THE UNITED STATES AND GLOBAL REGULATION OF CONVERTIBLE VIRTUAL CURRENCIES

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Introduction

The regulation of convertible virtual currencies (for instance Bitcoin) is an area both of global cooperation and global competition. On the one hand, virtual currencies create serious problems of payment for illegal transactions, money laundering, tax evasion, and consumer fraud. On the other hand such currencies, have the potential to lower the costs of commercial and consumer transactions and to facilitate international trade. Both dealing with the problems and realizing the potential of virtual currencies require international cooperation.

There is no uniformity in national legislation on virtual currency. A recent survey of over 100 countries showed a wide variation in both the amount and methods of regulation.[1] While, at this stage, experimentation with various types of regulation may help discover better ways to deal with this currency, on the other hand, there is a real danger that some countries will be come unregulated virtual currency havens where the worst aspects of virtual currency can flourish.

This article will look at United States law, and also at existing and needed international cooperation in the areas of taxation, investor protection, consumer protection, monetary regulation, and crime prevention

Federal Taxation

The United States has adopted what might seem to be a simple Federal income tax rule concerning cryptocurrency transactions. It treats cryptocurrency as if it were commodity. Thus if a taxpayer buys 10 Bitcoins for $7,000 each, the taxpayer has a tax basis of $70,000. If the taxpayer later converts these Bitcoins back into dollars and receives after any exchange fee, $80,000, the taxpayer has a taxable gain of $10,000. In other words the transactions are treated in the same way as if the taxpayer had bought 10 diamond rings for $7,000 each and later had sold the rings for $8,000 each. Even if no actual money is involved in transaction, each transaction will be treated by calculating the dollar value of the items exchanged in the transaction. This rule complicates bookkeeping, because whenever a transaction involves convertible virtual currency, the virtual currency, the currency must be valued for Federal tax purposes in United States dollars as of the time of the transaction, and the account books of the individual or business involved must be kept in dollar values.

In 2014 the United States tax authorities (the "Internal Revenue Service") issued guidelines, in the form of questions and answers,[2] for taxation of transactions involving convertible virtual currencies. While the detailed answers to these question are

[1] https://www.loc.gov/law/help/cryptocurrency/world-survey.php

[2] United States Internal Revenue Service, Notice 14-21. https://www.irs.gov/pub/irs-drop/n-14-21.pdf

peculiar to the United States tax system, the same or questions or similar questions need to be answered by every tax system. These questions are:

Question 1: How is virtual currency treated for federal tax purposes?

Question 2: Is virtual currency treated as currency for purposes of determining whether a transaction results in foreign currency gain or loss under U.S. federal tax laws?

Question 3: Must a taxpayer who receives virtual currency as payment for goods or services include in computing gross income the fair market value of the virtual currency?

Question 4: What is the basis of virtual currency received as payment for goods or services in Q&A-3?

Question 6: Does a taxpayer have gain or loss upon an exchange of virtual currency for other property?

Question 7: What type of gain or loss does a taxpayer realize on the sale or exchange of virtual currency?

Question 8: Does a taxpayer who "mines" virtual currency (for example, uses computer resources to validate Bitcoin transactions and maintain the public Bitcoin transaction ledger) realize gross income upon receipt of the virtual currency resulting from those activities?

Question 9: Is an individual who "mines" virtual currency as a trade or business subject to self-employment tax on the income derived from those activities?

Question 10: Does virtual currency received by an independent contractor for performing services constitute self-employment income?

Question 11: Does virtual currency paid by an employer as remuneration for services constitute wages for employment tax purposes?

Question 12: Is a payment made using virtual currency subject to information reporting?

Question 13: Is a person who in the course of a trade or business makes a payment using virtual currency worth $600 or more to an independent contractor for performing services required to file an information return with the IRS?

Question 14: Are payments made using virtual currency subject to backup withholding?

Question 15: Are there IRS information reporting requirements for a person who settles payments made in virtual currency on behalf of merchants that accept virtual currency from their customers?

Question 16: Will taxpayers be subject to penalties for having treated a virtual currency transaction in a manner that is inconsistent with this notice prior to March 25, 2014?

The answers of the Internal Revenue Service to the above questions followed quite directly from the basic principle of treating convertible virtual currency as property. The American Institute of Certified Public Accounts, a private organization, proposed that the tax authorities answer a number of more difficult questions.[3]

[3] https://www.aicpa.org/content/dam/aicpa/advocacy/tax/downloadabledocuments/20180530-aicpa-comment-letter-on-notice-2014-21-virtual-currency.pdf

Question 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?

Question 2: Are taxpayers allowed to use an average of different exchanges?

Question 3: May taxpayers use the average rate for the day to calculate the exchange rate?

Question 4: May taxpayers rely on virtual currency tax software as a reasonable and consistent method for determining fair value?

Question 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?

Question 6: May taxpayers use a different method for determining fair value for transactions in each of their virtual currency wallets and exchanges?

Question 7: May taxpayers use a virtual currency price index that aggregates the prices from major exchanges, such as the Coindesk Bitcoin Index (XBP)?

Question 8: May a taxpayer choose either the specific identification method or the FIFO method as the accounting method for computing capital gains and losses?

Question 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?

Question 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?

Question 11: Are virtual currency airdrops considered ordinary income?

Question 12: How do taxpayers report virtual currency events, including chain splits, airdrops, giveaways, or other similar activities?

Question 13: How should taxpayers report the Bitcoin split that occurred in August of 2017?

Question 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?”

Question 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.)?

Question 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?

Question 17: Are token swaps considered a taxable event?

Question 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)?

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

Question 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?

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

Question 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?

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

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

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

Question 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?

Question 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?

Some of these questions concerned “chain splits” and “airdrops.” The IRS provided detailed guidance concerning “hard forks” (the equivalent of “chain splits”) and “airdrops” in Revenue Ruling 2019-24.[4] The Ruling defines “hard forks” and “airdrops” as follows:

A hard fork is unique to distributed ledger technology and occurs when a cryptocurrency on a distributed ledger undergoes a protocol change resulting in a permanent diversion from the legacy or existing distributed ledger. A hard fork 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. Following a hard fork, transactions involving the new cryptocurrency are recorded on the new distributed ledger and transactions involving the legacy cryptocurrency continue to be recorded on the legacy distributed ledger.

An airdrop is a means of distributing units of a cryptocurrency to the distributed ledger addresses of multiple taxpayers. A hard fork followed by an airdrop results in the distribution of units of the new cryptocurrency to addresses containing the legacy cryptocurrency. However, a hard fork is not always followed by an airdrop.

The Revenue Ruling goes on to answer complex questions concerning if and when a hard fork or airdrop is to be treated for tax purposes as receipt of income.

In 2019, the Internal Service has warning letters to thousands of taxpayers who appear to have engaged in virtual currency transactions, cautioning them to be sure to report their income from such transactions.[5]

A few investors have become rich investing in virtual currencies. Others have lost their entire investments. Given the complexities of the tax situation, the only sure winners in the United States will be lawyers and accountants.

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[4] https://www.irs.gov/pub/irs-drop/rr-19-24.pdf

[5] https://www.irs.gov/pub/notices/letter_6173.pdf; https://www.irs.gov/pub/notices/letter_6174.pdf; https://www.irs.gov/pub/notices/letter_6174-a.pdf

State Taxation

In the United States each state has a taxation system. Most state income tax systems are patterned after the Federal Income tax system. Neither the United States nor the states have significant value-added taxes. There are no taxes on sales at the Federal level. However, most states have taxes on sales at the state level. Originally these taxes covered only retail sales of tangible property, however, many have been extended to various types of tangible property, since such important consumer items as software and music recordings are now bought by download rather than as tangible items such as discs.

Sales taxes normally are based on the actual sales price in dollars. This creates difficulty when the cost of goods or services are paid in virtual currency. Under Federal Income tax rules, such a sale is treated as a barter transaction, in which, if the seller's cost of goods is less that the selling price and the cost basis of the buyer's virtual currency is less than its current value, both will have income. With respect to sales tax, however, the law is still unclear in most states.[6] Theoretically the transaction could be classified as a barter transaction in which each party was both a buyer and a seller, and as a seller and so, as a seller would have to pay sales tax. However, the few states with clear legal rules do not treat the party paying in virtual currency as a seller. Rather they treat only the provider of goods or services as the seller. There is no uniformity among the states with respect to the determination of price. Two approaches are: (1) treating the list price of the goods or services as the price for sales tax purposes and (2) treating the dollar value of the virtual currency paid as the price.

Crime Prevention

In the United States, the Financial Recordkeeping and Reporting of Currency and Foreign Transactions Act of 1970 places a number of serious and strict requirements on banks.[7] This law is also called the "Bank Secrecy Act," a somewhat confusing name, since the Act is about requiring banks to disclose information. The Act requires all banks to engage in anti-money laundering, counter-terrorist measures, to know their customers, and to report large and suspicious transactions. Coordinating prevention and enforcement of financial crimes is the task of the United States Treasury Financial Crimes Enforcement Network ("FinCEN").[8] The enforcement of these measures against traditional banks is severe and effective.

FinCEN has issued official guidance, stating that its regulations apply to "money service businesses" dealing in virtual currency services.[9] However, because of the distributed nature of convertible virtual currencies like Bitcoin, which have no central body to perform banking transactions, enforcement of similar requirements for transactions

6 https://news.bitcoin.com/sales-tax-and-bitcoin-in-the-united-states-can-be-confusing/

7 Summarized and explained at: https://www.fdic.gov/regulations/safety/manual/section8-1.pdf

8 https://www/fincen.gov

9 "Application of FinCEN's Regulations to Certain Business Models Involving Convertible Virtual Currencies," https://www.fincen.gov/sites/default/files/2019-05/FinCEN%20Guidance%20CVC%20FINAL%20508.pdf

with such currencies is difficult or impossible. Even where there are businesses that facilitate storage and transfer of virtual currencies, they tend to be located outside the United States and thus can only be regulated through international cooperation. On its website FinCEN has highlighted one of the few cases in which it was able to enforce regulations against an American businessman who facilitated virtual currency transactions without complying with legal formalities.[10]

Other United States government agencies, relying on sophisticated criminal investigation techniques, have been able to take action against criminal use of convertible virtual currency. In particular, many current virtual currencies, such as Bitcoin, record each transaction in a distributed public registers of transaction. By studying transaction records American law enforcement authorities were able to shut down a "ransomware" operation that required victims to pay in Bitcoin.[11] Another similar successful operation involved the cooperation of the United States and six other countries in the detecting, shutting down, and seizing virtual currency assets of "Alphabay," the largest online "Dark Market," which specialized money-transfers for criminal transactions.[12]

A new generation of convertible currencies is emerging, which, unlike Bitcoin, will operate without a public transaction ledger and without sharing of crucial information. The most notable of these is Zcash.[13] Unlike Zcash, some other virtual currencies, such as Monero and Ethereum, which some think protect privacy, in fact have serious privacy flaws, but not as serious as those in Bitcoin.[14] The steady improvement of privacy of virtual currency transactions will create ever-increasing problems for law-enforcement authorities. The Achilles heel of criminal use of zero-knowledge currencies may lie in transactions for conversion of the profits of crime from such currencies into traditional money or for the purchase of physical goods and services, since such transactions cannot, by their nature, be "zero knowledge."

Financial Regulation

Existing convertible virtual currencies are no threat to traditional retail banks nor to their regulation by central banking authorities. Currencies such as Bitcoin have frightening volatility, high transaction costs, slow and limited transaction processing ability, and

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[10] "FinCEN Penalizes Peer-to-Peer Virtual Currency Exchanger for Violations of Anti-Money Laundering Laws," https://www.fincen.gov/news/news-releases/fincen-penalizes-peer-peer-virtual-currency-exchanger-violations-anti-money

[11] "Treasury Designates Iran-Based Financial Facilitators of Malicious Cyber Activity and for the First Time Identifies Associated Digital Currency Addresses," https://home.treasury.gov/news/press-releases/sm556

[12] "AlphaBay, the Largest Online 'Dark Market,' Shut Down," https://www.justice.gov/opa/pr/alphabay-largest-online-dark-market-shut-down

[13] "Zero-knowledge proofs, Zcash, and Ethereum," https://blog.keep.network/zero-knowledge-proofs-zcash-and-ethereum-f6d89fa7cba8

[14] Malte Möser and others, "An Empirical Analysis of Traceability in the Monero Blockchain, https://arxiv.org/pdf/1704.04299/; "Zero-knowledge proofs, Zcash, and Ethereum," https://blog.keep.network/zero-knowledge-proofs-zcash-and-ethereum-f6d89fa7cba8

no protection in case of bankruptcy of intermediaries. In contrast, automated payment systems based upon existing networks and traditional banking principles using national currencies can be extremely successful (e.g., "WeChatPay" in China) or moderately successful (e.g., "Apple Pay" in the United States). "Stablecoin" convertible virtual currencies could present a real threat to retail banks and banking regulators. Stablecoin currencies differ from regular convertible digital currencies in that they are tied by real-world values. On June 18, 2019, the leading social network company Facebook, announced that it and its partners were going to create a stablecoin virtual currency payment system, "Libra" in 2020. Libra would be backed by a basket of currencies, such as dollars, euros, pounds, and yen. Such a system would avoid all the problems that have caused virtual currencies like Bitcoin to fail as payment systems. Like WeChat in China, the system would take advantage of a huge existing user network and massive computer power to provide cheap and rapid payment processing. The value of Libra, unlike that of Bitcoin, would not be subject to wild market fluctuations.

The reaction by United States authorities was immediate and negative. Dr. Lael Brainard, a distinguished economist on the Board of Governors of the United States Federal Reserve System, outlined the problems in two talks.[15] The problems all stemmed from the original concept of Libra as essentially an unregulated international banking system with the power to create unlimited amounts of a new international currency. Dr. Brainard warns that such a system could grow extremely rapidly and put both consumers and national financial systems at risk. She argues that the many consumer-protections built into a heavily regulated banking system like that of the United States would be absent from a global virtual currency, such as Libra. She notes that, while banking regulations fight the use of the financial system for criminal purposes, similar safeguards are not guaranteed for stablecoin virtual currency. She suggests that for small countries, a currency like Libra could result in phenomena like dollarization, effectively preventing national implementation of financial policies. Her conclusion is that emerging stablecoin currencies must be subject to extensive regulation based on international cooperation. As an alternative, she suggests that central banks in various countries consider creating their own safe and convenient public digital payment systems. Considerations like those raised by Dr. Brainard led Facebook to slow and modify its plans to introduce Libra and led key original partners leave the Libra project.[16]

Investor Protection

In the United States, investors are protected by both Federal legislation, enforced by the United States Securities and Exchange Commission ("SEC") and by state laws,

[15] Lael Brainard, "At The Future of Money in the Digital Age," https://www.federalreserve.gov/newsevents/speech/brainard20191016a.htm; Update on Digital Currencies, Stablecoins, and the Challenges Ahead, https://www.federalreserve.gov/newsevents/speech/brainard20191218a.htm

[16] By Russell Brandom , "Facebook's Libra Association crumbling as Visa, Mastercard, Stripe, and others exit - One week after PayPal left the project," https://www.theverge.com/2019/10/11/20910330/mastercard-stripe-ebay-facebook-libra-association-withdrawal-cryptocurrency

called “Blue Sky Laws,” which vary from state to state. against the offering of investment opportunities without adequate disclosure The SEC and the states have long required detailed disclosure initial public offerings (IPOs) of stock and other public stock offerings. Some virtual currency startups have sought financing in a traditional way, by selling stock in the company that would issue the currency or would engage in currency mining. It is clear that such startups are offering investments and clear that they must fully comply with Federal and state investor protection legislation.

Matters are less clear with what are called “Initial Coin Offerings” (“ICOs”) in which a startup company seeks advanced payment for units of a virtual currency that it plans to create and release. The first important discussion of ICOs came in a June 2018 talk by William Hinman, Director, of the Division of Corporation Finance of the SEC.[17] The talk: “Digital Asset Transactions: When Howey Met Gary (Plastic),” discussed the application of two leading Supreme Court cases that defined as a security,” i.e., as an “investment,” *Howey*,[18] and *Gary Plastic*[19] Director Hinman, suggested that an ICO would be a security if the value of the coins-to-be depended upon the skill and luck of the issuer in setting the parameters of the currency. He contrasted, the sale of a block of Bitcoins the public, in which there would be no reliance by the buyer on the entrepreneurial skill of the seller. In a May 2019 talk, Commissioner Hester Pierce of the SEC criticized the SEC for having failed to provide clear guidance for ICOs and suggested that the lack of guidance created risks that might drive ICOs abroad.[20] However, even where the initial offering is abroad, the offeror may face legal difficulties with SEC attempts to protect investors in the United States. A recent case involves Telegram’s “GRAM” tokens.[21]

Regulation of futures markets in the United States is done under the supervision of the U.S. Commodity Futures Trading Commission with certification on particular types of futures contracts by self-regulating exchanges. Various exchanges have self-certified contracts for Bitcoin futures.[22]

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[17] William Hinman, “Digital Asset Transactions: When Howey Met Gary (Plastic),” https://www.sec.gov/news/speech/speech-hinman-061418

[18] *SEC v. W.J. Howey Co.*, 328 U.S. 293 (1946) https://supreme.justia.com/cases/federal/us/328/293/

[19] *Gary Plastic Packaging Corp. v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 756 F.2d 230 (2d Cir. 1985)
https://openjurist.org/756/f2d/230/gary-plastic-packaging-corporation-v-merrill-lynch-pierce-fenner-and-smith-inc

[20] *Hester M.* Pierce, “How We Howey,” https://www.sec.gov/news/speech/peirce-how-we-howey-050919

[21] SEC Slams the Brakes on Telegram’s $1.7 Billion Digital Token Offering in an Emergency Action,” https://www.crowdfundinsider.com/2019/10/152773-sec-slams-the-brakes-on-telegrams-1-7-billion-digital-token-offering-in-an-emergency-action/; SEC Seeking to Compel Bank Records Regarding Telegram’s $1.7 Billion Token Sale,” https://www.crowdfundinsider.com/2020/01/155937-sec-seeking-to-compel-bank-records-regarding-telegrams-1-7-billion-token-sale/

[22] https://www.cftc.gov/sites/default/files/idc/groups/public/%40customerprotection/documents/file/backgrounder_virtualcurrency01.pdf

International Cooperation

The experience of the United States show a major need for international cooperation. No country can stop the financing of terrorism, the sale of illicit goods, or money-laundering by itself. Regulation to prevent the defrauding of consumers and investors cannot be effective if the fraudsters can operate with impunity from a country with weak regulation. Countries that collect substantial taxes to finance social safety nets cannot carry out their policies if their citizens and business can divert profits to countries that are virtual currency havens. The possible emergence of a strong and convenient, but unregulated stablecoin system can threaten national financial and banking regulation.

Thus, although the convertible virtual currencies themselves are quickly evolving in nature, the time has already arrived for major efforts in international cooperation in policing and regulating these currencies.DOI: 10.17803