Cryptocurrency:
The Legal and Regulatory Environment

Presented by

Marshall University

and

Digital Innovation for America

Brad D. Smith Center for Business & Innovation
1425 4th Ave., Huntington, WV 25701
May 21, 2024

Program Outline

Welcome: 1pm – 1:10pm

Session 1: Balancing Innovation and Regulation

Time: 1:10pm-2pm (50 minutes)

1. Innovation's importance to society
2. Balancing the need for innovation and regulation
3. Educating regulators about innovation
4. Advising stakeholders about regulation

Session 2: Security, Privacy, and Crypto-Computing: The Technical Details

Time: 2:10pm-3pm (50 minutes)

1. The basics: blockchain, cryptocurrency, and bitcoin
2. Keeping digital and crypto-assets secure
3. Tracing the source of "anonymous" assets
4. Emerging risks

Session 3: Regulatory Horizons: FIT 21 and Other Emerging Legal Issues

Time: 3:10pm-4pm (50 minutes)

1. The current crypto-asset regulatory environment
2. FIT 21: The leading contender for comprehensive legislation
3. Emerging regulatory concerns

This seminar has been approved by the West Virginia State Bar for up to 3.0 general live-attendance credits for West Virginia Continuing Legal Education.

Select Readings

Cryptocurrency: Utility Determines Conceptual Classification Despite Regulatory Uncertainty 3

Authors: Ralph E. McKinney, Jr., Casey W. Baker, Lawrence P. Shao, and Jeff Y. L. Forrest

Originally published in 25 INTELL. PROP. & TECH. L.J. 1 (2020)

U.S. State Taxation of Cryptocurrency-Involved Transactions: Trends and Considerations for Policy Makers 20

Authors: Casey W. Baker, Thomas Norton, and Ralph E. McKinney, Jr.

Originally published in 75 TAX LAWYER 601 (2022).

A Good Fit for Crypto? 50

Authors: Casey W. Baker and Ralph E. McKinney, Jr.

Originally published in 11 APPALACHIAN RES. IN BUS. SYMP. 107 (2024)

The authors of the selected readings retain all rights thereto.

Originally Published in
25 Intell. Prop. & Tech. L.J. 1 (2020)

Cryptocurrency: Utility Determines Conceptual Classification Despite Regulatory Uncertainty

RALPH E. MCKINNEY, JR.*, CASEY W. BAKER**,
LAWRENCE P. SHAO***, & JEFF Y.L. FORREST****

Introduction

Previous scholarship has described cryptocurrency as "both a technology artifact and an economic instrument of value transaction."[1] Unlike ownership of some assets, conveyed by deeds,

---

* DBA, Brad D. Smith Schools of Business at Marshall University. Ralph E. McKinney, Jr. is an Assistant Professor of Management at the Lewis College of Business at Marshall University. McKinney has authored a number of publications concerning cryptocurrency, economics, forensic business practices, human resource management, indigent criminal defense, and poverty. McKinney has received various honors for his research including the 2017 Meet the Scholars Research; 2017 Intuit's Design for Delight Challenge; the 2016 MU Robert P. Alexander Award of Research Excellence; and in 2010, one of eleven instructors for the Pearson NEIS Economics Insider Contest Instructor Award. He holds degrees from Aston Business School at Aston University in Birmingham, England (DBA 2015), Marshall University (MBA 2003) and West Virginia State University (RBA 1998). Additionally, he is a licensed Private Investigator.

** J.D., Brad D. Smith Schools of Business at Marshall University. Casey W. Baker, J.D., is an Assistant Professor of Legal Environment at the Brad D. Smith Schools of Business at the Lewis College of Business at Marshall University. Professor Baker's scholarship touches on a broad base of knowledge, including ethics and professional conduct, debtor-creditor rights, marijuana regulation, and taxation. He is a 2008 graduate of The Ohio State University's Moritz College of Law and maintains an active law practice in Ohio and West Virginia. Professor Baker can be contacted at bakerc@marshall.edu.

*** Ph.D., Slippery Rock University. Dr. Lawrence P. Shao is Dean of the College of Business at Slippery Rock University and Professor of Finance. The College of Business, with over 80 faculty members and 2,000 majors, offers a blended Master of Business Administration Program and also includes undergraduate programs in all areas of business as well as degree programs in communication, hospitality and tourism, safety management, sport management, and military science. A prolific contributor to academic research, Dr. Shao has written three finance and management textbooks, published over 60 refereed journal articles, made more than 90 presentations both domestically and abroad and served as a business finance consultant. Dr. Shao has a Ph.D. in finance from the University of Tennessee and M.B.A. as well as B.B.A. degrees from Old Dominion University. Previously, he served as Division Head of Finance and Economics and Professor of Finance at Marshall University. During his tenure at Marshall University, Dr. Shao helped develop new business majors, several new programs, increased his division's enrollment, and worked on various fundraising projects.

**** Ph.D., Slippery Rock University. Dr. Forrest's research covers a wide range of areas, including economics, finance, management, marketing, mathematics, science, philosophy, etc. As of the end of 2016, he has published nearly 400 research papers and more than 40 books and special topic volumes. Dr. Forrest joined Slippery Rock University in 1988 and has lectured worldwide on various topics. He earned his BS degree in pure mathematics in 1982, and an MS degree in general topology in 1984, from Northwest University, Xi'an. He earned his PhD from Auburn University in 1988.

1. Xin Li & Chong Alex Wang, *The Technology and Economic Determinants of Cryptocurrency Exchange Rates: The Case of Bitcoin*, 95 DECISION SUPPORT SYS. 49, 49 (2017).

titles, stock certificates, and records, the transfer of cryptocurrency is contingent upon technology.[2] Additionally, the digital creation of cryptocurrency is significantly different than the minting and printing of traditional currency that has existed for thousands of years.[3] Moreover, any continuous technological innovations are likely to disrupt the current understanding of cryptocurrency utilities given that our "financial institutions are built off of much older forms of currency."[4] Functioning as a medium of exchange, cryptocurrencies are used as a currency, an alternative method of payment, a commodity, and an investment.[5] As such, there are differing opinions on what cryptocurrency is, some of which are discussed throughout this article.

Conceptualized in 2008, most cryptocurrencies are highly volatile and risky.[6] For example, the use of cryptocurrency for illegal activities has been well-documented.[7] It is the severity of these criminal activities (e.g., asset theft, counterfeiting, money-laundering) and cryptocurrencies' ability to enable criminal transactions (e.g., through market manipulation, Ponzi-schemes), that causes some to suggest that cryptocurrencies pose a disruptive threat to the U.S. economic system and a greater threat to national security interests.[8] According to these scholars, cryptocurrencies should be illegal.[9]

Whilst some researchers passionately advocate for the ban of cryptocurrencies, other researchers postulate that some governments may switch to virtual currencies to save costs (i.e. printing, coining, and distributing currency).[10] Still others suggest that proper regulations, specifically focusing on market stability (i.e. the environment and transactions associated with cryptocurrencies), can enable the success of this new type of asset.[11] After all, market stability relies on risk mitigation and minimization.

It is generally agreed that mitigation of some risk can be accomplished with a common legal framework and understanding of virtual currencies, such as cryptocurrencies.[12] Unfortunately, the laws and regulations surrounding cryptocurrency are not yet solidified. U.S. courts have issued conflicting holdings regarding whether cryptocurrency is or is not a type of money[13] while also

---

2. Michael Abramowicz, *Cryptocurrency-Based Law*, 58 ARIZ. L. REV. 359, 361 (2016).

3. Ralph E. McKinney, Jr. et al., *The Evolution of Financial Instruments and the Legal Protection Against Counterfeiting: A Look at Coin, Paper, and Virtual Currencies*, 2015 UNIV. ILL. J.L. TECH. & POL'Y 273, 286 (2015).

4. Peter D. DeVries, *An Analysis of Cryptocurrency, Bitcoin, and the Future*, INT'L J. BUS. MGMT. & COM. 1, 1 (2016).

5. Li & Wang, *supra* note 1; Abramowicz, *supra* note 2; Adam S. Hayes, *Cryptocurrency Value Formation: An Empirical Study Leading to a Cost of Production Model for Valuing Bitcoin*, 34 TELEMATICS & INFORMATICS 1308, 1308–09 (2017).

6. David Lee Kuo Chuen, Li Guo & Yu Wang, *Cryptocurrency: A New Investment Opportunity?*, 20 J. ALT. INVS. 16, 16 (2018).

7. Eric Engle, *Is Bitcoin Rat Poison? Cryptocurrency, Crime, and Counterfeiting (CCC)*, 16 J. HIGH TECH. L. 340 (2016).

8. *Id.* at 343–52.

9. *Id.* at 359.

10. Christian Brenig, Rahael Accorsi & Günter Müller, *Economic Analysis of Cryptocurrency Backed Money Laundering*, 23 EUR. CONF. ON INFO. SYS. (2015).

11. *See* Abramowicz, *supra* note 2; Li & Wang, *supra* note 1.

12. *See* McKinney et al., *supra* note 3.

13. SEC v. Shavers, No. 4:13-CV-416, 2014 U.S. Dist. LEXIS 194382, at *16–19 (E.D. Tex. Aug. 26, 2014).

ruling that cryptocurrency cannot even be categorized as a type of fund.[14] The youth and nature of this virtual 'asset' still causes spirited discussions that are helping shape the legal framework in which virtual currencies, including cryptocurrencies, operate.[15]

This discontinuity in the current legal framework can be illustrated by comparing the conflicting approaches to cryptocurrencies among the regulating agencies. For example, the U.S. Financial Crimes Enforcement Network ("FinCEN") asserts jurisdiction over cryptocurrency via its enforcement of anti-money laundering laws and regulation of money transmitters.[16] U.S. Federal Reserve System chairpersons have recognized FinCEN's role in regulating such conduct while also asserting that cryptocurrencies are not banking.[17] The Office of the Comptroller of the Currency ("OCC") on the other hand is open to issuing federal banking charters to cryptocurrency firms, including them in the banking system.[18]

The U.S. Internal Revenue Service ("IRS"), meanwhile, acknowledges that cryptocurrencies serve as a medium of exchange but classifies them as property rather than currency.[19] The Securities and Exchange Commission's ("SEC") guidance states that cryptocurrency may be a security on a case-by-case basis.[20] The Federal Election Commission states cryptocurrency is

---

14. United States v. Petix, No. 15-CR-227A, 2016 WL 7017919 (W.D.N.Y. Dec. 1, 2016); *see also*, Deidre A. Liedel, *The Taxation of Bitcoin: How the IRS Views Cryptocurrencies*, 66 DRAKE L. REV. 107, 117–19 (2018).

15. Abramowicz, *supra* note 6; Engle, *supra* note 11; McKinney et al., *supra* note 7.

16. FIN. CRIMES ENF'T NETWORK, GUIDANCE FIN-2013-G001, APPLICATION OF FINCEN'S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES 1 (Mar. 18, 2013), https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering [https://perma.cc/DE5W-KWC8] [hereinafter FINCEN, GUIDANCE FIN-2013-G001]; *see also*, FIN. CRIMES ENF'T NETWORK, GUIDANCE FIN2014-R011, REQUEST FOR ADMINISTRATIVE RULING ON THE APPLICATION OF FINCEN'S REGULATIONS TO A VIRTUAL CURRENCY TRADING PLATFORM 1 (Oct. 27, 2014), https://www.fincen.gov/resources/statutes-regulations/administrative-rulings/request-administrative-ruling-application-0 [https://perma.cc/CF4W-DTS5] [hereinafter FINCEN, GUIDANCE FIN-2014-R011]; *see also,* FIN. CRIMES ENF'T NETWORK, GUIDANCE FIN2014-R012, REQUEST FOR ADMINISTRATIVE RULING ON THE APPLICATION OF FINCEN'S REGULATIONS TO A VIRTUAL CURRENCY PAYMENT SYSTEM 1 (Oct. 27, 2014), https://www.fincen.gov/resources/statutes-regulations/administrative-rulings/request-administrative-ruling-application [https://perma.cc/XDH6-FMZ8] [hereinafter FINCEN, GUIDANCE FIN-2014-R012].

17. *Monetary Policy and the State of the Economy: Hearing Before the H. Comm. on Fin. Servs.*, 115th Cong. 22 (2018) (statement of Jerome Powell, Chair, Board of Governors of the Fed. Reserve System) [hereinafter *Powell Statement*]; *The Semiannual Monetary Policy Report to the Congress: Hearing Before the S. Comm. on Banking, Hous., and Urb. Affs.*, 113th Cong. 27–28 (2014) (statement of Janet Yellen, Chair, Board of Governors of the Fed. Reserve System) [hereinafter *Yellen Statement*].

18. *See* OFF. OF THE COMPTROLLER OF THE CURRENCY, COMPTROLLER'S LICENSING MANUAL SUPPLEMENT: CONSIDERING CHARTER APPLICATIONS FROM FINANCIAL TECHNOLOGY COMPANIES (2018), https://occ.gov/publications-and-resources/publications/comptrollers-licensing-manual/files/pub -considering-charter-apps-from-fin-tech-co.pdf [https://perma.cc/P7YZ-DD2W] [hereinafter OCC LICENSING MANUAL]; OFF. OF THE COMPTROLLER OF THE CURRENCY, POLICY STATEMENT ON FINANCIAL TECHNOLOGY COMPANIES' ELIGIBILITY TO APPLY FOR NATIONAL BANK CHARTERS (2018), https://www.occ.gov/publications/publications-by-type/other-publications-reports/pub-other-occ-policy-statement-fintech.pdf [https://perma.cc/2D6F-GD8D] [hereinafter OCC POLICY STATEMENT].

19. I.R.S. Notice 2014-21, 2014-1 C.B. 938; I.R.S. Bulletin 2014-16, 2014-16 I.R.B. 938.

20. Jay Clayton, *Statement on Cryptocurrencies and Initial Coin Offerings*, U.S. SEC. & EXCH. COMM'N (Dec. 11, 2017), https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11 [https://perma.cc/3PCE-JR56]; Speech, William Hinman, *Digital Asset Transactions: When Howey Met Gary (Plastic)* (June 14, 2018), https://www.sec.gov/news/speech/speech-hinman-061418 [https://perma.cc/7K45-5SXB]; *Framework for*

currency but must be treated like an 'in-kind contribution' of publicly traded stock.[21] State regulation is also piecemeal and inconsistent.[22]

Based upon the actions of the courts and regulating agencies, it appears that these regulation schemes are driven by the intended use and perception of cryptocurrency. This becomes critically important to standardizing regulations as the interpretation of the intended use is too subjective and is left to the discretion of the regulator. As with any freely transferable asset, cryptocurrencies have a myriad of uses, including being exchanged for goods and services, held for investments, gifted to individuals, and donated to charities and political campaigns.[23] Yet, the literature does not reveal empirical evidence on the users' actual use of cryptocurrency.[24]

The purpose of this paper is to highlight and explain some of these differing regulatory conceptualizations, including the key issue that, while research has focused on theoretical constructs and general observations of transactions and market behaviors,[25] research has neglected to gather data from stakeholders and individuals that may participate in or otherwise be impacted by cryptocurrencies. Because regulations seem to currently be based on the use of cryptocurrency, data about how cryptocurrency is actually used, not just how it is intended to be used, is required so that courts and regulatory agencies can produce a legal framework applicable to the actual uses of cryptocurrency.

It is the authors' hope that the regulatory definitions and approaches featured herein can serve as the framework for, and bring to light the need for, empirical studies of the utility of cryptocurrency.

I. Difficulties with Private Regulation of Cryptocurrency

The decentralized nature of cryptocurrencies such as Bitcoin precludes private regulation of user activity. Virtual currencies trace their origins to the development of virtual economies in multi-player online video games, in which players can produce, find, or trade virtual goods and services and receive virtual currencies in exchange.[26] The development of virtual in-game

---

"Investment Contract" Analysis of Digital Assets, U.S. SEC. & EXCH. COMM'N (Apr. 3, 2019), https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets [https://perma.cc/39V5-HYUQ].

21. Myles Martin, *AO 2014-02: Campaign May Accept Bitcoins as Contributions*, FED. ELECTION COMM'N (May 13, 2014), https://www.fec.gov/updates/ao-2014-02-campaign-may-accept-bitcoins-as-contributions/#:~:text=The%20Commission%20was%20unable%20to,it%20has%20received%20as%20contributions [https://perma.cc/5XQX-AX4W].

22. *See* discussion *infra* Part III.F.

23. *See* Edmund Mokhtarian & Alexander Lindgren, *Rise of the Crypto Hedge Fund: Operational Issues and Best Practices for an Emergent Investment Industry*, 23 STAN. J.L. BUS. & FIN. 112, 129 (2018) ("[C]ryptocurrency, by definition, operates as a store of value that is generally freely transferable (and thus a medium of exchange).").

24. *See, e.g.*, Abramowicz, *supra* note 2; Engle, *supra* note 7; Liedel, *supra* note 14; Chuen, Guo & Wang, *supra* note 6.

25. *Cf.* Luisanna Cocco, Giulio Concas, Michele Marchesi, *Using an Artificial Financial Market for Studying a Cryptocurrency Market*, 12 J. ECON. INTERACTION & COORDINATION 345 (2017); Obryan Poyser Calderón, *Herding Behavior in Cryptocurrency Markets* (Universitat Autònoma de Barcelona, Working Paper, Nov. 2018), https://arxiv.org/pdf/1806.11348.pdf [https://perma.cc/L2U4-BMWD].

26. Nika Antonikova, *Real Taxes on Virtual Currencies: What Does the I.R.S. Say?*, 34 VA. TAX REV. 433, 436–37 (2015); Adam Chodorow, *Rethinking Basis in the Age of Virtual Currencies*, 36 VA. TAX REV. 371, 376–77 (2017); Laura D. Pond, Note, *Schrödinger's Currency: How Virtual Currencies Complicate the RIC and REIT Qualification Requirements*, 9 COLUM. J. TAX L. 229, 232–33 (2018).

economies—with corresponding virtual in-game currencies—led to distinct types of virtual currency systems, typically categorized by utility.

"Closed" or "closed-flow" virtual currency systems are limited to "in-game" use only.[27] Thus, virtual-world participants can earn virtual currency through their online game performance, but such virtual currency can only be spent purchasing virtual goods and services within the virtual world.[28] The virtual currency cannot be traded outside the virtual community.[29]

"Unidirectional" or "hybrid" virtual currency systems permit users to spend real currency to purchase virtual currency at a specified exchange rate, but the virtual currency cannot be directly converted back to real currency.[30] Some systems may allow using the virtual currency to purchase real goods and services.[31]

"Bidirectional" or "open-flow" virtual currency systems allow users to both buy and sell virtual money according to specified exchange rates with real currency.[32] That is, the virtual currency is directly convertible to real currency and allows for the purchase of both virtual and real goods and services.[33]

However, in the case of in-game virtual currencies, there exists a central registry or issuer—the game producer—that can regulate conduct of currency users within the game.[34] This is not true with cryptocurrencies such as Bitcoin, which emerged in 2009 as the first decentralized open-flow virtual currency scheme—currency not issued or controlled by a single online game host company or other entity, and easily convertible to real currency.[35] Although Bitcoin remains the most widely-used and best known so-called "cryptocurrency," it is hardly alone.[36] According to Congressional researchers, as of November 25, 2018, approximately 2,100 cryptocurrencies, with a total market capitalization of $121.1 billion, were in circulation.[37]

---

27. *See* EUR. CENT. BANK, VIRTUAL CURRENCY SCHEMES 13–14 (2012), https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf [https://perma.cc/FF2M-M7KF]; U.S. GOV'T ACCOUNTABILITY OFF., VIRTUAL ECONOMIES AND CURRENCIES: ADDITIONAL IRS GUIDANCE COULD REDUCE TAX COMPLIANCE RISKS 4 (2013), https://www.gao.gov/assets/660/654620.pdf [https://perma.cc/NA5F-5M7Y].

28. EUR. CENT. BANK, *supra* note 27, at 13–14; GOV'T ACCOUNTABILITY OFF., *supra* note 27, at 4.

29. EUR. CENT. BANK, *supra* note 27, at 13–14; GOV'T ACCOUNTABILITY OFF., *supra* note 27, at 4.

30. EUR. CENT. BANK, *supra* note 27, at 13–14; GOV'T ACCOUNTABILITY OFF., *supra* note 27, at 4.

31. EUR. CENT. BANK, *supra* note 27, at 13–14; GOV'T ACCOUNTABILITY OFF., *supra* note 27, at 4.

32. EUR. CENT. BANK, *supra* note 27, at 13–14; GOV'T ACCOUNTABILITY OFF., *supra* note 27, at 4.

33. EUR. CENT. BANK, *supra* note 27, at 13–14; GOV'T ACCOUNTABILITY OFF., *supra* note 27, at 4.

34. *See* Antonikova, *supra* note 26, at 436–37; Chodorow, *supra* note 26, at 376–77; Pond, *supra* note 26, at 232–33.

35. EDWARD V. MURPHY, M. MAUREEN MURPHY & MICHAEL V. SEITZINGER, CONG. RSCH. SERV., BITCOIN: QUESTIONS, ANSWERS, AND ANALYSIS OF LEGAL ISSUES 1–2 (2015), https://fas.org/sgp/crs/misc/R43339.pdf [https://perma.cc/6Q2B-232P]; Antonikova, *supra* note 26, at 436–37; Chodorow, *supra* note 26, at 376–77; Pond, *supra* note 26, at 232–33.

36. CONG. RSCH. SERV., INTERNATIONAL APPROACHES TO DIGITAL CURRENCIES 3 (2018), https://crsreports.congress.gov/product/pdf/R/R45440 [https://perma.cc/K2GK-83N3].

37. *Id.*

These virtual currencies are referred to as "crypto" currencies because they incorporate cryptographic principles to assure stability, security, and anonymity of the digital asset.[38] The key components of a cryptocurrency unit transfer are the public key and the private key.[39] The public key, a lengthy set of numbers and letters, is analogized as the address to which the cryptocurrency unit is to be transferred.[40] The private key—another mathematical code—serves as the transferor's "signature" and validates the transfer.[41] Public keys are associated with each individual cryptocurrency wallet, but unless a user publicly associates himself or herself with his or her particular public key, it is impossible to ascertain the identity of the owner of the particular cryptocurrency unit without the use of tracing software.[42]

It is the decentralized and anonymous nature of cryptocurrency that gives it utility, while also creating its appeal for use in illegal conduct.[43] Researchers and government officials have noted the use of cryptocurrency to facilitate a host of criminal activities, including money laundering, drug trafficking, weapons smuggling, identity theft, and fraud.[44] Private regulation of cryptocurrency sufficient to counteract such criminal conduct would, necessarily, reduce its utility.[45]

However, a central public regulator of cryptocurrency has not yet emerged in the United States. For example, the Dodd-Frank Wall Street Reform and Consumer Protection Act created the Consumer Financial Protection Bureau ("CFPB") to serve as the lead federal consumer protection agency.[46] The CFPB has identified risks to consumers posed by cryptocurrencies.[47] But the CFPB has not determined that it may, itself, regulate cryptocurrency; instead the CFPB will forward consumer complaints to the "appropriate regulator."[48] Since there is no one central regulatory agency that acts as the "appropriate regulator," inefficiencies in regulatory resource allocations may arise. In the next section, we explain some of the key components of the piecemeal

---

38. *See* FIN. ACTION TASK FORCE, VIRTUAL CURRENCIES: KEY DEFINITIONS AND POTENTIAL AML/CFT RISKS 13 n.7 (2014), https://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf [https://perma.cc/A8EZ-LFL7].

39. *See* Derek A. Dion, Note, *I'll Gladly Trade You Two Bits on Tuesday for a Byte Today: Bitcoin, Regulating Fraud in the E-Conomy of Hacker-Cash*, 2013 UNIV. ILL. J.L. TECH. & POL'Y 165, 167–68 (2013).

40. *See id.*

41. *See id.*

42. *See id.* Some observers have noted the cat-and-mouse game: as techniques and technologies are developed to trace one cryptocurrency, users shift to a different, less traceable one. *See* Andrew W. Balthazor, *The Challenges of Cryptocurrency Asset Recovery*, 13 FIU L. REV. 1207, 1228–29 (2019).

43. *See* FIN. ACTION TASK FORCE, *supra* note 38, at 9–10; *see also* Engle, *supra* note 7, at 341–45.

44. *See* FIN. ACTION TASK FORCE, *supra* note 38, at 10–12; *see also* Engle, *supra* note 7, at 343–45.

45. *See* Engle, *supra* note 7, at 345 ("Supposedly, cryptocurrency would be at least as efficient as state issued currency and make economies in the market e.g., through reduced transaction costs. However, that usually libertarian argument ignores the central role of currency and finance law in affairs of State, as well as the state as regulator of legal transactions. More 'efficient' murder and more 'efficient' illegal arms sales are obviously not in the interests of society or of the victims of crime.").

46. *Creating the Consumer Bureau*, CONSUMER FIN. PROT. BUREAU, https://www.consumerfinance.gov/about-us/the-bureau/creatingthebureau [https://perma.cc/YP2D-GS5U].

47. *CFPB Warns Consumers About Bitcoin*, CONSUMER FIN. PROT. BUREAU (Aug. 11, 2014), https://www.consumerfinance.gov/about-us/newsroom/cfpb-warns-consumers-about-bitcoin/ [https://perma.cc/6AVZ-ZLWU].

48. *Id.*

cryptocurrency regulatory structure within the United States, highlighting some of the inefficiencies and contradictions raised thereby.

II. Current U.S. Regulatory Framework

Despite the consensus among observers regarding the risks posed by cryptocurrency,[49] regulators in the United States have struggled to formulate a consistent legal conceptualization of cryptocurrency to tackle the issues. As explained below, in the United States, regulation of cryptocurrency by a particular agency turns, essentially, on how that agency treats cryptocurrency as a legal construct.

A. FINANCIAL CRIMES ENFORCEMENT NETWORK: MEDIUM OF EXCHANGE

The United States Financial Crimes Enforcement Network, an investigatory and regulatory agency within the Treasury Department,[50] is tasked with preventing the use of the financial system for illicit purposes, including money laundering and related crimes.[51] To control and counteract money laundering, FinCEN regulates, *inter alia*, money services businesses ("MSB") including money transmission services such as, "the acceptance of currency, funds, or other value that substitutes for currency from one person and the transmission of currency, funds, or other value that substitutes for currency to another location or person by any means."[52] This also includes various record-keeping and reporting rules.[53] At least two Federal Reserve chairpersons have highlighted the risk cryptocurrency poses in money laundering and other criminal activities, as well as FinCEN's role in addressing such activities.[54]

Given the concerns discussed above regarding cryptocurrency-facilitated criminal activity, FinCEN seems an appropriate regulator of such conduct, as cryptocurrency is a medium of exchange.[55] FinCEN has described virtual currency (which includes cryptocurrency) as "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."[56] FinCEN contrasted virtual currency with "real currency," which is defined as "the coin and paper money of the United States or of any other country that [i] is designated as legal tender and that [ii] circulates and [iii] is customarily used and accepted as a medium of exchange in the country of issuance."[57]

In these medium of exchange transactions, goods and services are traded (i.e. exchanged) for a representation of value such as currency, cryptocurrency, money balances, credits, and

---

49. *See, e.g.*, Engle, *supra* note 7, *passim.*

50. FIN. CRIMES ENF'T NETWORK, *Frequently Asked Questions*, https://www.fincen.gov/frequently-asked-questions [https://perma.cc/6K2L-TA7B].

51. FIN. CRIMES ENF'T NETWORK, *Mission*, https://www.fincen.gov/about/mission [https://perma.cc/3C5W-VSWV].

52. 31 C.F.R. § 1010.100(ff)(5) (2014).

53. *See* 31 U.S.C. § 5311 *et seq*. (2018).

54. *Powell Statement*, *supra* note 17, at 22; *Yellen Statement*, *supra* note 17.

55. *See* FINCEN, GUIDANCE FIN-2013-G001, *supra* note 16.

56. *Id.* at 1.

57. *Id.*

commercial papers.[58] FinCEN considers organizations and individuals operating within these exchanges as potentially being MSBs and being subject to FinCEN regulations.[59]

These definitions for MSBs are so broad that "any other person engaged in the transfer of funds" is likely subject to FinCEN regulations.[60] However, FinCEN has, generally, distinguished between cryptocurrency exchanges and other transmission conduits, and users of cryptocurrency for purchase of goods or services.[61] Cryptocurrency exchanges or network administrators may be MSBs under FinCEN guidance, whereas mere users are not.[62]

However, the inherent anonymity provided by many cryptocurrencies is a stumbling block for exchanges and administrators under FinCEN rules.[63] FinCEN guidance makes clear that such exchanges are nevertheless subject to reporting and other regulatory obligations.[64] To comply with regulations, such exchanges would somehow have to link the user's cryptocurrency public key address to their real-world identity.[65]

Common sense suggests that persons desiring anonymity in the conduct of criminal activity would not utilize an exchange service that requires the destruction of that anonymity. In fact, FinCEN recognizes and identifies exchange models beyond the agency's jurisdiction over MSBs that will preserve user anonymity.[66] Thus, FinCEN, as currently empowered, is not sufficient to fully regulate cryptocurrency.

Former Federal Reserve Chairwoman Janet Yellen, while acknowledging FinCEN's role in combatting money laundering associated with cryptocurrency, called for specific regulatory action from Congress to address the other disruptive aspects of cryptocurrency.[67] The next section discusses some of the approaches federal banking regulators, such as the Federal Reserve, have taken toward cryptocurrency.

B. FEDERAL BANKING REGULATORS: DISAGREEMENT OVER FUNCTION AND

---

58. *See* Ricardo Lagos & Shengxing Zhang, *Turnover Liquidity and the Transmission of Monetary Policy*, 110 AM. ECON. REV. 1635, 1635–72 (2020).

59. FIN. CRIMES ENF'T NETWORK, GUIDANCE FIN-2019-G001, APPLICATION OF FINCEN'S REGULATIONS TO CERTAIN BUSINESS MODELS INVOLVING CONVERTIBLE VIRTUAL CURRENCIES (2019) [hereinafter FINCEN, GUIDANCE FIN-2019-G001].

60. *Id.* at 3.

61. FINCEN, GUIDANCE FIN-2013-G001, *supra* note 16, at 1–3.

62. *Id.*

63. FINCEN, GUIDANCE FIN-2019-G001, *supra* note 59, at 18–19.

64. *Id.*

65. *Id.* at 10 ("As part of its risk assessment, an MSB should determine both the identity and the profile of its customers and MSBs must know enough about their customers to be able to determine the risk level they represent to the institution.").

66. *Id.* at 23–28.

67. *Yellen Statement*, *supra* note 17 ("I think my understanding is that FinCEN and the Department of Justice have—I mean, one concern here with Bitcoin is the potential for money laundering. I think that they have indicated that their money-laundering statutes are adequate to meet their own enforcement needs. So the Fed does not have authority with respect to Bitcoin, but it certainly would be appropriate, I think, for Congress to ask questions about what the right legal structure would be for, you know, virtual currencies that involve nontraditional players . . . .").

AUTHORITY

The United States Federal Reserve System is the nation's central bank.[68] As such, the Federal Reserve conducts the nation's monetary policy, supports stability of the financial system, monitors the solvency and soundness of individual financial institutions, promotes payment and settlement systems among financial intermediaries, and analyzes consumer and community-development issues and efforts.[69] As cryptocurrency becomes a more widespread financial tool, the Federal Reserve regulation may be required.

However, while noting the criminal risk associated with cryptocurrency, Federal Reserve Chairman Jerome Powell argued that the Federal Reserve's regulatory powers do not extend generally to cryptocurrencies.[70] Powell's position appears to be that cryptocurrency is not currently subject to Federal Reserve oversight because it is not a currency.[71] In Congressional testimony he declared, "We [the Federal Reserve] don't have jurisdiction over cryptocurrency. We have jurisdiction over banks."[72]

Instead, the Federal Reserve may only regulate cryptocurrencies when banks are engaged in activities related to those virtual currencies.[73] Powell also asserted that cryptocurrency is not a threat to the Federal Reserve's monetary policy control functions, because cryptocurrency does not operate as either a medium of exchange or a store of value, due to limited use and volatility in pricing.[74] Thus, while acknowledging FinCEN's role in controlling money laundering that is associated with cryptocurrency, Powell seemingly undermined FinCEN's conceptualization of cryptocurrency.

Powell's predecessor at the Federal Reserve, Janet Yellen, agreed with her successor's general assessment that cryptocurrency is not banking.[75] In February 2014, before the Senate Committee on Banking, Housing, and Urban Affairs, Yellen testified that cryptocurrencies are beyond the regulatory powers of the Federal Reserve because cryptocurrency payments are occurring outside of the banking industry:

> I think it is important to understand that this is payment innovation that is taking place entirely outside the banking industry, and to the best of my knowledge, there is no intersection at all in any way between Bitcoin and banks that the Federal Reserve has the ability to supervise and regulate.[76]

However, the Federal Reserve is not the primary federal bank regulator in the United States—the OCC is, and the OCC has broad authority under the National Bank Act to grant charters to

---

68. BD. OF GOVERNORS OF THE FED. RESRV. SYS., THE FEDERAL RESERVE SYSTEM: PURPOSES & FUNCTIONS 1–2 (10th ed. 2016) (ebook), https://www.federalreserve.gov/aboutthefed/files/pf_complete. pdf [https://perma.cc/A7AE-4QU2].

69. *Id.*

70. *Powell Statement*, *supra* note 17, at 22.

71. *See id.*

72. *Powell Statement*, *supra* note 17, at 22.

73. *See id.*

74. *Id.*

75. *Yellen Statement*, *supra* note 17, at 27–28.

76. *Id.*

entities to engage in the "business of banking."[77] In contrast to the Federal Reserve chairpersons, the OCC has indicated that cryptocurrency users and exchanges may qualify as special purpose national banks.[78] According to a policy statement issued by the OCC just two weeks after Chairman Powell's testimony discussed above,[79] financial technology companies that engage in one of the three core functions of banking—receiving deposits, paying checks, or lending money—may be eligible for a special purpose national bank charter.[80]

The OCC provides that applicants would be required to specifically address risks relating to cybersecurity, information reporting, anti-money laundering requirements, and foreign economic sanctions obligations.[81] However, these concerns implicate FinCEN's potentially conflicting regulatory approach, discussed above.[82] Thus, the OCC and FinCEN would have to determine the jurisdictional bounds each entity has with regard to cryptocurrency. Seeing as these agencies work together under existing regulatory structures, such a cooperative effort seems realistic.

With regard to specific services that a cryptocurrency-related organization could offer, the OCC has stated that it is open to new, innovative methods of performing the "paying checks" or "lending money" core banking practices.[83] The OCC specifically offers "facilitating payments electronically" as an example of a modern payment process equivalent to traditional check processing.[84]

If the OCC is willing to consider "facilitating payments electronically" as a core banking function, virtually any user of Bitcoin and most other cryptocurrencies could be engaged in the "business of banking." Users of Bitcoin, for example, are necessary for the payment processing mechanism to function.[85] As one researcher has explained, each Bitcoin transaction depends on preceding transactions.[86] When a user transfers a Bitcoin, the network engages in a verification process of confirming ownership via the public keys embedded on the Bitcoin unit—resulting in a decentralized ledger known as "the blockchain."[87] But because the blockchain is decentralized, the entire network of users maintains it.[88]

Designating every user of Bitcoin a "bank" seems absurd. However, the public maintenance of the blockchain ledger system is designed to eliminate the need for a central clearing intermediary such as a bank—that is, the function of a traditional bank is replaced by the individual

---

77. OCC POLICY STATEMENT, *supra* note 18, at 2.

78. *Id.*

79. *Supra* Part III.B.2.

80. OCC POLICY STATEMENT, *supra* note 18, at 2. In other guidance, the OCC recognizes that most financial technology companies that accept deposits would be subject to Federal Deposit Insurance Corporation regulation; therefore the OCC is most likely to grant special purpose national bank status to financial technology companies engaged in payment processing or money lending services. *See* OCC LICENSING MANUAL, *supra* note 18, at 2–3.

81. OCC LICENSING MANUAL, *supra* note 18, at 7.

82. FINCEN, GUIDANCE FIN-2013-G001, *supra* note 18, at 1.

83. OCC LICENSING MANUAL, *supra* note 18, at 2 n.5.

84. *Id.*

85. *See* Pond, *supra* note 26, at 236–37.

86. *Id.*

87. *Id.*

88. *Id.*

user.[89] Even Chairman Powell has endorsed the use of a variant of blockchain distributed ledger technology for certain financial institution functions.[90] Furthermore, conceptualizing cryptocurrency as the business of banking would establish the OCC as the central federal regulator—with preemption of potentially conflicting state laws.[91] But whether a cryptocurrency exchange or other cryptocurrency business qualifies as a special purpose national bank is determined on a case-by-case basis, which considers an organization's business model, size, complexity, and risks, among other factors.[92] Thus, even if a comprehensive regulatory scheme could be created, there may still be uncertainty as to which cryptocurrencies it would apply to.

C. INTERNAL REVENUE SERVICE: CRYPTOCURRENCY IS PROPERTY BUT NOT CURRENCY

Like the Federal Reserve, the IRS has offered conflicting guidance on the conceptualization of cryptocurrency for federal tax purposes.[93] Ultimately, the IRS conceptualization essentially renders cryptocurrency transactions as barter transactions—exchange of property for goods or services.[94]

The IRS treatment is detailed in Notice 2014-21, addressing the taxability of transactions involving virtual currency.[95] Under the guidance, federal tax officials recognized, like FinCEN, that cryptocurrency functions as a medium of exchange. Furthermore, the IRS embraced FinCEN's definitional construction of "virtual currency," and also recognized that businesses may use virtual currency as a payment for regular, ordinary business expenses.[96]

And yet, under Notice 2014-21, federal tax guidance expressly declined to treat cryptocurrency as currency.[97] Instead, the IRS declared that "convertible" virtual currency—currency that has an equivalent value in real currency or that acts as a substitute for real currency—be treated as property for federal tax purposes.[98] Gain or loss is recognized upon the sale or other disposition of the virtual currency, based upon the "basis" of the virtual currency at the time it is acquired.[99]

---

89. *Id.*

90. Jason Brett, *Federal Reserve Endorses Ethereum-Backed Alternative to Libor*, FORBES (June 3, 2020, 5:42 PM), https://www.forbes.com/sites/jasonbrett/2020/06/03/federal-endorses-ethereum-backed-alternative-to-libor/#38d9bc6369f3 [https://perma.cc/DVU2-2ZVU].

91. *See* Ryan Tracy, *Cryptocurrency Firms Explore Getting Bank Licenses*, WALL STREET J. (May 18, 2018, 5:30 AM), https://www.wsj.com/articles/cryptocurrency-firms-explore-getting-bank-licenses-1526635800 [https://perma.cc/ZX5H-K6CY]. Potentially conflicting state laws are discussed in more depth, *infra* Part III.F.

92. OCC LICENSING MANUAL, *supra* note 18, at 3.

93. I.R.S. Notice 2014-21, *supra* note 19.

94. Chodorow, *supra* note 26, at 380; Liedel, *supra* note 10, at 117–19.

95. I.R.S. Notice 2014-21, *supra* note 19.

96. *Id.*

97. *Id.* at 938; *see also* Nicole Mirjanich, *Digital Money: Bitcoin's Financial and Tax Future Despite Regulatory Uncertainty*, 64 DEPAUL L. REV. 213, 214 (2014).

98. I.R.S. Notice 2014-21, *supra* note 19.

99. *Id.* at 939.

"Basis" is a tax concept used to calculate the income or loss recognized on the sale or other disposition of an asset.[100] Generally, basis is equivalent to cost.[101] However, by statute, adjustments can be made to basis to reflect certain costs associated with the property.[102] Under Notice 2014-21, though, it is unclear what adjustments—if any—the IRS will allow for cryptocurrency transactions.[103] The guidance instead directs taxpayers to use the cryptocurrency's "fair market value" at the time it was acquired as the asset's basis, determined by the price listed on a cryptocurrency exchange.[104]

While the IRS appears to have limited the scope of its guidance to only those virtual currencies readily convertible to real currency or usable in real-world transactions,[105] at least one researcher has criticized the IRS's approach.[106] Notice 2014-21 regulates business use of cryptocurrency.[107] Tracking and calculating the basis of every unit of cryptocurrency acquired and held for future use could be overly burdensome for regular business users of cryptocurrency.[108] Further study is needed to determine whether such inefficiencies are fatal to widespread use of cryptocurrency in regular business transactions.

D. SECURITIES AND EXCHANGE COMMISSION: SOMETIMES A SECURITY, SOMETIMES NOT

The SEC has cautioned investors about risks associated with cryptocurrencies and so-called "initial coin offerings."[109] However, the scope of the SEC's regulatory authority concerning virtual currencies has, until recently, been uncertain.[110]

The Securities Act of 1933 ("1933 Act") and the Securities Exchange Act of 1934 ("1934 Act"), from which the SEC receives its regulatory authority,[111] both broadly define the concept of a "security" to include dozens of specific financial instruments and investment products.[112]

---

100. 26 U.S.C. § 1011(a) (2018).

101. *Id.*

102. 26 U.S.C. § 1016 (2018); *see also* Casey W. Baker, *Tax Law and 100 Years of New York Giants Season Tickets: A Multifaceted Analysis of One Fan's Fortune*, 27 SPORTS LAWS. J. 169, 180–81 (2020).

103. I.R.S. Notice 2014-21, *supra* note 19, at 938–40.

104. *Id.* at 938–40.

105. *Id.* at 938 ("In general, the sale or exchange of convertible virtual currency, or the use of convertible virtual currency to pay for goods or services in a real-world economy transaction, has tax consequences that may result in a tax liability. This notice addresses only the U.S. federal tax consequences of transactions in, or transactions that use, convertible virtual currency, and the term "virtual currency" as used in Section 4 refers only to convertible virtual currency. No inference should be drawn with respect to virtual currencies not described in this notice.").

106. *See* Antonikova, *supra* note 26.

107. I.R.S. Notice 2014-21, *supra* note 19, at 939 (virtual currency received by an independent contractor or employee as payment for services is considered income); *Id.* ("[A] person who, in the course of a trade or business, makes payments using a virtual currency worth more than $600 must report the payments to the IRS on a Form 1099-MISC.").

108. Antonikova, *supra* note 26, at 444–45.

109. Clayton, *supra* note 20; *see also* Harv. L. Rev., *Recent Guidance: Securities Regulation — Financial Technology — SEC Provides Analytical Tools for Assessing Digital Assets*, 132 HARV. L. REV. 2418, 2419 (2019).

110. *See* Harv. L. Rev., *supra* note 109, at 2423.

111. 15 U.S.C. § 78d(a) (2018).

112. 15 U.S.C. § 77b(a)(1) (2018); 15 U.S.C. § 78c(a)(10) (2018).

However, both Acts pre-date the development of virtual currencies by roughly seventy years, and the 1934 Act specifically exempts "currency" from the definition of security.[113] Therefore, determining the legal nature of a particular virtual currency is a prerequisite to determining whether the SEC has regulatory authority over it.

Thus, in April 2019, the SEC provided guidance that referred to virtual currencies as "digital assets"—"an asset that is issued and transferred using distributed ledger or blockchain technology, including, but not limited to, so-called 'virtual currencies,' 'coins,' and 'tokens.'"[114] In doing so, the SEC recognized that such digital assets, even if widely circulated and traded, are not necessarily "securities" subject to SEC regulation.[115]

Instead, to qualify as a "security," a virtual security must be considered an "investment contract" under the United States Supreme Court's test developed in *SEC v. Howey Co*.[116] Under the *Howey* test, an investment contract includes any (i) investment of money (ii) in a common enterprise (iii) with a reasonable expectation of profits derived from the efforts of others.[117]

In *Howey,* the securities at issue were investments in orange grove operations.[118] The company sold portions of orange groves—some less than an acre in size—to investors.[119] Together therewith, the company offered service contracts to the purchasers, under the terms of which the company would service the orange groves using its own assets, market the oranges, and distribute to the owners a share of the net profits derived therefrom.[120] While the offering was not in the form of a traditional security certificate or nominal interests in the company's assets, the Court nevertheless deemed the arrangement an investment contract:

> The transactions in this case clearly involve investment contracts as so defined. The respondent companies are offering something more than fee simple interests in land, something different from a farm or orchard coupled with management services. They are offering an opportunity to contribute money and to share in the profits of a large citrus fruit enterprise managed and partly owned by respondents.[121]

The Court stressed that it is the substance—not the form—of the offering that determines its nature as a security.[122] Indeed, the concluding paragraph of *Howey* seems prescient regarding the concept of virtual currencies:

> The test is whether the scheme involves an investment of money in a common enterprise with profits to come solely from the efforts of others. If that test be satisfied, *it is immaterial whether the enterprise is speculative or non-speculative or whether there is a sale of property with or without intrinsic value*.[123]

---

113. 15 U.S.C. § 78c(a)(10) (2018).

114. *Framework for "Investment Contract" Analysis of Digital Assets*, *supra* note 20.

115. *Id.*; Harv. L. Rev., *supra* note 109, at 2419–20.

116. 328 U.S. 293, 298 (1946).

117. *Id.* at 301; *Framework for "Investment Contract" Analysis of Digital Assets*, *supra* note 20.

118. *Howey Co.*, 328 U.S. at 294.

119. *Id.* at 295.

120. *Id.* at 296.

121. *Id.* at 299.

122. *Id.*

123. *Id.* at 301 (emphasis added).

Thus, in applying the *Howey* test to cryptocurrency, the SEC focuses on the terms of the digital asset, as well as the circumstances and method in which it is offered, sold, and resold.[124] According to the SEC, the first two prongs of the *Howey* test are usually satisfied in the sale of a digital asset.[125] Cryptocurrencies are usually acquired in exchange for some consideration (the investment),[126] and the value of the cryptocurrency units is usually linked to other investors or the promoters (the common enterprise).[127]

It is therefore the third prong—the expectation of profits derived from the efforts of others—that is usually determinative under the SEC's analysis.[128] Generally, the prong is met only if the "profits" are expected from capital appreciation resulting from the enterprise's internal operations—that is, the initial investment of capital allows the enterprise to generate earnings organically, and the investor is entitled to a share thereof.[129] External market forces that drive an asset's value are not generally considered "profit" for *Howey* test purposes.[130] The SEC guidance identifies several relevant factors to consider, although no single factor is determinative.[131]

At least one SEC official has declared that two popular cryptocurrencies—Bitcoin and Ether—are not securities under the *Howey* test due to the failure of the third prong.[132] According to William Hinman, Director of the SEC's Division of Corporation of Finance, the purpose of the 1933 Act is to remove the information asymmetries between investors and management, so that investors may make an informed decision regarding value of the common enterprise—precisely because the value to investors depends on the efforts of management.[133] With decentralized cryptocurrencies such as Bitcoin and Ether, there is no central management figure with an information advantage, and no need to apply the securities regulations thereto.[134] Nevertheless, a cryptocurrency platform with a different distribution could present those information asymmetries that necessitate regulation.[135]

E. FEDERAL ELECTION COMMISSION: CURRENCY TREATED LIKE A SECURITY

The Federal Election Commission ("FEC") recognized that cryptocurrency operates as currency, "in that users pay for real goods and services . . . with bitcoins as opposed to U.S. dollars or other government issued currencies."[136] However, the FEC advised that campaign committees

---

124. *Framework for "Investment Contract" Analysis of Digital Assets*, *supra* note 20.

125. *Id.*

126. *Id.*

127. *Id.* at n.11.

128. *Id.*

129. *Id.*

130. *Id.*

131. *Id.* Some relevant factors identified include (1) whether an active participant in the enterprise is "responsible for the development, improvement (or enhancement), operation, or promotion" of the digital asset network; (2) whether the digital asset gives the holder the right to share in the enterprise's income or profits; and (3) whether the digital asset functions can be immediately used as a medium of exchange or if it must be held for appreciation before value is realized.

132. Hinman, *supra* note 20; *contra*, Christopher Burks, *Bitcoin: Breaking Bad or Breaking Barriers*?, 18 N.C. J.L. & TECH. 244, 263 (2017) (arguing that Bitcoin does fit the functional profile of a security).

133. Hinman, *supra* note 20.

134. *Id.*

135. *Id.*

136. FED. ELECTION COMM., *supra* note 21, at 2 (internal citations omitted).

should treat contributions of cryptocurrencies the same as contributions of publicly-traded securities.[137] This is in apparent conflict with the SEC's detailed conceptual framework, which explicitly rejects the notion that cryptocurrency should automatically be treated as a security.[138]

Furthermore, one must consider the use and regulation of cryptocurrency for political purposes in light of the United States Supreme Court's decision in *Citizens United v. F.E.C.*[139] In that case, the Court held laws restricting certain political spending by corporations as unconstitutional, as a restriction on political spending necessarily results in a limitation on quantity and quality of political speech.[140] If money is speech, and cryptocurrency is money, restrictions on the use of cryptocurrency in political spending could likewise run afoul of the First Amendment.

F. STATE REGULATORS: NO CONSENSUS

In the absence of pre-emptive federal regulation,[141] states possess some ability to regulate the U.S. financial and monetary system, primarily centered on insurance and banking activity.[142] Some researchers have argued that cryptocurrency may constitute counterfeit currency,[143] and states have already enacted various statutes against counterfeiting.[144] Most of these regulations are connected to criminal activities and intent of the user.[145]

The various state statutes must be examined closely to determine applicability.[146] For example, in Rhode Island counterfeiting only applies to coins.[147] Only a handful of states' counterfeiting statues could be applied to virtual currencies as of 2015.[148] If this disconnect and inconsistency is present in the treatment of counterfeiting U.S. currency, these authors postulate that a similar quagmire may result in the states' treatment of cryptocurrency.

With a lack of central federal oversight and regulation, states could enact measures concerning the regulation of virtual currencies based upon their respective histories associated with their criminal statutes; that is, states with the most stringent criminal penalties would be among the first to regulate cryptocurrencies.[149] The power of states to regulate cryptocurrencies is pursuant to the various federal agency classifications of cryptocurrencies as assets, contracts, commodities, securities, and investments.[150] In essence, some state-level regulators have recognized that cryptocurrencies operate as a medium of exchange, and as such, can be subject to regulations

---

137. *Id.* at 5–6 (internal citations omitted).
138. *Framework for "Investment Contract" Analysis of Digital Assets*, *supra* note 20.
139. 558 U.S. 310 (2010).
140. *Id.* at 339 (citing Buckley v. Valeo, 424 U.S. 1, 19 (1976) (per curiam)).
141. *See* Barnett Bank, N.A. v. Nelson, 517 U.S. 25, 31 (1996).
142. CONG. RSCH. SERV., WHO REGULATES WHOM? AN OVERVIEW OF THE U.S. FINANCIAL REGULATORY FRAMEWORK (2020), https://fas.org/sgp/crs/misc/R44918.pdf [https://perma.cc/ 8P2C-5BAD].
143. Engle, *supra* note 11, *passim*.
144. *See generally* McKinney et al., *supra* note 3 (giving a comprehensive discussion of state statutes).
145. *Id.* at 307 tbl. 1.
146. *Id.* at 308.
147. *Id.*
148. *Id.* at 309.
149. *Id.* at 310.
150. CONG. RSCH. SERV., *supra* note 143.

pursuant to this established federal and state dual role of protection of the financial and monetary system.

Under New York law, virtual currency is essentially any numeric representation of value in an electronic format.[151] The definition is so broad that it can include wire transfers, online payments, e-commerce, and automated clearing house transactions. Connecticut uses the same language as New York but also includes payment systems.[152] Hence, electronic payment services such as PayPal may fall under this definition of virtual currency.[153]

Since states have not standardized treatment of cryptocurrencies, some advocates propose stronger federal regulations while others advocate for no regulations.[154] The Constitution of the United States grants the federal government—not the states—the power to coin money and punish the counterfeiting of currency.[155] As other scholars have noted, this results in the federal government maintaining a monopoly on currency regulation—including cryptocurrency.[156]

In the regulation of a thing, that thing must be clearly conceptualized and defined. When there is ambiguity and uncertainty there can be conflict concerning that thing. In this case, state regulation of cryptocurrency in a piecemeal manner would add to the ambiguity and uncertainty.

Conclusion

The inconsistent and uncertain regulation of cryptocurrency in the United States is caused by the lack of a clear central regulatory body. Each regulatory agency determines whether it has the authority to regulate cryptocurrency based on the use of the cryptocurrency on a case-by-case basis. To summarize, cryptocurrency is considered to be: (1) a medium of exchange subject to regulation as a money transmission service by FinCEN; (2) beyond the scope of banking regulation by the Federal Reserve, but within the business of banking by the OCC; (3) not currency but tradeable property subject to taxation by the I.R.S.; (4) digital assets but not necessarily securities subject to SEC regulation; (5) similar to a security by the FEC; and, (6) a numeric representation of value in electronic format by many states.

This piecemeal approach could lead to inefficiencies in regulatory resource allocation.[157] This lack of a standardized and stable definition of cryptocurrency creates jurisdictional issues and provides significant risks for regulatory agencies as they can either compete for superiority of regulatory power at the same time or claim no duty to act based on a lack of jurisdiction. A great risk is associated with a regulatory agency's subjective concept of a cryptocurrency, its political

---

151. N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2(p) (2018). The New York Assembly also created a task force to address the transparency and regulation of cryptocurrencies. *See* Aaron Wood, *New York State Digital Currency Task Force Appoints New Members*, COINTELEGRAPH (July 24, 2019), https://cointelegraph.com/news/new-york-state-digital-currency-task-force-appoints-new-members [https://perma.cc/47Q8-4SXQ].

152. Conn. Gen. Stat. § 36a-596(18) (2018).

153. *See generally Who We Are*, PAYPAL, https://www.paypal.com/webapps/mpp/about [https://perma.cc/BR44-25ZC] (stating that PayPal is a digital platform that assists in financial transactions as these transactions are claims to legal tender).

154. DAVID W. PERKINS, CONG. RSCH. SERV., CRYPTOCURRENCY: THE ECONOMICS OF MONEY AND SELECTED POLICY ISSUES 21–22 (2020), https://fas.org/sgp/crs/misc/R45427.pdf [https://perma.cc/QZL8-LSD4].

155. U.S. CONST. art. 1, § 8, cl. 5–6.

156. *See* Engle, *supra* note 7, at 359.

157. *See* McKinney et al., *supra* note 3.

directives, or an agent's personal motivations; resource allocations can range from non-existent to remarkable. Without government agencies being accountable by a clear definition, authority, and responsibility, the users of cryptocurrencies must become similar to chameleons—they must evade the regulator by becoming camouflaged in the current ambiguity of a definition and government authority.[158] This means that nefarious activities can become unchecked with the ability of fraudsters to successfully perpetrate criminal operations.

The primary question 'are cryptocurrencies a medium of exchange with other functions being secondary?' is contingent upon which agency is asked. Based upon the above summary, the common concept by these regulating agencies is that cryptocurrencies are transferable digital assets with a numeric value. Because of the current regulatory inconsistency, using empirical evidence to show the actual use of cryptocurrencies could mitigate and alleviate many of these risks, as regulators could develop a universal legal construct based upon the actual use.

What is clear is that an agreed upon, consistent governance structure is essential to the success of cryptocurrency.[159] To that end, the authors would encourage further research on the matter, in an effort to better understand how resources should be allocated to best minimize the risks associated with the widespread adoption and use of cryptocurrencies. It is our belief that the key to resolving these problems in regulating cryptocurrency is the designation of a central authority that acts to protect this transferable digital asset. Through central regulation, consistent treatments of cryptocurrencies can calm user anxiety and reduce some market volatility. We further advocate research that focuses upon the users of cryptocurrency and understanding their needs, intents, and desires when using cryptocurrency. While cryptocurrencies may be complex in nature, the authors caution against overcomplicating their primary functions. Their use may be as simple as a medium of exchange to facilitate financial transactions.

158. *See, e.g.*, United States v. Murgio, 209 F. Supp. 3d 698, 709–10 (S.D.N.Y. 2016) (criminal defendant arguing that Bitcoins should not be considered "funds" based upon conflicting federal regulatory treatment).

159. Chuen, Guo & Wang, *supra* note 6, at 33.

Originally Published in
75 Tax Lawyer 601 (2022)

U.S. State Taxation of Cryptocurrency-Involved Transactions: Trends and Considerations for Policy Makers

CASEY W. BAKER*
THOMAS NORTON**
RALPH E. MCKINNEY***

Abstract

This Article examines legal doctrines relating to state-level taxation of cryptocurrency-involved commercial transactions in the United States, including constitutional limitations and current state approaches to income, sales and use, and property taxation systems. Thus far, state tax policy is underdeveloped with regard to transactions involving cryptocurrency. The vast majority of states defer to federal policy on taxation of income derived from such transactions as limited guidance is available from only a handful of states with regard to sales and use tax obligations, and no states have legislatively addressed cryptocurrency within state ad valorem property tax systems.

As commercial adoption of virtual currency grows, state policy makers and practitioners will need guidance in developing and navigating tax and regulatory systems. In particular, state policy makers and practitioners must consider the constitutional boundaries established by the four-prong test of Complete Auto Transit, Inc. v. Brady in developing state tax systems that can effectively reach cryptocurrency-involved transactions.

I. Introduction

Cryptocurrencies and other virtual currencies are among the most polarizing current topics in finance and commerce. Proponents hail the technology as the key to unlocking more efficient transactions in a global marketplace, free from third-party control and manipulation by

*Assistant Professor of Legal Environment, Marshall University Lewis College of Business, Brad D. Smith Schools of Business; Ohio University, B.B.A., 2005; Ohio State University Moritz College of Law, J.D., 2008.

**Assistant Professor of Accountancy, Marshall University Lewis College of Business, Brad D. Smith Schools of Business; Marshall University, B.B.A., 2009; West Virginia University College of Law, J.D., 2013; Georgetown University College of Law, LL.M., 2019.

***Associate Professor of Management, Marshall University Lewis College of Business, Brad D. Smith Schools of Business; West Virginia State University, R.B.A., 1998; Marshall University M.B.A., 2003; Aston University, D.B.A., 2015.

central banking authorities.[1] Detractors insist that cryptocurrencies facilitate fraud and illicit activities,[2] while simultaneously contributing to environmental collapse and climate change.[3]

Much of the scholarly discussion of cryptocurrency regulation in the United States focuses on federal efforts, but the federal regulatory approach to cryptocurrency in the United States is inconsistent.[4] At various times, federal authorities have been open to considering cryptocurrency as federally regulated banking activities,[5] securities,[6] or currency.[7] Some federal regulators view cryptocurrency as a medium of exchange.[8] Others question the usefulness of cryptocurrency as either a medium of exchange or a store of value.[9] Yet, Congress has looked to taxes on cryptocurrency transactions as a significant revenue source for new spending,[10] suggesting that federal policy makers are moving toward greater legitimization of cryptocurrency use. Indeed, the Infrastructure Investment and Jobs Act enacted in November 2021 expands cryptocurrency information reporting obligations for brokers and persons accepting cryptocurrency in commercial transactions.[11] Presumably, the intent is to use the information to drive expanded tax enforcement.[12]

---

[1] *See* Susan Alkadri, *Defining and Regulating Cryptocurrency: Fake Internet Money or Legitimate Medium of Exchange?*, 17 DUKE L. & TECH. REV. 71, 71–73 (2021).

[2] Alkadri, *supra* note 1, at 73–74.

[3] *See* Samantha T. Edgell, *Toto, I've a Feeling the Environment Isn't Safe from Cryptocurrency Anymore: The Degrading Ecological Effects of Bitcoin and Digital Currencies*, 32 VILL. ENVTL. L.J. 69 *passim* (2021).

[4] *See*, *e.g.*, Ralph E. McKinney Jr., Casey W. Baker, Lawrence P. Shao & Jeff Y. L. Forrest, *Cryptocurrency: Utility Determines Conceptual Classification Despite Regulatory Uncertainty*, 25 INTELL. PROP. & TECH. L.J. 1 *passim* (2020).

[5] *See* OFF. OF THE COMPTROLLER OF THE CURRENCY, POLICY STATEMENT ON FINANCIAL TECHNOLOGY COMPANIES' ELIGIBILITY TO APPLY FOR NATIONAL BANK CHARTERS (2018), https://www.occ.gov/publications/publications-by-type/other-publications-reports/pub-other-occ-policy-statement-fintech.pdf [https://perma.cc/QGJ7-3WTM].

[6] *See Framework for "Investment Contract" Analysis of Digital Assets*, U.S. SEC. & EXCH. COMM'N (Apr. 3, 2019), https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets [https://perma.cc/B6SV-BWPE]; *see also Recent Guidance: Securities Regulation—Financial Technology—SEC Provides Analytical Tools for Assessing Digital Assets*, 132 HARV. L. REV. 2418 (2019).

[7] *See* Myles Martin, *AO 2014-02: Campaign May Accept Bitcoins as Contributions*, FED. ELECTION COMM'N (May 13, 2014), https://www.fec.gov/updates/ao-2014-02-campaign-may-accept-bitcoins-as-contributions [https://perma.cc/ZN5L-9YTM].

[8] *See*, *e.g.*, FIN. CRIMES ENF'T NETWORK, GUIDANCE FIN-2013-G001, APPLICATION OF FINCEN'S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES (Mar. 18, 2013), https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering [https://perma.cc/G4MT-QEFT] (describing virtual currency (including cryptocurrency) as "a medium of exchange that operates like a currency in some environments but does not have all the attributes of real currency").

[9] *See*, *e.g.*, *Monetary Policy and the State of the Economy: Hearing Before the H. Comm. on Fin. Servs.*, 115th Cong. 22 (2018) (statement of Jerome Powell, Chair, Board of Governors of the Federal Reserve System).

[10] Laura Davison, *Senators Eye Cryptocurrency Taxes to Fund Infrastructure Plan*, BLOOMBERG (July 28, 2021, 8:16 PM), https://www.bloomberg.com/news/articles/2021-07-28/senators-eye-cryptocurrency-taxes-to-fund-infrastructure-plan?srnd=markets-vp https://perma.cc/3NSH-JJDU].

[11] Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, § 80603, 135 Stat. 429, 1339–41 (2021).

[12] *See* Casey W. Baker & Ralph E. McKinney, Jr., *Cryptocurrency and Federal Tax Enforcement*, BUS. L. TODAY (June 8, 2021), https://businesslawtoday.org/2021/06/cryptocurrency-and-federal-tax-enforcement/ [https://perma.cc/9YDM-NGRL].

Even as federal regulatory efforts evolve, states retain the authority to regulate cryptocurrency.[13] In 2020, at least a dozen states introduced bills to regulate or study the regulation of cryptocurrencies, with Wyoming and New York identified as prominent models.[14] As states are considered laboratories for regulatory experimentation, these state approaches should be monitored to anticipate evolving policy and responses among federal, state, local, and private parties.[15]

This mindset has guided the approach of this Article. Federal tax enforcement has emerged as a potential avenue of federal cryptocurrency regulation.[16] The Service refers to virtual currency (including cryptocurrency) as a "medium of exchange," but refuses to grant the digital assets the status of "currency."[17] Instead, the Service treats cryptocurrency as property that can be exchanged for goods and services.[18] Scholars have criticized this approach as impractical for sustained commercial use of cryptocurrency.[19]

This Article will look at state tax systems as potential laboratories of democracy in the development of tax systems that facilitate the use of cryptocurrency as a medium of exchange. To that end, the work primarily considers the state tax implications for users of cryptocurrency purchasing goods and services in the online marketspace, sometimes referred to herein as "cryptocurrency-involved transactions." Specifically, the Article considers the impact of state income taxation, sales and use taxation, and *ad valorem* personal property taxation on persons who hold cryptocurrencies for use in such commercial transactions. The Article first sets out some constitutional parameters and potential limitations on state taxation before turning to an examination of specific state approaches.

The Article concludes with general observations of trends in state tax efforts as well as with some considerations for policymakers as state tax systems evolve with regard to cryptocurrency. Because little existing scholarship on state-level taxation of cryptocurrency-involved transactions exists, practitioners advising clients as to the consequences of the use or acceptance of cryptocurrency in commercial transactions will find the information helpful as well.

---

[13] EDWARD V. MURPHY & M. MAUREEN MURPHY, CONG. RESEARCH. SERV., R43339, BITCOIN: QUESTIONS, ANSWERS, AND ANALYSIS OF LEGAL ISSUES 14–18 (2015), https://crsreports.congress.gov/product/pdf/R/R43339/20.

[14] *See* Milad Emamian, *The Cowboy State Tames Bitcoin's Regulatory Wild West*, REG. REV. (Apr. 7, 2021), https://www.theregreview.org/2021/04/07/emamian-cowboy-state-tames-bitcoins-regulatory-wild-west/ [https://perma.cc/Hv8J-AAMS].

[15] *See*, *e.g.*, Ariz. State Legis. v. Ariz. Indep. Redistricting Commission, 576 U.S. 787, 817 (2015).

[16] *See* Baker & McKinney, *supra* note 12.

[17] Notice 2014-21, 2014-1 C.B. 938.

[18] *Id.*; *see also* McKinney et al., *supra* note 4, at 11–13.

[19] *See*, *e.g.*, Nika Antonikova, *Real Taxes on Virtual Currencies: What Does the I.R.S. Say?*, 34 VA. TAX REV. 433, 436–37 (2015). Undermining the use of cryptocurrency as a medium of exchange may be precisely the point. Treasury Secretary Janet Yellen has warned that Bitcoin, the most popular cryptocurrency, is "extremely inefficient" for use in commercial transactions. Jeff Cox, *Yellen Sounds Warning About "Extremely Inefficient" Bitcoin,* CNBC (Feb. 23, 2021, 11:35 AM), https://www.cnbc.com/2021/02/22/yellen-sounds-warning-about-extremely-inefficient-bitcoin.html [https://perma.cc/J87U-7M6Z]. Likewise, federal tax authorities have ramped up enforcement efforts against unreported cryptocurrency transactions. Baker & McKinney, *supra* note 12.

II. Terminology

Before turning to the legal analysis, it is helpful to review certain terms as used within this Article. Technically, "cryptocurrencies" are a subset of a broader class of digital assets known as "virtual currencies."[20] Virtual currencies trace their origins to the virtual economies existing within multi-player online video game worlds.[21] In some video games, players can convert real world currency to virtual currency for in-game use, and then "cash out" virtual currency for real currency.[22] These virtual currencies have been labeled as "bidirectional" or "open-flow" virtual currencies by certain observers.[23]

Cryptocurrencies emerged in 2009, with Bitcoin serving as the first decentralized open-flow virtual currency outside of a virtual economy.[24] Instead of a central in-game register to maintain account balances and verify in-game transactions, Bitcoin utilizes distributed ledger technology known as the "blockchain."[25] Via the blockchain, each unit of Bitcoin contains a method of determining its entire history of ownership.[26] When one unit of Bitcoin is transferred to a new owner, cryptographic mathematical techniques are used to confirm ownership of the transferor and update the blockchain with the new owner's identity—hence the name, "cryptocurrency."[27]

Thus, the regulation and taxation of "virtual currencies" would include "cryptocurrencies," but the inverse is not necessarily true. Nevertheless, Bitcoin, a cryptocurrency, is the most widely known and used virtual currency,[28] so "cryptocurrency" has become a generic term for any virtual currency used in commercial transactions.[29] As such, this Article will use the terms "cryptocurrency" and "virtual currency" interchangeably, unless otherwise specified.

III. Constitutional Limits on State Taxation

In the United States, a state typically has broad authority to tax property, transactions, activities, privileges, and revenue (and, relatedly, the persons and businesses that engage in or enjoy them) within its jurisdiction, but certain constitutional limitations apply. The shift toward a more digital marketplace has forced courts and scholars to re-examine longstanding rules that

---

[20]*See* McKinney et al., *supra* note 4, at 4–6.
[21]*Id.* at 5.
[22]*Id.*
[23]*Id.*
[24]*Id.*
[25]*Id.* at 11.
[26]*Id.*
[27]*Id.* at 6.
[28]*Id.*
[29]*See*, *e.g.*, Charlotte A. Erdmann, *The Taxation of Cryptocurrencies*, 95 FLA. BAR J. 58, 58 n.2 (2021); Elizabeth Nevle, *Tales from the Crypt: Global Trends in the Taxation of Cryptocurrency*, 24 CURRENTS: J. INT'L ECON. L., no. 2, 2021, at 116; John W. Bagby, David Reitter & Philip Chwistek, *An Emerging Political Economy of the Blockchain: Enhancing Regulatory Opportunities*, 88 UMKC L. REV. 419, 436 (2019); Catherine Martin Christopher, *The Bridging Model: Exploring the Roles of Trust and Enforcement in Banking, Bitcoin, and the Blockchain*, 17 NEV. L.J. 139, 143 (2016).

govern tax and regulatory jurisdiction, as the traditional rules were better suited to a physical marketplace.[30]

The most notable limitation on a state's ability to tax interstate commerce is nexus.[31] Nexus combines elements of Commerce Clause and Due Process analysis to provide a constitutional test for whether a state may impose a tax-related duty—such as payment, collection, or remittance—on a particular person, business, or transaction.[32] Both the Commerce Clause and Due Process Clause separately limit a state's ability to tax a transaction, but recent scholarship finds that any distinctions between the limitations of the two clauses as they relate to nexus have largely evaporated.[33]

In 1977, the Supreme Court handed down *Complete Auto Transit v. Brady*, which laid out the four prongs of the constitutional nexus test.[34] In the absence of Congress speaking on the matter, a state is permitted to tax a transaction if (1) the taxed activity is sufficiently connected to the state, (2) the tax is fairly apportioned among potential taxing states, (3) the tax does not unfairly discriminate against out-of-state economic activity, and (4) the tax revenue is related to state services provided.[35]

A. *Prong One: Sufficient Connection to the Taxing State*

In 1992, the Supreme Court addressed the first prong of the *Complete Auto* test by laying down a bright-line rule in *Quill Corp. v. North Dakota*.[36] Under *Quill*, for state sales and use taxes, a remote seller was sufficiently connected to the taxing state under Commerce Clause analysis only if there was some physical presence within the state attributable to the seller.[37] Quill Corp., a direct sales office supply company, solicited business through the mail and sent products to North Dakota.[38] The company had no offices, employees, or significant personal property deployed to North Dakota.[39] The Court ruled this was not sufficient nexus to impose the duty to collect and remit North Dakota sales and use taxes because Quill Corp. needed either physical presence or other "substantial nexus."[40]

But the *Quill* holding was never extended to state income taxes (or other types of business activity taxes (BAT)), so in the years following the decision many states enacted income tax, business privilege tax, and gross receipts tax schemes that imposed tax obligations on out-of-

[30] *See*, *e.g.*, South Dakota v. Wayfair, Inc., 138 S. Ct. 2080 (2018); Tyler Alcorn, *American Business USA Corp.: The Cloudy Lines of the Dormant Commerce Clause in Sales Taxation*, 87 MISS. L.J. 679 (2018); Michael T. Fatale, *Foreign Commerce Clause Discrimination: Revisiting Kraft After Wayfair*, 72 BAYLOR L. REV. 47 (2020); James Alm, Joyce Beebe, Michael S. Kirsch, Omri Marian & Jay A. Soled, *New Technologies and the Evolution of Tax Compliance*, 39 VA. TAX REV. 287, 336–37 (2020).

[31] *See* Casey W. Baker, *Tax Law and 100 Years of New York Giants Season Tickets: A Multifaceted Analysis of One Fan's Fortune*, 27 SPORTS L.J. 169, 187–88 (2020).

[32] Alcorn, *supra* note 30, at 683–91.

[33] JEROME R. HELLERSTEIN & WALTER HELLERSTEIN, STATE TAXATION, ¶ 6.03 (3rd ed. 2021).

[34] 430 U.S. 274, 331 (1977).

[35] *Id.*

[36] 504 U.S. 298, 313 (1992).

[37] *Id.* at 314–18.

[38] *Id.* at 302.

[39] *Id.*

[40] *Id.* at 312–13.

state entities with no in-state physical presence.[41] Instead, these statutes focused on "economic presence."[42] State courts mostly upheld these state income tax and BAT systems, and the Supreme Court did not grant certiorari to review any challenge thereto.[43] As a result, states could require extra-territorial entities to fulfill income tax and BAT obligations—even when the tax was measured by sales—but could not impose a sales and use tax collection obligation directly upon a seller unless a physical presence could be established.[44]

While this was one workaround for taxing states, states that wished to collect sales tax revenue from out-of-state sellers continued to test the limits of the Commerce Clause.[45] Despite the physical presence standard, many states adopted laws to reach more than just entities with a strict physical presence.[46] Three primary doctrines emerged: affiliate nexus, click-through nexus, and economic nexus.[47]

Affiliate nexus is a doctrine which asserts an out-of-state business has what is akin to physical presence if it has a sufficient connection with a physically present in-state affiliate.[48] States differed in their definitions of an affiliate; however, most states passed these types of laws to reach out-of-state vendors.[49] Click-through nexus is similar to affiliate nexus in that the state is asserting jurisdiction over an out-of-state seller based on their connection with an in-state referral service.[50] Both of these doctrines served to subject out-of-state sellers to in-state sales tax collection and remittance obligations.

However, the biggest boon to nexus was economic nexus.[51] Economic nexus gained constitutional legitimacy in 2018 with the Supreme Court's decision in *South Dakota v. Wayfair, Inc.*[52] In that case, South Dakota was particularly concerned about sales tax revenue because it

---

[41]A thorough discussion of each of these instances would be beyond the scope of this Article, but for a summary of some of the developments, see Hayes R. Holderness, *Taking Tax Due Process Seriously: The Give and Take of State Taxation*, 20 FLA. TAX REV. 371, 411–14 (2017); see also Nathan Townsend, Note, *Winding Back* Wayfair*: Retaining the Physical Presence Rule for State Income Taxation*, 72 VAND. L. REV. 1391, 1403–07 (2019).

[42]Holderness, *supra* note 41, at 412; Townsend, *supra* note 41, at 1418, n.166.

[43]Holderness, *supra* note 41, at 412–13; Townsend, *supra* note 41, at 1404.

[44]*See*, *e.g.*, *Crutchfield Corp. v. Testa*, 151 Ohio St.3d 278. Note that Congress has adopted a significant limitation on a State's authority to impose an income tax on an out-of-state seller whose only presence in the state is an employee or representative who solicits orders for tangible goods that are approved and shipped from outside the state. 15 U.S.C. § 381 (2020) (limiting states' abilities to impose net income tax upon out-of-state businesses soliciting orders for tangible personal property within the state).

[45]Jennifer Jensen & Kathryn Thurber, *The Evolution of Sales Tax Nexus Expansion Laws*, THE TAX ADVISOR (April 1, 2012), https://www.thetaxadviser.com/issues/2012/apr/jensen-april2012.html [https://perma.cc/97NP-92VD].

[46]Jensen & Thurber, *supra* note 45.

[47]*What is Nexus?*, SALES TAX INST., https://www.salestaxinstitute.com/sales_tax_faqs/what_is_nexus [https://perma.cc/RU7V-TYAS].

[48]*Id.*

[49]HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 19.03.

[50]*Id.*

[51]*Remote Sales Tax Collection*, NAT'L CONF. ST. LEG. (Mar. 13, 2020), https://www.ncsl.org/research/fiscal-policy/e-fairness-legislation-overview.aspx [https://perma.cc/DRB5-N5V8].

[52]*See Wayfair*, 138 S. Ct. at 2099–100.

has no personal income tax.[53] South Dakota passed a more aggressive nexus law requiring out-of-state sellers to collect and remit sales tax if they had so-called economic nexus.[54]

In *Wayfair*, the Supreme Court overruled *Quill*'s holding that a physical presence was necessary to establish sufficient nexus under the first prong of *Complete Auto*.[55] In doing so, the Court specifically highlighted the growing importance of digital commerce in the interstate economy compared to that existing when *Quill* was decided.[56] South Dakota established sufficient economic nexus with Wayfair because, under the South Dakota statutory scheme, Wayfair was required to remit sales tax only when it had either more than 200 individual transactions or over $100,000 of in-state sales volume.[57] According to the Court, the first prong of *Complete Auto* was satisfied because "[t]his quantity of business could not have occurred unless [Wayfair] availed itself of the substantial privilege of carrying on business in South Dakota."[58]

Most states that have spoken on the issue have adopted very similar statutory requirements to that of South Dakota, many with a sales threshold (measured in dollars) or an alternative numerical transaction limit, others with only a sales volume limit.[59] As of July 2021, only one state that has a statewide sales tax does not have an economic nexus requirement and that state, Missouri, adopted legislation that will create an economic nexus standard as of January 2023.[60]

B. *Prong Two: Fair Apportionment Among States*

The second prong, requiring the fair apportionment of tax revenue among states that may tax the assessed activity, was more thoroughly discussed by the Supreme Court in *Oklahoma Tax Commission v. Jefferson Lines*.[61] In that case, Oklahoma imposed a tax on the sales of "transportation for hire," which was paid by the buyers but collected and remitted to the state by sellers of transportation.[62] Jefferson Lines, Inc., a common carrier and bus operator, collected and remitted the tax for sales of intrastate travel but not for interstate travel.[63] All sales at issue in the

---

[53] *Id.* at 2088.
[54] *Id.* at 2088–89.
[55] *Id.* at 2099.
[56] *Id.* at 2097.
[57] *Id.* at 2099.
[58] *Id.*
[59] *Economic Nexus State Guide*, SALES TAX INST. (July 5, 2021), https://www.salestaxinstitute.com/resources/economic-nexus-state-guide [https://perma.cc/9QSU-4ZCQ]. Two states, Connecticut and New York, require sales/use tax collection by out-of-state sellers if they meet both a sales volume threshold *and* a numerical transactions threshold.
[60]59 *Id.* Delaware, Montana, New Hampshire, and Oregon have no state or local sales/use taxes. Alaska does not have a statewide sales tax but allows local governments to collect sales tax. Many Alaska municipalities have adopted a model ordinance of the Alaska Remote Sellers Sales Tax Commission that includes an economic nexus standard requiring out-of-state retailers to collect and remit local sales/use tax. *See Stronger Together*, ALASKA REMOTE SELLERS SALE TAX COMM'N, https://arsstc.org/for-local-governments/ [https://perma.cc/7KG7-RZNM].
[61] 514 U.S. 175 (1995) (superseded by statute on other grounds).
[62] *Id.* at 177–78.
[63] *Id.*

case took place in Oklahoma, where the seller maintained a physical presence, so the first *Complete Auto* prong was not at issue.[64]

Instead, the arguments addressed whether Oklahoma could collect sales tax for the entire purchase of services where only a portion of those services would be provided in the taxing state.[65] Because any state through which the bus traveled could, theoretically, establish sufficient physical presence and tax the transaction, the bus operator argued that Oklahoma could tax only a pro-rated portion of the sales proceeds based on the percentage of total travel occurring in Oklahoma.[66]

Under the second *Complete Auto* prong, a state tax must be apportioned among taxing states to ensure that each taxes "only its fair share of an interstate transaction."[67] Essentially, a state may not impose taxes in such a way that a taxpayer is potentially subject to paying tax on the same transactional value more than once.[68] However, a distinction exists between leveling successive taxes upon distinct events in the stream of commerce and leveling substantially similar taxes upon the same event.[69] Imposing a tax upon the buyer at the point of sale is distinct from imposing a tax on the seller on gross income derived from the sale; likewise, taxing the buyer on the purchase is distinct from taxing the property itself based upon its sale value.[70] Thus, apportionment between distinct taxes is not necessary—apportionment is required only to the extent substantially similar taxes are imposed upon the same taxable event that occurs in multiple states.[71]

In *Jefferson Lines*, the Court applied two tests to determine whether the apportionment requirement was violated.[72] First, the "internal consistency" test supposes that every state adopts the tax in question and then asks whether the taxpayer would potentially be subject to taxation in multiple states for the same transaction or event.[73] If so, the tax unconstitutionally burdens interstate commerce.

Second, the "external consistency" test looks at the economic justification for the state's claim on the taxed event.[74] If the state's tax is imposed on value or an event attributable to

---

[64]*Id.* at 184.

[65]*Id.* at 178.

[66]*Id.* at 178–79. According to the bus operator, Oklahoma's taxation of the sales also implicated the third and fourth prongs of *Complete Auto*. However, the Court determined that the operator's arguments on those points were just reformulations of its argument as to the second prong, which was the focus of most of the Court's analysis. *Id.*at 198.

[67]*Id.* at 184 (quoting Goldberg v. Sweet, 488 U.S. 252, 261 (1989)).

[68]*Id.* at 184–85.

[69]*Id.* at 187–88.

[70]*Id.* at 188.

[71]*Id.* at 189–90.The Court distinguished *Jefferson Lines* from an earlier case, Central Greyhound Lines, Inc. v. Mealey, 334 U.S. 653 (1948), in which the Court found that a state tax on gross receipts from interstate bus operations must be apportioned among the states in which the operations took place. According to the Court, the sales tax in *Jefferson Lines* was imposed on a buyer making a purchase in a single state, which differs from a tax on a seller operating in multiple states, even if the purchase is for services to be provided in multiple states. *Id.* at 190–91.

[72]*Id.* at 185.

[73]*Id.*

[74]*Id.*

economic activity outside of the state, the tax may be an overreach. In this analysis, the event taxed must be compared with the measure of the economic activity attributed to the state. Thus, a tax on business income based on proportionate in-state gross sales is constitutional,[75] as is a business franchise tax based on a formula derived from business payroll, property, and sales within the taxing state.[76] But a tax on business gross receipts is not constitutional if the receipts are not apportioned among the states in which the economic activity generating the receipts occurs.[77]

In *Jefferson Lines*, the Court found that the sales tax at issue did not violate the apportionment prong of *Complete Auto*. According to the Court, the Oklahoma tax was internally consistent because it only applied to sales in Oklahoma for travel originating there—if every other state adopted the same tax, the transaction would nevertheless only be taxed in the state in which the ticket was purchased.[78] Likewise, the tax was externally consistent, despite the total allocation to Oklahoma, because the elements of sale (*i.e.*, payment for and delivery of the ticket, along with commencement of the services) comprised an event entirely local to Oklahoma.[79] That is, even though a part of the services rendered was interstate, the transaction that was taxed—the sale—occurred in Oklahoma.[80]

In reaching its conclusion, the Court relied heavily on an earlier decision in *Goldberg v. Sweet*, which may be illustrative for cryptocurrency-involved transactions because of its implications for interstate wire transmissions.[81] *Goldberg* involved an excise tax imposed by Illinois on telephone calls originating or received within the state and billed to an Illinois service address.[82] The taxing statute offered taxpayers an offsetting credit to the extent the taxpayer paid a tax in another state on the same call that triggered the Illinois tax.[83]

As to the second *Complete Auto* prong, the Court found the tax fairly apportioned under both the internal consistency and external consistency tests.[84] However, two key considerations were noted. First, the credit provision within the tax minimized the risk of multiple taxation.[85] Second, the Court recognized that a strict apportionment formula would not be administratively or technologically workable when the transaction involves intangible electronic impulses.[86] With respect to this second consideration, the Court found it significant "that Illinois' method of taxation is a realistic legislative solution to the technology of the present-day telecommunications industry."[87] Thus, the Supreme Court appears willing to offer taxing states

---

[75]*Id.* at 186 (citing Moorman Mfg. Co. v. Blair, 437 U.S. 267 (1978)).

[76]*Id.* (citing Container Corp. of America v. Franchise Tax Bd., 463 U.S. 159 (1983)).

[77]*Id.* (citing *Central Greyhound Lines*, 334 U.S. at 663).

[78]*Id.* at 185.

[79]*Id.* at 190–91.

[80]*Id.*

[81]*Goldberg*, 488 U.S. at 264 ("These cases, by contrast, involve the more intangible movement of electronic impulses through computerized networks."). In addition, *Goldberg* offers a more detailed analysis of the nondiscrimination and reasonable relation prongs. See *infra* text accompanying notes 88–97. *See also* Shane Padgett Morris, *Interstate Commerce and the Future of State Sales and Use Taxes*, 54 ALA. L. REV. 1393, 1405–10 (2003).

[82]*Goldberg*, 488 U.S. at 255–56.

[83]*Id.* at 256.

[84]*Id.* at 261–65.

[85]*Id.* at 263–64.

[86]*Id.* at 264–65.

[87]*Id.* at 265.

some grace so long as the method of apportionment is reasonable in relation to technological limitations. This may be important to the cause of tracking and taxing cryptocurrency-involved transactions.

C. *Prong Three: Nondiscrimination Against Out-of-State Parties*

Goldberg also offers a good discussion of the third *Complete Auto* prong, which prohibits a state from imposing a tax on interstate commerce if the tax discriminates against out-of-state transaction participants.[88] The Court contrasted the Illinois tax with a Pennsylvania tax deemed unconstitutional in *American Trucking Associations v. Scheiner*.[89] *Scheiner* involved a Pennsylvania law which imposed lump-sum annual taxes on the operation of trucks and truck tractors operating on Pennsylvania highways. The Court found the tax discriminatory because in-state trucks traveled more miles than out-of-state trucks that might only occasionally operate in Pennsylvania.

The Court in *Goldberg* found that the Illinois tax was not comparable to the unconstitutional Pennsylvania tax for two reasons.[90] First, the Illinois tax was only due from persons with a service address within Illinois—accordingly, the full tax was apportioned to in-state persons, with no discrimination against out-of-state persons.[91] Second, the Court again cited the technical difficulty of tracking exactly how much of an interstate phone call might take place in Illinois; in contrast, drivers could more easily track their actual mileage in Pennsylvania to determine the discriminatory impact.[92]

D. *Prong Four: Fair Relation to Benefits of State Services*

Turning finally to the fourth *Complete Auto* prong, the Court in *Goldberg* considered whether the Illinois tax was fairly related to the taxpayer's presence in the taxing state.[93] This prong is meant to ensure that persons with remote relationships to the taxing state, who do not benefit from state-provided services, do not bear the brunt of the state's tax burden.[94] However, according to the Court, the tax imposed on an interstate transaction does not have to bear a direct relationship to the services provided by the state regarding the taxed activity.[95] Rather, so long as the tax relates to covering the costs of all governmental services from which the taxpayer may benefit directly or indirectly, the test is satisfied.[96] Because the taxpayers in *Goldberg* not only subscribed to telephone services but also received the benefit of general governmental services in Illinois, the Court found the tax valid under the fourth prong.[97]

In considering the constitutionality of a state tax imposed on a transaction completed using cryptocurrency, no reason exists to believe *Complete Auto* would not apply. However, in a

---

[88] *Id.*
[89] 483 U.S. 266 (1987).
[90] *Goldberg*, 488 U.S. at 266.
[91] *Id.*
[92] *Id.*
[93] *Id.* at 266–67.
[94] *Id.* at 267.
[95] *Id.*
[96] *Id.*
[97] *Id.*

world in which the use of cryptocurrency in commercial transactions is growing,[98] a state may not be able to establish economic nexus over a transaction—even under *Wayfair*'s relaxed standard—as the buyer's location may not be easily identifiable.[99] In such a case, only the seller's home state may have a substantial economic nexus to tax the transaction.[100] Thus, states may encourage the commercial use of cryptocurrency in order to broaden the number of entities and transactions to which a particular tax may apply. But as more and more commerce is hosted and conducted on "the cloud"—that is, on the internet itself rather than on servers with a physical location—these jurisdictional issues compound, as even the seller's physical location may not be clear.[101]

State tax systems must also consider the limitations presented by the apportionment, nondiscrimination, and reasonable relationship prongs. As cryptocurrency use in commercial transactions grows, states may experiment with different administrative, enforcement, and collection approaches. While *Goldberg* recognizes that technological advances may complicate strict compliance with *Complete Auto*'s requirements, the case also stands for the proposition that states are offered some grace for good faith efforts at compliance in the face of those technological barriers.[102] Nevertheless, it does appear that there must be some in-state connection to the transaction in order for tax collection and remittance obligations to be valid—presumably, either the buyer or seller must be in-state, and some portion of the transaction must be conducted in the state.[103]

E. *Other Constitutional Considerations*

Nexus is hardly the only constitutional limitation on state taxation. For example, under concepts of federalism, one must reconcile the state-level conceptualization of "property" against federal interests. Generally, "property" is determined with reference to state law.[104] However, in law, "property" is not just the thing itself, but rather the rights that one possesses to the thing.[105] Thus, although state law may determine the property rights of an owner, federal law may nevertheless impact those rights via regulation, taxation, or levy.[106]

---

[98]*See* Niccolo Conte, *Visualizing the Rise of Cryptocurrency Transactions*, VISUAL CAPITALIST (Sept. 22, 2021), https://www.visualcapitalist.com/visualizing-the-rise-of-cryptocurrency-transactions/ [https://perma.cc/7LLB-HD8B].

[99]*See* Alcorn, *supra* note 33, at 700.

[100]*See id.*

[101]*See* Sami Ahmed, *Cryptocurrency & Robots: How to Tax and Pay Tax on Them*, 69 S.C. L. REV. 697, 730 (2018).

[102]*See* Bradley W. Joondeph, *The Meaning of Fair Apportionment and the Prohibition on Extraterritorial State Taxation*, 71 FORDHAM L. REV. 149, 178 (2002); *see also* Charles E. McLure, Jr., *Taxation of Electronic Commerce: Economic Objectives, Technological Constraints, and Tax Laws*, 52 TAX L. REV. 269, 348 (1997) (suggesting that formulaic averages may be sufficient for apportionment).

[103]*See* Walter Hellerstein, *State Taxation of Electronic Commerce*, 52 TAX L. REV. 425, 437 (1997).

[104]*See*, *e.g.*, United States v. Craft, 535 U.S. 274, 278–79 (2002).

[105]*See* Dickman v. Commissioner, 465 U.S. 330, 336 (1984).

[106]Drye v. United States, 528 U.S. 49, 58–59 (1999); Morgan v. Commissioner, 309 U.S. 78, 80–81 (1940) ("State law creates legal interests and rights. The federal revenue acts designate what interests or rights, so created, shall be taxed. Our duty is to ascertain the meaning of the words used to specify the thing taxed. If it is found in a given case that an interest or right created by local law was the object intended to be taxed, the federal law must prevail no matter what name is given to the interest or right by state law."); *but*, *cf.*, David Gray Carlson, *The*

Furthermore, the Constitution gives Congress a monopoly on the regulation of currency.[107] Cryptocurrency, as a medium of exchange, could be viewed to violate that monopoly.[108] Significant academic discussion has analyzed cryptocurrencies as counterfeit currency on these grounds.[109] Yet, states retain the authority also to regulate counterfeit currency as fraudulent activity, rather than as a direct regulation of the currency itself.[110] A parallel could be drawn to interstate commerce; even in the face of comprehensive federal regulation, states nevertheless maintain authority to tax transactions within their respective jurisdictions.[111] State taxation of cryptocurrency-involved transactions as a part of commerce, rather than distinct from commerce, could be justified as furthering the states' interests in monitoring and regulating counterfeit or fraudulent activity.[112]

In summary, when considering state-level taxation of cryptocurrency activities, one must consider the distinction in taxation of transactions involving cryptocurrency versus taxes specifically targeting cryptocurrency. Cryptocurrency has certain features—such as enhanced anonymity, ease of transfer, and volatility—that impact its overall utility in the commercial world. These features can complicate the extension of traditional tax schemes to cryptocurrency-involved transactions, which may tempt policy makers toward taxing cryptocurrency regardless of its function in commerce.

Nevertheless, the current analysis focuses on the application of conventional state tax approaches—income taxation, sales and use taxation, and *ad valorem* property taxation—to persons using cryptocurrency for commercial transactions. The law regarding such approaches is fairly well developed throughout the United States. Analysis of existing law is cleaner than speculation as to the form that a theoretical state tax specifically targeting cryptocurrency (regardless of function) might take.

In the next two Parts, this Article reviews state tax systems and trends with regards to cryptocurrency. However, the conclusion of the Article will return to constitutional concerns in

---

Federal Law of Property: The Case of Inheritance Disclaimers and Tenancy by the Entireties, 75 WASH & LEE L. REV. 3 (2018) (arguing that this approach amounts to a substantive federal law of property rights based on natural law theory that preempts state law).

[107]U.S. CONST. art. I, § 8, cl. 5 ("The Congress shall have Power . . . To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures . . . ."). See also U.S. CONST. art. I, § 10, cl. 1 ("No State shall . . . coin Money; make any Thing but gold and silver Coin a Tender in Payment of Debts . . ."); 31 U.S.C. §§ 303, 304 (establishing the Bureau of Engraving and Printing and the United States Mint as bureaus in the Treasury Department under the direction of the Secretary of the Treasury). Thus, the coining and printing of legal tender is exclusively at the discretion of the federal government. In refining the position of the federal government, the Legal Tender Act of 1862 provided the substitution of paper for precious metals in legal tender. *See* Juilliard v. Greenman (Legal Tender Case), 110 U.S. 421, 426–27, 449–50 (1884) (affirming Congress's power to issue paper money as legal tender).

[108]*See* Ralph E. McKinney, Jr., Lawrence P. Shao, Dale H. Shao & Duane C. Rosenlieb, Jr. , *The Evolution of Financial Instruments and the Legal Protection Against Counterfeiting: A Look at Coin, Paper, and Virtual Currencies*, 2015 U. ILL. J.L. TECH. & POL'Y 273, 310–11 (2015); *see also* Eric Engle, *Is Bitcoin Rat Poison? Cryptocurrency, Crime, and Counterfeiting (CCC)*, 16 J. HIGH TECH. L. 340, 357 (2016).

[109]McKinney et al., *supra* note 108, at 303–04; Engle, *supra* note 108, at 367–68.

[110]Fox v. State of Ohio, 46 U.S. 410 (1847) (noting in its conclusion that States do have the power to enact laws associated with circulating counterfeit coins).

[111]*Wayfair*, 138 S. Ct. at 2084.

[112]*See* McKinney et al., *supra* note 108, at 306–10.

order to provide some considerations for policy makers as to the development of cryptocurrency transaction taxation systems.

IV. State Tax Systems Applied to Cryptocurrency-Involved Transactions

If a person holds and uses cryptocurrency as a replacement for legal tender in customary transactions, what are the possible state tax consequences under existing law? Although state tax systems can vary significantly, three primary tax systems predominate in states: state income taxation, state sales and use taxation, and state *ad valorem* property taxation.[113]

A. *Income Taxation*

The largest source of state funding is still the personal income tax, which in 2020 accounted for $423.1 billion, or 38% of state tax revenues.[114] As of 2021, 42 states plus the District of Columbia tax residents' personal incomes in some manner.[115] Of those 43 jurisdictions, 37 adopt federal definitional constructs in determining the income subject to taxation,[116] and six use their own varying definitions of income.[117]

Thus, for the majority of states, the taxability of cryptocurrency under personal income tax systems requires an analysis of the federal tax conceptualization of cryptocurrency. Currently, the leading authority on income taxation of cryptocurrency at the federal level is Notice 2014-21.[118]

---

[113] *See State and Local Taxes*, U.S. DEP'T OF THE TREAS. (Dec. 15, 2010, 10:24 AM) https://www.treasury.gov/resource-center/faqs/taxes/pages/state-local.aspx [https://perma.cc/6QLE-M538].

[114] HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 1.02.

[115] Katherine Loughead, *State Individual Income Tax Rates and Brackets for 2021*, TAX FOUND. (Feb. 2021), https://files.taxfoundation.org/20210722161949/State-Individual-Income-Tax-Rates-and-Brackets-for-2021..pdf [https://perma.cc/9DSV-PJ3Y].

[116] ARIZ. REV. STAT. ANN. § 43-1001 (2020); CAL REV. & TAX CODE §§ 17071–17073 (2020); COLO. REV. STAT. § 39-22-104 (2020); CONN. GEN. STAT. § 12-701 (2020); DEL. CODE ANN. tit. 30, § 1123 (2020); GA. CODE ANN. § 48-7-27 (2020); HAW. REV. STAT. § 235-2.4 (2020); IDAHO CODE §§ 63-3011 through 63-3011B (2020); 320 ILL. COMP. STAT. 25/3.07 (2020); IND. CODE § 6-3-1-3.5 (2020); IOWA CODE § 422.7 (2020); KAN. STAT. ANN. § 79-32,117 (2020); KY. REV. STAT. ANN. § 141.900 (LexisNexis 2020); LA. STAT. ANN. § 47:293 (2020); ME. STAT. tit. 36, § 5102 (2020); MD. CODE ANN., TAX-GEN. § 10-203 (LexisNexis 2020); MASS. GEN. LAWS ch. 62, § 2 (2020); MICH. COMP. LAWS § 206.30 (2020); MINN. STAT. § 290.01 (2020); MO. REV. STAT. § 143.121 (2020); MONT. CODE ANN. § 15-30-2110 (2020); NEB. REV. STAT. § 77-2714.01 (2020); N.M. STAT. ANN. § 7-2-2 (2020); NY TAX LAW § 612 (LexisNexis 2020); N.C. GEN. STAT. § 105-153.3 (2020); N.D. CENT. CODE, § 57-38-01 (2020); OHIO REV. CODE ANN. § 5747.01 (2020); OKLA. STAT. tit. 68, § 2358 (2020); OR. REV. STAT. § 316.022 (2020); 44 R.I. GEN. LAWS § 44-30-12 (2020); S.C. CODE ANN. § 12-6-40 (2020); UTAH CODE ANN. § 59-10-103 (2020); VT. STAT. ANN. tit. 32, § 5811 (2020); VA. CODE ANN. § 58.1-322 (2020); W. VA. CODE § 11-21-12 (2020); WIS. STAT. § 71.01 (2020); D.C. CODE § 47-1803.02 (2020).

[117] ALA. CODE §§ 40-18-14, 40-18-15.1 (2020) (defining "taxable income" to include, *inter alia*, "the income derived from any source whatever . . ."); ARK. CODE ANN. §§ 26-51-403, 26-51-404 (2020) (taxing, *inter alia*, "gains or profits and income derived from any source whatever"); MISS. CODE ANN. § 27-7-15 (2020) (gross income includes "income derived from any source whatever and in whatever form paid . . ."); N.H. REV. STAT. ANN. §§ 77:3 & 77:4 (2020) (applying only to interest and dividends); N.J. STAT. § 54A:5-1 (2020) (enumerating items included as New Jersey gross income); 72 PA. CONS. STAT. §§ 7302 & 7303 (2020) (imposing tax on enumerated classes of income).

[118] Notice 2014-21, 2014-1 C.B. 938.

In the notice, the Service limited its discussion to convertible virtual currency.[119] Convertible virtual currency has an equivalent value in legal tender or can substitute for legal tender.[120] In contrast, nonconvertible virtual currency has no value outside of its intended application.

The Service then proceeds to single out convertible virtual currencies and subjects them to taxation as property.[121] Like other property, the receipt or purchase of virtual currency has varying tax treatments depending on context.[122] In the majority of transactions, convertible virtual currencies are likely to be treated as capital assets.[123] Unlike ordinary income which is taxed when earned, a capital transaction is taxed upon the sale or exchange.[124] Pursuant to section 1001(c), all realized gains or losses must be recognized on the sale or exchange of property.[125] The gain or loss realized is calculated by taking the amount realized less the adjusted basis.[126] The amount realized is usually the fair market value of all the property, money, or combination thereof received in a transaction.[127] The adjusted basis is typically the cost basis or what was paid for the assets plus or minus adjustments.[128]

To illustrate the tax consequences, assume that a taxpayer takes $100 of cash and exchanges it into a convertible virtual currency such as Bitcoin. The taxpayer would have a cost basis of $100 in the Bitcoin, and her holding period begins. Unlike other assets, very few, if any, adjustments are required for virtual currency transactions.[129] Once the taxpayer either sells or exchanges the Bitcoin, she will trigger a capital gain or loss.[130] For example, if the taxpayer sold the Bitcoin for $150 of cash, she would realize and recognize $50 of gain.[131] If she held the Bitcoin for more than one year, it would be a long-term capital gain.[132] If the holding period were shorter than one year, it would be considered a short-term capital gain.[133] All of the above information is typically reported on the taxpayer's individual Form 1040 under Schedule D Capital Gains and losses.[134]

---

[119] *Id.* ("This notice addresses only the U.S. federal tax consequences of transactions in, or transactions that use, convertible virtual currency, and the term "virtual currency" as used in Section 4 refers only to convertible virtual currency. No inference should be drawn with respect to virtual currencies not described in this notice.").

[120] *Id.* ("Virtual currency that has an equivalent value in real currency, or that acts as a substitute for real currency, is referred to as 'convertible' virtual currency.").

[121] *Id.*, Q&A 1.

[122] *Id.*, Q&A 1 ("General tax principles applicable to property transactions apply to transactions using virtual currency.").

[123] *Id.*, Q&A 7, 2014-1 C.B. at 939.

[124] *Id.*, Q&A 6.

[125] References to a "section" are to a section of the Internal Revenue Code of 1986, as amended (Code), unless otherwise indicated.

[126] I.R.C. § 1001(a).

[127] I.R.C. § 1001(b).

[128] I.R.C. §§ 1011(a), 1016.

[129] I.R.C. § 1012. Presumably any transaction costs incurred in the acquisition of the Bitcoin would be added to its basis. Reg. § 1.263(a)-4(c), (e).

[130] I.R.C. § 1001(c).

[131] I.R.C. §§ 1001(c), 1011(a).

[132] I.R.C. §§ 1221, 1222; Notice 2014-21, Q&A-7, 2014-1 C.B. at 939.

[133] I.R.C. §§ 1221, 1222.

[134] INTERNAL REV. SERVICE, INSTRUCTIONS FOR SCHED. D: CAPITAL GAINS AND LOSSES (Nov. 3, 2021), https://www.irs.gov/pub/irs-pdf/i1040sd.pdf [https://perma.cc/PR97-W5W2].

The receipt of virtual currency can also trigger ordinary taxable income. For instance, if the person in question is a contractor and accepts payment in virtual currency, the contractor would recognize income at ordinary rates.[135] The contractor's basis would be the amount of income recognized.[136] When the virtual currency is sold or exchanged, the gain or loss would be the amount realized less the basis.[137] Thus, the contractor would have two taxable transactions: the first when the virtual currency is received as payment, and the second when the virtual currency is sold or exchanged. This tax treatment is similar to miners of the virtual currency.[138] Miners recognize ordinary income when they mine the virtual currency and presumably incur tax on the gain when the virtual currency is sold or exchanged.[139] Depending on the holding period, the seller would either have a short-term or long-term capital gain or loss.[140]

The Service approach complicates the use of cryptocurrency in commercial transactions.[141] Unlike the use of currency, the use of cryptocurrency to purchase a product or service will result in income tax consequences to the buyer because the transfer of the cryptocurrency is a disposition of a capital asset. When the buyer uses the cryptocurrency to make the purchase, the buyer must determine both the basis of the cryptocurrency exchanged and the fair market value of the goods or services acquired.[142]

Tracking the basis of fungible cryptocurrency units could prove especially problematic.[143] The necessary recordkeeping to assure tax compliance may be economically prohibitive.[144] Notice 2014-21 does not provide guidance as to how to determine the basis of any cryptocurrency units acquired, which could lead to gaming of the tax system by users.[145]

The 37 jurisdictions that have incorporated federal income tax definitions into their state income tax systems likewise incorporate these policy complications for cryptocurrency users. While states routinely adjust their income tax systems to include or exclude items of income in differentiation from the federal calculations, as of July 1, 2021, none of the 37 jurisdictions have done so for cryptocurrency. As a result, these states have effectively ceded to the federal government control over a significant portion of cryptocurrency tax policy.

---

[135]Notice 2014-21, Q&A-3, 2014-1 C.B. at 938.

[136]*Id.*, Q&A-4.

[137]*Id.*, Q&A-6, 2014-1 C.B. at 939.

[138]*Id.*,17 Q&A 8.

[139]*Id.*, Q&A-7, -8; *see also* INTERNAL REV. SERVICE, INSTRUCTIONS FOR FORM 8949: SALES AND DISPOSITIONS OF OTHER CAPITAL ASSETS (Jan. 26, 2021), https://www.irs.gov/pub/irs-prior/i8949--2020.pdf [https://perma.cc/SF7U-FSCX].

[140]I.R.C. §§ 1001, 1221, 1222; Notice 2014-21, Q&A-7, 2014-1 C.B. at 939.

[141]Baker & McKinney, *supra* note 12.

[142]Notice 2014-21, Q&A-6, 2014-1 C.B. at 939.

[143]McKinney et al., *supra* note 4, at 13; *see* Alex Ankier, *Debugging IRS Notice 2014-21: Creating a Viable Cryptocurrency Taxation Plan*, 85 BROOKLYN L. REV. 883, 898–99 (2020).

[144]Ankier, *supra* note 143, at 898.

[145]*Id.* at 898–99.

Likewise, among the remaining six states that impose some type of income tax, none expressly address cryptocurrency in their taxing statutes. Of the six, Alabama,[146] Arkansas,[147] and Mississippi[148] all have broad definitional constructs of income, paralleling the federal definition even if not expressly incorporating it.[149] Thus, tax authorities in these three states would likely consider the federal approach when considering whether to impose income tax on a disposition of cryptocurrency.

New Jersey and Pennsylvania specifically enumerate the categories of income subject to taxation and have no broad definitional construction.[150] Nevertheless, both impose income tax on net gains or income derived from the disposition of intangible property.[151] As of July 1, 2021, neither state, via statute or caselaw, has specifically determined that cryptocurrency is intangible property for the purposes of income taxation, but no reason exists to believe either would take the position that cryptocurrency is exempt. Both states, in other contexts, have given "property" a broad construction.[152] Thus, both states would likely consider the use of cryptocurrency in a commercial transaction an event triggering state income tax consequences.

The final state, New Hampshire, imposes income tax only on interest and dividends.[153] The New Hampshire Supreme Court has previously found that taxation of interest and dividends is distinct from the taxation of gains on the disposition of property.[154] Thus, while a person receiving cryptocurrency as payment on an investment may be liable for income tax in New Hampshire, a buyer using cryptocurrency to complete a commercial purchase—the focus of this analysis—would not.

Therefore, of the 43 jurisdictions that impose some form of income taxation, 42 will likely assess income tax on a person using cryptocurrency to acquire goods and services. And of those 42, under current law the vast majority likely will defer to the federal government's policy. A clear opportunity exists among the states for differentiation by those jurisdictions that wish to assert their policy making power in the encouragement or discouragement of the commercial use of cryptocurrency.

---

[146] ALA. CODE § 40-18-14 (2020) (defining "gross income" to include "gains, profits and income . . . growing out of ownership or use of or interest in such property . . . the income derived from any source whatever, including any income not exempted under this chapter and against which income there is no provision for a tax.").

[147] ARK. CODE ANN. § 26-51-404(a)(1) (2020) ("'Gross income' includes . . . [g]ains, profits, and income derived from dealings in property, whether real or personal, growing out of the ownership of, use of, or interest in the property . . . [and] [g]ains or profits and income derived from any source whatever.").

[148] MISS. CODE ANN. § 27-7-15 (2020) ("'[G]ross income' means and includes . . . gains, or profits, and income derived from any source whatever and in whatever form paid.").

[149] I.R.C. § 61 ("'[G]ross income' means all income from whatever source derived, including (but not limited to) . . . [g]ains derived from dealings in property . . . .").

[150] N.J. STAT. § 54A:5-1 (2020); 72 PA. CONS. STAT. § 7303 (2020).

[151] N.J. STAT. § 54A:5-1.c; 72 PA. CONS. STAT. § 7303(3).

[152] *See*, *e.g.*, *Shelton v. Restaurant.com, Inc.*, 214 N.J. 419, 431 (2010); 18 PA. CONS. STAT. § 3901 (2020); 72 PA. CONS. STAT. § 1301.1 (2020).

[153] N.H. REV. STAT. ANN. § 77:4 (2020).

[154] Opinion of Justices, 117 N.H. 512, 516 (1977).

B. *Sales and Use Tax*

States, especially those with either no income tax or a modest income tax, often rely on sales and use tax to fund government operations.[155] As of 2020, 46 different states plus the District of Columbia had sales tax collections at a state or local level.[156] Sales and use tax produced $346.8 billion in revenue, which accounted for 31% of all state tax collections.[157] The reliance on sales tax revenue coupled with the changing sales tax landscape has created a myriad of collection and enforcement issues.[158]

1. *Sales Tax & Use Tax: The Basics*

Generally, sales taxes are typically designed as a consumption tax levied on the end-user of a good or specifically enumerated service.[159] As a result, many states have various exemptions to reduce the impact of the regressive nature of the tax or exempt some purchases to reduce a pyramiding effect of taxing goods multiple times throughout its life cycle to end consumers.[160] The sales tax base is typically the purchase price of the good multiplied by a rate.[161] Rates vary by state and locality. Some states are as low as 2.9% and can range up to 7.25%; the addition of local rates in many states increases the combined state and local tax rate in some areas to over 10%.[162] Sales tax receipts are often allocated between the state and the locality that has jurisdiction.[163]

Use tax is the tax on consumption, use, or storage of a taxable good or service for which no sales tax has been paid.[164] Most state laws impose use tax in tandem with sales tax to capture either the sale or use of all goods in their jurisdiction (*i.e.*, where no sales tax has been paid, use tax is usually due).[165] Use tax rates generally mirror sales tax rates.

As a general principle, states with a sales and use tax regime wish to expand their base and increase compliance.[166] Doing so increases revenue without a correlating rise in the tax rate.

---

[155] HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 1.02.

[156] *Economic Nexus State Guide*, *supra* note 59.

[157] HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 1.02.

[158] *See* Eugene T. Maccarrone, *The Impact of the U.S. Supreme Court's Decision in South Dakota v. Wayfair: Compliance Challenge for Small and Medium-Sized Business*, CPA J. (Apr. 2021), https://www.cpajournal.com/2021/04/26/the-impact-of-the-u-s-supreme-courts-decision-in-south-dakota-v-wayfair/ [https://perma.cc/QA2B-A79D].

[159] HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 12.01.

[160] *Id.* at ¶ 12.04.

[161] *Id.* at ¶ 12.04.

[162] *See* Janelle Cammenga, *State and Local Tax Rates 2021*, TAX FOUND. (Jan. 6, 2021), https://taxfoundation.org/2021-sales-taxes/ [https://perma.cc/N36K-PPML].

[163] Cammenga, *supra* note 162.

[164] HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 12.01.

[165] *Id.*

[166] *See* Liz Armbruester, *The State of Sales Tax in 2021*, BLOOMBERG TAX, (Feb. 9, 2021, 4:00 AM), https://news.bloombergtax.com/daily-tax-report-state/the-state-of-sales-tax-in-2021 [https://perma.cc/7WUT-KRUC].

Raising the tax rates can be politically detrimental especially when it comes at the expense of everyday taxpayers.[167]

To expand the sales and use tax base, states must first obtain sufficient nexus with the seller and the transaction.[168] States, by and large, like to establish nexus with the seller of goods in order to force the seller to collect and remit sales tax from the consumer of the good.[169] If sellers fail to collect or do not have to collect sales tax, it then falls on the consumer to remit the compensating use tax to the taxing jurisdiction.[170] Because most people do not know or care about potential use tax liability, many do not pay their share of tax.[171] This problem tends to be more acute in areas with significant discrepancies in sales tax rates.[172] For instance, people who live close to the Vermont-New Hampshire border will frequently travel to New Hampshire for larger purchases to avoid sales tax.[173] Even within a state, some Chicago residents will travel to the suburbs to avoid the substantially higher local sales tax rate in the city.[174]

2. *Marketplace Facilitators*

As discussed above, the *Wayfair* decision enhanced states' abilities to reach many different out-of-state vendors and force them to collect and remit sales tax on purchases in their jurisdiction.[175] States no longer need to rely on consumers to report purchases from out-of-state vendors for use tax purposes. Instead, states can directly expand their sales tax revenues by targeting the out-of-state vendors with direct collection and remittance obligations.[176]

Given the expanded "economic nexus" authorized by *Wayfair*, most states utilize another tool called marketplace facilitator laws.[177] A marketplace facilitator is a third-party host that provides a platform from which vendors sell their products.[178] Instead of seeking to collect sales tax from each of the sellers, states with these laws shift the burden to collect and remit sales and use tax to the marketplace facilitators.[179] Marketplace facilitator laws allow further expansion of the sales tax collections because it is easier to establish an economic nexus over a large marketplace facilitator than multiple smaller sellers conducting business through the facilitator.

---

[167] *See* William G. Gale, *Don't Buy the Sales Tax*, BROOKINGS INST. (Mar. 1, 1998), https://www.brookings.edu/research/dont-buy-the-sales-tax/ [https://perma.cc/X283-SMUT].

[168] *See Complete Auto Transit*, 430 U.S. at 274.

[169] HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 12.01.

[170] *Id.*

[171] *See*, *e.g.*, Katie Jickling, *Are Vermonters Paying the State's Mandatory Use Tax? (Spoiler: Nope)*, SEVEN DAYS (April 4, 2018), https://www.sevendaysvt.com/vermont/are-vermonters-paying-the-states-mandatory-use-tax-spoiler-nope/Content?oid=14358136 [https://perma.cc/7C5V-YHET].

[172] *Id.*

[173] *Id.*

[174] *See* David Merriman, *The Micro-Geography of Tax Avoidance: Evidence from Littered Cigarette Packs in Chicago*, 2 AM. ECON. J.: ECON. POL'Y 61 (2010).

[175] *See supra* text accompanying notes 52–58.

[176] *See* Jickling, *supra* note 171.

[177] HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 19.08.

[178] *See id.*

[179] *Id.*

A business such as Amazon may not only sell goods and services directly but may also permit others to exchange goods and services through its website.[180] In the absence of a marketplace facilitator law, Amazon would collect and remit sales tax only on the items it sells.[181] When merely acting as a third-party matching buyer and seller, Amazon did not collect and remit sales tax for such transactions.[182] Once states shifted the burden to collect and remit sales tax to marketplace facilitators, Amazon was then required to collect and remit sales tax on not only the products it sells but also the sales with respect to which it acts as the facilitator connecting the buyer and seller of goods.[183]

After the first pioneering states were successful in forcing facilitators to collect and remit sales tax, many other states followed suit.[184] As of June 30, 2021, only five states have not passed marketplace facilitators laws,[185] with most laws passed in early 2019.[186] The National Conference of State Legislators has even issued model legislation.[187] The Multistate Tax Commission has created a "*Wayfair* Implementation and Marketplace Facilitator Work Group" that actively develops guidance.[188] The Working Group issued a final white paper on the topic on July 1, 2020.[189]

As part of these laws, a critical debate centers on the definition of a marketplace facilitator.[190] Some states have a narrower focus, and some are far more expansive.[191] Of the states with marketplace facilitator laws, at least 16 have added language about virtual currencies to their statutes by defining a marketplace facilitator to include an entity providing a virtual currency that buyers are allowed or required to use to purchase goods.[192]

While some commenters have reached the conclusion that such statutes include third-party-developed cryptocurrency such as Bitcoin, some uncertainty exists whether that was the intent.[193] The operative word in most of the statutes is "provides." Because the intent of these

---

[180] *Id.*

[181] *See State by State Guide to Marketplace Facilitator Laws*, AVALARA (June 30, 2021), https://www.avalara.com/us/en/learn/guides/state-by-state-guide-to-marketplace-facilitator-laws.html [https://perma.cc/865L-MJ8N].

[182] *Id.*

[183] *Id.*

[184] *Id.*

[185] *Id.*

[186] *Id.*

[187] Nat'l Conf. St. Leg., *Marketplace Facilitator Sales Tax Collection Model Legislation* (undated), https://www.ncsl.org/Portals/1/Documents/Taskforces/SALT_Model_Marketplace_Facilitator_Legislation.pdf?ver=2020-01-30-122035-320×tamp=1580412048938 [https://perma.cc/FZ8A-V45Y].

[188] *See Wayfair Implementation & Marketplace Facilitator Work Group*, MULTISTATE TAX COMM'N, https://www.mtc.gov/Uniformity/Project-Teams/Wayfair-Implementation-Informational-Project [https://perma.cc/26B6-D6EU].

[189] Multistate Tax Comm'n, *Wayfair Implementation & Marketplace Facilitator Work Group, July 2020 White Paper* (July 6, 2020), https://www.mtc.gov/getattachment/The-Commission/News/Wayfair-Implementation-%E2%80%93-Marketplace-Facilitator-C/White-Paper-7-6-20-w-app.pdf.aspx [https://perma.cc/F82S-NXHM].

[190] *See id.* at 12.

[191] *See id.* at 12–21.

[192] *See* Ryan Prete, *More States Add Cryptocurrency Twist to Marketplace Sales Tax Laws*, BLOOMBERG TAX (Aug. 8, 2019, 4:46 AM).

[193] *Id.*; *see also* Hannah Hope, *Leveling the Playing Field for Remote Sellers: Missouri's Response in a Post-*Wayfair *World*, 65 ST. LOUIS U.L.J. 401, 420 (2021).

laws may have been limited to reach only those facilitators who create their own virtual currencies,[194] the statutes may not apply to those who simply allow for payment in virtual currencies. Thus, the use of cryptocurrencies in marketplace facilitator transactions may not significantly impact the sales tax base or collection and remittance obligations as currently defined.

3. *Cryptocurrencies & Sales Taxes*

In order for a state to impose sales tax obligations, a nexus or some minimum connection must exist to allow the state to impose the tax.[195] As discussed above, this connection is usually established through either physical presence or economic nexus.[196] The next step is to define the sales tax base, which creates potential collection and enforcement issues when dealing with virtual currencies.[197]

Typically states define their sales tax base as the sales price or purchase price.[198] This concept can be clouded when discounts, rebates, vouchers, coupons, commissions, gratuities, and the like are involved.[199] Although considerable precedent exists with respect to mixed transactions in which taxable goods and nontaxable services are purchased together,[200] cryptocurrency transactions will likely pose similar enforcement difficulties.[201]

Furthermore, the Service's conceptualization of convertible virtual currencies as property could cause administrative confusion because the Service effectively taxes cryptocurrency transactions as barter transactions.[202] It may be advantageous for states to maintain consistency in the treatment of cryptocurrency dispositions for both income tax and sales tax purposes, but barter transactions have a long-storied history in taxation and have been used as a tax avoidance mechanism.[203]

Many states tax laws are sufficiently expansive to include barter transactions or have specific language that incorporates barter transactions into the sales and use tax scheme.[204] For those that do not have such laws, many of these transactions could escape taxation.[205] As virtual

---

[194]For example, Facebook is developing a cryptocurrency for use across its network. *See* Ryan Browne, *Facebook-Backed Diem Aims to Launch Digital Currency Pilot Later this Year,* CNBC (Apr. 21, 2021, 8:17 AM), https://www.cnbc.com/2021/04/20/facebook-backed-diem-aims-to-launch-digital-currency-pilot-in-2021.html [https://perma.cc/H3XM-JA5G].

[195]See *Wayfair*, 138 S. Ct. at 2080.

[196]*See supra* text accompanying notes 36–58.

[197]*See* Nicole Kaeding, *Sales Tax Base Broadening: Right-Sizing a State Sales Tax*, TAX FOUND. (Oct. 2017), https://files.taxfoundation.org/20171026101536/Tax-Foundation-FF563.pdf [https://perma.cc/6S5L-7XHC].

[198]HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 12.01.

[199]*Id.*

[200]*Id.* at ¶¶ 12.01, 12.08.

[201]*See* Greg Iacurci, *Cryptocurrency Poses a Significant Risk of Tax Evasion*, CNBC (May 31, 2021, 8:30 AM), https://www.cnbc.com/2021/05/31/cryptocurrency-poses-a-significant-risk-of-tax-evasion.html [https://perma.cc/S9R3-GBCC].

[202]*See* Notice 2014-21, 2014-1 C.B. 938.

[203]Cara R. Baros, *Barter, Bearer, and Bitcoin: The Likely Future of Stateless Virtual Money*, 23 U. MIAMI BUS. L. REV. 201, 202 (2014).

[204]HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 19.08.

[205]*Id.*

currency becomes more ubiquitous, existing sales tax laws should be expanded to capture these transactions.[206]

4. *State-by-State Comparison*

Several states have provided guidance about how to measure the sales tax base in a transaction and to ensure compliance with sales tax obligations for cryptocurrency-involved transactions.[207] The most notable approaches are those of New York and Kansas, which offer some fundamental differences. The other states generally follow the trends of one of those two states.[208]

New York's guidance is found in Technical Memorandum TSB-M-14(5)C, (7)I, (17)S, which was issued on December 5, 2014.[209] In New York, virtual currency is considered intangible property, which does not trigger sales tax obligations for the acquirer of the virtual asset.[210] However, if a virtual currency is exchanged for a taxable good or service, sales tax accrues.[211] The vendor of the taxable good or service must record in its books the value of the virtual currency received at the time of each transaction along with the amount of sales tax collected.[212] The guidance directs that values should be converted to U.S. dollars, but no instruction is provided as to the method of conversion.[213] The taxing authorities of Wisconsin,[214] New Jersey,[215] and Michigan[216] largely follow New York's reporting and collection scheme.

In contrast, Kansas guidance provides that "with respect to each retail sale, sales tax is measured by the fair retail market value of the property or service received in payment for the property or service sold, and will be calculated using the list price in U.S. dollars of a good or service, not the value of the virtual currency."[217] Kansas offers no guidance as to recordkeeping.[218]

At one time, California clearly followed the Kansas model. In 2014, the California State Board of Equalization stated in guidance that "if a retailer enters into a contract where the

---

[206]*Id.* at ¶ 12.04.

[207]*Id.* at ¶ 17.02.

[208]*Id.*

[209]TAXPAYER GUIDANCE DIV., N.Y. ST. DEP'T TAX'N & FIN., TSB-M-14(5)C, (7)I, (17)S, TECHNICAL MEMORANDUM, TAX DEPARTMENT POLICY ON TRANSACTIONS USING CONVERTIBLE VIRTUAL CURRENCY (Dec. 5, 2014), https://www.tax.ny.gov/pdf/memos/multitax/m14_5c_7i_17s.pdf [https://perma.cc/5YHM-JVE8].

[210]*Id.*

[211]*Id.*

[212]*Id.*

[213]*Id.*

[214]Virtual Currency, WIS. DEP'T OF REV. (Mar. 28, 2014), https://www.revenue.wi.gov/Pages/TaxPro/2014/news-2014-140328b.aspx [https://perma.cc/DV4E-HFQK].

[215]N.J. DIV. TAX'N, TAM—2015-1(R), CONVERTIBLE VIRTUAL CURRENCY (July 28, 2015), https://www.state.nj.us/treasury/taxation/pdf/pubs/tams/tam-2015-1.pdf [https://perma.cc/4GPP-R52K].

[216]TAX POLICY DIV., MICH. DEP'T. TREAS., TREASURY UPDATE (Nov. 2015), https://www.michigan.gov/documents/treasury/Tax-Policy-November2015-Newsletter_504036_7.pdf [https://perma.cc/3CCG-Y6KU].

[217]KAN. DEP'T REV., NOTICE 20-04, SALES TAX REQUIREMENTS CONCERNING DIGITAL CURRENCY UNDER THE RETAILERS' SALES AND COMPENSATING TAX ACTS (Nov. 2, 2020), https://www.ksrevenue.gov/taxnotices/notice20-04.pdf [https://perma.cc/2QRM-L43Q].

[218]*Id.*

consideration is virtual currency, the measure of the tax for the sale of the product is the amount allowed by the retailer in exchange for the virtual currency (generally, the retailer's advertised price of the product)."[219] However, under legislation adopted in 2017, all the statutory duties of the former Board of Equalization moved to the California Department of Tax and Fee Administration (CDTFA).[220]

As of December 2021, the CDTFA has not indicated whether the Board of Equalization's previous guidance is rescinded or remains in effect. California sales tax regulations expressly direct that a transaction in which virtual currency is given as consideration for tangible personal property is to be treated as a barter exchange.[221] Under California's barter regulations, a vendor receiving property as compensation is taxable upon his "gross receipts."[222] The definition of "gross receipts" incorporated into the barter regulations states that "'[g]ross receipts' mean the total amount of the sale or lease or rental price, as the case may be, of the retail sales of retailers, valued in money, whether received in money or otherwise," with "sale or lease or rental price" including "[a]ll receipts, cash, credits and property of any kind."[223]

These definitional constructs suggest that the vendor will be assessed sales tax on the value of the cryptocurrency received rather than advertised price, although the regulations and statutes do not completely settle the issue of valuation.[224] The authors are certain that users of cryptocurrency and tax professionals would appreciate clear guidance as was previously provided by the California taxing authorities.

Washington's guidance provides vendors accepting cryptocurrency an option: immediately convert the cryptocurrency to U.S. dollars to determine value or reference a "reliable cryptocurrency pricing index" to determine convertible value.[225] In either event, Washington requires vendors accepting cryptocurrency to maintain a dated record of the cryptocurrency transfer from the buyer to the vendor, a copy of the sales invoice issued from the vendor to the buyer, and a dated record of the cryptocurrency's value.[226] (Washington's guidance applies to both the sales tax collected by the seller and the amount of business and occupation (B&O) tax due on the seller's gross receipts from the transaction.) Missouri has not offered

---

[219]HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 17.02[1][a] (citing CAL. BD. EQUALIZATION, SPECIAL NOTICE L-382 (June 1, 2014)).

[220]CAL. GOV'T CODE § 15570.22 (2021).

[221]CAL. CODE REGS. tit. 18, § 1684.5 (2021), incorporating CAL. CODE REGS. tit. 18, § 1654 (2021).

[222]CAL. CODE REGS. tit. 18, § 1654(a).

[223]CAL. REV. & TAX CODE § 6012 (2021).

[224]The regulations do more clearly address valuation when the barter exchange involves the trade of commodities. *See* CAL. CODE REGS. tit. 18, § 1654(c). Certain federal regulatory agencies have determined that Bitcoin and other cryptocurrencies are commodities under the Commodity Exchange Act. *See In re* Coinflip, Inc., d/b/a Derivabit, CFTC No. 15-29 (Sept. 17, 2015), https://www.cftc.gov/sites/default/files/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoinfliprorder09172015.pdf [https://perma.cc/7S23-DBGN]. California has not done likewise as of December 2021.

[225]*Interim Statement Regarding Bitcoin: Payments, Mining, and Investment Income*, WASH. DEP'T REV. (Aug. 20, 2019), https://dor.wa.gov/get-form-or-publication/publications-subject/tax-topics/interim-statement-regarding-bitcoin-payments-mining-and-investment-income [https://perma.cc/QT2L-VM7D]. The interim guidance identifies WorldCoinIndex as an example of a reliable index. *Id.*

[226]*Id.*

detailed guidance but has specified that the acquisition of Bitcoins is not a taxable event because sales of intangible assets are not taxed in that state.[227]

From the above guidance, two major commonalities become apparent. First, all states that have spoken on virtual currency follow the federal treatment of virtual currency (*i.e.*, it is not a currency but rather intangible personal property). Second, each state that has spoken on the issue has concluded that the purchase of virtual currency should not be subject to tax because the purchaser is acquiring intangible property.

Thus, the major distinction is in the measurement of the tax base. The New York approach measures the base according to the value of the cryptocurrency received converted to U.S. dollars, whereas the Kansas approach bases the value of the transaction on the price that the vendor would generally charge for the product or service. Among the other states that have issued guidance on the matter, most follow the New York approach.

C. *Ad Valorem Personal Property Tax*

Property tax is a significant source of state revenue for all states, but property tax systems vary widely across the United States.[228] Several states have included cryptocurrency within the scope of "property" in other contexts, potentially subjecting the digital assets to *ad valorem* taxation.[229] But among the different state property tax systems, a key distinction is the type of property upon which the tax is assessed—real property, tangible personal property, or intangible personal property.[230] Because of its digital nature, cryptocurrency—to the extent considered property—is generally considered intangible property.[231]

In the United States, few states impose an *ad valorem* tax on intangible property.[232] Alabama imposes an *ad valorem* tax on all real and personal property[233] but then exempts certain types of intangible property such as governmental bonds, mortgage loans, and bank deposits from taxation.[234] Likewise, North Carolina imposes a broad tax on all types of intangible

---

[227] MO. DEP'T REV., LETTER RUL. NO. 7411, 2014 Mo. Tax Ltr. Rul. LEXIS 39 (Sept. 12, 2014).

[228] *See* Lincoln Inst. of Land Pol'y, *State-by-State Property Tax at a Glance* (2020), https://www.lincolninst.edu/sites/default/files/gwipp/upload/files/tax_digest/PTAAG_Full_2020.pdf [https://perma.cc/Q79X-WUE3].

[229] *See*, *e.g.*, 9 COLO. CODE REGS. 2503-5.3.520.72 (2021) (cryptocurrency included as a countable asset for Medicaid qualification); OR. ADMIN. R. 461-145-0583 (2021) (status of cryptocurrency as income for Medicaid qualification determined based on how the cryptocurrency is acquired); *In re Marriage of DeSouza*, 54 Cal. App. 5th 25 (2020) (cryptocurrency included as community property in marriage dissolution); NEV. R. CIV. P. 16.2(d)(3) (2020) (disclosures of cryptocurrency holdings mandatory in divorce, annulment, separation, and other domestic relations matters).

[230] MANDY RAFOOL, A GUIDE TO PROPERTY TAXES: AN OVERVIEW 2–3 (2002), https://www.leg.state.nv.us/73rd/otherDocuments/PTax/NCSL-gptoverview.pdf [https://perma.cc/AXS8-L347].

[231] *See* Lincoln Inst. of Land Pol'y, *supra* note 228, at 6 (defining "intangible personal property" as "[p]roperty that does not have a physical character or existence, such as money, mortgages, stocks, bonds, and other paper claims to real and tangible personal property.").

[232] JARED WALCZAK & JANELLE CAMMENGA, 2021 STATE BUSINESS TAX CLIMATE INDEX 44 (2020), https://files.taxfoundation.org/20201026112452/2021-State-Business-Tax-Climate-Index1.pdf [https://perma.cc/3QVU-EQ83].

[233] ALA. CODE § 40-8-1 (2020).

[234] ALA. CODE § 40-9-1.

personal property unless specifically excluded.[235] Mississippi,[236] South Dakota,[237] and Tennessee[238] follow the same general pattern of broadly imposed taxes on intangible property, with specific exemptions.

In contrast, other states impose *ad valorem* tax only on limited classes of intangible assets. Iowa does not impose a tax on any personal property[239] except upon certain "moneys and credits" held by credit unions.[240] Kansas has a broad exemption for "[m]oney, notes and other evidence of debt,"[241] with "money" defined as "gold and silver coin, United States treasury notes, and other forms of currency in common use."[242] Kentucky exempts all intangible property of individuals from taxation[243] except for money on deposit at financial institutions as of January 1 of each year.[244]

The taxability of cryptocurrency as property will depend on the conceptualization of cryptocurrency within more traditional intangible property labels.[245] Cryptocurrency is clearly intangible property, but is it "money"? "Currency"? Some as-of-yet unrecognized form of intangible property? As more states recognize cryptocurrency firms as financial institutions, might cryptocurrency qualify as bank deposits?

These questions just scratch the surface of the range of questions involved, some of which will likely require legislative action to answer. Thus far, that legislative action has been limited. Two states, Nevada[246] and Wyoming,[247] have explicitly listed cryptocurrency as tax-exempt assets, but neither imposes tax on intangible property. Likewise, a bill was introduced in

---

[235]N.C. GEN. STAT. § 105-276 (2020). "Intangible personal property" is defined under the taxing statutes as "[p]atents, copyrights, secret processes, formulae, good will, trademarks, trade brands, franchises, stocks, bonds, cash, bank deposits, notes, evidences of debt, leasehold interests in exempted real property, bills and accounts receivable, or other like property." N.C. GEN. STAT. § 105-273(8).

[236]MISS. CODE ANN. § 27-35-33 (2020); with exemptions specifically identified at MISS. CODE ANN. § 27-31-1, *et seq.*

[237]S.D. CODIFIED LAWS § 10-4-2.2 (2020).

[238]TENN. CODE ANN. § 67-5-101 (2020). Tennessee exempts "[t]he entire amount of money deposited in an individual's personal or family checking or savings account" from property taxation. TENN. CODE ANN. § 67-5-215 (2020).

[239]IOWA CODE § 427A.2 (2020).

[240]IOWA CODE § 533.329 (2020).

[241]KAN. STAT. ANN. § 79-3109c (2020).

[242]KAN. STAT. ANN § 79-3109d (2020).

[243]KY. REV. STAT. ANN. § 132.208 (2020).

[244]KY. REV. STAT. ANN. § 132.030 (2020).

[245]*See* McKinney et al., *supra* note 4, at 11–13. The utility of the cryptocurrency (*i.e.*, the use and intention behind the exchange of cryptocurrency) drives the determination of how to classify the transactions; and subsequently, the classification determines the regulating entity. For example, cryptocurrency issued as an investment vehicle would be subject to securities regulation, and cryptocurrency issued for payment processing could be considered banking activities. Likewise, this classification becomes critically important to identifying when a transaction using cryptocurrency may be recognized as a taxable event (e.g., as ordinary income, capital gain, business income, etc.) and the type of tax imposed.

[246]NEV. REV. STAT. § 361.228(a) (2020).

[247]WYO. STAT. ANN. § 39-11-105(b)(vi)(A) (2020).

the 2021 Alabama legislative session that would have added cryptocurrencies to the express list of exempted assets, but no action has been taken on the bill.[248]

V. Identified Trends

From the above discussion, some major themes emerge. As to state income taxation, the vast majority of states defer to federal policy, effectively forfeiting state policy making authority absent specific statutory adoption.[249] State legislatures have thus far not yet spoken as to whether federally recognized gain on cryptocurrency disposition is or is not recognized as income at the state level.[250] Likewise, among the states that impose *ad valorem* property tax on intangible personal property, none has legislatively addressed cryptocurrency within its property tax regime.[251] Without legislative clarity, conceptualizing cryptocurrency within or outside of the various categories of taxed or untaxed classes of property may prove difficult.

As to sales and use taxation, with an increasingly digital economy, the use of virtual currency is likely to become more common.[252] States that wish to tax virtual currency transactions need to ensure that their existing tax laws establish nexus and cover virtual currency transactions. States will have to grapple with increasingly complex nexus facts, such as transactions occurring entirely online in which the buyer, the seller, or both have unclear physical and even economic ties to a particular location. Most states probably have broad enough sales and use tax statutes to cover these transactions, but each state should consider its existing legislation in light of these considerations.[253]

In addition, taxpayer compliance is much easier to achieve if the existing laws are well defined and easy to follow.[254] States and businesses alike would benefit from greater guidance in order to identify the transactions that are taxable and the value involved, to properly report the transaction on a return, and to document the cryptocurrency user's financial position with regard to the asset.

Generally, most states that have spoken on this issue focus not on the virtual currency but the other side of the transaction.[255] That is, at least as to questions of taxability and sourcing, sales tax implications are based on the property purchased and not the form of payment.[256] This represents what we believe to be the best approach for states to adopt if they have not already. In the absence of specific legislation, this allows existing precedent to dictate what goods or services are taxable and allows the transaction to fit within the established framework.

---

[248]H.B. 372, 2021 Leg., Reg. Sess. (2021 Ala.).

[249]*See supra* Part IV.A.

[250]*See supra* Part IV.A.

[251]*See supra* Part IV.C.

[252]*See* Jim Barth, *Is Cryptocurrency Going Mainstream? Yes, but There's More to the Story*, AUBURN UNIV.: NEWSROOM (Jan. 22, 2021), https://harbert.auburn.edu/news/is-cryptocurrency-going-mainstream-yes-but-theres-more-to-the-story.html [https://perma.cc/NPV7-VMX6].

[253]HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 19.08.

[254]*Cf.* Plain Writing Act of 2010, Pub. L. No. 111-274, § 2, 124 Stat. 2861 (2010)("promoting clear Government communication that the public can understand and use").

[255]HELLERSTEIN & HELLERSTEIN, *supra* note 33, at ¶ 17.02[1][a].

[256]*Id.* at ¶ 19.08.

Determining the value of the transaction is likely to be the most nuanced area of the analysis.[257] As discussed previously, the issue of how to determine the value of the transaction has largely followed one of two models, exemplified by the Kansas method—basing taxed value on the value of the goods sold—and the New York method—basing taxed value on the value of the cryptocurrency exchanged.[258]

Each of the models has its benefits and drawbacks. The New York model offers some administrative consistency for a business accepting cryptocurrency, as a vendor or seller of taxable goods or services must, in computing gross income, determine the fair market value of the cryptocurrency as of the date received for federal tax purposes.[259] Thus, these vendors will have determined that value in terms of U.S. dollars anyway in order to determine their taxable income and their basis in the virtual currency.[260]

However, virtual currencies are notoriously volatile, with significant intraday price swings common.[261] Likewise, there may be significant differences between bid-price and ask-price for a given cryptocurrency on a given exchange, or across different exchanges.[262] Without specificity as to when value should be determined or what stated price or index should be referenced, some users of cryptocurrency will likely engage in gamesmanship to underreport income and sales tax base.

The Kansas model avoids this gamesmanship problem by focusing on the U.S. dollar value of the good or service exchanged for the virtual currency. The value of a good or service exchanged should be easier to prove because the vendor presumably will have a separate U.S. dollar price. Nevertheless, administrative difficulties could arise when variations occur between the value of the cryptocurrency (needed for income tax purposes) and the U.S. dollar value of the goods or services sold (needed for sales tax purposes).

VI. Considerations for Policy Makers

States, as laboratories of democracy,[263] should feel empowered to embrace cryptocurrency within their taxing systems. Importantly, however, state taxation of interstate transactions implicates Commerce Clause analysis. Because the Constitution vests Congress with the authority to regulate interstate commerce, congressional action will control.[264] Observers

[257] *Id.* at ¶ 17.02[1][a].

[258] *See supra* text accompanying notes 209–218.

[259] Notice 2014-21, Q&A-3, 2014-1 C.B. at 938.

[260] *Id.*; *see also* I.R.C. §§ 1001, 1011.

[261] *See* MacKenzie Sigalos, *Bitcoin's Wild Price Moves Stem from Its Design—You'll Need Strong Nerves to Trade It*, CNBC (May 20, 2021, 8:37 AM), https://www.cnbc.com/2021/05/19/why-is-bitcoin-so-volatile.html [https://perma.cc/4UPT-98WJ]; *see also* Josephine Shawver, *Commodity or Currency: Cryptocurrency Valuation in Bankruptcy and the Trustee's Recovery Powers*, 62 B.C. L. REV. 2013, 2030–33 (2021).

[262] *See* Kristin N. Johnson, *Decentralized Finance: Regulating Cryptocurrency Exchanges*, 62 WM. & MARY L. REV. 1911, 1955–56 (2021).

[263] New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932).

[264] *See Wayfair*, 138 S. Ct. at 2089.

have noted that, given the complexities of interstate taxation in modern digital markets, Congress is in the better position to develop a cohesive state taxation system for interstate commerce.[265]

In the absence of federal legislation, states should begin with *Complete Auto*'s four-prong test when reimagining tax systems for cryptocurrency-involved commercial transactions. Even pre-*Wayfair*, states could constitutionally tax in-state residents' income, sales, and property; post-*Wayfair*, states can more easily reach an out-of-state seller's economic activity with state residents in order to impose sales tax obligations. Nevertheless, some of the peculiarities of cryptocurrency-involved transactions may complicate analysis under *Complete Auto*.

For example, after *Wayfair*, physical presence is no longer necessary to establish nexus; a remote seller's substantial economic activity within the state is sufficient to establish economic nexus for tax collection and remittance purposes. However, this presupposes that the buyer's physical location is known to be in-state. Even after *Wayfair*, the state of Ohio, for instance, could not tax a transaction between an Indiana seller and a Pennsylvania buyer simply because the wires carrying the digital transaction pass through Ohio.[266]

A buyer's physical location may not always be known in a cryptocurrency transaction if the product or service sold is also delivered digitally.[267] At least one observer has suggested that when the buyer's location is unknown, only the seller's state should be permitted to collect sales tax on the transaction.[268] However, such an approach would effectively revert the tax system to a pre-*Wayfair* model based on the seller's physical presence. Also, it is possible that the seller's location may be unknown.

To avoid this, states wishing to tax a cryptocurrency-involved transaction based on the buyer's location must establish that the buyer is within the taxing state's jurisdiction. Verification that an in-state buyer did in fact own and use cryptocurrency to make the purchase, triggering the various taxes associated therewith, is an administrative problem.

For income and *ad valorem* property taxes, states can work with federal tax enforcement and forensic specialists to identify residents owning and using cryptocurrency and assess the taxpayers directly. Service enforcement agents claim to be able to identify supposedly anonymous users of cryptocurrency,[269] and federal law expressly authorizes the disclosures of

---

[265]*See*, *e.g.*, Alcorn, *supra* note 30, at 699; *see also Quill*, 504 U.S. at 318 ("This aspect of our decision is made easier by the fact that the underlying issue is not only one that Congress may be better qualified to resolve, but also one that Congress has the ultimate power to resolve. No matter how we evaluate the burdens that use taxes impose on interstate commerce, Congress remains free to disagree with our conclusions.").

[266]*See Goldberg*, 488 U.S. at 263 (1989) ("We doubt that States through which the telephone call's electronic signals merely pass have a sufficient nexus to tax that call.").

[267]For example, nonfungible tokens (NFTs) are unique digital assets built on blockchain concepts similar to that of cryptocurrencies. *See* Robyn Conti & John Schmidt, *What You Need to Know About Non-Fungible Tokens (NFTs)*, FORBES (May 14, 2021, 12:17 PM), https://www.forbes.com/advisor/ investing/nft-non-fungible-token/ [https://perma.cc/ARF5-DF4B]. Other examples of digitally-delivered products include software, video games, music files, graphics, digital art, and 3-D printing code.

[268]*See* Alcorn, *supra* note 30, at 700.

[269]*See* Baker & McKinney, *supra* note 12.

federal tax returns and return information to states for administrative purposes.[270] Interstate tax administration compacts among states could also help administration.[271]

However, sales taxation is more difficult to enforce as the collection and remittance obligations typically fall on sellers.[272] If the seller does not know a buyer's physical location because the item purchased is not physically delivered, the seller will not know to collect and remit sales taxes to the buyer's taxing state (or possibly even whether the seller has met economic activity thresholds for nexus with that state).[273] Thus, the taxing state will need to develop some mechanism for assuring that a remote seller can verify whether or not a buyer is located in the taxing state.

A taxing state may be tempted to assume that all sales by a seller with sufficient economic nexus are presumed to be in-state unless otherwise demonstrated, thereby capturing all sales not taxed by other states. However, such an approach would implicate the *Complete Auto* apportionment prong. Again, *Goldberg* is instructive. In *Goldberg*, the tax at issue was only levied on telephone calls charged to an in-state service address.[274] The Court concluded the tax was internally consistent under the apportionment prong only because of the in-state service address requirement, which established a physical in-state location associated with the telephone calls.[275] While *Goldberg* does provide some grace as to apportionment in light of technological limitations of administration,[276] an assumption that all sales are made into a particular state unless the seller can prove otherwise probably stretches that grace too far.

One possibility is mandatory registration of cryptocurrency wallets. The ownership and use of cryptocurrency involves two codes: the public key and the private key.[277] "The public key, a lengthy set of numbers and letters," can be thought of as an "address to which the cryptocurrency unit" will be transferred.[278] The private key, which is also a mathematical code, acts as a "signature" to validate the transfer.[279] Keys are associated with individual cryptocurrency wallets, which store the mathematical codes on behalf of the cryptocurrency users.[280] Wallets can be hardware-based or software-based, and software-based wallets can exist on the user's local computer, on virtual web platforms, or even on tangible media with a QR Code.[281]

[270] I.R.C. § 6103(d).

[271] *See*, *e.g.*, *Multistate Tax Compact*, MULTISTATE TAX COMM'N, https://www.mtc.gov/The-Commission/Multistate-Tax-Compact [https://perma.cc/G6GE-GZNW].

[272] *See* Hellerstein, *supra* note 103, at 492–94.

[273] *Id.* at 492–94.

[274] *Goldberg*, 488 U.S. at 256.

[275] *Id.* at 261.

[276] *Id.* at 264–65.

[277] McKinney et al., *supra* note 4, at 6.

[278] *Id.*

[279] *Id.*

[280] *See* Carol Goforth, *The Lawyer's Cryptionary: A Resource for Talking to Clients About Crypto-Transactions*, 41 CAMPBELL L. REV. 47, 112–14 (2019).

[281] Goforth, *supra* note 280, at 113–14.

Requiring residents to register their wallets may be justified under state money transmitter or anti-counterfeiting laws.[282] Most notably, New York has already required virtual wallet providers (among other cryptocurrency service providers) to register and obtain a state license.[283] This could give states the ability to connect specific transactions (via the public key and wallet) to individual cryptocurrency users to assess use tax on any uncollected sales tax. However, the registration of a digital wallet reduces the privacy of purchases since the public ledger can be viewed.[284]

Alternatively, states could attempt to shift the administrative burden of verifying buyer addresses to the out-of-state seller, as sellers are in a better position, compared to states, to collect the required information. Key information the collection of which could be mandated includes the buyer's city, state, and zip code.

However, enforcement of these requirements could be problematic. A state could not forbid out-of-state sellers from accepting cryptocurrency from in-state residents without implicating the *Complete Auto* nondiscrimination prong.[285] Furthermore, there is no guarantee that buyers would be honest in their address reporting, and the rise of virtual private networks complicates the tracking of internet protocol addresses.[286] In fact, the anonymity of cryptocurrency is among the primary draws for use.[287]

VI. Conclusion

In considering state taxation of cryptocurrency-involved commercial transactions, the most striking observation is how little states have addressed the emerging technology. The authors anticipate that this will change as state legislative efforts have accelerated in recent years despite the relative lack of statutory adoption. Practitioners should likewise be mindful of the evolving cryptocurrency regulatory landscape in advising clients as to potential tax liabilities from commercial use.

In considering state taxation of cryptocurrency-involved commercial transactions, the most striking observation is how little states have addressed the emerging technology. The authors anticipate that this will change as state legislative efforts have accelerated in recent years despite the relative lack of statutory adoption. Practitioners should likewise be mindful of the

---

[282] *See* McKinney et al., *supra* note 108.

[283] N.Y. COMP. CODES R. & REGS. tit. 23, § 200.1, *et seq.* (2021).

[284] *See*, *e.g.*, BLOCKEXPLORER.COM, https://www.blockexplorer.com/ (last accessed Oct. 7, 2021); *see also* Briseida Sofia Jiménez-Gómez, *Risks of Blockchain for Data Protection: A European Approach*, 36 SANTA CLARA HIGH TECH. L.J. 281, 288 (2020).

[285] *See* Alcorn, *supra* note 30, at 698.

[286] *See* Engle, *supra* note 108, at 341–45; *see also* Samuel E. Mogensen, *Don't Chase Your Losses: Online Gambling Regulation and Solutions in Minnesota*, 44 MITCHELL HAMLINE L. REV. 1105, 1125 (2018).

[287] *See* FIN. ACTION TASK FORCE, VIRTUAL CURRENCIES: KEY DEFINITIONS AND POTENTIAL AML/CFT RISKS 9–10 (June 2014), https://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf [https://perma.cc/H6TW-VUSD]; *see also* Engle, *supra* note 108, at 341–45.

evolving cryptocurrency regulatory landscape in advising clients as to potential tax liabilities from commercial use.[288]

As cryptocurrencies become more widely used in commerce, state legislatures should consider the unique tax aspects of the digital assets. Developing a method to establish constitutional nexus is a key consideration given the anonymity associated with cryptocurrency. Partnerships among the states and with federal tax enforcement agencies will help with the identification of users of cryptocurrency. In the absence of more explicit statutory direction, cryptocurrencies will persist as the metaphorical square peg jammed into the round hole of state taxation.

[288] *See,* Executive Order on Ensuring Responsible Development of Digital Assets, Exec. Order No. 14,067, 87 Fed. Reg. 14,143 (Mar. 9, 2022), outlining federal regulatory priorities with regard to developing a comprehensive and cohesive regulatory approach to cryptocurrency. Although this Executive Order does not have an immediate impact, subsequent actions resulting from this order will impact future financial transactions and economies. In examining this framework, we speculate that the U.S. Treasury will become a greater influence on regulating these transactions potentially through current regulations combined with new powers.

Originally published in
11 Appalachian Res. in Bus. Symp. 107 (2024)

A Good FIT for Crypto?

Casey Baker
Department of Accounting and Legal Environment
Brad D. Smith Schools of Business
Lewis College of Business
Marshall University
One John Marshall Dive
Huntington, WV 25755
bakerc@marshall.edu
304.696.3058 (Contact Author)

Ralph E. McKinney, Jr.
Department Management and Health Care Administration
Brad D. Smith Schools of Business
Lewis College of Business
Marshall University
One John Marshall Dive
Huntington, WV 25755
mckinney23@marshall.edu
304.539.3162

Key words (3-5):
Cryptocurrency, regulation, monetary policy, blockchain

A Good Fit for Crypto?

Introduction

One of the major obstacles to further advances in commercial cryptocurrency adoption is the unsettled and piecemeal regulatory scheme within the United States. Federal regulators have failed to coalesce on consistent regulatory treatment, with U.S. courts instead filling much of that role (Hamilton, 2023). The purpose of this paper is to consider is to examine how the proposed *Financial Innovation and Technology for the 21st Century Act* ("FIT 21") applies to cryptocurrency.

Literature Overview

Similar to legal tenders, a cryptocurrency may function as a payment system, an investment, or as a store of value (McKinney *et al*., 2015). It can be exchanged between individuals, businesses, or other entities. Moreover, it does not require a central banking system and it is often issued outside of governments. It is these characteristics of issuance, function, and utility that makes users interested and governments concerned (Baker *et al*., 2020).

Hence, it is important to recognize that cryptocurrency represents two distinct sets of policy concerns. The "crypto" element of cryptocurrency refers to cryptographic techniques used to transfer the digital record associated with the asset. This allows for a decentralized ownership record—which is embedded within the code of each digital token or unit as the "blockchain"—(*see* Ruiz *et al*., 2023) and promotes anonymity of use, raising concerns that cryptocurrency facilitates criminal activity. The "currency" element raises issues of monetary policy, tax, and other matters within various subareas of commercial regulation.

The decentralized nature and anonymity inherent in most cryptocurrencies make private regulation difficult. To the extent that federal regulation exists, cryptocurrency faces what often looks like definitional turf wars between various regulatory bodies with different definitional constructions of the digital asset. Key crypto participants may face regulation by the Financial Crimes Enforcement Network, Federal Reserve, Office of the Comptroller of the Currency, Securities and Exchange Commission, or other regulatory agencies, based on different definitional formulations developed by each agency internally (McKinney *et al*., 2020, p. 1).

Congress has not offered much clarity for stakeholders. Lawmakers supporting cryptocurrency may find themselves fighting multi-front battles with others vested in these areas of regulation. Proposed legislation highlights the difficulties with defining the asset in a way that enables regulatory capture of the "bad" without overburdening the "good" of crypto-assets. In particular, non-currency digital assets with blockchain features may be subject to regulation not truly being cryptocurrency.

For example, the proposed Financial Innovation and Technology for the 21st Century Act (118th U.S. Congress, 2023) ("FIT 21") would split regulatory authority over cryptocurrency between the Commodity Futures Trading Commission ("CFTC") and the Securities and Exchange Commission ("SEC"). The CFTC would have jurisdiction over any digital asset with a functional and

decentralized blockchain. The SEC would have regulation over digital assets with a functional but not decentralized blockchain. Assets without a decentralized blockchain would be beyond the jurisdiction of either regulatory body. The CFTC and SEC would be required to jointly issue rules to reduce the likelihood of duplicative and conflicting regulations.

While FIT 21 represents a positive legislative declaration of regulatory intent, it is worth considering whether unintended non-currency digital assets could potentially fall within its scope.

The most important definitional elements for currency are (1) service as a medium of exchange in transactions and (2) a representation or store of value. U.S. regulators have differing views as to whether cryptocurrencies fulfill those roles (McKinney *et al*., 2020, p. 1). However, use of cryptocurrencies is sufficiently widespread that specific federal and state tax rules have developed for their use in commercial transactions (Baker *et al*., 2022, p. 601). While regulators may disagree, the market sees cryptocurrencies as currencies.

One particular type of cryptocurrency is known as a stablecoin. A stablecoin is a cryptocurrency whose value is tied to another asset, like conventional currency or commodities (Hertig, 2023). The benefit is that the asset reserve stabilizes the price of the stablecoin somewhat, compared to the volatile swings that can occur in non-pegged cryptocurrencies.

Under FIT 21, a stablecoin would escape much of the regulation imposed by the bill if it qualifies as a *"...permitted payment stablecoin"* (118th U.S. Congress, §401). A permitted payment stablecoin must be subject to regulation by another federal or state regulator, must not be a national currency, and must not be a security issued by a registered investment company (118th U.S. Congress, §101). It is unclear what other federal or state agencies may have express regulatory authority over the stablecoins, but several may assert some authority (McKinney *et al*., 2020, p. 1).

However, not all crypto-assets are cryptocurrencies. For example, some assets, such as non-fungible tokens ("NFTs"), serve a role similar to title documents for digital assets. The sale or exchange of such a digital asset requires transfer of the associated NFT, which commonly uses the same blockchain technology as true cryptocurrency (Cheun, 2024).

In the case of NFTs, the drafters of FIT 21 appear to have met this need. Under the bill, regulated digital assets *"…any fungible digital representation of value that can be exclusively possessed and transferred, person to person, without necessary reliance on an intermediary, and is recorded on a cryptographically secured public distributed ledger."* (118th U.S. Congress, §101). Because only fungible tokens are subject to the bill—and NFTs are inherently non-fungible—these digital assets could continue to be traded without regulation from the CFTC or SEC.

But other non-currency digital assets could unintentionally fall within such a definition. For example, it is not difficult to conceive of a digital debt instrument, such as a certificate of deposit or savings bond, with a sum-certain value upon a definite maturity date (Cotton, 2019). Exchanges could facilitate trade of these instruments with blockchain features to assure title.

Likewise, consider a digital coupon or novelty scrip-like private currency issued by a retailer to promote consumer purchases. The Walt Disney Company once issued novelty currency called "Disney Dollars" that could be used at various Disney-associated stores and exchanged for U.S.

currency dollar-for-dollar (DisneyDollar.net, 2023). A digital version of this concept, traded and maintained on the blockchain, would operate essentially as a cryptocurrency within the retailer's operations but with limited utility beyond.

Even general admission event tickets—for concerts, sports, or similar events—could feasibly fall within the concept of "digital asset" as defined by FIT 21 if digitally-issued and tradable on various ticket exchanges or even among individuals in some instances.

However, none of these "digital assets" are of the type typically regulated by the CFTC. Thus, lawmakers should recognize that blockchain is a tool associated with cryptocurrency but is not itself cryptocurrency. Failure to do so could stymie innovative development and implementation of blockchain technologies across other areas of the economy.

Methodology

This paper considers the 118th U.S. Congresses FIT 21 to address the concerns of cryptocurrency through public policy. Using key literature on cryptocurrency, this paper takes a qualitative approach to evaluate the major implications of this bill.

Results and Implications

The paper notes that there will be significant cooperation among Federal agencies to ensure additional protections for cryptocurrency stakeholders. However, there are some gaps within the bill that may need addressed. Specifically, issues associated with hybrid cryptocurrencies may potentially exempt that instrument from regulation. For example, the stablecoin where a percentage of its value is linked to a national currency and the remaining value is linked to commodities or other concepts.

Another issue is the investments that may be made on behalf of individuals may include some crypto-assets. Should additional disclosures be made to individuals concerning brokerage investments? That is, should individuals be allowed to opt-out or opt-in? Thus, disclosures may need to go beyond the risk associated with investment, but also include additional details on the types of crypto-assets invested.

In essence, the FIT 21 bill can significantly modify Federal financial policies and significantly influence laws and policies of the states and territories. But, does this do enough?

Conclusion

This paper illustrates that significant attention has been given to cryptocurrencies by U.S. policymakers. However, there are concerns associated with unintended consequences of regulations may be extended to traditional venues that have electronic tickets. Moreover, using a hybrid stablecoin may exempt the cryptocurrency from regulation.

References

118th U.S. Congress. (2023 July 20). *Financial Innovation and Technology for the 21st Century Act*, H.R.4763 ("FIT 21").

Baker C.W., & Norton, T., & McKinney, R.E. Jr. (2022). U.S. State taxation of cryptocurrency-involved transactions: Trends and Considerations for Policy Makers. *American Bar Association The Tax Lawyer, 75*(3), 601-636.

Chuen, D.L.K. (Ed.). (2024). The Handbook of Digital Currency: Bitcoin, Innovation, Financial Instruments, and Big Data. Elsevier: Chennai, India. ISBN: 9780128021170.

Cotton, T. (2019 March 7). Decentralizing a certificate of deposit. Replicating banking functions on the ethereum blockchain. *Medium*. Accessed on 2024 January 27 from https://blog.cotten.io/decentralizing-a-certificate-of-deposit-45f62b65edd3

DisneyDollars.net. (2023). What are Disney Dollars? Accessed on 2023 January 27 from https://www.disneydollars.net/what_are_they.htm

Hamilton, J. (2023 December 18). Crypto won't get long-awaited U.S. rules in 2024, but the courts may steer its future. *CoinDesk*. Accessed on 2024 January 27 from https://www.coindesk.com/consensus-magazine/2023/12/18/crypto-wont-get-long-awaited-us-rules-in-2024-but-the-courts-may-steer-its-future/

Hertig, A. (2023 August 8). What is a Stablecoin? *CoinDesk*. Accessed on 2024 January 27 from https://www.coindesk.com/learn/what-is-a-stablecoin/

McKinney, R.E., Jr., Baker, C.W., Shao, L.P., & Forrest, J.Y.L. (2020). Cryptocurrency: Utility determines conceptual classification despite regulatory uncertainty. *San Francisco Intellectual Property and Technology Journal, 25*(1), 1-18.

McKinney, R.E., Jr., Shao, L.P., Shao, D.H., & Rosenlieb, D.C., Jr. (2015). The evolution of financial instruments and the legal protection against counterfeiting: A look at coin, paper, and virtual currencies. *Journal of Law, Technology & Policy, 2015*(2), 273-313

Ruiz, G.E.S, Forrest, JY, Han, X., McKinney Jr., R.E., & Chatterjee, A. (2023). The Blockchain Technology and Digital Marketing. *Journal of Business, Economics and Technology, 26*(1), 75-83.