

DEFINING AND REGULATING CRYPTOCURRENCY: FAKE INTERNET MONEY OR LEGITIMATE MEDIUM OF EXCHANGE?

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ABSTRACT

Digitalization makes almost everything quicker, sleeker, and more efficient. Many argue cryptocurrency is the future of money and payment transfers. This paper explores how the unique nature of cryptocurrencies creates barriers to a strict application of traditional regulatory strategies. Indeed, state and federal regulators remain uncertain if and how they can regulate this cutting-edge technology. Cryptocurrency businesses face difficulty navigating the unclear regulatory landscape, and consumers frequently fall prey to misinformation. To reconcile these concerns, this paper asserts cryptocurrency functions as “currency” or “money” and should be treated as such for regulatory purposes. It also proposes each state implement a uniform cryptocurrency-specific framework following the Uniform Regulation of Virtual-Currency Business Act. Such a harmonious approach would reduce compliance costs for cryptocurrency businesses, protect consumers, and provide satisfactory state and federal oversight.

INTRODUCTION

In the final weeks of 2017, cryptocurrency¹ mania skyrocketed, garnering widespread media attention and consumer interest. As a result,

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¹ This paper uses the term “cryptocurrency” to refer to decentralized virtual currencies utilizing a “cryptographic protocol that manages the creation of new units of the currency through a peer-to-peer network . . . [where creation] happens through a process called mining.” For a straightforward explanation and comparison of centralized and decentralized virtual currencies, see TEX. DEP’T OF BANKING, SUPERVISORY MEMORANDUM 1037, REGULATORY TREATMENT OF VIRTUAL CURRENCIES UNDER THE TEXAS MONEY SERVICES ACT (2014) [hereinafter “Memorandum 1037”]. Original terminology, such as “digital” or “virtual currency,” is retained in any statutory or proposed definitions. The Financial Action Task Force (FATF), an independent inter-governmental body that investigates and recommends global anti-money laundering (AML) and counter-terrorism financing (CTF) standards, has also issued a useful report defining types of virtual currencies. FIN. ACTION TASK FORCE, FATF REPORT:

the global market capitalization of all cryptocurrencies passed \$700 billion in January 2018, reaching an all-time high.² Presently, most cryptocurrency trading³ is done by small, retail investors using centralized cryptocurrency trading venues (“exchanges”).⁴ Emboldened by the frenzy, some individuals initiated second home mortgages to invest in Bitcoin, the first and best-known cryptocurrency.⁵

Cryptocurrency has been heralded for its many benefits, including increased payment efficiency, reduced transaction costs, and facilitation of international payments.⁶ Moreover, the blockchain technology underlying Bitcoin is completely operable without third-party intervention.⁷ Hard-line cryptocurrency proponents are fearful that

VIRTUAL CURRENCIES: KEY DEFINITIONS AND POTENTIAL AML/CFT RISKS (2014), *available at* <http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf> [hereinafter “FATF Report”].

² Will Martin, *The global cryptocurrency market hit a new record high above \$700 billion*, BUSINESS INSIDER (Jan. 3, 2018), <http://www.businessinsider.com/bitcoin-price-global-cryptocurrency-market-capitalisation-january-3-2018-1>.

³ As used in this paper, “trading” refers to the exchange of traditional legal tender, e.g. fiat currency such as the U.S. Dollar (U.S.D.), for a cryptocurrency, as well as the exchange of one cryptocurrency for another.

⁴ Oscar Williams-Grut, *The cryptocurrency market is now doing the same daily volume as the New York Stock Exchange*, BUSINESS INSIDER (Dec. 20, 2017), <http://markets.businessinsider.com/currencies/news/daily-cryptocurrency-volumes-vs-stock-market-volumes-2017-12-1011680451>. Unless otherwise noted, this paper uses the term “exchange” as it is understood colloquially by cryptocurrency users, businesses, and analysts; i.e., in reference to online cryptocurrency trading venues where consumers can initiate a purchase or sale of the instruments themselves, as opposed to purchase and sale of cryptocurrency-based derivatives such as options and futures.

⁵ See Chris Morris, *Some Bitcoin Investors Are Mortgaging Their Homes to Buy More Digital Currency*, FORTUNE (Dec. 12, 2017), <http://fortune.com/2017/12/12/bitcoin-investors-mortgages/> (discussing securities regulator Joseph Borg’s observation that investors ran up credit card debt and mortgaged their homes to buy into Bitcoin at the height of its price spike in December 2017).

⁶ See, e.g. Marc Andreessen, *Why Bitcoin Matters*, N.Y. TIMES: DEALBOOK (Jan. 21, 2014), http://dealbook.nytimes.com/2014/01/21/why-bitcoin-matters/?_r=0 (discussing the function, appeal, and potential uses of bitcoin and underlying blockchain technology). The FATF recognizes the legitimate use of cryptocurrencies. FATF Report, *supra* note 1 at 8–9.

⁷ The Bitcoin White Paper describes the technology as “[a] purely peer-to-peer version of electronic cash” where “online payments [are] sent directly from one party to another without going through a financial institution,” and emphasizes the importance of information privacy achieved through keeping public transaction logs anonymous. SATOSHI NAKAMOTO, BITCOIN: A PEER-TO-PEER-ELECTRONIC CASH SYSTEM (2008), *available at* <https://bitcoin.org/bitcoin.pdf>.

regulation may place an undue burden on technological development,⁸ and are wary of intervention by sovereign governments, regulatory bodies, and financial institutions, as these entities are viewed as uneducated on the complex technology.⁹ Further, there is an underlying distrust of governments and financial institutions to responsibly handle consumer money in a financial crisis.¹⁰ Some argue that decentralized cryptocurrencies such as Bitcoin and the underlying distributed ledger technology are inherently incapable of efficient regulation.¹¹

However, increased investor interest in cryptocurrencies and the pseudonymous nature of decentralized cryptocurrencies are exactly why regulators are so wary of this technology. Regulators are concerned with misinformed investments,¹² market fraud and manipulation,¹³ destabilization of the global economy,¹⁴ and its use for illicit purposes such

⁸ See, e.g., Bloomberg, *Washington Is Trying to Regulate Bitcoin. These People Are Trying to Stop It*, FORTUNE (Dec. 14, 2017), <http://fortune.com/2017/12/14/new-bitcoin-restrictions/> (describing pro-cryptocurrency advocacy groups' lobbying efforts against what they view as unnecessary and restrictive contemplated regulation).

⁹ *Id.*; see also Jon Martindale, *Go ahead, pass laws. They can't kill bitcoin, even if they try*, DIGITAL TRENDS (Dec. 19, 2017), <https://www.digitaltrends.com/computing/dont-worry-about-bitcoin-regulation-it-cant-be-stopped/> (touting the low transaction costs, efficiency, and pseudonymous nature of decentralized cryptocurrency).

¹⁰ See Danny Bradbury, *Bitcoin and Financial Crises: Bitcoin as a Safe Haven in an Economic Storm*, THE BALANCE, <https://www.thebalance.com/is-bitcoin-the-answer-in-a-financial-crisis-391275> (last updated Dec. 3, 2018) (Countries experiencing a financial crisis "often tighten their financial thumbscrews," limiting their population's access to cash).

¹¹ See Martindale, *supra* note 9 (government regulation of cryptocurrency itself is futile due to decentralization and availability of circumvention measures such as VPNs or proxy systems); but see B.G., *Bitcoin is fiat money, too*, ECONOMIST (Sept. 22, 2017), <https://www.economist.com/free-exchange/2017/09/22/bitcoin-is-fiat-money-too> ("The developers behind distributed ledgers [] talk as if governance is something they are beyond. They are not.").

¹² See, e.g., Jay Clayton & J. Christopher Giancarlo, *Regulators Are Looking at Cryptocurrency: At the SEC and CFTC, We Take Our Responsibility Seriously*, WALL ST. J. (Jan. 24, 2018), <https://www.wsj.com/articles/regulators-are-looking-at-cryptocurrency-1516836363> (comparing the cryptocurrency craze to the dot-com bubble of the 1990s, and stating that "experience tells us that while some market participants may make fortunes, the risks to all investors are high. Caution is merited.").

¹³ *Id.*

¹⁴ See, e.g., Camilla Hodgson, *Bitcoin could trigger the next financial crisis*, BUSINESS INSIDER (Dec. 22, 2017), <http://www.businessinsider.com/bitcoin-could-trigger-financial-crisis-2017-12> (cautioning that without regulation,

as money laundering and terrorism financing.¹⁵ As a result, federal and state lawmakers in the United States are scrambling to determine what regulatory framework would best fit this technology.

This paper explores how the unique nature of cryptocurrency creates barriers to a strict application of traditional regulatory strategies. It asserts that decentralized cryptocurrencies function as currency or money, and proposes state-based regulation of cryptocurrency business intermediaries analogous to Money Transmission Services (MTSs), a subset of Money Service Businesses (MSBs).¹⁶ This paper examines the current state of cryptocurrency exchange and money transfer platform regulation, specifically how the states of New York, California, and Texas

cryptocurrencies have potential to destabilize the global financial system); *c.f.* Rakesh Sharma, *Jerome Powell: Cryptocurrencies Aren't Big Enough to Matter Yet*, INVESTOPEDIA, <https://www.investopedia.com/news/jerome-powell-cryptocurrencies-arent-big-enough-matter-yet/> (last updated Nov. 29, 2017) (summarizing Federal Reserve Chairman Jerome Powell's November 2017 Senate testimony where he suggested the cryptocurrency market was not yet large enough to affect the mainstream economy, but noting his agency continues to "monitor[] cryptocurrencies 'very carefully'").

¹⁵ See FATF Report, *supra* note 1, (detailing potential risks); see also Angela Monaghan, *Bitcoin is a fraud that will blow up, says JP Morgan boss*, THE GUARDIAN (Sept. 13 2017), <https://www.theguardian.com/technology/2017/sep/13/bitcoin-fraud-jp-morgan-cryptocurrency-drug-dealers> (discussing JP Morgan chairman and CEO Jamie Dimon's opinion that cryptocurrency such as Bitcoin is "only fit for use by drug dealers, murderers and people living in places such as North Korea.").

¹⁶ This paper focuses on state-implemented regulatory oversight of cryptocurrency businesses as—or analogously to—MTSs. Competing theories of classification exist. Individual cryptocurrencies may fit within other regulatory frameworks outside the analytical scope of this paper. For example, U.S. Securities and Exchange Commission (SEC) Chairman Jay Clayton and Commodity Futures Trading Commission (CFTC) Chairman J. Christopher Giancarlo question whether the "historical approach to the regulation of currency transactions is appropriate for the cryptocurrency markets." The SEC is also monitoring Initial Coin Offerings ("ICOs") for cryptocurrencies that qualify as securities subject to federal regulation. See, e.g., 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> ("Tokens and offerings that incorporate features and marketing efforts that emphasize the potential for profits based on the entrepreneurial or managerial efforts of others continue to contain the hallmarks of a security under U.S. law."). In 2015, the CFTC concluded "Bitcoin and other virtual currencies" fit within the definition of "commodity" in Section 1a(9) of the Commodity Exchange Act, 7 U.S.C. §§ 6c(b) and 7b-3(a)(1) (2018). See *In re Coinflip, Inc., d/b/a Derivabit, and Francisco Riordan*, CFTC No. 15-29, at 3 (Sept. 17, 2015) [hereinafter "Derivabit"].

have applied their respective MTS/MSB Blue Sky laws—or variants thereof—to different types of cryptocurrency exchanges, and why a traditional MTS/MSB regulatory framework is incomplete. The analysis also considers interstate reciprocity and uniformity efforts by two pertinent policy-shaping organizations: the Conference of State Bank Supervisors (CSBS) and the National Conference of Commissioners on Uniform State Laws.

Some degree of regulation is necessary to prevent criminal activity and misinformed investments. This paper proposes that the 50 states implement a cryptocurrency-specific framework based on the Uniform Regulation of Virtual-Currency Business Act (URVCBA).¹⁷ At the very least, individual states should pass legislative amendments clarifying the applicability of existing state MTS laws to cryptocurrency businesses. Either approach must be augmented with required reporting to the U.S. Financial Crimes Enforcement Network (FinCEN), the IRS, and state tax boards, as applicable. Such a coordinated regulatory framework strikes a balance between encouraging technological innovation, maintaining market stability, and ensuring consumer protection.

I. WHAT ARE DECENTRALIZED CRYPTOCURRENCIES?

The proper regulatory framework for this (relatively) new phenomenon is contingent on how cryptocurrencies are classified. Though plausible arguments have been proffered that cryptocurrencies are distinct from traditional fiat currencies and could destabilize the global financial market,¹⁸ proponents of cryptocurrency insist the instruments function analogously—and should be treated identically—to traditional “fiat” currency.¹⁹ Many hope to see payments in cryptocurrencies one day become the international standard.²⁰ This Part examines current statutory definitions of “currency,” “money,” and crypto (“virtual”) currency at the federal and state level, as well as scholarly positions against classification of cryptocurrency as “currency” or “money.” It concludes that while cryptocurrencies may not fit within the traditional legal definitions of currency or money, they function as such. Presuming cryptocurrencies

¹⁷ UNIF. REGULATION OF VIRTUAL-CURRENCY BUS.’S ACT 10 (UNIF. LAW COMM’N 2017), http://www.uniformlaws.org/shared/docs/regulation%20of%20virtual%20currencies/URVCBA_Final_2017oct9.pdf [hereinafter “URVCBA”].

¹⁸ See *infra* notes 33–36 and accompanying text.

¹⁹ See, e.g., Ameer Rosic, *What is Cryptocurrency: Everything You Must Need To Know!*, BLOCKGEEKS, <https://blockgeeks.com/guides/what-is-cryptocurrency/> (last updated Sept. 13, 2018) (arguments for cryptocurrency as “digital cash”).

²⁰ See, e.g., Martindale, *supra* note 9 (“Many people see cryptocurrencies like bitcoin as an evolution of existing currency Digital transactions online and in person preclude the typical need for real-world money.”).

should be classified as money, Part II proposes a suitable regulatory framework.

A. *The Limited Scope of Current Statutory Definitions*

Cryptocurrencies do not neatly fit into the present legal definitions or interpretations of “currency” or “money” in the United States. On several occasions, federal regulators have distinguished cryptocurrency from traditional or “real” currency. For example, in 2013, FinCEN issued interpretive guidance defining “real” currency 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.”²¹ Conceding that “‘virtual’ currency is a medium of exchange that operates like a currency in some environments,” the agency nonetheless stressed that cryptocurrency “does not have legal tender status in any jurisdiction.”²²

Individual states’ definitions align with their federal counterparts. California defines “money” as “a medium of exchange that is authorized or adopted by the United States or a foreign government.”²³ The Texas Finance Code defines “currency” for the purposes of “currency exchange” as “the coin and paper money of [any country] that is designated as legal tender and . . . customarily used and accepted as a medium of exchange in the country of issuance.”²⁴ Texas regulators also conclude that cryptocurrencies do not fit under the current definition of “money or monetary value” in the Money Services Act.²⁵ Presently, no

²¹ FIN. CRIMES ENF’T NETWORK, U.S. DEP’T OF TREASURY, FIN-2013-GOO 1, APPLICATION OF FINCEN’S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES (Mar. 18, 2013) (citing 31 C.F.R. § 1010.100(m) (2014)).

²² *Id.* For similar definitions of virtual currency, see Derivabit, *supra* note 16 at 2 n.2 (acknowledging cryptocurrency such as bitcoin as “a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value,” but noting that unlike traditional or “real” currency, cryptocurrencies “do[] not have legal tender status in any jurisdiction.”).

²³ CAL. FIN. CODE § 2003(p) (West 2017).

²⁴ TEX. FIN. CODE § 151.501(b)(1) (West 2017). Cryptocurrencies are not negotiable instruments, thus failing to satisfy the second definition of currency exchange in Texas.

²⁵ Memorandum 1037, *supra* note 1 at 3. As used in the Act, “money” or “monetary value” refer to “currency or a claim that can be converted into currency through a financial institution, electronic payments network, or other formal or informal payment system.” TEX. FIN. CODE §151.301(b)(3) (West 2017). Moreover, cryptocurrency is neither a “currency” as used in the Code, nor a “claim” as used in the Act. *See* Memorandum 1037, *supra* note 1 at 3 (stating the

cryptocurrency meets either California or Texas’s definitions of “money” or “currency”—though if a sovereign government chose to designate a cryptocurrency as legal tender, and the currency became a widely used medium of exchange (as many cryptocurrency enthusiasts hope), the instruments could certainly fall into these existing statutory frameworks.

New York, on the other hand, explicitly defines and differentiates both traditional fiat currency and virtual or cryptocurrency in its codified regulations:²⁶

Fiat Currency means government-issued currency that is designated as legal tender in its country of issuance through government decree, regulation, or law.²⁷

* * *

Virtual Currency means any type of digital unit that is used as a medium of exchange or a form of digitally stored value. Virtual Currency shall be broadly construed to include digital units of exchange that (i) have a centralized repository or administrator; (ii) are decentralized and have no centralized repository or administrator; or (iii) may be created or obtained by computing or manufacturing effort.²⁸

As shown above, neither states nor the federal government have accorded cryptocurrency the same status as fiat currency or money. Nonetheless, this framework is increasingly called into question as cryptocurrency use expands.

B. How Cryptocurrency Functions as Money

Despite not conforming to traditional definitions of “currency” or “money,” particularly the qualification as legal tender, cryptocurrencies should be treated as such. Cryptocurrencies function as a method “of transferring value from one person to another.”²⁹ The instruments can be

legal definition of a claim to be “a right enforceable by a court”) (citing Black’s Law Dictionary 264 (8th Ed. 2004)).

²⁶ New York’s regulatory treatment of cryptocurrency businesses is discussed *infra* in Part II. New York’s money transmission statute covers “payment instruments.” N.Y. BANKING LAW § 640 (McKinney 2011).

²⁷ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2(e) (Current through July 31, 2018) (emphasis in original).

²⁸ *Id.* at § 200.2(p) (emphasis in original).

²⁹ John L. Douglas, *New Wine into Old Bottles: Fintech Meets the Bank Regulatory World*, 20 N.C. BANKING INST. 17, 39 (2016).

directly transferred peer-to-peer,³⁰ function as vehicles for international remittance,³¹ and used as a payment option at some major retailers.³²

Some criticize cryptocurrencies as less desirable than traditional or fiat currency because the instruments are not backed by a physical commodity (e.g., gold) or the full faith of a sovereign government (e.g., the U.S. and E.U. guarantee of the U.S. dollar and Euro, respectively).³³ For example, Professor Hilary J. Allen considers cryptocurrency privately issued money, and is concerned the volatile nature of these instruments may affect the global financial market.³⁴ Allen asserts that cryptocurrencies “are inherently fragile because they are nothing more than a series of numbers recorded on a database, and have no worth as an asset class other than their ability to facilitate transactions.”³⁵ Like others, Allen recognizes that the value of cryptocurrency stems from “people[’s] belie[f] that others will be willing to accept the virtual currency in exchange for other goods and services.”³⁶

³⁰ See, e.g., discussion of Memorandum 1037, *supra* note 1.

³¹ Instead of transferring a given cryptocurrency itself, some businesses instead accept a user-sender’s fiat money, use it to purchase a corresponding amount of cryptocurrency (such as bitcoin), then sell the cryptocurrency for the fiat currency of the receiving nation, remitting the fiat to the user-recipient. For a description on the overseas bitcoin remittance business, see Shobhit Seth, *Bitcoin’s Most Profitable Use: the \$600 Billion Overseas Remittance Business?*, INVESTOPEDIA (Mar. 29, 2018), <https://www.investopedia.com/tech/bitcoins-best-use-isnt-currency-its-overseas-remittances/>.

³² Elise Moreau, *15 Major Retailers and Services That Accept Bitcoin*, LIFEWIRE, <https://www.lifewire.com/big-sites-that-accept-bitcoin-payments-3485965> (last updated Nov. 4, 2018).

³³ See, e.g. Hilary J. Allen, *§=€=BITCOIN?*, 76 MD. L. REV. 877, 880–89 (2017) (arguments why cryptocurrencies fit neither the legal nor functional definition of “currency” or “money”).

³⁴ *Id.* at 881.

³⁵ *Id.* (citing Paul Krugman, *Bits and Barbarism*, N.Y. TIMES (Dec. 22, 2013), <http://www.nytimes.com/2013/12/23/opinion/krugman-bits-and-barbarism.html>; see also Paul Vigna, *Howard Marks Trashes Bitcoin: ‘An Unfounded Fad’*, WALL ST. J. (Jul. 27, 2017), <https://blogs.wsj.com/moneybeat/2017/07/27/howard-marks-trashes-bitcoin-an-unfounded-fad/> (quoting an investment letter by Howard Marks, co-founder of Oaktree Capital Management, stating: “[B]itcoin is really no more than ‘an unfounded fad (or perhaps even a pyramid scheme), based on a willingness to ascribe value to something that has little or none beyond what people will pay for it.’”).

³⁶ Allen, *supra* note 33 at 881; see also Douglas, *supra* note 29 at 40 (musing the willingness of individuals to accept cryptocurrencies as a method of payment “appears to hinge on the ability to exchange the digital currency for legal tender”).

These arguments are compelling, and it is true cryptocurrency values are volatile.³⁷ However, any insinuation that a string of computer code is an inherently less valid or legitimate representation of value than a piece of paper is misguided. The only real value attached to *any* instrument functioning as a currency—whether a tangible metal coin or paper note, or an intangible series of 1s and 0s comprising the code behind thousands of cryptocurrencies—is the ability and willingness of others to use the instrument as a form of exchange.³⁸ Normative value judgments are not necessarily dictated by the characteristics of the medium itself. To illustrate, one U.S. dollar bill (\$1 U.S.D.) is printed on exactly the same type of paper, of the same length, width, thickness, and consistency, as a one hundred U.S. dollar bill (\$100 U.S.D.).³⁹ Watermarks and holograms aside, the key distinction between these two pieces of paper is that most (if not all) people value the piece of paper with the “one hundred dollars” stamp 100x more than the paper with a “one dollar” stamp. As a result, it has more purchasing or exchange power.⁴⁰ Similarly, if I alone value antique brass buttons, and am willing to exchange goods and services or traditional currency to obtain them, it would be far-fetched to classify such buttons as currency or money. However, should I convince hundreds or thousands of others of the value behind brass buttons, this classification becomes much more appropriate. Because a significant number of people and businesses use cryptocurrencies to transfer value from one party to another,⁴¹ cryptocurrencies function as—and should be regulated as or analogously to—traditional currency or money.

³⁷ See, e.g., Ruzbeh Bacha, *Cryptocurrency—Bitcoin, Ethereum, Ripple, Litecoin—Everything You Need to Know in 2017*, MEDIUM (May 22, 2017), <https://medium.com/cryptolinks/cryptocurrency-bitcoin-ethereum-ripple-litecoin-everything-you-need-to-know-in-2017-28109d927037> (concluding volatility partially due to lack of a stabilizing central entity and acknowledging fragmentation as one of the largest problems with cryptocurrency such as Bitcoin).

³⁸ See *id.* (pointing out the majority of fiat currencies also “only exist as numbers in a computer system”).

³⁹ *USA Currency Bills*, IMMIHELP <https://www.immihelp.com/newcomer/usa-currency-bills.html> (last visited Dec. 5, 2018).

⁴⁰ I dare say that if an indigenous individual from the North Sentinel Island of India came across any denomination of U.S.D., he or she would have absolutely no use or interest—and thus no value—in the piece of paper.

⁴¹ See *supra* notes 29–32 and accompanying text.

II. CURRENT REGULATORY SCHEME AND PROPOSED MODEL FRAMEWORKS

A. *Why Regulate Cryptocurrency?*

As discussed, cryptocurrencies are a unique instrument, and the underlying technology has great potential utility. Purchasing and using the instruments themselves is risky, and their pseudonymous nature may serve and often have served as a vehicle for illegal or unscrupulous activity.⁴² Moreover, the lack of an issuing entity or individual to hold accountable⁴³ and the decentralized, nearly-instantaneous transferability of these instruments create significant roadblocks to direct regulation (such as federal securities laws regulate the “issuers” of securities). As the remainder of this paper will explain, regulation of the transaction intermediaries (cryptocurrency trading venues/exchanges) would likely be the most feasible, and most effective, means of regulation.

While cryptocurrencies can be transferred peer-to-peer (without an intermediary), most cryptocurrency trading is conducted using cryptocurrency trading venues (“exchanges”).⁴⁴ The mainstream cryptocurrency market space is dominated by centralized exchanges facilitating inter-user transactions between cryptocurrencies, from fiat currencies (such as the U.S.D. and Euro) to cryptocurrencies, and vice versa.⁴⁵

A centralized cryptocurrency exchange acts as a third-party intermediary to facilitate transactions between buyers and sellers.⁴⁶ Utilizing a third-party provides many advantages to users. These intermediaries undertake a search function to locate another party from the

⁴² See *supra* notes 12–15 and accompanying text.

⁴³ See Memorandum 1037, *supra* note 1 at 3 (“There is no entity that must honor the value of a cryptocurrency, or exchange any given unit of a cryptocurrency for sovereign currency.”).

⁴⁴ See *supra* note 4 and accompanying text.

⁴⁵ See Nathan Reiff, *What Are Centralized Cryptocurrency Exchanges?*, INVESTOPEDIA (Mar. 16, 2018), <https://www.investopedia.com/-/what-are-centralized-cryptocurrency-exchanges/> (overview of form and function of centralized cryptocurrency exchanges); see also Loi Luu, *Solving the Liquidity Challenge of Decentralized Exchanges*, COINDESK (Aug. 13, 2017), <https://www.coindesk.com/solving-liquidity-challenge-decentralized-exchanges/> (same). The price for cryptocurrencies is set by “spot” trading platforms—i.e., what the market is willing to pay. Clayton & Giancarlo, *supra* note 12.

⁴⁶ Reiff, *supra* note 45.

exchange's user network.⁴⁷ The intermediary then matches buyers and sellers, safely completing the transaction on the users' behalf (whether executing the buy-sell transaction, or providing instant liquidity if an appropriate match is not found).⁴⁸ Because cryptocurrencies are often stored in digital wallets accessible only through long alphanumeric public and private keychains, the entirety of the wallet's contents are lost forever if an individual forgets or loses his or her wallet key.⁴⁹ Thus, users may find it advantageous to transfer their cryptocurrency assets to a centralized exchange, allowing the business to safeguard (take custody of) the coins.⁵⁰

While using cryptocurrency exchanges can be beneficial to users, the presence of an intermediary in the transaction chain increases exposure to potential risks and vulnerabilities. For example, hackers frequently exploit weaknesses in the cybersecurity of centralized exchanges. On several occasions, criminals have successfully stolen tens of millions of dollars' worth of cryptocurrency which was never recovered.⁵¹ This is

⁴⁷ Reiff, *supra* note 45; *see also* Hans R. Stoll, *Electronic Trading in Stock Markets*, 20 J. ECON. PERSP. 153, 154 (2006) (discussing the need for market's capacity both to search and match buyers and sellers).

⁴⁸ *See* Stoll, *supra* note 47, at 154 (“[M]arkets must have the facility to search for the other side of trades and to provide liquidity should the other side not be available.”).

⁴⁹ *See* Reiff, *supra* note 45 (“[A]n individual can lose hundreds or thousands of dollars in digital currency holdings simply by forgetting the key to a wallet.”); *see also* Louise Matsakis, *How Wired Lost \$100,000 in Bitcoin*, WIRED (May 28, 2018), https://www.wired.com/story/wired-lostbitcoin/?mbid=nl_052818_daily_list_p.

⁵⁰ Centralized exchanges such as Coinbase act as custodial services, holding users' funds and promising to protect the digital assets, allowing wallet access through a username and password. *See, e.g., Digital Asset Custody For Institutions*, COINBASE, <https://custody.coinbase.com> (last visited Dec. 5, 2018). Decentralized cryptocurrency exchanges also exist. *See* Luu, *supra* note 45. Unlike their centralized counterparts, decentralized exchanges do not function as digital asset custodians; instead, customer funds are held by each individual user in a personal wallet. *Id.* This function is touted as allowing users greater autonomy and privacy. *See id.* However, decentralized platforms have yet to attract a mainstream user base. *Id.*

⁵¹ *See, e.g.,* Darryn Pollock, *The Mess That Was Mt. Gox: Four Years On*, COINTELEGRAPH (Mar. 9, 2018), <https://cointelegraph.com/news/the-mess-that-was-mt-gox-four-years-on> (discussing 2014 hack of Mt. Gox—at the time the largest cryptocurrency exchange—where 750,000 user Bitcoins and 100,000 of the exchange's own coins were stolen); *see also* Stan Higgins, *The Bitfinex Bitcoin Hack: What We Know (And Don't Know)*, COINDESK, <https://www.coindesk.com/bitfinex-bitcoin-hack-know-dont-know/> (last updated Jun. 20, 2018) (detailing theft of more than \$60 million U.S.D. from one of the largest cryptocurrency exchanges, BitFinex. At the time, the hack was “the largest

especially concerning in custodial arrangements where the platform holds and promises to protect users' funds. Therefore, it is imperative that exchanges are subject to regulations establishing sufficient cybersecurity protocols.

Section II(B) will address the current scheme and desirability of regulating cryptocurrency exchange intermediaries as money transmitters.

B. Regulation of Cryptocurrency Exchanges and the Applicability of Existing Money Transmission Laws.

State and federal money transmission statutes govern the transfer of money or value from one party to another. The individual states have the authority to administer and license money transmitters through their respective Blue Sky Laws.⁵² Additionally, “money transmitting businesses” must register with the U.S. Secretary of the Treasury.⁵³ Money transmitters are a subset of the Money Service Business (MSB) category, and must comply with FinCEN requirements relating to Bank Secrecy Act (BSA)⁵⁴ laws, including AML measures and Know Your Customer (KYC) rules.⁵⁵

Currently, many cryptocurrency exchanges are opting for classification as money transmitters, which are primarily regulated under

loss of bitcoins by an exchange since Japan's infamous Mt. Gox[.]”). Cryptocurrency businesses also face the risk of insider trading and fund mismanagement. Rialto.AI, *How much do we really know about insider trading in crypto?*, MEDIUM, <https://medium.com/@RialtoAI/how-much-we-really-know-about-insider-trading-in-crypto-81911018c9e2> (July 13, 2018).

⁵² Federal law proscribes operating an “unlicensed money transmitting business.” 18 U.S.C. § 1960 (2018). This term is explicitly defined as “affect[ing] interstate or foreign commerce . . .” and either (A) operating without a license in a state criminalizing unlicensed operation, (B) failing to comply with federal registration requirements of 31 U.S.C. § 5330, or (C) transmitting funds known to have been derived from or intended to be used in criminal or unlawful activity. 18 U.S.C. § 1960(b)(1). There is no federal money transmission licensing scheme.

⁵³ 31 U.S.C. § 5330 (West 2018). “Money transmitting business” and “money transmitting service” are defined in §§ 5330(d)(1) and (2), respectively. *Id.*

⁵⁴ The Bank Secrecy Act (BSA), also known as the Currency and Foreign Transactions Reporting Act, requires that financial institutions in the U.S. assist U.S. government agencies in detecting and preventing money laundering and fraud. The Bank Secrecy Act, 31 U.S.C. §§ 5311–5332 (2018).

⁵⁵ FinCEN retains authority to administer the BSA. *See* Treas. Order 180-01 (July 1, 2014), *available at* <https://www.treasury.gov/about/role-of-treasury/orders-directives/Pages/to180-01.aspx>.

individual state Blue Sky laws.⁵⁶ Some exchanges report to FinCEN.⁵⁷ At first, the jurisdictional basis for such regulatory authority might appear tenuous; after all, Part II(A) discussed how cryptocurrencies do not fit within certain legal definitions of “currency” or “money.” But, a 2013 FinCEN guidance clarified that certain cryptocurrency-related activities fall within its regulatory purview under the BSA.⁵⁸ Thus, absent Congressional legislation or state statutes specifically applicable to cryptocurrencies, money transmission seems to be the default regulatory framework.

Money transmission statutes, however, were not designed to regulate cryptocurrency businesses.⁵⁹ Presently, interstate classification of cryptocurrencies and regulation of cryptocurrency markets and exchanges varies significantly. Most states have yet to consider cryptocurrency-specific legislation.⁶⁰ As a result, cryptocurrency-related businesses are faced with an uncertain regulatory landscape. The effective or proposed regulatory treatment of cryptocurrency businesses in three states with active securities markets, financial sectors, and technology industries—New York, California, and Texas—will be discussed in turn below.

⁵⁶ Cf. Clayton & Giancarlo, *supra* note 12 (“Many . . . cryptocurrency-trading platforms have registered as payment services and are not subject to direct oversight by the SEC or the CFTC”); see also *Virtual Currencies: The Oversight Role of the U.S. Securities and Exchange Commission and the U.S. Commodity Futures Trading Commission: Hearings Before S. Comm. on Banking, Housing, and Urban Affairs*, 115th Cong. 1 (2018) [hereinafter *Hearings*] (statement of Jay Clayton, Chairman, Sec. & Exch. Comm’n), available at <https://www.banking.senate.gov/imo/media/doc/Clayton%20Testimony%202-6-18.pdf> (claiming current regulatory framework applicable to cryptocurrency exchanges “was not designed with trading of the type we are witnessing in mind.”). Coinbase, Inc.—the parent company behind cryptocurrency exchanges Coinbase and Global Digital Asset Exchange (GDAX) in the United States—maintains it “is licensed to engage in money transmission in most U.S. jurisdictions” and is registered with FinCEN as a Money Services Business. *Is Coinbase regulated?*, COINBASE, https://support.coinbase.com/customer/en/portal/articles/2689172-is-coinbase-regulated-?b_id=13521 (last visited Dec. 5, 2018).

⁵⁷ See, e.g., *Is Coinbase Regulated?*, *supra* note 56.

⁵⁸ FinCEN Guidance, *supra* note 21.

⁵⁹ See Douglas, *supra* note 29, at 47 (“[M]any of the money transmitter statutes neither squarely cover digital currencies nor provide the degree of regulatory oversight desired.”); see also *Hearings*, *supra* note 56 (questioning desirability of current regulatory scheme).

⁶⁰ See, e.g., Douglas, *supra* note 29, at 44–45 (outlining the “different [states’] approaches on the regulation of digital currency”).

I. New York

In 2014, New York became the first state to adopt a cryptocurrency-specific licensing regime: the “BitLicense.”⁶¹ As of August 8, 2015, businesses that deal with any form of digital currency are required to apply for a license from the New York Department of Financial Services (NYDFS), pay a nonrefundable application fee of \$5,000,⁶² consent to state examination, post a surety bond in an amount determined on a case-by-case basis,⁶³ provide various disclosures and financial information,⁶⁴ and establish AML,⁶⁵ cybersecurity,⁶⁶ and business continuity and disaster recovery programs.⁶⁷ The strict and expensive BitLicense led to a massive public outcry from the cryptocurrency community and a swift departure of Bitcoin-related businesses from the state.⁶⁸ Though several cryptocurrency businesses have applied, NYDFS has awarded only nine BitLicenses to date.⁶⁹

⁶¹ Stan Higgins, *NY Bitcoin Businesses Now Have 45 Days to Apply for BitLicense*, COINDESK, <https://www.coindesk.com/ny-bitcoin-business-45-days-bitlicense/> (last updated Oct. 23, 2015); *see also* N.Y. COMP. CODES R. & REGS. tit. 23, § 200.3 (stating a license is required to engage in any “Virtual Currency Business Activity.”).

⁶² N.Y. COMP. CODES R. & REGS. tit. 23, § 200.5.

⁶³ *Id.* at § 200.9.

⁶⁴ *Id.* at § 200.14.

⁶⁵ *Id.* at § 200.15.

⁶⁶ *Id.* at § 200.16.

⁶⁷ *Id.* at § 200.17.

⁶⁸ Many Bitcoin companies have said the BitLicense application process is expensive and difficult; one week after the BitLicense’s effective date, Bitstamp had spent roughly \$100,000 in time allocation and legal and compliance fees. Daniel Roberts, *Behind the “exodus” of bitcoin startups from New York*, FORTUNE (Aug. 14, 2015), <http://fortune.com/2015/08/14/bitcoin-startups-leave-new-york-bitlicense/>. For a nonpartisan reaction, *see* Martin Tillier, *What BitLicense Regulations Mean for Bitcoin*, NASDAQ (June 10, 2015), <https://www.nasdaq.com/article/what-bitlicense-regulations-mean-for-bitcoin-cm485273> (acknowledging valid overreach concerns but ultimately concluding the BitLicense is “the first, if somewhat wobbly, step toward” Bitcoin gaining widespread acceptance).

⁶⁹ Coinbase was granted a BitLicense in 2017. *See* Michael del Castillo, *Bitcoin Exchange Coinbase Receives New York BitLicense*, COINDESK, <https://www.coindesk.com/bitcoin-exchange-coinbase-receives-bitlicense/> (last updated Jan. 18, 2017). A (quite short) list of institutions with a BitLicense can be found by searching “Type of Institution: Virtual Currency” on the NYDFS website. *See Who We Supervise*, Department of Financial Services,

2. California

California has considered two BitLicense-type proposals, though neither has been successful. The California Department of Business Oversight (CDBO) licenses and regulates money transmitters.⁷⁰ In February 2015, a California assemblyman introduced Assembly Bill (A.B.) 1326 as a proposal to regulate virtual currency in the state.⁷¹ A few months later, the bill was ordered “inactive” and set aside.⁷²

Critics voiced concerns about A.B. 1326’s vague definitions and unclear data collection practices, believing this threatened the future of virtual currency innovation in California.⁷³ In particular, opponents feared an overly broad definition of “virtual currency business” might subject unsuspecting product developers and individuals transacting on a small scale or personal basis to the onerous licensing requirements.⁷⁴

Two years later, the same lawmaker introduced A.B. 1123, another (ultimately unsuccessful) bid to regulate virtual currency in the state.⁷⁵ Despite failing in the Assembly, A.B. 1123 offers insight into California’s approach to the process to cryptocurrency regulation. For example, the bill would have required any person or entity involved in a

<https://myportal.dfs.ny.gov/web/guest-applications/who-we-supervise> (last visited Dec. 5, 2018).

⁷⁰ In California, the act of “money transmission” encompasses the following: “(1) Selling or issuing payment instruments,” “(2) Selling or issuing stored value,” or “(3) Receiving money for transmission.” CAL. FIN. CODE § 2003(q) (West 2018). In May 2015, the CDBO stated it was “still assessing the extent to which, if at all, we want to regulate virtual currencies under existing California law.” See Tanaya Macheel, *California Leaks, Retracts Bitcoin-Friendly Statement*, AMERICAN BANKER (May 22, 2015), <https://www.americanbanker.com/news/california-leaks-retracts-bitcoin-friendly-statement> (retraction of CDBO statement which indicated agency’s decision to defer digital currency regulation to the legislature).

⁷¹ See Yessi Bello Perez, *California’s Bitcoin Bill Shelved by State Senator*, COINDESK (last updated Sept. 17, 2015), <https://www.coindesk.com/californias-bitcoin-bill-shelved-by-state-senator/>.

⁷² *Id.*

⁷³ See Rainey Reitman, *A License to Kill Innovation: Why A.B. 1326—California’s Bitcoin License—is Bad for Business, Innovation, and Privacy*, ELECTRONIC FRONTIER FOUNDATION (Aug. 7, 2015), <https://www.eff.org/deeplinks/2015/08/license-kill-innovation-why-ab-1326-californias-bitcoin-license-bad-business> (criticism of A.B. 1326).

⁷⁴ *Id.*

⁷⁵ Assem. Bill 1123, 2017-2018 Reg. Sess. (Cal. 2017), available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180A_B1123.

“virtual currency business”⁷⁶ in California to register with California’s Commissioner of Business Oversight and obtain a license.

Interestingly, many of the virtual currency business license application requirements proposed in A.B. 1123 mirrored those required of California Money Transmitter license applicants.⁷⁷ To obtain a license under A.B. 1123, applicants would be required to pay a nonrefundable \$5,000 application fee, \$2,500 annual renewal fee and \$125 annual fee for each “license branch office,” maintain a bond or trust account in U.S.D. in an amount specified by the Commissioner, submit certain ownership and capital-related information, agree to annual audits, and periodically provide balance sheets, income statements, and other verification forms.⁷⁸ The Commissioner would also determine the minimal amount of capital deemed sufficient for the “safety and soundness” of the applicant and maintenance of consumer protection.⁷⁹

While A.B. 1123 appeared to strike a compromise between allowing innovation and protecting consumers, many argued A.B. 1123 overreached.⁸⁰ However, some welcomed the potential regulatory clarity.⁸¹

California’s proposals have been analogized to New York’s BitLicense regime.⁸² Pawel Kuskowski, CEO and co-founder of

⁷⁶ The proposal defined “[v]irtual currency business’ [as] maintaining full custody or control of virtual currency in [California] on behalf of others.” *Id.* at § 26000(c). “Virtual currency” was defined as “any type of digital unit that is used as a medium of exchange or a form of digitally stored value.” It excluded digital units with sole use in online gaming platforms or as part of merchant rewards programs and that are redeemable for goods and services with merchants “but cannot be converted into, or redeemed for, fiat currency.” *Id.* at § 26000(b)(1)–(2).

⁷⁷ See generally CAL. FIN. CODE § 2032 (West 2018).

⁷⁸ See Assem. Bill 1123 § 26006 (setting forth license application requirements).

⁷⁹ *Id.* at § 26008.

⁸⁰ See, e.g., Jamie Redman, *Bitcoin Advocates Prepare to Fight the California Bitlicense*, BITCOIN (May 4, 2017), <https://news.bitcoin.com/bitcoin-advocates-fight-california-bitlicense/> (highlighting the fact that applicants could be “rejected for any reason, with no administrative appeal” as a primary objection by those who opposed the bill).

⁸¹ See, e.g., Peter Van Valkenburgh, *California is back at it; a new (old) virtual currency licensing bill is pending in the Assembly*, COINCENTER (April 12, 2017), <https://coincenter.org/link/california-is-back-at-it-a-new-old-virtual-currency-licensing-bill-is-pending-in-the-assembly> (acknowledging A.B. 1123 was an improvement from A.B. 1326, and “would remove some of that dangerous uncertainty in California[,]” but advocating for adoption of the URVCBA).

⁸² See Michael Scott, *How Five States Are Approaching Bitcoin Regulation*, BITCOIN MAGAZINE (May 16, 2017), <https://www.nasdaq.com/article/how-five->

Coinfirm,⁸³ believes A.B. 1123 strongly resembled New York's BitLicense.⁸⁴ Because California occupies a "unique position as the technology innovation and startup capital of the world," he worries a California BitLicense scheme will "have an even more catastrophic effect than the [New York] version."⁸⁵ While larger, more established companies could weather the cost of applying for another money transmission or BitLicense, the high costs could stifle startups and lead to a mass exodus of many cryptocurrency firms from California as it did in New York.

3. Texas

In lieu of a BitLicense-type regime, Texas regulators opted for a synthesized approach. In 2014, the Texas Department of Banking issued Supervisory Memorandum 1037 clarifying "the regulatory treatment of [cryptocurrencies] under [the state's] existing statutory definitions."⁸⁶ Regulators concluded that although "[e]xchanging [cryptocurrency] for sovereign currency is not currency exchange under the Texas Finance Code,"⁸⁷ such a cryptocurrency transaction involving sovereign currency "may be money transmission depending on how the sovereign currency is handled."⁸⁸

Regulators provided examples of common cryptocurrency transactions and guidance on appropriate regulatory treatment. For example, the "[e]xchange of cryptocurrency for sovereign currency between two parties is not money transmission,"⁸⁹ nor is the "[e]xchange of one cryptocurrency for another cryptocurrency,"⁹⁰ or the "[t]ransfer of cryptocurrency by itself."⁹¹ However, the "[e]xchange of cryptocurrency

states-are-approaching-bitcoin-regulation-cm790123 (referring to A.B. 1123 as "a version of New York's infamous BitLicense."); *see also* Redman, *supra* note 80.

⁸³ Coinfirm is a blockchain AML risk and compliance platform. For a description of Coinfirm's business, see COINFIRM BLOCKCHAIN TRANSACTIONS, <https://www.coinfirm.io> (last visited Dec. 5, 2018).

⁸⁴ *See* Scott, *supra* note 82 (quoting Kuskowski).

⁸⁵ Scott, *supra* note 82.

⁸⁶ Memorandum 1037, *supra* note 1 at 1.

⁸⁷ Memorandum 1037, *supra* note 1 at 2 (citing TEX. FIN. CODE § 151.501(b)(1)).

⁸⁸ Memorandum 1037, *supra* note 1 at 3.

⁸⁹ Memorandum 1037, *supra* note 1 at 3–4 (classifying such transaction as "essentially a sale of goods between two parties.").

⁹⁰ Memorandum 1037, *supra* note 1 at 4 (the transaction involves "no receipt of money, and therefore no money transmission occurs.").

⁹¹ Memorandum 1037, *supra* note 1 at 4 (reiterating cryptocurrency is "not money or monetary value" thus "the receipt of it in exchange for a promise to make it available at a later time or different location is not money transmission. This includes intermediaries who receive cryptocurrency for transfer to a third party,

for sovereign currency through a third party exchanger is generally money transmission,⁹² and a cryptocurrency-sovereign currency exchange “through an automated machine [such as a “Bitcoin ATM”] is usually but not always money transmission.”⁹³

A cryptocurrency business involved in money transmission in Texas is required to comply with applicable statutory licensing provisions that include a \$10,000 nonrefundable application fee, minimum \$300,000 surety bond (up to \$2,000,000), and financial statements.⁹⁴ Three additional considerations apply to virtual currency transactions conducted online: (1) licensees must have a minimum net worth of \$500,000, which may be increased to \$1,000,000 at the Commissioner’s discretion,⁹⁵ (2) licensees cannot include virtual currency assets as permissible investments,⁹⁶ and (3) licensees must submit a current third-party cybersecurity audit of computer systems used in the virtual currency business.⁹⁷

As shown above, securing a money transmission license from just one state is a complicated and uncertain process. Consequently, cryptocurrency businesses seeking licensure in multiple states are faced with exponential time and monetary expenditures. If states wish to retain jurisdiction over cryptocurrency exchanges, they must act quickly to clarify and coordinate applicable regulation.

and entities who, akin to depositories, hold cryptocurrency on behalf of customers.”).

⁹² Memorandum 1037, *supra* note 1 at 4 (“most Bitcoin exchange sites, such as the failed Mt. Gox, facilitate exchanges by acting as an escrow-like intermediary . . . [i]rrespective of its handling of the cryptocurrency, the exchanger conducts money transmission by receiving the buyer’s sovereign currency in exchange for a promise to make it available to the seller.”).

⁹³ Memorandum 1037, *supra* note 1 at 4 (“[i]f the machine never involves a third party, and only facilitates a sale or purchase of Bitcoins by the machine’s operator directly with the customer, there is no money transmission.”).

⁹⁴ Licensing provisions are found in TEX. FIN. CODE §151. The Texas Department of Banking also provides a table outlining general application requirements for MSBs, *available at* <http://www.dob.texas.gov/applications-forms-publications/general-application-requirements> (last updated Sept. 2017).

⁹⁵ TEX. FIN. CODE § 151.307 (West 2017). Texas DOB’s policy is that license holders operating through the internet meet the five-location threshold for § 151.307(a)’s net worth requirement. The commissioner may increase the net worth requirement up to \$1,000,000 maximum. *Id.* at § 151.307(b). *See also* Memorandum 1037, *supra* note 1 at 4.

⁹⁶ TEX. FIN. CODE § 151.309.

⁹⁷ TEX. FIN. CODE § 151.203(a)(3).

C. Endeavors to Improve and Streamline the Current Regulatory Framework

Because cryptocurrency businesses must obtain licenses from each state of operation,⁹⁸ they are subject to both cumulative licensing/application fees and high compliance costs of ongoing reporting and disclosure obligations to retain their licenses.⁹⁹ Cryptocurrency businesses are not the only ones affected by inconsistent state regulation. Federal regulators worry the “patchwork of state [money transmitter] regulation” applicable to cryptocurrency exchanges creates obstacles to transparency and consumer protection.¹⁰⁰

This section examines current proposals for interstate reciprocity and uniformity for cryptocurrency business regulation. These proposals aim to clarify Blue Sky legislative scope, increase transparency, and reduce compliance costs for covered businesses.

1. The CSBS’s Efforts at Uniformity and Reciprocity

In September 2015, the Counsel of State Bank Supervisors (CSBS) released its Model Regulatory Framework for State Regulation of Certain Virtual Currency Activities (“Model Framework” or “CSBS Framework”).¹⁰¹ The Model Framework suggests states regulate

⁹⁸ Assuming the state has enacted an applicable money transmission statute.

⁹⁹ See discussion *supra* note 68; see also Douglas, *supra* note 29 at 45–46 (discussing sizable “time and cost component” to complying with varied (and sometimes conflicting) state money transmission laws); David Floyd, *Can the SEC Regulate Bitcoin? Cryptoassets’ Legal Questions (Tentatively) Answered*, NASDAQ (Dec. 15, 2017) <https://www.nasdaq.com/article/can-the-sec-regulate-bitcoin-cryptoassets-legal-questions-tentatively-answered-cm892254> (Matthew Gertler, senior analyst and counsel at Digital Asset Research, says the process of obtaining a money transmission license “can take over a year and cost half a million dollars.”).

¹⁰⁰ Roger Aitken, *U.S. CFTC Commissioner Says Cryptocurrency Exchanges Adopting ‘Self-Regulation’ Could Spur Standards*, FORBES (Feb. 15, 2018), <https://www.forbes.com/sites/rogeraitken/2018/02/15/u-s-cftc-commissioner-says-cryptocurrency-exchanges-adopting-self-regulation-could-spur-standards/#f631c6145e12> (quoting CFTC commissioner Brian Quintenz, who views the current regulatory scheme of cryptocurrencies as a “patchwork regulatory framework” of state and federal jurisdictions); see also Clayton and Giancarlo, *supra* note 12.

¹⁰¹ CSBS, STATE REGULATORY REQUIREMENTS FOR VIRTUAL CURRENCY ACTIVITIES: CSBS MODEL REGULATORY FRAMEWORK (Sept. 15, 2015), <https://www.csbs.org/sites/default/files/2017-11/CSBS-Model-Regulatory-Framework%28September%2015%202015%29.pdf> [hereinafter “Model Framework” or “CSBS Framework”].

cryptocurrency businesses as they regulate fiat money transmission and exchanges.¹⁰²

First, the CSBS encourages states to update their existing “currency” or “money” definitions “to clarify the scope of their statutes and promote consistency over state lines.”¹⁰³ The organization defines “virtual currency”¹⁰⁴ as “a digital representation of value used as a medium of exchange, a unit of account, or a store of value, but does not have legal tender status as recognized by the United States Government.”¹⁰⁵ The organization recommends state licensure and supervision over “entities performing activities involving third party control of virtual currency” and activities involving virtual currency which would be subject to state laws when involving fiat currency.¹⁰⁶

To accomplish this objective, the Framework proposes several statutory guidelines. For example, it suggests cryptocurrency businesses submit business plans and disclosures as a licensure prerequisite.¹⁰⁷ It also allows flexibility in source of capital or bond reserves.¹⁰⁸ It further requires “clear consumer disclosures and notice of risks,”¹⁰⁹ BSA/AML compliance,¹¹⁰ and periodic reporting requirements.¹¹¹ The Framework does not mandate a cybersecurity audit¹¹² or the education and training of regulators.¹¹³

¹⁰² See Model Framework, *supra* note 101 at 3 n.7. The CSBS Model Framework has been equated to the New York BitLicense. Douglas, *supra* note 29 at 48 (CSBS Framework “largely mirrors the New York [BitLicense].”).

¹⁰³ Model Framework, *supra* note 101 at 2.

¹⁰⁴ As used in the Model Framework, “virtual currency” includes “digital currency” and “cryptocurrency.” Model Framework, *supra* note 101 at 11.

¹⁰⁵ Model Framework, *supra* note 101 at 2. The definition excludes “the software [and] protocols governing the transfer of the digital representation of value” and “stored value redeemable exclusively in goods or services limited to transactions involving a defined merchant, such as rewards programs.” Model Framework, *supra* note 101 at 2.

¹⁰⁶ Model Framework, *supra* note 101 at 2–3.

¹⁰⁷ Model Framework, *supra* note 101 at 3.

¹⁰⁸ See Model Framework, *supra* note 101 at 5 (States can determine acceptable amount of “[p]ermissible investment reserves in the form of cash, virtual currency, or high- quality, highly liquid, investment-grade assets.”).

¹⁰⁹ Model Framework, *supra* note 101 at 6 (internal quotations omitted).

¹¹⁰ Model Framework, *supra* note 101 at 7.

¹¹¹ Model Framework, *supra* note 101 at 7.

¹¹² Model Framework, *supra* note 101 at 6 (suggesting an audit “should be performed where necessary” contingent on the company’s risk profile).

¹¹³ See Model Framework, *supra* note 101 at 9 (acknowledging “understanding how a cryptocurrency is managed, created, and valued will facilitate appropriate

While the Framework is a productive first step in clarifying regulatory ambiguity surrounding cryptocurrency businesses, it notably “does not include an ‘on ramp,’ temporary or conditional license” for startup companies with “low volumes and/or limited business activities.”¹¹⁴ Moreover, it does not explicitly address reciprocal licensure.

On February 6, 2018, the CSBS announced that seven states had agreed to a multi-state compact (“Compact”) that standardizes the licensing process for Fintech firms and non-bank companies subject to blue sky money transmission laws.¹¹⁵ The Compact is part of the CSBS “Vision 2020” plan for Fintech Regulation.¹¹⁶ Under this agreement, if any participatory state reviews the “key elements of state licensing” for a single licensed money transmitter through its initial licensing process, the other participating states agree to accept the findings.¹¹⁷ While Vision 2020 may signal a shift toward a reciprocal 50-state licensing scheme, unless individual states update their money transmission statutes to include jurisdiction over cryptocurrency businesses, regulatory ambiguity remains. The following subsection explores another potential regulatory scheme that builds upon both the CSBS Framework and existing MTS laws.

2. *The URVCBA: A Comprehensive Solution?*

In 2017, the National Conference of Commissioners on Uniform State Laws (also known as the Uniform Law Commission, or “ULC”) proposed its own regulatory solution: the Uniform Regulation of Virtual-Currency Business Act (“URVCBA”).¹¹⁸ In contrast to the CSBS Framework’s suggestive guidelines, the URVCBA is a substantive model

regulation and supervision of companies utilizing virtual currencies,” but nonetheless excluding such guidance from the Framework).

¹¹⁴ Model Framework, *supra* note 101 at 3 (“consumers can be harmed by entities regardless of size”).

¹¹⁵ The states currently participating in the Compact are Georgia, Illinois, Kansas, Massachusetts, Tennessee, Texas and Washington. *See* CSBS, *State Regulators Take First Step to Standardize Licensing Practices for Fintech Payments* (Feb. 6, 2018), <https://www.csbs.org/state-regulators-take-first-step-standardize-licensing-practices-fintech-payments>. The CSBS announcement also stated that “[o]ther states are expected to join this compact.”

¹¹⁶ *Id.* *See also* CSBS, *Vision 2020 for Fintech and Non-Bank Regulation* (Jun. 7, 2018), <https://www.csbs.org/vision2020> [hereinafter “Vision 2020”].

¹¹⁷ CSBS, *Vision 2020*, *supra* note 116.

¹¹⁸ URVCBA, *supra* note 17; *see also* Peter Van Valkenburgh, *The Uniform Law Commission Has Given States a Clear Path to Approach Bitcoin*, COINDESK (July 27, 2017), <https://www.coindesk.com/uniform-law-commission-given-states-clear-path-approach-bitcoin/> (praising the definitional clarity and regulatory transparency of the URVCBA).

statute. In drafting the URVCBA, the ULC solicited comments and input from various federal and state regulatory agencies, attorneys, and industry organizations across the spectrum. These included the U.S. Department of the Treasury, the Federal Reserve Bank of New York, the Conference of State Bank Supervisors (CSBS), the Texas Department of Banking, the California Department of Business Oversight, the Electronic Freedom Frontier, Coinbase, Inc., the Bitcoin Foundation, and PayPal.¹¹⁹

The ULC was significantly influenced by the CSBS efforts¹²⁰ and existing state money transmission statutes.¹²¹ The diversity of views reflected in the URVCBA results in a balanced regulatory scheme sufficiently tailored to the unique characteristics and innovative capability of cryptocurrencies. The URVCBA reflects the ULC's goal of reducing information costs to individuals and businesses transacting in different states.¹²² Notably, cryptocurrency proponents are more amenable to the URVCBA than to other regulatory schemes or proposals.¹²³

Key features that distinguish the URVCBA from many Blue Sky “money services” or “money transmitter” statutes include (1) a focus on interstate “reciprocal licensure,” (2) more flexible net worth and reserve requirements, (3) a three-tier system to determine full licensure, intermediate or “on-ramp” registration, or complete exemption from the act, and (4) requirements that particular cryptocurrency businesses—those with “control” or custody over cryptocurrency belonging to users—satisfy aggregate entitlements and favor the interests of persons placing virtual currency under the control of a licensee or registrant over the interests of

¹¹⁹ URVCBA, *supra* note 17, at 11–12.

¹²⁰ See Douglas, *supra* note 29, at 48 n. 169 (discussing drafting process of then-in-progress URVCBA).

¹²¹ See URVCBA, *supra* note 17, § 103 cmt. 1 at 28. The ULC recognizes that the appropriate regulatory framework focuses on “persons that issue virtual currencies or that provide services that allow others to transfer virtual currencies, provide ‘virtual-currency’ exchange services to the public, or offer to take custody of virtual currency for other persons.” The URVCBA “is intended to govern persons that hold themselves out as providing services to owners of virtual currency comparable to service that would be deemed ‘money transmission’ under the Uniform Money Services Act or other state ‘money transmission’ statute.” URVCBA, *supra* note 17, § 103 cmt. 1 at 28.

¹²² See URVCBA, *supra* note 17, at 1 (“Clarity about which regulatory regime will govern virtual-currency business activity will assist virtual-currency businesses in many states and the greater legitimacy that uniform acts can bring to industry sectors will enhance the ability of these types of businesses to attract investment and customers.”).

¹²³ See Van Valkenburgh, *supra* note 118 (explaining how the URVCBA is superior to New York’s BitLicense and California’s vague current money transmission laws).

creditors of the licensee or registrant.¹²⁴ These provisions will be discussed below.

The URVCBA defines “virtual currency”¹²⁵ as “a digital representation of value that: (i) is used as a medium of exchange, unit of account, or store of value; and (ii) is not legal tender, whether or not denominated in legal tender”¹²⁶ The jurisdictional scope focuses on intermediaries functioning analogously to traditional money transmitters¹²⁷ and custodianships.¹²⁸ Transactions covered by the act “must involve ‘virtual currency’ and ‘virtual-currency business activity,’ [as] defined in Section 102(25), a definition that relies on active verbs – control, exchange, store, and transfer.”¹²⁹ Covered activity must be “performed with or on behalf of residents of the jurisdiction that seeks to license the provision of such activities in a jurisdiction in the United States.”¹³⁰ The URVCBA’s definition of virtual currency, and its recommendation of a framework analogous to state-overseen money transmission and exchange regulation, comports with the CSBS Model Framework.¹³¹

Like existing money transmission statutes¹³² and the CSBS Framework,¹³³ the URVCBA proposes a state-administered licensing

¹²⁴ PREFATORY NOTE: PURPOSE OF THE ACT, URVCBA, *supra* note 17, at 11–12. The ULC plans to develop a substitute for URVCBA § 502 that “adopts UCC Article 8’s more balanced approach to this matter,” and submit it for enactment in 2018. *Id.* at 2. Therefore, feature (4) is not discussed at length.

¹²⁵ *See supra* note 1 (the term “virtual currency” encompasses “cryptocurrency” as used in this paper).

¹²⁶ URVCBA, *supra* note 17, § 102(23), at 17. Similar to the definition proposed by the CSBS, *see supra* note 101, the definition in the URVCBA excludes the digital representation of value granted in rewards programs (without the ability to exchange for legal tender) or used solely in gaming. URVCBA, *supra* note 17, § 102(23)(B)(i) – (ii), at 17.

¹²⁷ *See* discussion *supra* note 121; *see also* URVCBA, *supra* note 17, § 102 cmt. 2 at 21.

¹²⁸ *See* URVCBA, *supra* note 17, § 102 cmt. 2 at 21 (activities comparable to “custodianships similar in nature to a securities entitlement subject to Article 8 of the Uniform Commercial Code”).

¹²⁹ *See* URVCBA, *supra* note 17, at 4 (“To be covered by this act, the transaction must involve ‘virtual currency’ and ‘virtual-currency business activity,’ which is defined in Section 102(25), a definition that relies on active verbs – control, exchange, store, and transfer.”).

¹³⁰ URVCBA, *supra* note 17, § 102 cmt. 2 at 21.

¹³¹ *See* discussion *supra* notes 101–106.

¹³² *See* discussion on California and Texas money transmission statutes *supra* Part II(B).

¹³³ CSBS Framework, *supra* note 101, at 2–3.

scheme.¹³⁴ Unlike the former two, however, the URVCBA permits an individual or business licensed in another state to file for a reciprocal license under Alternative A, or conduct business with in-state residents after following the substantial notice and certification requirements in Alternative B.¹³⁵ License applicants must also satisfy security, net worth, and reserve requirements set by state regulators in order to meet reasonably foreseeable liquidity demand.¹³⁶ The URVCBA recognizes that due to the immaturity of the market, surety bonds and letters of credit are not readily available to cryptocurrency start-ups.¹³⁷ Thus, it cautions against using surety bonds and letters of credit as an exclusive means of ensuring security. In addition to these traditional methods, the URVCBA suggests states consider funds, investment property, or other security from applicants to satisfy financial asset requirements.¹³⁸

The URVCBA compels license issuance “[a]bsent good cause . . . if the applicant complies with this [article] and pays the costs of the investigation under Section 202(g) and the initial licensee fee under Section 202(a)(3).”¹³⁹ The model act also permits a reasonable 30-day appeals process for application denials.¹⁴⁰ This addresses a significant criticism of both the New York and proposed California BitLicenses: lack of adequate appellate procedures.¹⁴¹

The URVCBA also proposes three tiers of classification for cryptocurrency businesses. Each tier imposes obligations proportionate to

¹³⁴ URVCBA, *supra* note 17, §§ 202–203.

¹³⁵ URVCBA, *supra* note 17, § 203; *but cf. supra* notes 115–116 (CSBS’s multi-state Compact and “Vision 2020” also contemplate MSB licensing reciprocity, albeit through a different process).

¹³⁶ URVCBA, *supra* note 17, § 204.

¹³⁷ URVCBA, *supra* note 17, § 204.

¹³⁸ URVCBA, *supra* note 17, § 204 cmts. 1–3.

¹³⁹ URVCBA, *supra* note 17, § 205(a).

¹⁴⁰ URVCBA, *supra* note 17, § 205(b).

¹⁴¹ *See, e.g.* Redman, *supra* note 80 (discussing how critics of California’s A.B. 1123 were displeased that “[l]icense applications [could] be rejected for any reason, with no administrative appeal” under the proposed legislation.); Letter from Marcia Hofmann, EFF Special Counsel and Attorney at Law, to the New York State Department of Financial Services, *Comments to the New York State Department of Financial Services on BitLicense: The Proposed Virtual Currency Regulatory Framework, on behalf of Electronic Frontier Foundation, Internet Archive, and reddit* (Oct. 21, 2014), <https://www.eff.org/files/2014/10/21/bitlicense-comments-eff-ia-reddit-hofmann-cover.pdf> (“The proposal does not even set out a process for an applicant to appeal the denial of a license. Regardless, even if there were such a procedure, [New York judicial precedent] puts the burden on the censor to seek judicial review of its decision, not the applicant.”).

the business's monetary aggregate annual activity volume with residents of an enacting state. Individuals and business entities that do not exceed a \$5,000 annual activity volume are fully exempt from the Act.¹⁴² Unlike the CSBS Framework, the URVCBA also provides for an “on-ramp” to full licensure: those with annual activity volume that exceeds \$5,000 but is less than \$35,000 are classified as “registrants.”¹⁴³ Registrants do not need to undergo and wait for full licensure, but must comply with the same user protection, cybersecurity, and anti-money laundering requirements the Act imposes on licensees,¹⁴⁴ and must register with FinCEN “to the extent that FinCEN’s regulations and guidance mandate registration.”¹⁴⁵ Businesses with annual activity volumes exceeding \$35,000 must be licensed in that state.¹⁴⁶ Through formulating this three-tier system, the ULC hopes to encourage innovators in the cryptocurrency community, clarify “activity that should be licensed in order to avoid prosecution as an unlicensed money transmitter under 18 U.S.C. Section 1960,” and provide a path to bring exempt and registrant businesses “under state licensure and supervision” if their businesses eventually expand.¹⁴⁷

Though the CSBS Framework argues any “on-ramp” allowance would subject consumers to harm,¹⁴⁸ the URVCBA’s tiered approach imposes satisfactory disclosure and consumer protection obligations on registrants.¹⁴⁹ Thus, “registrants” do not completely escape oversight but can still benefit from less costly compliance and disclosure obligations. And, it is unlikely those with annual activity volume of \$5,000 or less would significantly impact in-state residents.

Permissible legislative variation could include a modest increase of (but should not substantially decrease) the monetary thresholds delineating the three licensing tiers. Though the aggregate amounts may seem small in isolation, as drafted in the URVCBA, the amount tolls separately for each individual state.

¹⁴² URVCBA, *supra* note 17, § 103. Aggregate dollar amount is in U.S.D. equivalency. *See also* URVCBA, *supra* note 17, §102 cmt. 11 at 24–25 (threshold amounts are calculated by equivalent value of given virtual currency as quoted on a U.S.-based virtual currency exchange for a particular date or period specified within the Act).

¹⁴³ URVCBA, *supra* note 17, at § 207.

¹⁴⁴ URVCBA, *supra* note 17, at § 102 cmt. 8.

¹⁴⁵ URVCBA, *supra* note 17, at § 207 cmt. 2.

¹⁴⁶ URVCBA, *supra* note 17, at § 102 cmt. 8.

¹⁴⁷ URVCBA, *supra* note 17, at § 103 cmt. 2.

¹⁴⁸ *See supra* note 114.

¹⁴⁹ *See* discussion *supra* notes 144–147.

Both the URVCBA¹⁵⁰ and CSBS Framework¹⁵¹ recommend substantial disclosures at the application stage and periodically thereafter. Indeed, companies should clearly disclose information relating to their principals, assets, obligations, financial statements, standing of licenses held in other states, cybersecurity, customer residency verification, and AML programs. Such disclosures would provide state and federal regulators with sufficient information to assess the stability and suitability of a cryptocurrency business. Additionally, disclosures would protect consumers and ensure compliance with AML/BSA laws and tax obligations.

Many staunch opponents of New York and California's (proposed) laws lament the disclosure obligations. Indeed, the Electronic Frontier Foundation has argued that Satoshi Nakamoto, the supposed creator of Bitcoin, would not have qualified for a California BitLicense because his real name, address, and identity are unknown to this day.¹⁵² However, if the proposed URVCBA framework is adopted, the Nakamotos of the world need not fret. Unless future creators are transacting on a scale large enough to trigger "on-ramp" registrant status¹⁵³ or full licensure within a particular state, they would be exempt from all license-related compliance and disclosure requirements.¹⁵⁴ However, should an individual or business conduct or facilitate cryptocurrency activity above the threshold, complying with disclosure and consumer protection measures is reasonable.

Neither the URVCBA nor CSBS Model Framework require insurance against loss.¹⁵⁵ But, cryptocurrency exchanges (particularly

¹⁵⁰ See URVCBA, *supra* note 17, §§ 202–209 and §§ 302–307 (stating application and examination disclosures); *see also id.* § 501 (discussing disclosures and other protections for residents).

¹⁵¹ See CSBS Framework, *supra* note 101, at 12–14 (outlining regulatory requirements).

¹⁵² See Reitman, *supra* note 73 ("Bitcoin creator Satoshi Nakamoto would never have qualified for a license under California's proposed virtual currency legislation [since-abandoned A.B. 1326].").

¹⁵³ See URVCBA, *supra* note 17, § 207 cmt. 3 ("For the virtual-currency business, registration provides an 'on-ramp' to doing business within a new state.").

¹⁵⁴ See URVCBA, *supra* note 17, § 102 cmt. 11 (describing a "full exemption" for those doing business at "annual volumes of activity less than \$5,000"); *see also* Van Valkenburgh, *supra* note 118 ("Under the ULC's model act, precise and sensible definitions are laid out that *specifically encompass only businesses* [sic] *models in which a third party takes control of user funds*, because only in those situations can that third party then lose or steal the funds.") (emphasis added).

¹⁵⁵ See URVCBA, *supra* note 17, §§ 202 and 501 (requiring a company to disclose whether it carries loss insurance, but not mandating it must guarantee loss

those maintaining control or custody over user's cryptocurrency assets) face serious threats, including the potential to lose tens of millions of dollars in cryptoassets.¹⁵⁶ While enhanced cybersecurity measures should mitigate these vulnerabilities, risk of breach by hackers or fund mismanagement by company insiders remains. Therefore, these businesses should maintain a minimal form of insurance to protect investor assets. While insurance would impose an additional cost, concern over increasing premiums might further encourage cryptocurrency businesses to act responsibly and exercise appropriate oversight.

CONCLUSION

Cryptocurrency is an innovative, disruptive technology. While this technology is promising, it comes with many risks, including misinformed investments and use in criminal activities. The utopia of a cryptocurrency trading scheme—especially one which closely resembles consumer-facing financial services—cannot continue unrestrained. Indeed, cryptocurrency exchanges act as intermediaries for most trading transactions, and themselves generate more risks. These include exposure to hackers and insider mismanagement. Regulation of these intermediaries is necessary for consumer protection, market stability, and prevention of illegal activity. But lawmakers should not stifle technological innovation with unduly burdensome regulation.

Despite lacking “legal tender” status, decentralized cryptocurrency is a transferable store of value and functions like “currency” or “money.” Thus, regulating cryptocurrency businesses at the state level analogously to money transmitters is ideal. States are fully equipped to oversee such a regulatory scheme, and have successfully done so with fiat currency for decades. Unfortunately, the present status quo is unclear and inefficient.

The most sensible regulation would follow the URVCBA; i.e., a multi-level licensing scheme with certain disclosure, reporting, and consumer protection requirements, including precise definitions and activity exemptions. This paper strongly suggests that states go beyond the URVCBA and require a form of insurance, especially from custodial cryptocurrency businesses.

Unlike the CSBS Framework, the URVCBA was drafted to address concerns from a multitude of interested parties. Consequently, state and federal regulators and cryptocurrency businesses alike are more likely to view such oversight as reasonable. A URVCBA-type framework would resolve regulatory ambiguity surrounding the applicability of

insurance to customers); *see also* CSBS Framework, *supra* note 101, at 7 (“CSBS has not included cyber insurance in the final framework”).

¹⁵⁶ *See* discussion on Mt. Gox and BitFinex hacks *supra* note 51.

current Blue Sky money transmission laws, allow for sufficient oversight by state and federal regulators (as applicable), reduce burdensome compliance costs for cryptocurrency exchanges, and secure consumer protection. And—perhaps most importantly—the world will not miss out on the full potential of cryptocurrency technology.