Clean Slate: Why Pennsylvania Should Enact Favorable Virtual Currency and Blockchain Law

Jake DeLeers*

ABSTRACT

The regulation of virtual currency and blockchain technology is an increasingly important yet under-developed area of law. As interest in virtual currency and blockchain continues to increase, so too does the need for regulatory and legislative guidance. Currently, the regulatory landscape in the United States offers no uniform guidance, leaving a cluster of disparate treatment across state borders. In response to the lack of federal guidance, states have taken differing approaches when regulating virtual currency and blockchain technologies. Two of these states are Wyoming and New York.

Wyoming recognized the need for favorable laws for virtual currency and blockchain businesses and enacted several pieces of legislation with the goal of bringing more capital, jobs, and revenue into its economy. In contrast to Wyoming, New York created the BitLicense, which led to many financial technology companies fleeing the state. One attempt to create uniform guidance was made with the creation of the Uniform Regulation of Virtual Currency Businesses Act; however, since its creation in 2017, only one state has enacted the Act. States such as Pennsylvania should learn from Wyoming and New York and adopt favorable virtual currency and blockchain law similar to Wyoming.

This Comment analyzes the benefits and criticisms of Wyoming's, New York's, and the Uniform Law Commission's regulation of virtual currency and blockchain. Pennsylvania has been relatively silent on this topic; therefore, this Comment suggests that Pennsylvania lawmakers recognize direct property rights for virtual currency owners, allow for the creation of a financial technology sandbox, and ensure that individuals and businesses have a safe and legal way to house their digital assets.

^{*} J.D. Candidate, Pennsylvania State University, Penn State Law, 2022.

Table of Contents

I.	INTRO	DUCTION	548
П.	BACKGROUND		550
	A.	Understanding Digital Assets and Blockchain Technology	550
	В.	Current Federal Regulation of Virtual Currency and	
		Blockchain in the United States	552
		1. Securities and Exchange Commission	553
		2. Financial Crimes Enforcement Network	554
		3. Commodities and Futures Trading Commission	556
		4. Internal Revenue Service	557
	<i>C</i> .	Efforts to Unify Virtual Currency Regulations	558
	D.	How State Legislatures Currently Regulate Virtual Currency	
		and Blockchain Technology	559
		1. Wyoming's Approach	560
		a. Wyoming Statute Sections 34-29-101 through -103	561
		b. Creation of the Financial Technology Sandbox	561
		c. Wyoming's Special Purpose Depository Institutions	562
		d. Wyoming's Money Transmitter Law	
		2. New York Approach	564
		3. Pennsylvania	565
	E.	Growing Acceptance of Virtual Currency and Blockchain	
		Technology	
	ANAL	YSIS	567
	A.	Pennsylvania Should Adopt a Regulatory Framework Similar	
		to Wyoming	
		1. Money Transmitter Laws	
		2. Digital Assets as Property	
		3. Financial Technology Sandbox	
		4. Special Purpose Depository Institutions	571
	В.	Pennsylvania Should Avoid Adopting Law Similar to New	
		York and the URVCBA	
		Rejecting BitLicense	
		2. Rejecting the URVCBA	573
IV.	Conci	LUSION	574

I. INTRODUCTION

Since Bitcoin's development in 2009, virtual currency and blockchain technologies have captured the attention of the American public. The popularity of many different types of virtual currencies, such

^{1.} See Bernard Marr, A Short History of Bitcoin and Crypto Currency Everyone Should Read, Forbes (Dec. 6, 2017, 12:28 AM), https://bit.ly/3kd2lXg; see also Number of Daily Transactions in Bitcoin, Ethereum and 11 other Cryptocurrencies from January 2017 to September 13, 2021, STATISTA, https://bit.ly/37vqKSH (last visited Feb. 19, 2021)

as Bitcoin, Dogecoin, and Ethereum has led to the growth of a virtual currency business industry designed to facilitate virtual currency transactions among users.² Although virtual currency business operations vary, these third-party service providers can permit: (1) the exchange of virtual currency into traditional currency; (2) the purchase and sale of assorted virtual currencies; (3) the storage of virtual currency; (4) virtual currency transfers; and (5) growing acceptance of virtual currency payments.³ The potential uses of virtual currency, however, are not limited to only serving as a traditional currency alternative.⁴ With changing values over time, many view virtual currency as a security that is useful for speculative investments.⁵

To date, little consensus exists regarding how to properly regulate virtual currency and blockchain.⁶ Several regulatory bodies have begun to issue guidance, but much of this guidance has been focused on incorporating virtual currency treatment under existing law.⁷ States have also begun to regulate virtual currency and blockchain technologies.⁸ Thus far, state-enacted regulations have been inconsistent from jurisdiction to jurisdiction.⁹

This Comment begins by examining what virtual currency and blockchain technologies are and their many different uses. ¹⁰ Part II provides an overview of relevant federal regulations and examines the inconsistent legal treatment of virtual currency. Then, this Comment details several differing state approaches to the regulation of virtual

(showing the millions of daily transactions between the users of different virtual currencies).

^{2.} See generally Cryptocurrency Market Size, Share and COVID-19 Impact Industry Analysis, By Component (Hardware, Software), By Type (Bitcoin, Ether, Litecoin, Ripple, Ether Classic, Others), By End-use (Trading, E-commerce and Retail, Peer to Peer Payment, and Remittance), and Regional Forecast, 2021-2028, FORTUNE BUS. INSIGHTS, https://bit.ly/3pFHXPx (last visited Feb. 20, 2021) (analyzing the current state of the virtual currency industry).

^{3.} See, e.g., Yuliya Chernova, New Use for Bitcoin: Compensation for Open-Source Software Development, The Wall St. J. (Jan. 22, 2014, 4:39 PM), https://on.wsj.com/3qHoGyu; see also infra Section II.E.

^{4.} See Andrea Kramer, Can a Virtual Currency Position Be Treated as a Security for Tax Purposes?, JDSUPRA (June 11, 2020), https://bit.ly/2OQh1jc; see also infra Section II.B.1.

^{5.} See infra Section II.B.1; see also Speculation, INVESTOPEDIA, https://bit.ly/3k9XC8w (last visited Feb. 21, 2021) (defining speculation as the "act of conducting a financial transaction that has substantial risk of losing value but also holds the expectation of a significant gain or other major value").

^{6.} See infra Part II.

^{7.} See infra Sections II.B.1, II.B.2, II.B.3, II.B.4.

^{8.} See infra Sections II.D.1, II.D.2, II.D.3.

^{9.} See infra Sections II.D.1, II.D.2, II.D.3.

^{10.} See infra Section II.A.

currency and blockchain.¹¹ Pennsylvania has been relatively silent with respect to this topic; therefore, this Comment suggests Pennsylvania lawmakers to enact favorable virtual currency and blockchain laws as a way to promote innovation and economic growth in the state economy.¹²

II. BACKGROUND

Before analyzing the virtual currency laws best suited for Pennsylvania, an understanding of blockchain and virtual currency basics is necessary. Once virtual currency and blockchain have been explained, studying the history of federal virtual currency laws will allow for an understanding of why virtual currency needs to be regulated and to what extent. Lastly, reviewing other states virtual currency and blockchain regulation schemes will provide a framework from which Pennsylvania regulations can be formed.

A. Understanding Digital Assets and Blockchain Technology

Generally, virtual currency can be understood as a "medium of exchange" that is electronically created and stored. Virtual currency has no physical presence and exists entirely online. Unlike digital currency, which is issued by a bank and controlled by a centralized banking authority, virtual currency relies on the user's trust and central banks and other types of banking regulatory authorities cannot issue it. Despite their

- 11. See infra Section II.D.
- 12. See infra Part III.
- 13. See infra Section II.A.
- 14. See infra Sections II.B.1, II.B.2, II.B.3, II.B.4.
- 15. See infra Sections II.D.1, II.D.2, II.D.3.
- 16. See Virtual Currencies, INTERNAL REVENUE SERV. (Apr. 30, 2021), https://bit.ly/2H6UaMr; see also Cryptocurrency Asset Classification Overview, CAP. FUND L. BLOG, https://bit.ly/3iQIDz9 (last visited Oct. 18, 2020) (explaining that the terms cryptocurrency and virtual currency have been applied broadly "to encompass digital assets, whether value is derived as a potential medium of exchange, store of value, utility function, or otherwise").
- 17. See Allen Kogan, Note, Not All Virtual Currencies Are Created Equal: Regulatory Guidance In The Aftermath of CFTC v. McDonell, 8 Am. U. Bus. L. Rev. 199, 203 (2019); see also Nat'l Conf. of Comm'rs on Unif. State L., Uniform Regulation of Virtual-Currency Business Act 1 (2017), https://bit.ly/2Jkv0LB [hereinafter URVCBA].
- 18. See Digital Currency Definition and Examples, MKT. BUS. NEWS, https://bit.ly/3hpbQBc (last visited Dec. 29, 2020) (noting that "[s]ometimes, digital currencies represent sovereign (traditional) currencies which people can redeem for cash, just like digital money. In some cases, digital currency represents e-money, i.e., electronic money").
- 19. See Cryptocurrency, INVESTOPEDIA, https://bit.ly/36z2Ndq (last visited Oct. 5, 2020).

similarities, virtual currencies differ in many respects and have important distinctions among them.²⁰

Virtual currencies take many different forms,²¹ but in terms of legal status, virtual currencies are either centrally issued or not centrally issued.²² For centrally-issued virtual currency, the issuer can track the ownership of a given currency.²³ Conversely, if a virtual currency is not centrally issued, the transfer of ownership is recorded using distributed ledger technology.²⁴

These distributed ledgers that record decentralized virtual currency transactions are often collectively called blockchain technology. ²⁵ Blockchain involves complex cryptography²⁶ and can be exceedingly difficult to conceptualize, but blockchain can accurately be defined as a "distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way." Blockchain technology has diverse uses too. ²⁸ For example, blockchain can be used for public means of keeping electronic lists of verified records, such as secure sharing of medical data, and it can be used privately for intercompany record keeping, such as supply chain and logistics monitoring. ²⁹

- 20. See infra Sections II.A, II.D and accompanying text.
- 21. See generally What is Virtual Currency?, CORP. FIN. INST., https://bit.ly/31UzKOa (last visited Oct. 29, 2020) (listing different types of virtual currency).
- 22. See id. (clarifying that a centralized virtual currency has a central issuer, typically the issuer of the currency, while a decentralized currency has no central issuer and instead is authenticated by a distributed system).
 - 23. See URVCBA, supra note 17, at 3.
- 24. See id.; see also Blockchain & Distributed Ledger Technology (DLT), THE WORLD BANK (Apr. 12, 2018), https://bit.ly/3efvkqf (describing distributed ledgers as independent computers (nodes) that record, share, and synchronize transactions in electronic ledgers in a more efficient and reliable way than a traditional ledger).
- 25. See Advait Deshpande et al., Understanding the Landscape of Distributed Ledger Technologies/Blockchain: Challenges, Opportunities, and the Prospects for Standards 1 (Rand Europe 2017).
- 26. See Shawn S. Amuial et al., The Blockchain: A Guide for Legal & Business Professionals § 1:2 (2016) (defining cryptography as the study and practice of keeping secret information away from adversaries and describing how cryptographic codes include complicated algorithms and use computers to conduct both the encryption and decryption).
- 27. Marco Iansiti & Karim R. Lakhani, *The Truth about Blockchain*, HARV. BUS. REV., Jan.-Feb. 2017, at 118; *see also* AMUIAL ET AL., *supra* note 26 (explaining that the "involvement of complex cryptographic mathematics and a general association with Bitcoin and its checkered past are factors contributing to [a] lack of understanding").
- 28. See generally Moe Adham, Business Applications for Blockchain, FORBES (Sept. 27, 2019, 8:30 AM), https://bit.ly/37WL0xG (offering potential uses for blockchain).
- 29. See Shanhong Liu, Blockchain Statistics & Facts, STATISTA (May 12, 2021), https://bit.ly/37kqoy5; see also Sam Daley, 34 Blockchain Applications & Real-World Use Cases Disrupting The Status Quo, BUILT IN (Oct. 25, 2021), https://bit.ly/3sYPX0G (listing prominent blockchain uses that are impacting a variety of sectors "in ways that range from how contracts are enforced to making government work more efficiently"). See generally 4 Ways Any Business Can Use Blockchain, INC. (Aug. 14, 2018), https://bit.ly/36Ggvvk

In practice, if a person or legal entity wishes to transfer virtual currency or electronic records, blockchain operates much like sending electronic mail, but offers the added bonuses of permanency and, because the transfer occurs on a blockchain, difficulty of falsification.³⁰ In response to the growing prominence of virtual currency and blockchain technology over the past decade, federal regulators have attempted to police these new technologies.³¹

B. Current Federal Regulation of Virtual Currency and Blockchain in the United States

Lacking legislative guidance, the federal government's focus has been to regulate virtual currency and blockchain technology at the administrative and agency levels.³² Currently, the regulatory landscape in the United States lags behind the innovations of virtual currency and blockchain.³³ Critics of the current federal regulations warn that, absent a cohesive goal, continuing to develop and implement regulations will further confuse investors, regulators, and federal courts.³⁴ The lag occurring in the United States between virtual currency innovation and virtual currency regulation stems from numerous federal agencies attempting to expand their jurisdictional purviews in order to regulate various forms of digital currencies. This power struggle between federal agencies has resulted in minimal formal rule-making and overlapping jurisdiction.³⁵ To understand where regulation of virtual currency in the United States is lacking, knowledge of the role each relevant federal

(clarifying that businesses can use blockchain technology for better supply chain management, faster payments, and more transparency in their contracts).

-

^{30.} See Maryanne Murray, Blockchain Explained, REUTERS GRAPHICS (June 15, 2018), https://tmsnrt.rs/34HXsix; see also Mike Orcutt, How Secure is Blockchain Really?, MIT TECH. REV. (Apr. 25, 2018), https://bit.ly/31Xp8OW (explaining that "blockchains store data using sophisticated math and innovative software rules that are extremely difficult for attackers to manipulate").

^{31.} See infra Section II.E.

^{32.} See GLOBAL LEGAL INSIGHTS, BLOCKCHAIN & CRYPTOCURRENCY REGULATION 2-3 (Josias Dewey ed., 1st ed. 2019), https://bit.ly/3iOW0AC [hereinafter GLOBAL LEGAL INSIGHTS].

^{33.} See Kevin V. Tu & Michael W. Meredith, Rethinking Virtual Currency Regulation in the Bitcoin Age, 90 Wash. L. Rev. 271, 304 (2015); see also The Applications and Future of Blockchain, Consumers Tech. Ass'n (May 28, 2020), https://bit.ly/38a4m1P (describing a smartphone empowering users to "own their data by decentralized apps, websites and services," and explaining that with the phone in blockchain mode users can use their phones without third parties monitoring or blocking their data).

^{34.} *See* Tu & Meredith, *supra* note 33; *see also* GLOBAL LEGAL INSIGHTS, *supra* note 32.

^{35.} See Kogan, supra note 17, at 209; see also GLOBAL LEGAL INSIGHTS, supra note 32, at 2.

agency plays becomes important.³⁶ Four federal agencies that are relevant in the virtual currency regulation discussion are the Securities and Exchange Commission (SEC), the Financial Crimes Enforcement Network (FinCEN), the Commodities and Futures Trading Commission (CFTC), and the Internal Revenue Service (IRS).³⁷

1. Securities and Exchange Commission

The SEC generally possesses regulatory authority over the issuance or resale of any asset that represents a security.³⁸ Further, the SEC maintains that most virtual currencies, and all initial coin offerings,³⁹ satisfy the test set out by the Supreme Court in *S.E.C. v. W.J. Howey Co.*,⁴⁰ colloquially referred to as the "*Howey*" test.⁴¹ The *Howey* test finds that an investment contract exists, thereby giving the SEC jurisdiction, when circumstances show an investment of funds in a common enterprise with a reasonable expectation of profits to be gained from the effort of others.⁴² When a virtual currency satisfies the *Howey* test, and is therefore deemed a security, then the issuer of the virtual currency must register with the SEC unless an exemption from the registration requirements exists.⁴³ The *Howey* test proves useful for determining the current security status of a digital asset, but it may cause confusion if an asset's security status changes over time.⁴⁴

^{36.} See infra Sections II.B.1, II.B.2, II.B.3, II.B.4.

^{37.} See generally MICHAEL S. SACKHEIM & NATHAN A. HOWELL, THE VIRTUAL CURRENCY REG. REV. 335 (2019), https://bit.ly/3zuSGTv (introducing multiple United States regulators that may assert jurisdiction over virtual currency market participants).

^{38.} See 15 U.S.C. § 78c(a)(10); see also 15 U.S.C. § 77b(a)(1) (defining security).

^{39.} See Initial Coin Offering, INVESTOPEDIA, https://bit.ly/3hPq5Q0 (last visited Jan. 4, 2020) (defining an initial coin offering (ICO) as the "cryptocurrency industry's equivalent to an initial public offering (IPO)[,]" and explaining that companies looking to raise capital to create a new coin, app, or service can use an ICO as a way to raise funds); see also Spotlight on Initial Coin Offerings (ICOs), U.S. SEC. AND EXCH. COMM'N (July 14, 2021), https://bit.ly/3nFmrdR.

^{40.} See Sec. and Exch. Comm'n v. W.J. Howey Co., 328 U.S. 293 (1946).

^{41.} See id. at 301.

^{42.} See id. (determining that an investment contract exists, and the SEC has jurisdiction, when a "scheme involves an investment of money in a common enterprise with profits to come solely from the efforts of others").

^{43.} See GLOBAL LEGAL INSIGHTS, supra note 32, at 35. See generally 17 C.F.R. § 230.400 (2020) (listing the exemptions from required registration).

^{44.} See Amy B. Caiazza & Rob. H Rosenblum, Why the SEC Thinks Most Tokens Are Securities and When the SEC Thinks a Token Might Stop Being a Security, WILSON SONSINI GOODRICH & ROSATTI (Aug. 1, 2018), https://bit.ly/3kTgSXk.

In June 2018, the SEC considered whether a "token," originally classified as a security, could lose its security status. The Director of the Division of Corporation Finance, William Hinman, offered several guiding factors to determine when tokens do or do not qualify as securities. The factors offered by Hinman are not meant to be exhaustive, and no single factor is determinative; therefore, the SEC encourages market participants dealing with digital assets to seek the advice of legal counsel to determine the status of their securities. While SEC regulations may not apply to virtual currency in some circumstances, FinCEN regulations may affect virtual currency activity by seeking to safeguard the financial system from criminal activities.

2. Financial Crimes Enforcement Network

FinCEN regulates money service businesses⁵¹ ("MSBs") and derives its power to regulate MSBs from the Bank Secrecy Act.⁵² In 2013, FinCEN released interpretive guidance on virtual currencies "to persons creating, obtaining, distributing, exchanging, accepting, or transmitting virtual currencies."⁵³ FinCEN groups these persons into three categories: (1) users, (2) administrators, and (3) exchangers.⁵⁴ Users of virtual currency are not considered to be MSBs under FinCEN regulations,⁵⁵ while administrators and exchangers are considered MSBs.⁵⁶ In classifying virtual currency administrators and exchangers, FinCEN unequivocally

^{45.} See *id.* (using the term "token" interchangeably with digital cryptocurrency or other crypto assets, such as virtual currency).

^{46.} See William Hinman, Digital Asset Transactions: When Howey Met Gary (Plastic), U.S. Sec. AND EXCH. COMM'N (June 14, 2018), https://bit.ly/3G4F5or.

^{47.} See id. (listing six factors that indicate when a token, otherwise known as virtual currency, may no longer be a security).

^{48.} See id.

^{49.} See Framework for Investment Contract Analysis of Digital Assets, U.S. Sec. and Exch. Comm'n (Apr. 3, 2019), https://bit.ly/35YzQ8P.

^{50.} See What We Do, Fin. Crimes Enf't Network, https://bit.ly/35brCuS (last visited Jan. 6, 2022).

^{51.} See Money Services Business Definition, Fin. CRIMES Enf't Network, https://bit.ly/3mEigls (last visited Jan. 6, 2022).

^{52.} See Bank Secrecy Act Regulations – Definitions and Other Regulations Relating to Money Services Businesses, 76 FR 43485 (July 21, 2011) (to be codified at 31 C.F.R. pts. 1010, 1021, 1022) (detailing the Department of the Treasury's authority to delegate the authority of the Bank Secrecy Act to the Director of FinCEN).

^{53.} Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies, Dep't of the Treasury Fin. Crimes Enf't Network 1 (Mar. 18, 2013), https://bit.ly/3n3FbFg.

^{54.} *See id.*

^{55.} See id. (explaining that a user who obtains virtual currency and uses it for the purchase of real or virtual goods is not a money service business because this type of activity "does not fit within the definition of 'money transmission services").

^{56.} See id. at 2 (defining users, administrators, and exchangers).

applies the existing anti-money laundering regulations to virtual currency. The dividuals and legal entities classified as MSBs are subject to FinCEN regulations as money transmitters and are therefore "subject to MSB registration, reporting, and recordkeeping regulations." Notably, in addition to FinCen regulation, many states require money transmitters to obtain a license from their respective state in order to avoid operating as an unlicensed money transmitter. Federal money transmitter laws do not create large burdens such as large licensing fees or minimum capital requirements. However, large licensing fees and minimum capital requirements are common under state money transmitter laws. In addition to the FinCen regulations aimed at combatting money laundering, virtual currency businesses must also consider the CFTC's regulations when virtual currency is used for fraud or manipulation practices.

^{57.} See Tu & Meredith, supra note 33, at 307; see also GLOBAL LEGAL INSIGHTS, supra note 32, at 482 (noting that MSBs that are classified as money transmitters must implement an anti-money laundering program and the anti-money laundering program "must: (i) incorporate written policies, procedures and internal controls reasonably designed to assure ongoing compliance; (ii) designate an individual compliance officer responsible for assuring day-to-day compliance with the program and BSA requirements; (iii) provide training for appropriate personnel, which specifically includes training in the detection of suspicious transactions; and (iv) provide for independent review to monitor and maintain an adequate program").

^{58.} See 31 C.F.R. 103.11(uu)(5)(a) (2010); see also What is a Money Transmitter?, PAYMENT FACILITATOR, https://bit.ly/35adZfe (last visited Jan. 6, 2022) (defining a money transmitter as someone who receives funds to transfer them to someone else).

^{59.} Application of FinCen's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies, Fin. Crimes Enf't Network (Mar. 18, 2013), https://bit.ly/3leMady.

^{60.} See Anita Ramasastry, Bitcoin: If You Can't Ban It, Should You Regulate It? The Merits of Legislation, JUSTIA (Feb. 25, 2014), https://bit.ly/3ejp6pg; see also Justin S. Wales & Matthew E. Kohen, State Regulations on Virtual Currency and Blockchain Technologies, in Payment Sys. and Elec. Fund Transfers Guide 100:400 (2020) (showing which states require virtual currency businesses to obtain a money transmitter license).

^{61.} See Kevin V. Tu, Regulating the New Cashless World, 65 ALA. L. REV. 77, 93 (2013).

^{62.} See What We Do, FIN. CRIMES ENF'T NETWORK, https://bit.ly/3oTjB5H (last visited Nov. 15, 2021). But see A CFTC Primer on Virtual Currencies, COMMODITY FUTURES TRADING COMM'N 11, 16 (Oct. 17, 2017), https://bit.ly/2ZB6URL [hereinafter CFTC Primer].

3. Commodities and Futures Trading Commission

The CFTC regulates futures, 63 options, 64 swaps, 65 and any other type of derivative contracts⁶⁶ that constitute commodities.⁶⁷ In 2015, the CFTC determined that "[b]itcoin and other virtual currencies are ... properly defined as commodities."68 In March 2018, a federal district court, in CFTC v. McDonnell, confirmed that bitcoin and other virtual currencies qualify as commodities.⁶⁹ The CFTC can exercise jurisdiction over virtual currencies when "a virtual currency is used in a derivatives contract, or if there is fraud or manipulation involving a virtual currency traded in interstate commerce."⁷⁰ Outside of fraud and deception, however, the CFTC does not oversee "cash market exchanges and transactions involving virtual currencies that do not utilize margin, leverage, or financing."⁷¹ In some states, money transmitters that facilitate the transmission of virtual currencies must obtain a money transmitter license.⁷² The former chairman of the CFTC, however, testified before Congress that "there may be a gap in the oversight of virtual currencies that are not securities, stating that . . . state money transmission regulations [are] not satisfactory" because a gap exists in the oversight of virtual currencies that do not qualify as securities.⁷³

^{63.} See Adam Hayes, Futures Contract, INVESTOPEDIA (Oct. 30, 2021), https://bit.ly/3enqPdb (defining a future contract "future" as "a legal agreement to buy or sell a particular commodity asset, or security at a predetermined price at a specified time in the future").

^{64.} See James Chen, What is an Option?, INVESTOPEDIA (Sept. 8, 2021), https://bit.ly/32a4nzm(defining options as a "financial instrument that is based on the value of underlying securities such as stocks").

^{65.} See Michael McCaffrey, An Introduction to Swaps, INVESTOPEDIA (June 28, 2021), https://bit.ly/34VKTk2 (stating a "swap is an agreement between two parties to exchange sequences of cash flows for a set period of time").

^{66.} See James Chen, Derivative, INVESTOPEDIA (June 8, 2021), https://bit.ly/2L88FC1 (defining a derivative as "a contract between two or more parties whose value is based on an agreed-upon underlying financial asset").

^{67.} See 7 U.S.C § 2(a)(1)(A).

^{68.} *In re* Coinflip, Inc., CFTC No. 15-29, 2015 WL 5535736, at *2 (Sept. 17, 2015).

^{69.} See Commodity Futures Trading Comm'n v. McDonnell, 287 F. Supp. 3d 213, 225 (E.D.N.Y. 2018).

^{70.} CFTC Primer, supra note 62, at 11. See generally McDonnell, 287 F. Supp. 3d at 228, 230 (holding that the "CFTC has standing to exercise its enforcement power over fraud related to virtual currencies sold in interstate commerce," however, "this power does not preclude other agencies from exercising their regulatory power when virtual currencies function differently than derivative commodities").

^{71.} *CFTC Primer*, supra note 62, at 11.

^{72.} See N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2(q) (2020); see also Wales & Kohen, supra note 60 (showing which states require virtual currency businesses to obtain a money transmitter license).

^{73.} See SACKHEIM & HOWELL, supra note 37, at 335.

4. Internal Revenue Service

As other federal agencies consider the regulation of virtual currency, the IRS declared that "existing general tax principles apply to transactions using virtual currency." The IRS further clarified that "virtual currency may be used to pay for goods or services, or [be] held for investment." By accepting virtual currency as a medium of exchange certain environments allow it to act like real currency; the IRS notes that virtual currency can have an equivalent value in real currency. Virtual currency that can be used as a substitute for real currency is labeled "convertible virtual currency." For federal tax purposes, the IRS treats convertible virtual currency as property; therefore, the general tax principles that apply to property transactions apply to convertible virtual currency. For example, any gain or loss from the sale or exchange of convertible virtual currency into other forms of property will be taxable.

The bulk of current regulatory action taken by the SEC, FinCEN, the CFTC, the IRS, and other federal agencies narrowly focuses on specific issues impacting virtual currency in particular contexts such as anti-money laundering and tax treatment. ⁸³ As a result, the regulatory actions taken by federal regulators thus far lack cohesion and clarity. ⁸⁴ The Uniform Law Commission ("ULC") has taken notice of this lack of cohesion and clarity regarding virtual currency regulation. ⁸⁵ In response, the ULC created the

^{74.} Internal Revenue Service (IRS), *Notice* 2014-21 § 1 (2014), https://bit.ly/3Hw8BnU [hereinafter IRS Notice] (noting that for federal tax purposes, virtual currency will be treated as property and the general tax principles applicable to property transactions will apply to virtual currency transactions).

^{75.} See id. § 2.

^{76.} See HSB Survey Finds One-Third of Small Businesses Accept Cryptocurrency, BUSINESSWIRE (Jan. 15, 2020, 8:50 AM), https://bwnews.pr/2NeygdH (showing that 36% of small and medium sized businesses accepted cryptocurrency, while 59% purchase it for their own use).

^{77.} See id.

^{78.} Adam Hayes, $Convertible\ Virtual\ Currency$, Investopedia (Oct. 28, 2021), https://bit.ly/2I5fNh7.

^{79.} See Julia Kagan, Property Tax, INVESTOPEDIA (May 29, 2020), https://bit.ly/2MkavjA (defining property tax as a "tax paid on property owned by an individual or other legal entity, such as a corporation").

^{80.} See GLOBAL LEGAL INSIGHTS, supra note 32, at 343–44 (stating that every individual or business that owns convertible virtual currency will need to keep records of virtual currency purchases and sales, meaning they will pay taxes on any gains upon the sale of virtual currency for cash, on any gains that are made upon the purchase of a good or service with cryptocurrency, and on the fair market value of any mined virtual currency).

^{81.} See IRS Notice, supra note 74, § 2.

^{82.} *See* Tu & Meredith, *supra* note 33, at 310–11.

^{83.} See Commodity Futures Trading Comm'n v. McDonnell, 287 F. Supp. 3d 213, 222 (E.D.N.Y. 2018).

^{84.} See Tu & Meredith, supra note 33, at 311.

^{85.} See Jeremy M. McLaughlin et al., Newly Released Virtual-Currency Businesses Act Augurs Increased State Regulation of Bitcoin, Ether, and Other Digital and Crypto

Uniform Regulation of Virtual Currency Business Act ("URVCBA")86 in an effort to create a regulatory framework for virtual currency businesses.87

C. Efforts to Unify Virtual Currency Regulations

The ULC⁸⁸ provides states with a regulatory regime to bring uniformity and transparency to undeveloped areas of state law.⁸⁹ In 2017, the ULC drafted the URVCBA for states to adopt as a means of regulating virtual currency at the state level. 90 The underlying assumption of the URVCBA is that predictable regulations will provide protection to those engaging in virtual currency business in the same way users of traditional financial products and services are protected. 91 The URVCBA provides clear definitions of virtual currency and virtual currency business activity. 92 Due to its simplistic definitions of both virtual currency and virtual currency business, the URVCBA, where enacted, creates a "defined zone of liability," which could become the standard for service providers across the United States. 93 The URVCBA fails to mention other important uses of virtual currency, however, as the Act does not discuss Initial Coin Offerings ("ICOs").94

Under the URVCBA, a license is required for those engaging in virtual currency business activities. 95 In addition to licensing

Currencies, K&L GATES (Nov. 7, 2017), https://bit.ly/3beuDwh (noting that the URVCBA is intended to provide protections and obligations similar to state money transmission laws and FinCEN).

- 86. See URVCBA, supra note 17, at 1.
- 87. See About Us, UNIF. L. COMM'N, https://bit.ly/34QD91e (last visited Nov. 16,
- 88. See id. ("The Uniform Law Commission . . . provides states with non-partisan, well-conceived and well drafted legislation that brings clarity and stability to critical areas of statutory law.").
 - 89. See id.
- 90. See URVCBA, supra note 17, at 10 (stating the purpose of the act is to create a statutory structure for "virtual currency business activity[,]" but does not seek to regulate virtual currency).
- 91. See id. at 1 (stating that this act would "require licensure of and impose prudential regulations and consumer protections on businesses whose products and services include" the exchange of virtual currency).
- 92. See id. at 17 (stating that virtual currency is a digital unit used as a medium of exchange or stored value and includes both centralized and decentralized currencies). Virtual currency business activity means "exchanging, transferring, or storing virtual currency or engaging in virtual currency administration, whether directly or through an agreement with a virtual-currency control-services vendor[.]" See id. at 18.
- 93. See Anisha Reddy, Note, Coinsensus: The Need for Uniform National Virtual Currency Regulations, 123 DICK. L. REV. 251, 275 (2018).
- 94. See McLaughlin et al., supra note 85 (discussing that because the URVCBA does not discuss ICOs, it is unclear whether the Act applies to ICOs or not).
- 95. See URVCBA, supra note 17, at 25 (noting that licensing is required for anyone engaging, transferring, or storing virtual currency under the URVCBA).

requirements, the URVCBA imposes substantive compliance requirements, including: maintaining a sufficient net worth and capital reserve; 96 providing certain disclosures in connection with transactions; 97 and meeting certain record retention requirements. 98 The URVCBA does include exemptions to the licensing requirements, however, for government agencies, banks and persons using virtual currency on their own behalf, among others. 99 While, the URVCBA has not fostered much support from state legislators, the Act intends to provide states with a uniform statutory framework standard for the regulation of virtual currency. 100

Thus far, only Rhode Island has adopted the URVCBA.¹⁰¹ Critics of the URVCBA believe that the ULC rushed the URVCBA and that the language of the Act suppresses innovation;¹⁰² therefore, states continue to regulate virtual currency business under their own state created regulations rather than regulations modeled after the URVCBA.¹⁰³

D. How State Legislatures Currently Regulate Virtual Currency and Blockchain Technology

While federal regulators' efforts to regulate virtual currency have resulted in little formal rulemaking, the collective discussions have helped virtual currency markets mature and gain wider acceptance. Due to the growing prominence of various types of virtual currencies, more states are moving to adopt their own regulatory regime or otherwise update how their existing regulations apply to virtual currency. Until federal law becomes more clear and preempts state law, states have an opportunity to

^{96.} See id. at 41-42.

^{97.} See id. at 70.

^{98.} See id. at 53.

^{99.} See SACKHEIM & HOWELL, supra note 37, at 355 (listing licensed money transmitters, entities that do not receive compensation for providing virtual currency products or services, and entities whose annual transactions have a value of \$5,000 or less as exemptions from the proposed Uniform Act); see also McLaughlin et al., supra note 85 (summarizing all the exemptions and alternates to licensing that are provided in the URVCBA).

^{100.} See Reddy, supra note 93, at 279–80.

^{101.} See Virtual-Currency Businesses Act, Regulation of, UNIF. L. COMM'N (2017), https://bit.ly/2HSOYwI (showing a map of the states considering the URVCBA with Rhode Island being the lone state); see also H.R. 5847, 2019 GEN. ASSEMB., JAN. SESS. (R.I. 2019).

^{102.} See Reddy, supra note 93, at 275.

^{103.} See, e.g., infra notes 106–81 and accompanying text; see also Reddy, supra note 93, at 275.

^{104.} See Craig Colgan, Have Virtual Currencies Virtually Arrived?, AM. BANKERS ASS'N (June 25, 2020), https://bit.ly/3dgybij ("As central banks join research firms, global conferences and financial pundits in churning out commentaries, surveys, discussions, papers and pilot studies on the topic, major change is brewing.").

^{105.} See SACKHEIM & HOWELL, supra note 37, at 355.

differentiate themselves and attract virtual currency- related revenues by enacting favorable laws. 106 Currently, states take many different approaches to the regulation of virtual currency and blockchain technology, 107 but, states generally fall into one of two categories: (1) attempting to promote the technology by passing virtual currency and blockchain friendly laws, 108 or (2) passing restrictive laws in an effort to protect consumers. 109 Although each state has taken steps toward regulating virtual currency and blockchain technology, Wyoming is often praised as being the leader in passing innovation friendly legislation. 110 In contrast, New York is most often criticized as the most restrictive state for virtual currency and blockchain technology regulation. 111 Pennsylvania, like many other states, 112 has essentially remained silent on how it will approach virtual currency and blockchain technology regulation, but Pennsylvania and other states will likely look to states that have already taken action for guidance. 113

1. Wyoming's Approach

Wyoming remains the most "crypto-friendly" jurisdiction in the country and has earned the title "Delaware of digital asset law."¹¹⁴ Wyoming has enacted thirteen pieces of legislation enabling innovation and creativity, with the goal of bringing more capital, jobs, and revenue to Wyoming's economy. ¹¹⁵ The enacted legislation makes Wyoming one of

^{106.} See Wales & Kohen, supra note 60.

^{107.} See id. (comparing and contrasting the treatment of virtual currency and blockchain in each state). Compare infra Section II.D.1, with infra Section II.D.2.

^{108.} See Stephen O'Neal, US Crypto Review: Top-5 States with Welcoming Regulations, Cointelegraph (Aug. 20, 2019), https://bit.ly/32bmuoH (naming California, Colorado, Ohio, Texas and Wyoming as states with a "crypto friendly" approach).

^{109.} See GLOBAL LEGAL INSIGHTS, supra note 32, at 479 (listing California, New Mexico, and New York as states that have passed restrictive laws).

^{110.} See Caitlin Long, What Do Wyoming's 13 New Blockchain Laws Mean?, FORBES (Mar. 4, 2019, 7:29 AM), https://bit.ly/32NuuNw.

^{111.} See generally Matthew Kohen & Carlton Fields, New York's Relaxed BitLicense Could Still Take Lessons From Wyoming's Permissive Approach, JDSUPRA (July 28, 2020), https://bit.ly/2TP4gVg (highlighting some of the negative effects of New York's BitLicense).

^{112.} See generally Wales & Kohen, *supra* note 60 (summarizing the states that have not taken steps in the regulation of virtual currency and blockchain technology).

^{113.} See id. (explaining that Pennsylvania does not have laws regulating blockchain or digital currency).

^{114.} Long, *supra* note 110; *see also* Elaine Zelby, *How Delaware Became the State Where Companies Incorporate*, MEDIUM (Jan. 30, 2019), https://bit.ly/2M6Qcq7 (noting that as of 2018, "66.8% of all Fortune 500 companies and nearly 100% of US startups that have been incorporated over the last 5 years" have done so in Delaware).

^{115.} See Long, supra note 110.

the rare states to provide a comprehensive legal framework that allows for advancement of virtual currency businesses and blockchain technology. 116

a. Wyoming Statute Sections 34-29-101 through -103

Perhaps most importantly, Wyoming recognizes direct property rights for owners of digital assets.¹¹⁷ By recognizing digital assets as "intangible personal property[,]"¹¹⁸ Wyoming applies commercial law to these assets, just as it would for traditional currency.¹¹⁹ Additionally, Wyoming creates an exemption from property taxation for virtual currency. Further, Wyoming authorizes that perfection of a security interest¹²¹ in virtual currency or digital securities may be achieved through possession or control, or by filing a financing statement with the Wyoming Secretary of State.¹²² While Wyoming does recognize property rights for owners of digital assets, Wyoming has taken further steps to invite virtual currency business, namely, by creating a financial technology sandbox.¹²³

b. Creation of the Financial Technology Sandbox

In 2019, Wyoming legislation formed a "financial technology sandbox," an online tool for the testing of innovative financial products and services in the state.¹²⁴ Innovative financial products or services include, "new or emerging technology, . . . that provides a product, service, business model or delivery mechanism to the public and has no substantially comparable, widely available analogue in Wyoming,

^{116.} See Wales & Kohen, supra note 60; see also id.

^{117.} See generally WYO. STAT. ANN. § 34-29-101(a)(i) (West 2021) (defining digital assets in Wyoming).

^{118.} Will Kenton, *Intangible Personal Property*, INVESTOPEDIA (Feb. 27, 2021), https://bit.ly/35cj8Uu (defining intangible personal property as "an item of individual value that cannot be touched or held").

^{119.} See WYO. STAT. ANN. § 34-29-102 (West 2021); see also Long, supra note 110; Jose Rivera, Commercial Law, LEGALMATCH (June 26, 2018), https://bit.ly/3oe2gmh (noting that commercial law "regulates the conduct of persons, merchants, and businesses who are engaged in trade, sales, and commerce").

^{120.} See Wyo. STAT. ANN. § 39-11-105 (West 2018). But see Long, supra note 110 (noting that while Wyoming exempts virtual currency from property taxes, no federal tax relief exists for digital assets).

^{121.} See Julia Kagan, Security Interest, INVESTOPEDIA (Apr. 7, 2021), https://bit.ly/3jLgbPo (noting a perfected security interest is any interest in an "asset that cannot be claimed by any other party").

^{122.} See WYO. STAT. ANN. § 34-29-103 (West 2021); see also Matt Crockett, Wyoming's DIY Project Gets Western With the UCC, 20 WYO. L. REV. 105, 118–19 (2020) (explaining perfection's importance because it "protects the secured party against claims of other secured parties, other creditors, and transferees of collateral from the debtor").

^{123.} See infra Section II.D.1.b.

^{124.} See Financial Technology Sandbox, WYO. DIV. OF BANKING, https://bit.ly/30J6jBk (last visited Nov. 17, 2021) [hereinafter Sandbox]; see also WYO. STAT. ANN. § 40-29-101 (West 2020).

including blockchain technology."¹²⁵ The financial technology sandbox aims to provide innovators with regulatory relief in a helpful environment that facilitates creativity. ¹²⁶ The financial technology sandbox works by offering eligible financial products or services a two-year testing period, "with the possibility of a one-year extension." ¹²⁷ After completing the application process, innovative financial products or services eligible in the financial technology sandbox may be granted a waiver of Wyoming statutes or rules if the statutes or rules "do not currently permit the product or service to be made available to consumers." ¹²⁸ A person participating in the financial technology sandbox can be exempted from Wyoming's civil usury laws, ¹²⁹ but exemptions currently do not exist for any criminal or consumer protection laws. ¹³⁰ To further facilitate virtual currency business, Wyoming went a step further than the financial sandbox by allowing for the chartering of special purpose depository institutions. ¹³¹

c. Wyoming's Special Purpose Depository Institutions

Beginning in 2019, Wyoming became the first state to allow the chartering of special purpose depository institutions ("SPDIs"). ¹³² Wyoming's new legislation regarding SPDIs now approves banking charters for digital assets ¹³³ and allows individuals and businesses using digital assets—such as virtual currencies—access to reliable financial services. ¹³⁴ SPDIs resemble custody banks, ¹³⁵ meaning that SPDIs conduct

- 125. Sandbox, supra note 124.
- 126. See id.
- 127. See id.
- 128. See id.; see also Wyo. Stat. Ann. § 40-29-103 (West 2021) (listing statutes and rules that may be waived).
 - 129. See Wyo. STAT. ANN. § 40-14-106 (West 2020).
 - 130. See id.
 - 131. See infra Section II.D.1.c.
- 132. See Wyo. STAT. ANN. § 13-12-103 (West 2020); see also Special Purpose Depository Institutions, Wyo. DIV. OF BANKING, https://bit.ly/3oCxrdo (last visited Nov. 17, 2021) [hereinafter SPDIs] ("Wyoming first authorized SPDI charters with the enactment of House Bill 74 in 2019, which created the Special Purpose Depository Institutions Act ("SPDI Act") at Wyo. Stat. § 13-12-101, et seq. Wyoming also created its digital asset law at Wyo. Stat. § 34-29-101, et seq. with the enactment of Senate File 125 in 2019. Since then, Wyoming amended the SPDI Act in 2020 and amended its digital asset law in 2021, with the latter becoming effective July 1, 2021. The Division of Banking also promulgated new SPDI and digital asset regulations in 2020. It also adopted amendments to the SPDI and digital asset regulations in 2021.").
- 133. See Patrick J. Boot & Marysia Laskowski, Wyoming Issues Second Crypto Bank Charter, NAT'L L. REV. (Nov. 10, 2020), https://bit.ly/3sYIEq7 (listing Avanti Bank and Kraken as the first two SPDIs in Wyoming).
- 134. See News Director, Wyoming Becomes First State with A Special Purpose Depository Institution, WyoToday Media (Sept. 17, 2020), https://bit.ly/3eNwABr.
- 135. See Adam Barone, Custodian, INVESTOPEDIA (Sept. 28, 2021), https://bit.ly/354TwbT (defining a custodian bank as a "financial institution that holds customers' securities for safekeeping to prevent them from being stolen or lost").

fiduciary services, asset management, and safekeeping. ¹³⁶ Excluding the activities performed by custody banks, SPDIs cannot make loans with deposits of fiat currency. ¹³⁷ Because SPDIs cannot make loans, they have no obligation to obtain insurance from the Federal Deposit Insurance Corporation; ¹³⁸ however, they are not barred from obtaining such insurance. ¹³⁹ Under the Wyoming Business Corporation Act, ¹⁴⁰ SPDIs can be organized as corporations and will carry the same legal rights as a standard corporation. ¹⁴¹ The establishment of SPDIs in Wyoming creates a general framework for virtual currency banking that is consistent with existing federal law. ¹⁴² Before becoming a charter, ¹⁴³ however, SPDIs have to satisfy multiple requirements. ¹⁴⁴

d. Wyoming's Money Transmitter Law

In becoming America's most crypto-friendly state, ¹⁴⁵ Wyoming amended its existing Money Transmitter Act by creating an exemption for virtual currency. ¹⁴⁶ State money transmitter laws aim to regulate the transfer of money. ¹⁴⁷ Typically, companies dealing with state money transmitter laws must obtain certain licenses and endure other costly regulatory obligations. ¹⁴⁸ In some cases, the costs may reach amounts into

^{136.} See SPDIs, supra note 132.

^{137.} See WYO. STAT. ANN. § 13-12-103(c) (West 2020) (noting a "special purpose depository institution may purchase debt obligations specified by W.S. 13-12-105(b)(iii)"); see also James Chen, Fiat Money, INVESTOPEDIA (Oct. 26, 2021), https://bit.ly/39hvYTi (defining fiat money as a "government-issued currency that is not backed by a physical commodity, such as gold or silver, but rather by the government that issued it").

^{138.} See About, FED. DEPOSIT INS. CORP., https://bit.ly/3aELE3E (last visited Nov. 17, 2021) ("The Federal Deposit Insurance Corporation (FDIC) is an independent agency created by Congress to maintain stability and public confidence in the nation's financial system.").

^{139.} See SPDIs, supra note 132.

^{140.} See Wyo. Stat. Ann. § 17-16-101 (2020).

^{141.} See generally WYO. STAT. ANN. § 13-12-103 (West 2020) (listing the powers special purpose depository instructions have in Wyoming).

^{142.} See WYO. STAT. ANN. § 13-12-107 (West 2019) ("A special purpose depository institution shall comply with all applicable federal laws, including those relating to antimoney laundering, customer identification and beneficial ownership.").

^{143.} See Corporate Charter, BLACK'S LAW DICTIONARY (9th ed. 2009).

^{144.} See Wyo. Stat. Ann. § 13-12-106 (West 2019); Wyo. Stat. Ann. § 13-12-108 (West 2019) (listing the requirements before an SPDI charter will be granted).

^{145.} See supra notes 114–46 and accompanying text.

^{146.} See Wyo. STAT. ANN. § 40-22-104(vi) (West 2021) (stating the "[b]uying, selling, issuing, or taking custody of payment instruments or stored value in the form of virtual currency or receiving virtual currency for transmission to a location within or outside the United States by any means" is exempted).

^{147.} See Kathryn L. Ryan & Christopher Robins, Navigating State Money-Transmission Laws, C-Suite Fin. Serv. Rev., Fall 2018, at 23, 24.

^{148.} See Ashley Grimes, Money Transmitter Licensing, GRIMES LAW PLLC, https://bit.ly/3kWGcvS (last visited Nov. 4, 2020) (explaining companies that are designated money transmitters have to "comply with federal regulation by registering as

the mid-six figures, causing companies to look to other states for conducting operations.¹⁴⁹ By creating an exemption for certain digital assets, Wyoming helps virtual currency companies cut substantial compliance and licensing costs.¹⁵⁰ While each state has its own money transmitter laws, several states, such as Texas¹⁵¹ and Pennsylvania,¹⁵² have taken Wyoming's approach by exempting certain types of virtual currency sales from their money transmitter licensing requirements.¹⁵³ In most states, however, a virtual currency exchange still falls under the money transmitter laws.¹⁵⁴

2. New York Approach

In contrast to Wyoming's favorable treatment of virtual currency businesses, New York created "BitLicense," ¹⁵⁵ a far-reaching regulatory framework for New York's virtual currency marketplace. ¹⁵⁶ BitLicense requires businesses dealing in any form of virtual currency to obtain a license from New York's Department of Financial Services ("NYDFS") before beginning operations; ¹⁵⁷ however, "[b]efore being granted a license, the state requires applicants to have strict compliance and supervisory policies and procedures in place ¹⁵⁸ Because of the strict BitLicense requirements, critics tend to view conducting virtual currency business in New York as "far too disruptive and costly for many

an MSB and must also comply with state regulations"); see also Thomas Brown, 50-State Survey: Money Transmitter Licensing Requirements, U.C. BERKLEY L. SCH. AND PAUL HASTINGS LLP, https://bit.ly/3616pTO (last visited Nov. 7, 2020) (listing the licensing requirements and costs for each state).

- 149. See Ryan & Robins, supra note 147, at 25.
- 150. See WY Money Transmitter License New Application Checklist (Company), NATIONWIDE MULTISTATE LICENSING SYS. (Apr. 1, 2020), https://bit.ly/34PYJmH (listing some of the common licensing fees in Wyoming).
- 151. See generally Memorandum from the Tex. Dep't of Banking on Regulatory Treatment of Virtual Currencies Under the Texas Money Services Act (Apr. 1, 2019) (on file with author).
 - 152. See infra Section II.D.3.
- 153. See generally Money Transmitter Licensing Law, BLOCKCHAIN L. GUIDE, https://bit.ly/3mOSF5h (last visited Nov. 4, 2020) (listing Colorado, Kansas, Pennsylvania and Texas as states that exempt certain types of virtual currency sales from state money transmitter licensing requirements).
- 154. *See id.* (describing that most states, except for a small minority, still subject virtual currency exchanges to the same state licensing and regulation requirements as other money transmitters).
- 155. See Christopher Casper, What is the BitLicense? Understanding New York's Crypto Laws, COINIQ (July 20, 2018), https://bit.ly/2GteCY5 ("BitLicense is the name New York's state government gave to its set of regulations for the cryptocurrency industry.").
 - 156. See N.Y. COMP. CODES R. & REGS. tit. 23, §§ 200.1-200.22 (2021).
 - 157. See N.Y. COMP. CODES R. & REGS. tit. 23, § 200.3(a) (2021).
 - 158. Wales & Kohen, supra note 60.

-

cryptocurrency companies."¹⁵⁹ As a result, virtual currency businesses operating in New York frequently relocate to states with more favorable regulation frameworks.¹⁶⁰

Responding to some of BitLicense's criticisms, the NYDFS "proposed a conditional licensing framework for virtual currency business entities so that these entities can participate in the coin listing process for licensed exchanges while their BitLicense is being evaluated." Further, since 2019, New York has introduced several bills that allow for more freedom in blockchain technology use, 162 resources for blockchain startups, 163 and the creation of a task force to study blockchain technology. 164 In 2019, the NYDFS proposed a new rule that allows those who have applied for a BitLicense the opportunity to obtain a conditional BitLicense. 165 The conditional BitLicense allows BitLicense applicants to collaborate with a current licensee for various business activities, so the applicants can begin offering its services before it acquires a BitLicense. 166

3. Pennsylvania

Pennsylvania has been relatively quiet with respect to legislating and regulating virtual currency and blockchain. In 2019, however, Pennsylvania's Department of Banking Services ("PDoBS") stated that virtual currencies are not money because only fiat currency, or U.S. government-issued currency, is money. Excluding virtual currencies from the definition of money means that virtual currency businesses do

^{159.} See David Adler, The BitLicense: Regulatory Overreach or Prudent Response?, FORDHAM J. OF CORP. & FIN. L. BLOG (Mar. 26, 2018), https://bit.ly/34V3rRa.

^{160.} See Daniel Roberts, Behind the "Exodus" of Bitcoin Startups from New York, FORTUNE (Aug. 14, 2015, 11:19 AM), https://bit.ly/3iNi2SG.

^{161.} Wales & Kohen, supra note 60.

^{162.} See Senate Bill S1801, THE N.Y. STATE SENATE, https://bit.ly/2Z0PCke (last visited Nov. 17, 2021) ("[A]llowing signatures, records and contracts secured through blockchain technology to be considered in an electronic form and to be an electronic record and signature [and] allow[ing] smart contracts to exist in commerce.").

^{163.} See S. 5643, 242nd Leg., Reg. Sess. (N.Y. 2019) (creating an "office of financial resilience" to advocate on behalf of blockchain startups).

^{164.} See Wales & Kohen, supra note 60 (discussing several bills New York introduced with respect to blockchain); see also H.R. 1371, 242nd Leg., Reg. Sess. (N.Y. 2019) (creating a task force to study and report on the "potential implementation of blockchain technology in state record keeping, information storage, and service delivery").

^{165.} See Jeremy M. McLaughlin et al., New York (More) Open For (Crypto) Business: NYDFS Proposes Important Changes to the BitLicense, The NAT'L L. Rev. (July 11, 2020), https://bit.ly/3n2SinI; see also N.Y. Comp. Codes R. & Regs. tit. 23, § 200.4(c) (2021).

^{166.} See id

^{167.} See Wales & Kohen, supra note 60.

^{168.} See Money Transmitter Act Guidance for Virtual Currency Businesses, PA. DEP'T OF BANKING AND SEC., https://bit.ly/3mLRF2L (last visited Nov. 17, 2021) [hereinafter Money Transmitter Act].

not require a money transmitter license to offer financial services in Pennsylvania. Further, in 2019, PDoBS clarified that virtual currency kiosks, ATMs, and vending machines are not considered money transmitters because "[t]here is no transfer of money to any third party" Kiosk users simply exchange fiat currency for virtual currency and vice versa; therefore, no transmission of money occurs. 171

Due to these classifications, several web-based virtual currency exchange platforms sought guidance on the applicability of Pennsylvania's money transmitter laws to their businesses. Normally, these companies operate by facilitating the "purchase or sale of virtual currencies in exchange for fiat currency or other virtual currencies, and many platforms permit buyers and sellers of virtual currencies to make offers to buy and/or sell virtual currencies from other users." Pennsylvania responded to these questions by stating "these platforms are not money transmitters []" because these platforms never truly handle the fiat currency themselves. While Pennsylvania does not have any laws that directly regulate blockchain or virtual currency, in 2019, Pennsylvania "recognized that blockchain technology is a driver of spending growth."

As explained, states take differing approaches to the regulation of virtual currency and blockchain technology. One reason for several states' recent efforts to regulate virtual currency and blockchain technology is the constantly growing number of people starting to accept the new technology's usefulness. 179

E. Growing Acceptance of Virtual Currency and Blockchain Technology

Traditionally, monetary and electronic payment procedures involve intermediaries, such as central banks and private financial institutions, to carry out financial transactions between individuals, businesses, and

^{169.} See id.

^{170.} See id.

^{171.} See id.

^{172.} See Jamie Redman, Money Transmitter License Not Required for Crypto Businesses in Pennsylvania, BITCOIN.COM (Jan. 23, 2019), https://bit.ly/3laUXLm (noting that Pennsylvania's DoBS does not respond to requests on a case-by-case basis).

^{173.} See Money Transmitter Act, supra note 168.

^{174.} See id.

^{175.} See id. Any fiat currency involved in a transaction is held in a bank account in the platform's name at a depository institution. See id.

^{176.} See Wales & Kohen, supra note 60.

^{177.} Id. (citing H.R. 224, 203rd Gen. Assemb., Reg. Sess. (Pa. 2019)).

^{178.} See SACKHEIM & HOWELL, supra note 37, at 355.

^{179.} See infra Section II.E.

governments.¹⁸⁰ Financial transactions vary in complexity;¹⁸¹ therefore, the intermediaries carrying out these financial transactions expend large amounts of money maintaining extensive records and other infrastructure, such as employees and time.¹⁸² Thus, in order to meet costs and earn profits, intermediaries charge fees for servicing financial transactions.¹⁸³

Virtual currency and blockchain technology advocates assert that virtual currency business provides a distinct cost advantage over traditional monetary and electronic procedures. The cost advantage of virtual currency and blockchain use stems from its decentralized nature and convenience. Because of these features, virtual currency and blockchain can improve existing financial processes. Critics of the increased use of virtual currency in financial transactions have been tempered, as the use of blockchain technology becomes increasingly accepted as a trusted way to validate transactions between multiple parties. Virtual currency and blockchain's popularity and need for regulation continues to increase, and states, like Pennsylvania, must soon decide which framework to employ in their attempts to regulate it.

III. ANALYSIS

A lack of federal regulation for virtual currency and blockchain technology has resulted in each state legislature making its own decision on how to best treat virtual currency and blockchain in its respective state. ¹⁹⁰ While the end goal should be to have clear federal virtual currency and blockchain regulation in the United States, currently, that goal appears distant. ¹⁹¹ A number of states, namely Pennsylvania, have remained

^{180.} See David W. Perkins, Cong. Rsch. Serv., R45427, Cryptocurrency: The Economics of Money and Selected Policy Issues 11 (2020).

^{181.} See id.

^{182.} See id.

^{183.} See id.

^{184.} See id.

^{185.} See CORP. FIN. INST., supra note 21.

^{186.} See Anders Henten & Iwona Windekilde, Blockchains and Transaction Costs, 1 NORDIC AND BALTIC J. OF INFO. AND COMMC'NS. TECH. 33, 34–35 (2020) (noting that the blockchain process is likely to be "cheaper, more reliable, transparent and faster" because it has the ability to verify records all over the globe at real time).

^{187.} See id

^{188.} See Rebecca M. Bratspies, Cryptocurrency and the Myth of the Trustless Transaction, 25 Mich. Tech. L. Rev. 1, 18–19 (2018).

^{189.} See, e.g., infra Part III.

^{190.} See SACKHEIM AND HOWELL, supra note 37, at 334; see also Wales & Kohen, supra note 60 (describing the various state regulations on virtual currency and blockchain technologies).

^{191.} See Caitlin Long, Seismic News About State Virtual Currency Laws: ULC Urges States to Withdraw Model Act, FORBES (Mar. 25, 2019, 10:07 PM), https://bit.ly/3bx54bo (asking states considering the uniform model act regarding virtual currencies "to refrain from enacting it").

relatively quiet with respect to virtual currency and blockchain.¹⁹² By waiting to legislate, Pennsylvania has a unique opportunity to shape its legislation around what other states have done in response to the growing acceptance of virtual currency and blockchain use.¹⁹³ Pennsylvania legislators, therefore, should consider both the positive and negative impacts of virtual currency and blockchain laws in other states when proposing legislation.¹⁹⁴

A. Pennsylvania Should Adopt a Regulatory Framework Similar to Wyoming

Pennsylvania should follow Wyoming's lead and propose legislation that encourages virtual currency and blockchain based businesses to innovate and create the best possible financial technologies. ¹⁹⁵ If Pennsylvania's legislators choose to mirror Wyoming's virtual currency and blockchain technology regulation, they should consider: (1) money transmitter laws, ¹⁹⁶ (2) treating digital assets as property, ¹⁹⁷ (3) creating a financial technology sandbox, ¹⁹⁸ and (4) allowing the creation of SPDIs. ¹⁹⁹

1. Money Transmitter Laws

Pennsylvania has already taken a step in the right direction by clarifying that virtual currency trading platforms, kiosks, ATMs, and vending machines are not money transmitters under Pennsylvania law.²⁰⁰ As state money transmitter laws are considered in the future, Pennsylvania legislators should continue to exempt certain types of virtual currency business as a way to attract emerging businesses.²⁰¹ By exempting virtual

^{192.} See Wales and Kohen, supra note 60; see also Money Transmitter Act, supra note 168.

^{193.} See Wales & Kohen, supra note 60; see also Catherine Coley, Why 2020 Might Be The Year Cryptocurrency Goes Mainstream, FORTUNE (Aug. 24, 2020, 7:00 PM), https://bit.ly/38wnN5i (listing several reasons why cryptocurrency and digital money are poised to go mainstream with a few of the reasons including large banking institutions like JPMorgan Chase promoting digital currencies and the inherent value of government money dropping as businesses and individuals continue to receive public assistance).

^{194.} See generally SACKHEIM & HOWELL, supra note 37, at 350–54 (describing New York's BitLicense as aggressive regulatory measure and offering alternative guidance for inclusive legislation and regulation).

^{195.} See Noelle Acheson, Crypto Long & Short: Wyoming Is Crypto's 'Wild West,' Which Is Exactly What We Need, Coindesk (Sept. 14, 2021, 6:26 AM), https://bit.ly/2LjO8uu; see also infra Sections III.A.1, III.A.2, III.A.3, III.A.4.

^{196.} See infra Section II.D.1.d.

^{197.} See infra Section II.D.1.a.

^{198.} See infra Section II.D.1.b.

^{199.} See infra Section II.D.1.c.

^{200.} See Money Transmitter Act, supra note 168.

^{201.} See Carol R. Goforth, The Case for Preempting State Money Transmission Laws for Crypto-Based Businesses, 73 ARK. L. REV. 301, 311-312 (2020) (discussing public policy reasons for money transmission laws).

currency business, virtual currency businesses in Pennsylvania will not be subject to licensing costs or other regulatory obligations that can be both expensive and time consuming for emerging companies. ²⁰² If Pennsylvania changed its state money transmitter laws to include virtual currency businesses, companies may choose to incorporate in states, like Wyoming, with more favorable laws. ²⁰³ Virtual currency businesses that choose to incorporate in Pennsylvania will therefore avoid substantial compliance costs. ²⁰⁴ Unfortunately, exempting virtual currency businesses from state money transmitter laws is only the first of many steps Pennsylvania needs to take as it regulates virtual currency. The second step is building a bridge between existing state law and new virtual currency markets by recognizing digital assets as property. ²⁰⁵

2. Digital Assets as Property

Most of the various federal agency efforts to regulate virtual currency and blockchain are aimed at defining virtual currency and virtual currency business to fit within existing federal law.²⁰⁶ Pennsylvania legislators should take note of these efforts and attempt to bridge the gap between existing state law and new virtual currency markets, rather than create a new, separate body of law to regulate virtual currency businesses.²⁰⁷ In Pennsylvania's attempt to fit virtual currency within existing state law, Pennsylvania should follow Wyoming's lead and recognize direct property rights for owners of digital assets.²⁰⁸ By recognizing direct property rights, contractual disputes arising from virtual currency business in Pennsylvania would be governed by existing Pennsylvania commercial law.²⁰⁹ In contrast to Wyoming, however, Pennsylvania should not exempt

^{202.} See Ryan & Robins, supra note 147, at 24 ("Money-transmission laws are rules-based (as opposed to principles-based) and riddled with compliance obligations; they are not uniform and typically lack the flexibility to foster financial innovation in an efficient manner.").

^{203.} See id. Companies undertake the tedious exercise of examining money-transmission laws and must determine whether a license is required. Id.; id. ("[T]he process can take several months and may result in significant delays in launching a product.").

^{204.} See id. Between the cost of application fees, renewal fees, net-worth requirements, surety-bond premiums, and other expense associated with obtaining licenses it is common for costs to reach into the mid-six figures. See id.

^{205.} See infra Section III.A.2.

^{206.} See Reddy, supra note 93, at 269–70 (describing the CFTCs efforts to classify virtual currencies as commodities, the IRS applying property tax principles, and the FinCEN stating that virtual currency exchange may qualify as money transmitters).

^{207.} See supra Section III.A.1; see also infra Sections III.A.3, III.A.4.

^{208.} See Kenton, supra note 118. See generally WYO. STAT. ANN. § 34-29-101(a)(i) (West 2021) (defining digital assets in Wyoming).

^{209.} See generally 13 PA. STAT. AND CONST. STAT. ANN. § 1103(a) (West 2008) (noting that the Pennsylvania commercial code is liberally construed with the purpose to: "simplify, clarify, and modernize the law governing commercial transactions; permit the

virtual currency from property taxation and should adopt legislation in accordance to the IRS's position on the tax treatment of virtual currency. While Pennsylvania legislators should consider innovation and creativity when regulating, generating tax revenue should be in Pennsylvania legislators' minds. Recognizing digital assets as property is an important consideration for Pennsylvania legislators to make. Property rights alone, however, do not push financial innovation and creativity; therefore, Pennsylvania legislators should also take steps to create a financial technology sandbox.

3. Financial Technology Sandbox

Another important step Pennsylvania legislators must take to attract virtual currency businesses is the creation of a "financial technology sandbox," similar to the version created in Wyoming. The Pennsylvania "financial technology sandbox" would open the door for innovative financial products and services, including innovations focused on virtual currency and blockchain technology. A proposed sandbox in Pennsylvania would drive innovation when new financial products and services may not comply with existing banking standards. With a sandbox in effect, Fintech²¹⁸ companies in Pennsylvania would not be focused on compliance and data requests; rather, these Fintech companies could focus on creating the best possible financial products. In addition to giving companies more freedom to develop new products and

continued expansion of commercial practices through custom, usage and agreement of the parties; and to make uniform the law among various jurisdictions").

- 212. See supra notes 206–11 and accompanying text.
- 213. See infra Section III.A.3.
- 214. See Sandbox, supra note 124 (defining a financial technology sandbox).
- 215. See Wyo. Stat. Ann. § 40-29-101 (West 2020).

_

^{210.} See IRS Notice, supra note 74 (noting that the IRS treats convertible virtual currency as property, therefore, general property tax principles will apply to property transactions).

^{211.} See Revenues, Peter G. Peterson Found., https://bit.ly/38vS1VM (last visited Jan. 9, 2021) (showing that federal and state government operations are financed almost entirely by taxes).

^{216.} See generally DELOITTE, C-Suite Briefing: 5 Blockchain Trends for 2020 2 (2020), https://bit.ly/30LUfzg (describing 2020 as a year with an opportunity for blockchain technology to receive significant investments for "real business-ready solutions").

^{217.} See Reena Agrawal Sahni et al., Banking Laws and Regulations 2021, GLOB. LEGAL INSIGHTS (2021), https://bit.ly/3sbPojY (introducing traditional banking standards in the United States).

^{218.} See Julia Kagan, Financial Technology - Fintech, INVESTOPEDIA (Aug. 27, 2020), https://bit.ly/3hZNz4V (defining Fintech as "new tech[nology] that seeks to improve and automate the delivery and use of financial services").

^{219.} See The Sandbox Approach, PWC, https://pwc.to/3hYVjUR (last visited Jan. 9, 2020).

technology, a Pennsylvania sandbox could help facilitate partnerships between established companies and start-up companies, as some of the risks of dealing with a Fintech start-up would be mitigated.²²⁰ The creation of a sandbox would certainly allow for greater financial innovation and creativity;²²¹ however, Pennsylvania should also consider the positive effects of SPDIs.²²²

4. Special Purpose Depository Institutions

To ensure that individuals and businesses have a safe and legal place to house their digital assets, Pennsylvania needs to follow Wyoming's lead and allow for the creation of "Special Purpose Depository Institutions" (SPDIs).²²³ Pennsylvania SPDIs would provide those with digital assets an on-and-off ramp between fiat and digital currencies, as well as custodial services for blockchain assets.²²⁴ With an SPDI charter, companies that help to exchange digital assets into national currencies will be able to expand their business offerings and eliminate the need to partner with third-party banks.²²⁵ In effect, Pennsylvania SPDIs would allow for greater integration between the traditional banking system and digital asset ownership.²²⁶

Going forward, the Pennsylvania legislature's efforts should be directed towards enacting favorable virtual currency and blockchain technology laws to best promote innovation. ²²⁷ Specifically, Pennsylvania should follow Wyoming's lead by taking these four steps: (1) continuing to exempt virtual currency from state money transmitter laws, ²²⁸ (2) treating digital assets as property, ²²⁹ (3) creating a financial technology sandbox, ²³⁰ and (4) allowing the creation of special purpose depository

^{220.} See id. ("Piloting a product or business model through a sandbox will help companies manage their regulatory risk during the testing period itself.").

^{221.} See Giulio Cornelli et al., Inside the Regulatory Sandbox: Effect on Fintech Funding, BIS (Nov. 9, 2020), https://bit.ly/3sbGKkt (entering a sandbox increases the probability of raising funds and increases the amount of funding raised by 15% on average).

^{222.} See infra Section III.A.4.

^{223.} See SPDIs, supra note 132 (defining SPDIs).

^{224.} See Carolyn Duren, Wyoming Aims to Become 'Silicon Prairie' With 1st Cryptocurrency Bank, S&P GLOB. MKT. INTEL. (Sept. 23, 2020), https://bit.ly/39ffWbk (describing Wyoming's first cryptocurrency bank and the future effects of SPDI charters).

^{225.} See id.

^{226.} See id.

^{227.} See Myriam Ertz & Émilie Boily, The Rise of the Digital Economy: Thoughts on Blockchain Technology and Cryptocurrencies for the Collaborative Economy, 3 INT'L. J. OF INNOVATION STUD. 84, 88 (2019) (summarizing the effects of blockchain and virtual currency on the economy).

^{228.} See supra Section II.D.1.d.

^{229.} See supra Section II.D.1.a.

^{230.} See supra Section II.D.1.b.

institutions.²³¹ Pennsylvania lawmakers, however, should also be aware of steps to avoid when considering virtual currency and blockchain regulation.²³²

B. Pennsylvania Should Avoid Adopting Law Similar to New York and the URVCBA

While adopting strict virtual currency regulations to best protect consumers may seem appropriate, several of these efforts have proven to be ineffective.²³³ Pennsylvania legislators should become familiar with BitLicense and the URVCBA but should not adopt similar legislation.²³⁴

1. Rejecting BitLicense

Pennsylvania should reject legislation similar to BitLicense because only large businesses can withstand the fees associated with the BitLicense.²³⁵ New York, through the NYDFS, took a less favorable approach, compared to Wyoming, when New York created BitLicense as a way to regulate virtual currency.²³⁶ Pennsylvania legislators should not adopt regulations similar to BitLicense and must be aware of the negative outcomes resulting from BitLicense.²³⁷

By adopting regulations similar to BitLicense, Pennsylvania would require virtual currency businesses to obtain a license from the state before the virtual currency business could legally operate.²³⁸ Obtaining a license in New York carries substantial costs and regulatory hurdles and has proven to be unsuccessful as many virtual currency businesses have fled the state since BitLicense's adoption.²³⁹ A framework similar to BitLicense would cause many of the same problems in Pennsylvania

- 231. See supra Section II.D.1.c.
- 232. See infra Section III.B.
- 233. See Reddy, supra note 93, at 273 ("[S]tate legislatures have acted independently resulting in a regulatory mishmash of guidance, clarification, extension[,] and ongoing discussion."); see also Tu & Meredith, supra note 33, at 304.
 - 234. See infra Sections III.B.1, III.B.2.
- 235. See Jamie Redman, NYDFS Superintendent Was Wrong BitLcense Severely Damaged Bitcoin Businesses, BITCOIN.COM (Apr. 13, 2018), https://bit.ly/2KRb9EW (noting as of 2018, fifteen digital currency companies left New York for states with more favorable laws).
- 236. See Casper, supra note 155; see also SACKHEIM & HOWELL, supra note 37, at 350–51 (explaining BitLicense and its licensing requirements).
- 237. See Matthew Kohen & Carlton Fields, New York's Relaxed BitLicense Could Still Take Lessons from Wyoming's Permissive Approach, JDSUPRA (July 28, 2020), https://bit.ly/3q2f4NS (noting that BitLicense was intended to "safeguard the public, but its greatest impact has been creating a regulatory burden that makes it cost prohibitive for most fledging companies to operate in New York."). The prohibitive effect can be seen as BitLicense has only granted 25 BitLicenses since its enactment. See id.
 - 238. See N.Y. COMP. CODES R. & REGS. tit. 23, §§ 200.1-200.22 (2020).
 - 239. See Kohen & Fields, supra note 237.

because virtual currency businesses would simply choose to operate in another state with more favorable virtual currency laws, i.e., Wyoming.²⁴⁰ Virtual currency business in Pennsylvania is far less developed than in New York, and an attempt to adopt strict virtual currency regulation may stifle any attempt for Pennsylvania to attract virtual currency business in the future. By adopting a strict body of law like BitLicense, Pennsylvania could lose out on many of the benefits of attracting virtual currency business, such as job creation, capital, and tax revenues.²⁴¹ In addition to not requiring virtual currency businesses to obtain a license before they can legally operate, Pennsylvania should not impose other BitLicense-type compliance requirements.²⁴² Many of the BitLicense compliance requirements for virtual currency businesses are aimed at precluding startups and low budget market participants from operating.²⁴³ Rather than creating unnecessary requirements in the same way that BitLicense does, Pennsylvania should either wait to regulate virtual currency and blockchain or propose legislation that is attractive to virtual currency businesses of all types.²⁴⁴ New York's BitLicense is not the only failed attempt at regulating virtual currency business that Pennsylvania legislators should be aware of; Pennsylvania legislators should also refrain from enacting the URVCBA.²⁴⁵

2. Rejecting the URVCBA

The substance of the URVCBA mirrors that of New York's BitLicense and should therefore be rejected by Pennsylvania legislators.²⁴⁶ First, the URVCBA calls for the uniform regulation of virtual currency and blockchain technology within an undeveloped and quickly changing industry before these new innovations are fully understood.²⁴⁷ Pennsylvania legislators should not adopt the URVCBA because possible

^{240.} See JD Alois, Low Taxes, Business Friendly: Wyoming Welcomes Economic Growth Including Blockchain Firms, CROWDFUND INSIDER (Sept. 25, 2020, 3:41 PM), https://bit.ly/2Xzw8P3 (claiming that new business registrations in Wyoming are up 75% year to date, in large part to favorable virtual currency and blockchain laws).

^{241.} See PERKINS, supra note 180, at 26 (noting the future role and value of virtual currencies remains highly uncertain, proponents assert that virtual currencies will become widely used payment methods and provide increased economic efficiency).

^{242.} See SACKHEIM & HOWELL, supra note 37, at 351 (listing several other compliance requirements provided by BitLicense that can place burdens on market participants).

^{243.} See id; see also Wales & Kohen, supra note 60.

^{244.} See Wales & Kohen, supra note 60.

^{245.} See infra Section III.B.2.

^{246.} See SACKHEIM & HOWELL, supra note 37, at 350.

^{247.} See Reddy, supra note 93, at 277; see also Trevor I. Kiviat, Note, Beyond Bitcoin: Issues in Regulating Blockchain Transactions, 65 DUKE L.J. 569, 574 (2015) ("[F]inancial regulators must develop a better understanding of blockchain technology's impact potential as they continue to engage in its pragmatic regulation.").

regulatory mistakes would preclude innovation in the emerging virtual currency and blockchain industries.²⁴⁸ One example of these regulatory mistakes would be using definitions that could be interpreted in a broad manner, thereby limiting virtual currency use and innovation. Further, in contrast to the URVCBA, which offers restrictive language for blockchain technology, ²⁴⁹ Pennsylvania should resist any attempt to adopt regulations that hinder the development of blockchain technology in emerging fields.²⁵⁰ The URVCBA requirements of both initial disclosure at the application stage as well as ongoing periodic disclosure requirements throughout the course of virtual currency business activities could act as a barrier for smaller start-up companies.²⁵¹

While implementing uniform regulations in each state may be the end goal in the United States, the URVCBA regulations are not viable. Pennsylvania should resist adopting the URVCBA prematurely, just as every other state, besides Rhode Island, has done. Any steps taken by Pennsylvania legislators should be aimed at trying to fit virtual currency business into existing regulatory frameworks, rather than creating a new statutory and licensing framework like the URVCBA. Pennsylvania must avoid a URVCBA-type licensing framework and continue taking a broadly exemptive approach.

IV. CONCLUSION

Businesses and individuals in the virtual currency and blockchain trade are currently operating in a legislative environment without any clear guidance on virtual currency and blockchain.²⁵⁶ As economic significance

^{248.} See Reddy, supra note 93, at 278-79.

^{249.} See Osato Avan-Nomayo, Nevada Lawmakers Scrap Flawed Cryptocurrency Bill, BITCOINIST (2019), https://bit.ly/2NOAujG (introducing money transmitter license burdens on virtual currency companies and exempting cryptocurrency from supernegotiability protection).

^{250.} See Susan Alkadri, Defining and Regulating Cryptocurrency: Fake Internet Money or Legitimate Medium of Exchange, 17 DUKE L. & TECH. REV. 71, 96 (2018) (noting the URVCBA recommends "substantial disclosures at the application stage and periodically thereafter").

^{251.} See URVCBA, supra note 17, at 33–52, 53–60, 70 (stating application, examination disclosures, and required disclosures).

^{252.} See Long, supra note 191 (asking states to refrain from enacting the URVCBA before the impacts of the emerging industry are better understood).

^{253.} See URVCBA, supra note 17, at 1; see also Who's Regulating Bitcoin and Other Crypto-Currencies? No One., Concord L. Sch. Purdue Univ. Glob. (Apr. 14, 2020), https://bit.ly/30EaVZ3.

^{254.} See URVCBA, supra note 17, at 1 (adopting the URVCBA is a move to adopt a separate regulatory regime for virtual currencies).

^{255.} See Money Transmitter Act, supra note 168; see also SACKHEIM & HOWELL, supra note 37, at 354.

^{256.} See supra Sections II.B.1, II.B.2, II.B.3, II.B.4. See generally SACKHEIM & HOWELL, supra note 37, at 335–49 (reviewing "the web of concurrent and overlapping

in both virtual currency and blockchain technology continues to grow, so too does the need for clear laws.²⁵⁷ Many critics call for strict licensing frameworks, but strict licensing frameworks have shown to be ineffective and far too restrictive on technology and innovation.²⁵⁸

When Pennsylvania considers virtual currency and blockchain laws, it should opt for an innovation friendly approach to attract investment, stimulate the economy, and move forward with modern technology. ²⁵⁹ Even New York, a state known for being restrictive to virtual currency and blockchain, has recently enacted legislation aimed at fostering creation and economic growth. ²⁶⁰ Pennsylvania lawmakers must enact laws that attract virtual currency and blockchain-based businesses to Pennsylvania. ²⁶¹ By taking steps to enact laws similar to those enacted in Wyoming, Pennsylvania opens the door for digital asset businesses to excel without putting a halt to innovation and economic growth.

regulatory jurisdiction and developments in the United States regarding virtual currency and digital assets, including regulatory requirements applicable to intermediaries and trading platforms").

^{257.} See supra Section II.E.

^{258.} See supra Section II.D.2; see also supra notes 101–79 and accompanying text (discussing Rhode Island as the only state to adopt the URVCBA before the URVCBA told states to refrain from enacting the URVCBA until the impacts of the emerging technologies are better understood).

^{259.} See David Heck et al., Crypto Asset Regulation: Is the US or UK Keeping Up Best With This Emerging Market?, JDSUPRA (Jan. 8, 2021), https://bit.ly/3ooP2DA; see also supra Section III.A.

^{260.} See supra notes 155–66 and accompanying text (describing New York's recent efforts to become more inviting for virtual currency and blockchain technology businesses).

^{261.} See supra Sections III.A.1, III.A.2, III.A.3, III.A.4.