What Is Cryptocurrency?

• Like a currency
  • Medium of exchange
• But not like a sovereign currency
  • Does not have legal tender status by any gov’t
• Used either
  • For goods or services AND convertible to real currency, or
  • Only in a virtual world
• Virtual (electronic)
  • Intangible
  • No physical location
• Other names: digital currency, virtual currency
  • But can be differences in how they operate and are set up.
  • Example: IRS letters to taxpayers of August 2019 – “We have information that you have or had one or more accounts containing virtual currency and may not have met your U.S. tax filing and reporting requirements for transactions involving virtual currency, which include cryptocurrency and non-crypto virtual currencies.”
“Cryptocurrencies”

• Bitcoin
• Litecoin
• Primecoin
• Zerocash
• Mazacoin
• Dogecoin
• Solarcoin

[Scientific American, April 2014]

“Alternative currencies”

• BerkShares
• Equal Dollars
• Starbucks Stars
• Amazon Coins
• Linden Dollars
• Bitcoin [Note: This is a virtual currency.]

[Calif. AB 129 analysis (2014)]

“Depending on their end-use, VCs may be structured in various ways, thereby embedding different properties. Therefore, a ‘one-size-fits-all’ definitional approach poses great challenges for both the industry as well as the regulators worldwide.”

Malta, Discussion Paper on ICOs, VCs, Nov 2017

Caution - terminology
More later –
Where does Libra fit?

What Is Bitcoin?

• “Bitcoin: A Peer-to-Peer Electronic Cash System
  • Satoshi Nakamoto paper issued in 2008; first transaction in 2009
    • https://bitcoin.org/bitcoin.pdf
  • Decentralized virtual currency.
    • No one is in charge.
    • Uses blockchain as “guts” of the system – to avoid misuse (such as fake coins and double spending), maintain records of transfers, verify ownership by parties and transfers, and more.
    • Might be anonymous use but depends on the transaction too such as buying a car
  • Based on cryptography to identify and verify transactions.
  • Uses the blockchain
    • Blockchain can be used beyond bitcoin.
  • Risks:
    • Volatility
    • Can be lost due to error or carelessness or hackers; too bad if lost
    • Incomplete guidance – tax and non-tax
  • Good set of FAQs - https://bitcoin.org/en/faq


Blockchain

• Is not tied only to Bitcoin.
• aka “distributed ledger technology” (DLT)
• “Blockchain Technology” = “distributed ledger technology that uses a distributed, decentralized, shared and replicated ledger, which may be public or private, permissioned or permissionless, or driven by tokenized crypto economics or tokenless. The data on the ledger is protected with cryptography, is immutable and auditable and provides an uncensored truth.”
  • Source: Arizona HB 2417 (Chapter 97, 3/29/17) – treat signature secured through this tech as electronic; address rights to information stored using blockchain tech.
• Allows for decentralized/peer-to-peer system for trading, tracking and verification of transactions. System has ability to verify transactions using cryptography and proof of work or proof of stake protocols.
• Also see
  • IBM website
    • https://www.ibm.com/blockchain/what-is-blockchain
  • World Economic Forum
    • https://www.weforum.org/agenda/2017/11/blockchain-bitcoin-ethereum-tech-explained
  • CRS, Blockchain: Background and Policy Issues, 2/28/18
    • https://fas.org/sgp/crs/misc/R45116.pdf

A Few More Cryptocurrency Operational Details ...

• Software and cryptology involved
• Public and private keys
  • Sender uses his private key to send once knows recipient’s public key. Serves as sender’s “signature” which is verified by the system
• Wallets for transferring the codes
• UTXO – unspent transaction output (Bitcoin approach; Ethereum uses account based balance model (more like journal entries))
  • This is what you hold and use
• Network
• Trust
• Openness – Blockchain browsers, open source software
  • Examples of seeing blocks:
    • https://www.blockchain.com/en/explorer
    • http://etherscan.io/
### Spending Option Comparisons

<table>
<thead>
<tr>
<th>Identity (assuming seller keeps no record)</th>
<th>Cash</th>
<th>Credit card</th>
<th>Bitcoin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anonymous</td>
<td>Credit card company knows</td>
<td>Pseudonymous (bitcoin address can be traced, but not user name)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security</th>
<th>Cash</th>
<th>Credit card</th>
<th>Bitcoin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good unless counterfeit</td>
<td>Credit card company knows</td>
<td>Risk that merchant and others have your info; all parties involved have your credit card info and can continue to use if desired (“pull” transactions)</td>
<td>Cryptography and blockchain offer high security; user and exchanges must protect codes; new code for every transaction; no continued access to your wallet (“push” transactions)</td>
</tr>
</tbody>
</table>

| Doublespend and creation concerns                | None          | None                     | Yes (blockchain system needed to avoid this) |

| Transaction cost                                 | Zero          | Merchant pays fee         | Lower than credit card                       |

| Consumer chargebacks                             | No            | Yes                      | No                                           |

| Can you transfer exact amount?                   | Yes, but can also get change. | Yes | If have exact amount in your wallet. Otherwise, get back “change” (UTXO) with new code. |

| Use in foreign country                           | Must convert  | Credit card fee           | Recognized globally                          |

| Micropayments                                    | 1¢ minimum    | $10 minimum allowed       | < 1¢ feasible                                |

| Merchant receives over $10K                      | Must file Form 8300 ($6050I) | No; Form 8300 is for cash | No filing; exchanger/money transmitter likely must register with FinCen and States |

| Volatility                                       | No problem in most countries | Yes | |

| Who is in charge?                                | Federal Reserve, federal laws | Credit card companies, federal and state laws | No one; decentralized; community of miners/nodes; open source software and seeing the “blocks” |

| Digital benefits                                 | None          | Recordkeeping possible    | Recordkeeping possible; blockchain many uses/benefits |

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**Notice 2014-21**

- Binding (rather than web FAQs)
- Convertible virtual currencies
- Request comments
  - Doesn’t address all federal tax issues
- 16 Q&As
- Key — Treat as property, not currency
  - “General tax principles applicable to property transactions apply to transactions using virtual currency.”
Notice 2014-21 and Income

• Include in income at FMV if receive VC for rendering services or selling goods.
• G/L when exchange VC for other property.
• Mining VC
  • To measure basis and amount realized – use exchange rate in a “reasonable manner that is consistently applied”
  • Character — apply normal rules
  • Mining may also be trade or business
    • SE tax owed on net earnings

Tax Issues (some of them)

• What exchange rate to use?
  • End of day? Average for the day? Something else?
• Track by specific identification or FIFO?
  • Existing regulations allow either approach for sale of stock
    • Will IRS allow for virtual currency?
  • Jane needs to keep record that she used 50 of her $1/VC basis VC (assuming she did)
  • What if Jane can’t tell which VC she used?
• When §1031 applied beyond real property, could one virtual currency be like kind to another?
• Treatment of forks, airdrops, price discovery
• Treatment when “loan” VC to someone?
  • Since VC treated as property – is this truly a loan or a lease?
  • Could it be sale and a right to buy back at later date?
• Can VC be held in retirement accounts?
• Do broker reporting rules apply to exchangers?
• FBAR and Form 8938 (§6038D) obligations?
Issue

*Merchant Accepts and Uses a Virtual Currency*

• Does vendor own the VC or is a third party handling it?
  • If third party, is that equivalent to vendor holding it?
    • Possible “benefits and burdens” argument?
    • Who has the exchange risk and reward and accounting?

• If vendor holds own VC
  • What type of asset?
    • IRS – property
      • Used in the business – for bartering with customers.
      • Depreciable? Inventory? Something else?

• What recordkeeping is needed?

Seeking IRS Guidance - ABA

• ABA Section of Taxation
  • Tax Treatment of Cryptocurrency Hard Forks for Taxable Year 2017 (3/19/18)
    • Suggestion to IRS for August 2017 Bitcoin Cash fork
      • Taxable event
      • Deemed value of forked coin at realization event = zero (so basis is also zero)
      • Holding period starts on day of hard fork
      • If follow above, must disclose on return
      • ABA will continue to work on topic

https://www.americanbar.org/content/dam/aba/administrative/taxation/policy/031918comments2.authcheckdam.pdf
Seeking IRS Guidance – AICPA (2nd letter)

- AICPA – Letter with Q&As in 12 Areas (5/30/18)
  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
  9. Treatment under Section 1031
  10. Treatment under Section 453
  11. Holding Virtual Currency in a Retirement Account
  12. Foreign Reporting Requirements for Virtual Currency


IRS Concerns

Virtual Currency Transactions

- IRS reminder to holders of virtual currency
  - “Taxpayers who do not properly report the income tax consequences of virtual currency transactions can be audited for those transactions and, when appropriate, can be liable for penalties and interest. In more extreme situations, taxpayers could be subject to criminal prosecution for failing to properly report the income tax consequences of virtual currency transactions. Criminal charges could include tax evasion and filing a false tax return. Anyone convicted of tax evasion is subject to a prison term of up to five years and a fine of up to $250,000. Anyone convicted of filing a false return is subject to a prison term of up to three years and a fine of up to $250,000.”
The Honorable Tom Emmer
U.S. House of Representatives
Washington, DC 20515

Dear Representative Emmer:

Thank you for your letter dated April 11, 2019, requesting that we provide additional guidance for taxpayers regarding the tax consequences of virtual currency transactions.

As noted in your letter, we issued Notice 2014-21, which stated that virtual currency is treated as property and existing tax principles applicable to property transactions apply to virtual currency transactions. Since that time, virtual currency as a medium of exchange and investment has continued to develop. We have received numerous comments in response to the Notice and have been working with internal and external stakeholders to identify areas where needed and helpful additional guidance can be provided.

I share your belief that taxpayers deserve clarity on basic issues related to the taxation of virtual currency transactions and have made it a priority of the IRS to issue guidance. Specifically, your letter mentions (1) acceptable methods for calculating cost basis; (2) acceptable methods of cost basis assignment; and (3) tax treatment of forks. We have been considering these issues and intend to publish guidance addressing these and other issues soon.

I hope this information is helpful. I am sending a similar letter to your colleagues. If you have additional questions, please feel free to contact me, or a member of your staff may contact Leonard Gourdier, Director, Legislative Affairs, at 202-317-6989.

Sincerely,

Charles P. Rettig

Cryptocurrency Audits by the IRS Coming - IR-2019-132 (7/26/19)

WASHINGTON — The Internal Revenue Service has begun sending letters to taxpayers with virtual currency transactions that potentially failed to report income and pay the resulting tax from virtual currency transactions or did not report their transactions properly.

"Taxpayers should take these letters very seriously by reviewing their tax filings and when appropriate, amend past returns and pay back taxes, interest and penalties," said IRS Commissioner Chuck Rettig. "The IRS is expanding our efforts involving virtual currency, including increased use of data analytics. We are focused on enforcing the law and helping taxpayers fully understand and meet their obligations."

The IRS started sending the educational letters to taxpayers last week. By the end of August, more than 10,000 taxpayers will receive these letters. The names of these taxpayers were obtained through various ongoing IRS compliance efforts.

For taxpayers receiving an educational letter, there are three variations: Letter 6173, Letter 6174 or Letter 6174-A, all three versions strive to help taxpayers understand their tax and filing obligations and how to correct past errors.

Taxpayers are pointed to appropriate information on IRS.gov, including which forms and schedules to use and where to send them.

Last year the IRS announced a Virtual Currency Compliance Campaign to address tax noncompliance related to the use of virtual currency through outreach and examinations of taxpayers. The IRS will remain actively engaged in addressing noncompliance related to virtual currency transactions through a variety of efforts, ranging from taxpayer education to audits to criminal investigations.

Virtual currency is an ongoing focus area for IRS Criminal Investigation.

IRS Notice 2014-21 (PDF) states that virtual currency is property for federal tax purposes and provides guidance on how general federal tax principles apply to virtual currency transactions. Compliance efforts follow these general tax principles. The IRS will continue to consider and solicit taxpayer and practitioner feedback in education efforts and future guidance.

The IRS anticipates issuing additional legal guidance in this area in the near future.

Taxpayers who do not properly report the income tax consequences of virtual currency transactions are, when appropriate, liable for tax, penalties and interest. In some cases, taxpayers could be subject to criminal prosecution.

More information on virtual currencies can be found on IRS.gov.
Reporting Virtual Currency Transactions

Dear [Name]:

Why we're writing to you
We have information that you have or had one or more accounts containing virtual currency but may not know the requirements for reporting transactions involving virtual currency, which include cryptocurrency and non-crypto virtual currencies.

What you need to do
After reviewing the information below, if you believe you didn't accurately report your virtual currency transactions on a federal income tax return, you should file amended returns or delinquent returns if you didn't file a return for one or more taxable years. If you do not accurately report your virtual currency transactions, you may be subject to future civil and criminal enforcement activity. For more information, visit www.irs.gov/filing.

When filing amended or delinquent returns, write "Letter 6174" at the top of the first page of the return. Mail the original amended or delinquent return to:

Internal Revenue Service
2970 Market Street
Philadelphia, PA 19104

Reporting virtual currency transactions
Virtual currency is considered property for federal income tax purposes. Generally, U.S. taxpayers must report all sales, exchanges, and other dispositions of virtual currency. An exchange of a virtual currency (such as Bitcoin, Ether, etc.) includes the use of the virtual currency to pay for goods, services, or other property, including another virtual currency such as exchanging Bitcoin for Ether. This obligation applies regardless of whether the account is held in the U.S. or abroad. More information can be found on www.irs.gov and in Notice 2014-21, found at www.irs.gov/pub/irs-pdf/n1421.pdf which describes how annual tax returns...
Reporting Virtual Currency Transactions

Dear [Name]:

Why we’re writing to you
We have information that you have or had one or more accounts containing virtual currency and may not have met your U.S. tax filing and reporting requirements for transactions involving virtual currency, which include cryptocurrency and non-crypto virtual currencies.

Virtual currency is considered property for federal income tax purposes. Generally, U.S. taxpayers must report all sales, exchanges, and other dispositions of virtual currency. An exchange of a virtual currency (such as Bitcoin, Ether, etc.) includes the use of the virtual currency to pay for goods, services, or other property, including another virtual currency such as exchanging Bitcoin for Ether. This obligation applies regardless of whether the account is held in the U.S. or abroad. More information can be found on www.irs.gov and in Notice 2014-21, found at www.irs.gov/pub/irs-drop/n-14-21.pdf, which describes how general tax principles for property transactions apply to transactions using virtual currency.

For one or more of tax years 2013 through 2017, we haven't received either a federal income tax return or an applicable form or schedule reporting your virtual currency transactions.

What you need to do by the "respond by" date above
Take one of the following actions:

- If you failed to file one or more income tax returns, file the delinquent returns and report your virtual currency transactions as soon as possible. For more information see www.irs.gov/filing
- If you made a mistake on your income tax return, such as not reporting your virtual currency transactions or incorrectly calculating your income, gain, or loss; you can file an amended return. For more information visit www.irs.gov/forms-pubs/about-form-1040x
- If you believe you followed all tax and information reporting requirements relating to your virtual currency accounts, mail or eFax the following to the address or eFax number shown at the top of this letter.
  - A statement of facts explaining your position. Include a complete history of previously reported income from your virtual currency transactions. Explain the actions you took to become compliant with U.S. reporting requirements and provide copies of previously filed documents that confirm your compliance.
  - Your contact information, including your telephone number, complete address, and the address where you receive mail (if different)
Beyond the Basics
And – anything new from IRS?

- The following statements with your signature and date:

I, __________________________, declare under penalties of perjury that I have examined this entire document, including all attachments and accompanying statements, and that the enclosed is true, correct, and complete.

I also understand with respect to any submission that the IRS reserves the right to make further contacts with me and my representatives to clarify any written explanation or any other documents. Statements and documents sent under this option will be checked against information received from banks, financial advisors, and other sources for accuracy.

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
</tr>
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</table>

Please note that there is a 10MB limit for data sent to the eFax number. If your electronic file exceeds this size, either mail your documents or fax the information in multiple, smaller transmissions to fit the size requirements.

Do not send original returns or amended returns for processing via eFax. Instead, send original returns to the address below and include a copy in your response to this letter. Write "Letter 6173" at the top of the first page of the amended or delinquent return. Mail the originals to:

Internal Revenue Service
2970 Market Street
Philadelphia, PA 19104

If you need more time, send a request for a 30-day extension to the address above by the "respond by" date shown at the top of this letter.

If we don't hear from you by the "respond by" date
We may refer your tax account for examination. Please be aware that underpayments of tax are subject to interest and penalties.

Someone may represent you
If you want someone to represent you in this matter, send a completed Form 2848, Power of Attorney and Declaration of Representative, with your response to the address above.

Additional information
You can find the forms and publications for reporting your virtual currency transactions by visiting our website at www.irs.gov/forms-pubs or by calling 800-TAX-FORMS (880-829-3676).

If you have questions, you can call the hotline telephone number shown at the top of this letter and leave a message. We'll respond to all messages within three business days.

Thank you for your cooperation.
1. Digital Currency

- Decentralized Digital Ledgers.
- Transfers are recorded in Blocks.
- Miners that verify new Blocks are rewarded with new coins.
- As Digital Currencies, they have specific properties:
  - Limited supply.
  - Can be carried and stored virtually or physically.
  - Easily transferred and verified.
  - Highly liquid and completely fungible.

2. New Coins Issued in ICO – Typical Features

- Created at one time in a finite number.
- Used to buy a product or service on a specific platform.
- ERC-20 Compliant, so they can run on Ethereum network.
- Ether is used to “pay” for token transfers and to run the platform.
3. Security Tokens and Stable Coins: Tokenizing Tangible and Intangible assets

• Newest Category of Digital Assets
• Blockchain becomes a register for ownership of physical or intangible assets.
• Open question: What does the digital asset represent for tax purposes?

• For more on ICOs and security tokens from SEC - https://www.sec.gov/ICO

Tax Issues for ICOs

• Typically, they are taxable.
  • What about stable coins or security coins?
• Timing of income: SAFT
• Can ICO Revenue be Deferred under 451(c) (old Revenue Procedure 2004-34)?
• Compensation for founders and members of team: 83(b) elections.
Tax Issues for ICOs Continued

- Is character of revenue from token sale ordinary or capital?
- Can the character change (i.e., using tokens to compensate employees vs. selling tokens in original issuance)?
- International tax issues: subpart F income.

Libra Currency – What is it?


An Introduction to Libra

White Paper • From the Libra Association Members

Libra’s mission is to enable a simple global currency and financial infrastructure that empowers billions of people.

“Libra is designed to be a stable digital cryptocurrency that will be fully backed by a reserve of real assets — the Libra Reserve — and supported by a competitive network of exchanges buying and selling Libra.”

Senate and House Hearings (July 16 and 17, 2019)

Is Libra a cryptocurrency? Does it matter?
What is it?

• Libra White Paper (7/23/19 version):
  • “The unit of currency is called “Libra.” Libra will need to be accepted in many places and easy to access for those who want to use it. In other words, people need to have confidence that they can use Libra and that its value will remain relatively stable over time. Unlike the majority of cryptocurrencies, Libra is fully backed by a reserve of real assets. A basket of bank deposits and short-term government securities will be held in the Libra Reserve for every Libra that is created, building trust in its intrinsic value. The Libra Reserve will be administered with the objective of preserving the value of Libra over time.”
  • Defines cryptocurrency as a “digital currency that uses cryptography to verify and secure financial transactions.”
  • Permissioned blockchain but they say it may eventually become permissionless.
    • Founding Members will run the validator nodes.
  • “Libra Blockchain is pseudonymous and allows users to hold one or more addresses that are not linked to their real-world identity.”
    • https://libra.org/en-US/white-paper/#the-libra-blockchain