER: _____
ADDRESS: _____
TAXABLE YEAR: Calendar Year 20__

2. The property which is the subject of this election is described below.

3. The property was transferred to the undersigned on [DATE].

4. The fair market value of the property at the time of the event is: \$_____.

5. For the property transferred, the undersigned paid \$_____.

6. The amount to include in ordinary income is \$_____. [The result of the amount reported in Item 4 minus the amount reported in Item 5.]

The undersigned taxpayer will file this election with the Internal Revenue Service office with which taxpayer files his or her annual income tax return not later than 30 days after the date of transfer of the virtual currency event. The undersigned is the person with potential economic benefit in connection with the virtual currency event.

Dated: _____ Taxpayer: _____