Bitcoin/Cryptocurrency
An Introduction and the Related Tax Consequences of Buying, Holding, and Selling
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What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Transactions that are computationally impractical to reverse would protect sellers from fraud…. The system is secure as long as honest nodes collectively control more CPU power than any cooperating group of attacker nodes.”

Satoshi Nakamoto 2008
Distinguishing Blockchain from Bitcoin

- Blockchain is the technology platform underlying bitcoin.
- A distributed ledger built on a data structure known as “blocks”
- What problems does it solve?
The Double-Spending Problem

• Centralized ledgers vs. distributed ledgers
• The role of intermediaries
• How a blockchain solves the double-spending problem
Cryptocurrency Enforcement

• Silk Road
• Mt. Gox
• United States v. Coinbase
2. What Is Cryptocurrency?

**Like a currency**
Medium of exchange

**But not like a currency**
Does not have legal tender status by any government

**Used either**
- For goods or services AND convertible to real currency, or
- Only in a virtual world

**Virtual (electronic)**
- Intangible
- No physical location

01

02

03

04
Types of Cryptocurrency

- Over 1,600 cryptocurrencies to date (see https://coinmarketcap.com/all/views/all/)
- Top 5 most popular (based on market cap/price 05/23/18):
  1. Bitcoin (BTC) – $7,565.85
  2. Ethereum (ETH) – $577.18
  3. Ripple (XRP) – $0.59
  4. Bitcoin Cash (BCH) – $995.44
  5. EOS (EOS) – $10.95
A secure digital wallet used to store private and public keys with various blockchains. Also used to send/receive various cryptocurrencies.

- Private key is a secure digital code known only to you and your wallet.
- Public key is a digital code connected to a certain amount of cryptocurrency.
Q-1: How is virtual currency treated for federal tax purposes?

A-1: For federal tax purposes, virtual currency is treated as property. General tax principles applicable to property transactions apply to transactions using virtual currency.
Tax Basics

- When received, fair market value (FMV) at time of receipt determines income or amount realized.
- Basis based generally on value at time of receipt.
- FMV may be determined by value on established exchange.
- Use of cryptocurrency to purchase/pay is a disposition giving rise to gain/(loss).
3. Initial Coin Offerings

• ICO – “Initial Coin Offering” is an unregulated means by which funds are raised for a new type of cryptocurrency.
• Mining – using of computer hardware/software in solving mathematical problems for the blockchain in exchange for receiving a portion of cryptocurrency.
• Exchanges:
  – Fiat exchanges, government-backed currencies for cryptocurrency
  – Cryptocurrency-to-cryptocurrency exchanges
## 4. AICPA Comment Letters

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AICPA Comment Letters (cont.)

01 – Acceptable valuation and documentation

02 – Expenses of obtaining virtual currency

03 – Challenges with specific identification for computing gains and losses

04 – General guidance regarding property transaction rules

05 – Nature of virtual currency held by a merchant
06 – Charitable contributions

08 – Need for a *de minimis* election

10 – Foreign reporting requirements for virtual currency. As of date, the IRS has not responded to the June 10, 2016 comment letter.
The AICPA is in the process of issuing an updated and revised comment letter to the IRS in a Q&A format.

Additional guidance expected to be requested in the 2018 letter, along with the 10 areas from the 2016 letter, including:

- Virtual currency events, such as chain splits, airdrops, giveaways or other similar activities
- Treatment under Section 1031
5. Tax Issues

Gain/loss calculation
- capital vs. ordinary
- wash sales, straddles, etc.

Like-kind exchanges
- Not an issue post-TCJA
Tax Issues (cont.)

- Valuation
  - “Reasonable manner” per IRS Notice 2014-21
- Charitable contributions
  - Report on Form 8283? Is qualified appraisal required if FMV > $5,000?
- Accounting methods
  - Can the FIFO method or specific identification method be used?
- De minimis election
  - Possible election similar to $200 Section 988(e)(2) for foreign currency exchange gain?
Tax Issues (cont.)

- Retirement accounts
  - Are IRAs or retirement savings accounts permitted to hold virtual currency investments?
- Broker reporting
- Splits, airdrops and giveaways
- Derivatives/futures
6. Non-Tax Issues

- Financial statements
  - SEC Statement on Cryptocurrencies and Initial Coin Offerings (Dec. 11, 2017)
  - FASB – June 8, 2017 letter from Digital Chamber of Commerce for guidance on digital currency recognition and how to measure
No guidance exists for foreign reporting requirements for virtual currency.
7. Trends & Legal Risks

- Securities laws
- State and international regulation
- ICOs
- FinCEN—Anti-Money Laundering and the Bank Secrecy Act
- The Commodity Futures Trading Commission
8. Questions
9. Resources

- AICPA Tax Section (aicpa.org/tax)
- AICPA Tax Policy and Advocacy Website
- AICPA Tax Advocacy Comment Letters Website
- AICPA Tax Practitioner’s LinkedIn Group
10. Glossary

- **Virtual currency** – A medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency. In particular, virtual currency does not have legal tender status in any jurisdiction. Virtual currency serves as a digital representation of value that is generally tracked through a blockchain or software.
Glossary (cont.)

• **Blockchain** – A decentralized, distributed ledger that is governed by a consensus protocol, maintained by a group of peers and that operates as a data structure for organizing information.

• **Consensus protocol** – A set of rules and procedures that control how and when blockchain transactions are verified, validated, recorded and recognized.
• **Mining** – A process through which blockchain transactions are verified and accepted by adding such transactions to a blockchain ledger.

• **Staking** – The act of holding or “mining” a cryptocurrency that is based upon a proof-of-stake consensus protocol.
Glossary (cont.)

- **Proof of work** – A consensus protocol used to validate transactions recorded on certain blockchains and that generally requires the production of proof of complex cryptographic computations that require large amounts of computing power in order to validate transactions.

- **Proof of stake** – A consensus protocol used to validate transactions recorded on certain blockchains that is based upon a user’s or miner’s proof of stake in the blockchain. Proof of stake is a common alternative to a proof-of-work protocol.
Glossary (cont.)

• **Virtual wallet** – A software program used to store cryptocurrency private keys.

• **Initial Coin Offering (ICO)** – An offer of a coin or token for fiat currency or other cryptocurrency, generally performed through a crowdfunding process.
Glossary (cont.)

- **Distributed ledger** – A database or ledger that is shared and administered in a decentralized form across a network.

- **Cryptographic hash** – A mathematical function or algorithm that cyphers a given input into a fixed-size alphanumeric strand known as a hash value.
• **Token** – A subset of cryptocurrency that generally serves as a representation of value or a particular asset or utility.

• **Airdrop** – A procedure for the distribution of virtual currency, usually for free and often as a promotional activity.
• **Chain split** – A split or divergence in a blockchain leading to distinct blockchains with a shared history up to the point of the chain split event.

• **Soft fork** – A change in a blockchain’s protocol that is generally intended to result in all users adopting the changed protocol and maintaining a continuing blockchain.
Glossary (cont.)

- **Hard fork** – A change in a blockchain’s protocol that results in a permanent divergence from the prior version and results in two blockchains with a shared history up to the point of the fork.

- **Public key infrastructure** – A set of protocols that govern digital certificates and an encryption and decryption process designed to allow for the secure exchange of information.
Glossary (cont.)

- **Node** – A computer in a peer-to-peer blockchain network.

- **Peer-to-peer network** – A computer network that allows each computer in the network to share files directly without the need for a centralized, intermediary server.
Utility token – A digital token or cryptocurrency that represents the ability to access a product or service. The concept of a utility token is generally used to describe a digital token that is not intended to serve as an investment vehicle.

Cold storage – The act of generating and storing one’s private keys in an offline environment.