

WHY CHINA HAD TO “BAN” CRYPTOCURRENCY BUT THE U.S. DID NOT: A COMPARATIVE ANALYSIS OF REGULATIONS ON CRYPTO-MARKETS BETWEEN THE U.S. AND CHINA

INTRODUCTION

The cryptocurrency market grew from a \$1.5 billion market capitalization in early 2013 to over \$795 billion in January 2018.¹ Bitcoin, an exemplar cryptocurrency, gained value from \$0.08 before 2010 to over \$17,000 per bitcoin in December 2017.² While cryptocurrencies have campaigned for revolutionizing financial transactions, the crypto-market is plagued by nefarious minds, fleecing investors in frauds and Ponzi schemes.³ This crypto-mania therefore presents numerous legal and regulatory challenges that demand prompt and efficient responses. Nevertheless, the decentralized, anonymous nature of cryptocurrencies magnifies these challenges and has constantly outpaced the law’s ability to respond. To understand the effects of different regulatory strategies, this Note compares regulatory landscapes on cryptocurrency between the U.S. and China.

In a nutshell, while China explicitly banned any exchange or financing activities between fiat money and “coin substitution” in 2017, the U.S. has placed cryptocurrencies within its existing legal labyrinth. What explains the difference and what is its result? Rather than reducing the regulatory

1 Global Charts – Total Market Capitalization, COINMARKETCAP, <https://coinmarketcap.com/charts/> (last visited Jan. 11, 2018).

2 Blu Putnam & Erik Norland, *Bitcoin and Gold: A Growth Comparison*, OPEN MARKETS (Nov. 27, 2017), <http://openmarkets.cmegroup.com/12749/bitcoin-gold-growth-comparison>; Stan Higgins, *From \$900 to \$20,000: Bitcoin’s Historic 2017 Price Run Revisited*, COINDESK (Dec. 29, 2017), <https://www.coindesk.com/900-20000-bitcoins-historic-2017-price-run-revisited/>.

3 Ted Knutson, *Cryptocurrency Fraud Widespread, Warns Regulator*, FORBES (Apr. 10, 2018), <https://www.forbes.com/sites/tedknutson/2018/04/10/cryptocurrency-fraud-widespread-warns-regulator/#6b59a3cc6b06>; *see also infra* notes 41-47.

variances simply to differences in political ideologies,⁴ this Note attempts to explain the reasons behind the two countries' drastically different regulatory approaches by understanding the regulators' institutional capacities and objectives. This Note also identifies the interesting impacts of the two countries' regulatory approach. Namely, China has attempted to substitute the crypto-market with state-led projects and even potential crypto-fiats, while the U.S. regulatory framework has maintained its consistency, but left some areas lawless while others potentially over-regulated.

Part I of this Note introduces the background of cryptocurrency and its technological strengths and weaknesses. Part II surveys the existing regulatory landscapes of the U.S. and China. Part III explains the reasons why the two countries take drastically different approaches in regulating cryptocurrency. Part IV lists comparative strengths and weaknesses between the two regulatory frameworks. Part V concludes and cautiously makes policy recommendations.

I. BACKGROUND OF CRYPTOCURRENCY AND CRYPTO-MANIA

A. *Emergence of Cryptocurrency*

Cryptocurrency is a form of digital or virtual currency that uses cryptography to secure and verify transactions.⁵ Created in 2008, bitcoin is the world's first decentralized cryptocurrency.⁶ The term bitcoin encompasses both the bitcoin virtual currency and the payment system, the

4 See, e.g., Michael J. Casey, *It's Political: Why China Hates Bitcoin and Loves the Blockchain*, COINDESK (Sept. 27, 2017), <https://www.coindesk.com/political-china-hates-bitcoin-loves-blockchain/>; cf. generally THE ECONOMIST, *China Invents the Digital Totalitarian State* (Dec. 17, 2016), <https://www.economist.com/news/briefing/21711902-worrying-implications-its-social-credit-project-china-invents-digital-totalitarian>. It is also rather obvious that the U.S. has a market-centered political economy, with a tradition of honoring individualism and minimal state intervention, but China has a more state-centered political economy due to its socialist ideology and communitarian tradition.

5 *Cryptocurrency*, INVESTOPEDIA, <https://www.investopedia.com/terms/c/cryptocurrency.asp> (last updated Dec. 10, 2018).

6 See CARL MULLAN, *THE DIGITAL CURRENCY CHALLENGE: SHAPING ONLINE PAYMENT SYSTEMS THROUGH US FINANCIAL REGULATIONS* 93-96 (2014), https://link.springer.com/chapter/10.1057/9781137382559_14; L.S., *Who is Satoshi Nakamoto?*, THE ECONOMIST: THE ECONOMIST EXPLAINS (Nov. 2, 2015), <https://www.economist.com/blogs/economist-explains/2015/11/economist-explains-1>; Satoshi Nakamoto, *Bitcoin: A Peer to Peer Electronic Cash System* (White Paper), <http://bitcoin.org/bitcoin.pdf> (last visited Feb. 7, 2018).

latter operating as a peer-to-peer transactional network that does not rely on any central government authority or established financial institution.⁷

One of the purposes of the bitcoin payment system is to overcome the trust-based model of conventional online transactions, which relies on financial institutions to process payments.⁸ Satoshi Nakamoto, an alias of the unknown inventor of bitcoin, argues that the existing model requires a heightened yet unnecessary need of trust, but also tolerates a certain level of fraud.⁹ Additionally, third parties are often unable to avoid disputes on finality in each payment, increasing transaction costs.¹⁰ In light of these problems, Nakamoto proposes a more effective system, technologically making payment reversal impossible and eliminating the need for third parties.¹¹

To eliminate such a need, the bitcoin payment system develops two processes: mining and blockchain.¹² Mining is the process by which transactions are verified and added to a public ledger.¹³ This public ledger,

7 Sarah J. Hughes & Stephen T. Middlebrook, *Advancing a Framework for Regulating Cryptocurrency Payments Intermediaries*, 32 YALE J. REG. 495, 504 (2015); Danielle Drainville, *An Analysis of the Bitcoin Electronic Cash System* (Dec. 21, 2012), <https://pdfs.semanticscholar.org/f7e3/3271bc73b1ae8501aa3776f9fb72695edffe.pdf>.

8 Nakamoto, *supra* note 6.

9 *Id.* at 1. Satoshi Nakamoto's true identity is still a mystery. According to Nakamoto, existing internet commerce “rel[ies] almost exclusively on financial institutions serving as trusted third parties to process electronic payments. While the system works well enough for most transactions, it [systematically] suffers from the inherent weaknesses of the trust-based model.” *Id.* Because transactions are reversible, “financial institutions cannot avoid mediating disputes. The cost of mediation increases transaction costs, limiting the minimum practical transaction size and cutting off the possibility for small casual transactions[.]” *Id.* Additionally, “[w]ith the possibility of reversal, the need for trust spreads. Merchants must be wary of their customers, hassling them for more information than they would otherwise need.” *Id.* The existing transaction system accepts that a certain percentage of fraud is unavoidable. While “costs and payment uncertainties can be avoided in person by using physical currency. . . no [virtual] mechanism exists to make payments over a communications channel without a trusted party.” *Id.* However, Bitrated, a company that provides blockchain payment platform, has claimed success in making cryptocurrency transactions reversible. See BITRATED, <https://www.bitrated.com/> (last visited Feb. 7, 2018). Also, irreversibility is a double-edged sword. For instance, the bitcoin protocol provides no correction mechanism for a payer to reverse an accidental or unwanted purchase, whereas other payment platforms, such as credit cards, do include such procedures. Adhil Shetty, *Driven by Demonetisation, Bitcoin Hits \$1,000: Should Indians Buy It?*, FINANCIAL EXPRESS (Jan. 27, 2016), <http://www.financialexpress.com/money/driven-by-demonetisation-bitcoin-hits-1000-should-indians-buy-it/510084/> (last updated Jan. 16, 2017).

10 Nakamoto, *supra* note 6.

11 *Id.*

12 *How Does Bitcoin Work?*, BITCOIN, <http://bitcoin.org/en/how-it-works>.

13 *Id.*

also known as a blockchain, chronologically records every transaction in the system and serves as the foundation of the bitcoin verification system.¹⁴ Each blockchain is encrypted and logs information into smaller datasets referred to as “blocks.”¹⁵ Each block contains information about certain transactions, a reference to a preceding block, as well as a verification process that employs mathematical puzzles, also known as *proof of work*, to validate the information stored with the block.¹⁶ A new block of data will be added to the end of the blockchain only after computers in the same network reach a consensus,¹⁷ but incompatible blocks will be rejected.¹⁸ Since every transaction is encrypted and verified, blockchain technologically makes transaction reversal impossible and third-party verification unnecessary.¹⁹

The decentralized nature of bitcoin blockchain allows volunteers and engineers (often referred to as the blockchain ecosystem) to modify the blockchain network through “informal processes that depend on rough notions of consensus and that are subject to no fixed legal or organizational structure.”²⁰

14 *Id.*

15 Antony Lewis, A Gentle Introduction to Blockchain Technology 4 (Oct. 11, 2017) (Brave New Coin Gentle Introduction Reference Papers Series paper), <https://j2-capital.com/gentle-introduction-blockchain-technology>. See also *Block chain*, BITCOIN FOUNDATION WIKI, https://en.bitcoin.it/wiki/Block_chain (last visited Feb. 7, 2018) (noting that a “block chain is a transaction database shared by all nodes” on a network).

16 See Joseph Bonneau et al., *SoK: Research Perspectives and Challenges for Bitcoin and Cryptocurrencies*, 2015 IEEE SYMP. ON SECURITY & PRIVACY, 3-4, www.jbonneau.com/doc/BMCNKF15-IEEE-SP-bitcoin.pdf. The “core ingredient” of the Nakamoto consensus that supports the bitcoin blockchain is the use of “use of a challenging computational puzzle to determine which party’s block will be considered the next block in the chain.” However, the bitcoin’s mining puzzle is not a true proof-of-work scheme but “a probabilistic one.” This means that while finding a solution is computationally challenging, “it is possible to get lucky and find a solution with very little work.” Aaron Wright & Primavera De Filippi, *Decentralized Blockchain Technology and the Rise of Lex Cryptographia* 7 (Mar. 10, 2015) (SSRN Article), <http://dx.doi.org/10.2139/ssrn.2580664>.

17 Lewis, *supra* note 15, at 13, 15.

18 *Id.*

19 *Id.*

20 Shawn Bayern, *Of Bitcoins, Independently Wealthy Software, and the Zero-Member LLC*, 108 NW. U. L. REV. ONLINE 257, 259 (2014). Theoretically, initial bitcoin blockchain not only establishes physical codes that provide a payment platform with a self-enforcing constraint on the supply of the amount of bitcoins, but also creates a structure that incentivizes the mining community to refine the ecosystem. See *Bitcoin Developer Guide*, BITCOIN, <https://bitcoin.org/en/developer-guide#proof-of-work> (last visited Feb. 7, 2018).

Meanwhile, bitcoin also functions as a *virtual currency*, serving as a “medium of exchange existing entirely in intangible form that is not legal tender, but which can substitute for legal tender.”²¹ It is an “internet-based virtual currency in which the ownership of a particular unit of value is validated using cryptography.”²² Mining functions both as a transaction system and the means through which bitcoin is released.²³ The process essentially involves resolving complex mathematical puzzles and intense coding, which create additional blocks in the blockchain to facilitate further transaction.²⁴ Bitcoin’s value as a virtual currency derives precisely from the creation of this alternative yet useful form of money.²⁵ Upon the initial “release” of bitcoin, “miners” were incentivized to solve the mathematical puzzles by rewarding them a certain amount of bitcoins.²⁶ The cap was set at 21 million bitcoins.²⁷

Inspired by the bitcoin-blockchain technology, over 1,900 other cryptocurrencies or crypto-based tokens have emerged with different functions.²⁸ For instance, Ethereum issued its cryptocurrency, ether, to operate a decentralized software platform and offer developers smart

21 Hughes & Middlebrook, *supra* note 7, at 504. Generally, bitcoin can be obtained in three ways: (1) in exchange for conventional money in person or on an online exchange, (2) “in exchange for the sale of goods or services,” and (3) through mining. CRAIG K. ELWELL ET AL., CONG. RESEARCH SERV., BITCOIN: QUESTIONS, ANSWERS, AND ANALYSIS OF LEGAL ISSUES 1, 2 (July 15, 2014).

22 *Id.*

23 *Supra* note 12.

24 Jan Reess-Alaric, *Making Sense of Bitcoin -Part 1*, FINEXTRA: BLOGS (Aug. 16, 2013), <http://www.finextra.com/community/fullblog.aspx?blogid=8039>. See also Ken Tindell, *Geeks Love the Bitcoin Phenomenon Like They Loved the Internet in 1995*, BUSINESS INSIDER (Apr. 5, 2013), <http://www.businessinsider.com/how-bitcoins-are-mined-and-used-2013-4>. The actual mining of Bitcoins is a purely mathematical process.

A useful analogy is with the search for prime numbers: it used to be fairly easy to find the small ones (Eratosthenes in Ancient Greece produced the first algorithm for finding them). But as they were found it got harder to find the larger ones. Nowadays researchers use advanced high-performance computers to find them and their achievements are noted by the mathematical community (for example, the University of Tennessee maintains a list of the highest 5,000).

Id.

25 *Why Do People Trust Bitcoin?*, BITCOIN, <https://bitcoin.org/en/faq#why-do-people-trust-bitcoin> (last visited Feb. 7, 2018).

26 Reess-Alaric, *supra* note 24.

27 Nicholas A. Plassaras, *Regulating Digital Currencies: Bringing Bitcoin within the Reach of the IMF*, 14 CHI. J. INT’L L. 377, 387 (2013).

28 *All Cryptocurrencies*, COINMARKETCAP, <https://coinmarketcap.com/all/views/all/> (last visited Jan. 16, 2018).

contracts to issue their own tokens.²⁹ Ripple issued XRP to facilitate exchanges among cryptocurrencies and fiat money.³⁰ However, unlike bitcoin or Ethereum, the Ripple network is not decentralized. Rather than open the network to the public, it runs a permissioned blockchain network that predetermines its transaction validators.³¹

Crypto-based tokens, in contrast, usually represent ownership of an asset, and by employing existing blockchain technology and smart contracts (often powered by the ERC standardized smart contract based on the Ethereum network),³² a company might forgo a traditional initial public offering (“IPO”), and instead issue shares and voting rights over the blockchain through initial coin offerings (“ICOs”).³³ Rather than providing ownership interest, other ICO projects issue the so-called utility tokens or app coins, providing users with future access to the blockchain product or service, usually at a fraction of the finished product’s sticker price.³⁴ As the crypto-mania has spread worldwide, capital raised through ICOs increased

29 Ether is used in Ethereum, a decentralized software platform that enables Smart Contracts and Distributed Applications to be built and run without any downtime, fraud, control or interference from a third party. *See* ETHEREUM, <https://www.ethereum.org/> (last visited Feb. 7, 2018).

30 “XRP, acts as a bridge currency to other currencies” on Ripple, “an open source and peer-to-peer decentralized platform that allows for a seamless transfer of money in any form, whether USD, Yen, litecoin, or bitcoin.” Ripple “does not discriminate between one fiat/crypto currency and another, and thus, makes it easy for any currency to be exchanged for another.” *Ripple (Cryptocurrency)*, INVESTOPEDIA, <https://www.investopedia.com/terms/r/ripple-cryptocurrency.asp> (last updated June 26, 2017).

31 Nolan Bauerle, *What Is the Difference between Public and Permissioned Blockchains?*, COINDESK, <https://www.coindesk.com/information/what-is-the-difference-between-open-and-permissioned-blockchains/> (last visited Sept. 17, 2018).

32 Unlike traditional contracts, a smart contract is not written, but programmed. “All of the rules and regulations pertaining to the contract are programmed, meaning that the software will execute each and every action that is specified in the contract. This eliminates the possibility of miscommunication or misinterpretation.” *Cryptocurrencies and Smart Contracts: What Are They?*, STRATEGIC COIN, <http://strategiccoin.com/cryptocurrencies-smart-contracts/> (last visited Feb. 7, 2018). *See also* *ERC20 Token Standard*, THE ETHEREUM WIKI, https://theethereum.wiki/w/index.php/ERC20_Token_Standard.

33 Josial Wilmoth, *3 Types of ICO Tokens*, STRATEGIC COIN, <http://strategiccoin.com/3-types-ico-tokens/> (last visited Feb. 7, 2018). “For example, Filecoin—which raised an ICO-record \$257 million—plans to provide a decentralized cloud storage service that will take advantage of unused computer hard drive space. ICO contributors received tokens that they will be able to use to purchase storage space from Filecoin once the service has launched.”

34 *Id.*

from approximately \$95 million in 2016 to over \$3.8 billion in 2017, and continued to escalate to over \$18 billion until September 2018.³⁵

B. Technological Strengths and Weaknesses of Cryptocurrency

1. As a Payment Platform

Because no intermediary is involved, cryptocurrency transactions are theoretically cheaper and faster than traditional payment networks. At least theoretically, the elimination of third-party intermediaries allows small businesses to gain access to capital, protect individuals against capital control and censorship, and encourage innovation.³⁶ For instance, cryptocurrency can eliminate a variety of authorization fees, transactions, and customer service fees that have burdened small businesses under the current credit card system.³⁷ Cryptocurrency also facilitates cross-border transactions.³⁸ In 2014, immigrants in developed countries sent at least \$427 billion in remittances back to relatives living in developing countries.³⁹ While the global average fee for sending remittances was 7.37%, bitcoin payment system charges only 0.005 bitcoin or 1% of the transaction.⁴⁰

On the other hand, the decentralized nature of the cryptocurrency payment system presents opportunities for crime and fraud.⁴¹ The

35 Cryptocurrency ICO Stats 2016, COINSCHEDULE, <https://www.coinschedule.com/stats.html?year=2016> (last accessed Sept. 15, 2018); Cryptocurrency ICO Stats 2017, COINSCHEDULE, <https://www.coinschedule.com/stats.html?year=2017> (last accessed Sept. 15, 2018).

36 JERRY BRITO & ANDREA CASTILLO, BITCOIN: A PRIMER FOR POLICYMAKERS 13, (2d ed. 2016), <https://www.mercatus.org/publication/bitcoin-primer-policymakers>.

37 *Bitcoin: Examining the Benefits and Risks for Small Business: Hearing Before the H. Comm. on Small Business*, 113th Cong. 6 (2014) (statements of Jerry Brito, Senior Research Fellow, Mercatus Center, George Mason University).

38 Tom Simonite, *Bitcoin Hits the Big Time, to the Regret of Some Early Boosters*, MIT TECH. REV. (May 22, 2013), <http://www.technologyreview.com/news/515061/bitcoin-hits-the-big-time-to-the-regret-of-some-early-boosters/>. The Founders Fund, the venture capital fund led by Peter Thiel, initial investor of PayPal and Facebook, has invested \$3 million in the payment-processing company BitPay because of Bitcoin's ability to lower cross-border online transactions.

39 BRITO & CASTILLO, *supra* note 36, at 16.

40 *Id.* at 17.

41 See, e.g., FBI DIRECTORATE OF INTELLIGENCE, BITCOIN VIRTUAL CURRENCY: UNIQUE FEATURES PRESENT DISTINCT CHALLENGES FOR DETERRING ILLICIT ACTIVITY (2012) [hereinafter FBI INTELLIGENCE REPORT], https://www.wired.com/images_blogs/threatlevel/2012/05/Bitcoin-FBI.pdf; Ari Juels et al., *The Ring of Gyges: Investigating the Future of Criminal Smart Contracts*, 23 ACM CONF. ON COMPUTER & COMM. SECURITY 283 (2016), <http://dx.doi.org/10.1145/2976749.2978362>.

pseudonymous nature of cryptocurrency can be abused for money laundering and transactions of illicit goods and services.⁴² Although substantive evidence is lacking, the anonymity of cryptocurrency transactions “allows” criminals to discreetly move ill-gotten money.⁴³ Additionally, online black markets such as the infamous Deep Web and Silk Road have already taken advantage of the pseudonymous nature of bitcoin, where buyers can use bitcoin to purchase illicit drugs online in the same way that cash has been traditionally used for illicit purchases in person.⁴⁴

In China, the explosion of cryptocurrency trading was accompanied by fraud, theft, and scams.⁴⁵ Around the same time as the police shutdown of Silk Road, Global Bond Limited, a Chinese bitcoin trading platform, suddenly closed its transaction platform, vanishing with about \$5 million worth of bitcoin.⁴⁶ Due to the decentralized nature of the transaction platform, Chinese law enforcement was often confused about what exactly was “stolen.”⁴⁷

2. *As a Virtual Currency*

As a virtual currency, cryptocurrency offers a functional alternative to state-issued fiat money.⁴⁸ Cryptocurrencies, especially bitcoin, can allegedly provide the most value to failing monetary regimes where residents are losing confidence in the value of their central bank.⁴⁹ Unlike

42 FBI INTELLIGENCE REPORT, *supra* note 41.

43 BRITO & CASTILLO, *supra* note 36, at 39.

44 See Benjamin Weiser, *Man behind Silk Road Website Is Convicted on All Counts*, N.Y. TIMES (Feb. 4, 2015), <https://nyti.ms/2yk3z9M>; Grace Caffyn, *Bitcoin on the Dark Web: The Facts*, COINDESK (Sept. 23, 2015), <https://www.coindesk.com/bitcoin-on-the-dark-web-the-facts/>.

45 See Kadhim Shubber, *\$4.1 Million Goes Missing as Chinese Bitcoin Trading Platform GBL Vanishes*, COINDESK (Nov. 11, 2013), <https://www.coindesk.com/4-1m-goes-missing-chinese-bitcoin-trading-platform-gbl-vanishes/>.

46 *Id.*

47 Bite Bi: Yi Changchetouchewei de Pang Shi Pianju (比特币：一场彻头彻尾的庞氏骗局), TAKUNGPAO (大公报) (Dec. 4, 2013) [hereinafter Bitcoin: An Absolute Ponzi Scheme], <http://finance.takungpao.com/tech/q/2013/1204/2083491.html> (This article, *Bitcoin: An Absolute Ponzi Scheme*, describes the bitcoin phenomenon as a fraudulent Ponzi scheme, and potentially a conspiracy led by the U.S.).

48 See BRITO & CASTILLO, *supra* note 36, at 19-20.

49 *Id.* Interestingly, while China’s central bank considered developing its state-owned cryptocurrency, Deloitte Consulting Group made similar suggestions that the U.S. should consider a state-sponsored cryptocurrency to overcome risks associated with completely decentralized cryptocurrency. LINDA PAWCZUK, DELOITTE, STATE-SPONSORED CRYPTOCURRENCY: ADAPTING THE

state issued currencies, cryptocurrency appears to have “no political master to serve.”⁵⁰ Transactional cryptocurrency allows citizens to have an option of exchange in countries where domestic currency only derives its value from its redeemability at a fixed rate for U.S. dollars.⁵¹ For instance, during the Argentinian Peso crisis, bitcoin entrepreneurs offered individuals and businesses the ability to circumnavigate the country’s currency regulations by using bitcoin exchanges and services.⁵²

Individuals in oppressive monetary regimes can also benefit from the financial privacy that cryptocurrency offers.⁵³ Experiences with despotic governments suggest that citizens in oppressed regime might benefit from the ability to make private transactions free from confiscation or censorship.⁵⁴ Cryptocurrency also can provide additional benefits of digital transfer to traditional cash transactions.⁵⁵ Additionally, as a medium of exchange, bitcoin excels at addressing the “double-spending” problem, thereby preventing counterfeiting.⁵⁶ Blockchain makes it computationally impossible to use the same “currency” twice as it develops a chronological record of each irreversible transaction.⁵⁷

BEST OF BITCOIN’S INNOVATION TO THE PAYMENTS ECOSYSTEM (2015), <https://www2.deloitte.com/us/en/pages/consulting/articles/state-sponsored-cryptocurrency-adpating-bitcoin-innovation.html>.

50 John O. McGinnis & Kyle Roche, *Bitcoin: Order Without Law in the Digital Age* (Northwestern Pub. Law Research Paper No. 17-06, 2017), <http://dx.doi.org/10.2139/ssrn.2929133>; cf. Bitcoin: An Absolute Ponzi Scheme, *supra* note 47. Some Chinese analysts argued that bitcoin was a U.S. government-led conspiracy, evidenced by the fact that FBI held 144,000 bitcoins as one of the top bitcoin holders. *See id.* Additionally, because the measurement of bitcoin is usually in dollars, the popularity of bitcoin would enhance the superiority of USD just as the petrodollar system. However, while rejecting bitcoin as an independent currency, the PBoC proposed to launch its state-centralized cryptocurrency following the crackdown of crypto market transactions. Wolfie Zhao, *PBoC Digital Currency Director Calls for Centralized State Cryptocurrency*, COINDESK (Oct. 13, 2017), <https://www.coindesk.com/pboc-digital-currency-director-calls-centralized-state-cryptocurrency/>.

51 McGinnis & Roche, *supra* note 50, at 36.

52 Tom Jeffreys, *Can Bitcoin Save Argentina's Flailing Economy?*, DIGG (Jan. 15, 2016), <http://digg.com/2016/argentina-bitcoin>.

53 *See generally* BRITO & CASTILLO, *supra* note 36.

54 BRITO & CASTILLO, *supra* note 36, at 20.

55 *Id.*

56 *Id.* at 6.

57 Thomas Lowenthal, *Bitcoin: Inside the Encrypted, Peer-to-Peer Digital Currency*, ARS TECHNICA (June 8, 2011), <http://arstechnica.com/tech-policy/2011/06/bitcoin-inside-the-encrypted-peer-to-peer-currency/>.

On the other hand, the cryptocurrency market has been extremely volatile as investors are eager to participate in mining and speculation.⁵⁸ Such volatility would seriously undermine the function of transactional cryptocurrency as a medium to store value. For instance, although its initial offering was around \$0.08, bitcoin reached its peak value of \$19,000 in December 2017.⁵⁹ The decentralized nature also does not allow national central banks to stabilize bitcoin value.⁶⁰ Therefore, bitcoin might lack the faith and credit that has allowed national currencies to successfully function and resist crises.⁶¹

With astronomical price surges, the cryptocurrency market becomes highly susceptible to Ponzi schemes, scams and fraud.⁶² As the Chinese government has traditionally banned individual cross-border investment and limited corporate investment overseas,⁶³ unwitting investors mistook certain ICO Ponzi schemes as profitable opportunities beyond government control, some even gambling all their retirement savings.⁶⁴ In the U.S., the SEC halted a \$15 million ICO Ponzi scheme where Plexcorp, by issuing Plexcoin, promised investors over 1,300% return-on-investment in a month.⁶⁵ Slightly more elaborate fraud includes Centra Tech, which raised \$32 million by offering CTR Tokens for its supposed debit card service backed by Visa and MasterCard that would allow users to instantly convert cryptocurrencies into fiats.⁶⁶

58 *Id.*

59 *Bitcoin*, COINMARKETCAP, <https://coinmarketcap.com/currencies/bitcoin/> (last visited Sept. 15, 2018).

60 *See* Zhao, *supra* note 50.

61 McGinnis & Roche, *supra* note 50; *cf. see* commentary, *supra* note 50.

62 *See* Laura Shin, *From Blockchains To Mooncakes: Two Chinese Crypto Founders on the ICO and Bitcoin Exchanges Ban*, FORBES (Sept. 19, 2017), <https://www.forbes.com/sites/laurashin/2017/09/19/from-blockchains-to-mooncakes-two-chinese-crypto-founders-on-the-ico-and-bitcoin-exchanges-ban/#7f91489d6a3d>.

63 *See* *China May Be Set to Loosen Outbound Investment*, BLOOMBERG (Aug. 21, 2017), <https://www.bloomberg.com/news/articles/2017-08-21/stable-china-markets-revive-talk-of-plan-for-outbound-investors>.

64 *Bitcoin: An Absolute Ponzi Scheme*, *supra* note 47. Qiming Li, the CEO of Bitcoin China said, "from the technological perspective, you'll understand that bitcoin cannot be regulated. Chinese people like it" (translation by author).

65 Press Release, SEC, SEC Emergency Action Halts ICO Scam (Dec. 4, 2017), <https://www.sec.gov/news/press-release/2017-219>.

66 Press Release, SEC, SEC Halts Fraudulent Scheme Involving Unregistered ICO (Apr. 2, 2018), <https://www.sec.gov/news/press-release/2018-53>.

II. CURRENT REGULATORY LANDSCAPE IN THE U.S. AND CHINA

A. U.S. Federal Agencies Place Cryptocurrency Within Existing Regulatory Frameworks.⁶⁷

1. The U.S. Constitution Has Not Barred the Creation of Virtual Currency.

Article I, § 8(5) of the U.S. Constitution reserves the power to coin money and regulate its value exclusively to the Federal Government.⁶⁸ However, statutes that prohibit the circulation and use of “unauthorized instruments” functioning like currency have not been interpreted to prohibit any forms of virtual currency.⁶⁹ So far, these statutes have been exclusively applied to prosecute counterfeited dollar bills and coins.⁷⁰

⁶⁷ However, certain states proposed more specific regulations. For instance, in mid-2015, New York regulators published the final version of their BitLicense regulations, which regulate the use of cryptocurrency. New York’s BitLicense allows New York “persons” to engage in certain virtual currency business activities, such as operating an exchange or wallet, or issuing virtual currency. Merchants who simply want to accept virtual currency in exchange for goods or services, however, do not need a BitLicense. See Michael Bobelian, *NY’s BitLicense Reveals the Difficult Trade-offs of Regulating Bitcoin*, FORBES (June 8, 2015), <https://www.forbes.com/sites/michaelbobelian/2015/06/08/nys-bitlicense-reveals-the-difficult-trade-offs-of-regulating-bitcoin/#3dae301822bc>; N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2 (2015) (defining person as “an individual, partnership, corporation, association, joint stock association, trust, or other entity, how- ever organized”); N.Y. COMP. CODES R. & REGS. tit. 23, § 200.3 (“No Person shall, without a license obtained from the superintendent as provided in this Part, engage in any Virtual Currency Business Activity.”). Also, California unsuccessfully attempted to amend its Assembly Bill 1326, which sought to regulate “digital currency business.” by asking every cryptocurrency holder to register for a license before they could buy or sell goods or services. See generally, H.B. 1326, 2015–2016 Reg. Sess. (Cal. 2015) (withdrawn).

⁶⁸ U.S. CONST. art. I, § 8, cl. 5.

⁶⁹ See 18 U.S.C. § 336 (2018); Paul H. Farmer, Jr., Note and Comment, *Speculative Tech: The Bitcoin Legal Quagmire & the Need for Legal Innovation*, 9 J. Bus. & Tech. L. 85, 94-98 (2014). In particular, the Stamp Payments Act of 1862 states:

Whoever makes, issues, circulates, or pays out any note, check, memorandum, token, or other obligation for a less sum than \$1, intended to circulate as money or to be received or used in lieu of lawful money of the United States, shall be fined under this title or imprisoned not more than six months, or both.

18 U.S.C. § 336 (2018).

⁷⁰ See Julie Andersen Hill, *Virtual Currencies & Federal Law*, 18 J. CONSUMER & COM. L. 65 (2015); but cf. Press Release, U.S. Attorney’s Office, Western District of North Carolina, Defendant Convicted of Minting His Own Currency (Mar. 18, 2011), <http://www.fbi.gov/charlotte/press-releases/2011/defendant-convicted-of-minting-his-own-currency> (“Along with the power to coin money, Congress has the concurrent power to restrain the circulation of money which is not issued under its own authority in order to protect and preserve the constitutional currency for the benefit of all citizens

2. *FinCEN Treats Exchanges of Cryptocurrency as Money Services Business.*

The Financial Crimes Enforcement Network (FinCEN), a branch of the U.S. Department of Treasury, has treated bitcoin exchanges as monetary services, requiring cryptocurrency administrators to register as a money services business (“MSB”) under the Bank Secrecy Act.⁷¹ In its 2013 Guidance, FinCEN distinguished virtual currency from currency.⁷² While “real” currency is characterized as “the coin and paper money of the United States or of any other country that is designated as legal tender . . . ,” virtual currency is “a medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency.”⁷³

FinCEN also defines the money transmission services as “the acceptance of currency, funds, or other value that substitutes for currency from one person and the transmission of currency, funds, or other value that substitutes for currency to another location or person by any means.”⁷⁴ Under this definition, a user who obtains a cryptocurrency and uses it to purchase real or virtual goods or services is *not* an MSB according to FinCEN’s regulations,⁷⁵ “but an administrator or exchanger that (1) accepts

of the nation. It is a violation of federal law for individuals . . . to create private coin or currency systems to compete with the official coin and currency of the United States.”)

71 DEP’T OF TREASURY FIN. CRIMES ENF’T NETWORK, GUIDANCE: APPLICATION OF FINCEN’S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES 1 (2013) [hereinafter FINCEN GUIDANCE], http://www.fincen.gov/statutes_regs/guidance/pdf/FIN-2013-G001.pdf. Under the Bank Secrecy Act, money services businesses like check cashers, money transmitters, and currency exchanges, must register with the Department of the Treasury. 31 U.S.C. § 5330 (2018); 31 C.F.R. § 1022.380 (2018). The statute uses the term “money transmitting business,” but the regulations use the term “money services businesses.” “Failure to register can result in civil and criminal penalties. Once registered, money services businesses must maintain anti-money laundering programs. They also have specific reporting and recordkeeping requirements that are designed to help law enforcement officials detect criminal activity and determine the identity of the criminals.” Hill, *supra* note 70, at 67. See 31 U.S.C. § 5330(e); 18 U.S.C. § 1960 (2018); 31 C.F.R. § 1022.210.

72 FINCEN GUIDANCE, *supra* note 72, at 1.

73 See 31 CFR § 1010.100(m) (2018); FINCEN GUIDANCE, *supra* note 72, at 1.

74 31 CFR § 1010.100(ff) (2018).

75 FINCEN GUIDANCE, *supra* note 72. Nevertheless, in footnote 1, FinCEN included a disclaimer that this definition should not be interpreted as a statement about the extent to which the user’s “activities comport with other federal or state statutes, rules, regulations, or orders.” According to footnote 8, the activity may still be subject to abuse in the form of trade-based money laundering or terrorist financing. The activity may follow the same patterns of behavior observed in the ‘real’ economy with respect to the purchase of ‘real’ goods and services, such as systematic over- or under-invoicing or inflated transaction fees or commissions.

and transmits a convertible virtual currency or (2) buys or sells convertible virtual currency for any reason is a money transmitter under FinCEN’s regulations.”⁷⁶

3. While the SEC and Federal District Courts Characterize Bitcoin as a Form of Currency, Other Tokens that Raise Funds through Bitcoin or Ether Constitute Securities.

In *SEC v. Shavers*, a federal district court in 2013 defined bitcoin as “an electronic form of currency unbacked by any real asset and without specie, such as coin or precious metal,”⁷⁷ recognizing that “[i]t is not regulated by a central bank or any other form of governmental authority; instead, the supply of bitcoins is based on an algorithm which structures a decentralized peer-to-peer transaction system.”⁷⁸ Bitcoin especially “can be used as money” because it can be used to purchase goods and services, living expenses, and it can be exchanged for “conventional currencies.”⁷⁹ The court recognized that, although bitcoin’s acceptance in only a handful of places limits its use as money, it was nonetheless a “currency or form of money” because it can be exchanged for conventional currencies.⁸⁰ Similarly, the DAO Report from the Securities and Exchange Commission (“SEC”) claims that an investment of ether is equivalent to an investment of money at least for purposes of satisfying the first prong of the *Howey* test.⁸¹

Striving to curb fraud, courts and the SEC also concluded that financing instruments that used bitcoin or ether constituted a form of security under *SEC v. W.J. Howey*. Both the *Shavers* court and the SEC found that the

Id. at 2, n. 8.

⁷⁶ FINCEN GUIDANCE, *supra* note 72, at 3. An administrator is “a person engaged as a business in issuing (putting into circulation) a virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency.” *Id.* at 2.

⁷⁷ See *SEC v. Shavers*, 2013 WL 4028182, (E.D. Tex. Aug. 6, 2013) (citing Derek A. Dion, *I’ll Gladly Trade You Two Bits on Tuesday for a Byte Today: Bitcoin, Regulating Fraud in the E–Conomy of Hacker–Cash*, 2013 U. ILL. J.L. TECH & POL’Y 165, 167 (2013).

⁷⁸ *Id.*

⁷⁹ *Id.* at *2.

⁸⁰ *Id.*

⁸¹ SEC, REPORT OF INVESTIGATION PURSUANT TO SECTION 21(A) OF THE SECURITIES EXCHANGE ACT OF 1934: THE DAO, RELEASE NO. 81207, 11 (July 25, 2017) [hereinafter *The DAO Report*].

transactions or tokens met the three-factor *Howey* test because these transactions involve (1) an investment of money or in the form of money, (2) in a common enterprise, and (3) with the expectation that profits will be derived from the efforts of the promoter or a third party.⁸² Such characterization places cryptocurrency within the reach of the Securities Act, requiring token issuers either to file registration requirements with the SEC or obtain adequate exemption.⁸³

Nevertheless, no federal court has declared whether major cryptocurrencies like bitcoin or ether constitute securities. In fact, William Hinman, Director of Corporation Finance Division of the SEC recently announced ether was not a security (“The Hinman Speech”).⁸⁴ This is because the decentralized nature of bitcoin and ether would fail to meet the third prong of the *Howey* test.⁸⁵ The sufficiently decentralized structure of bitcoin and ether suggested that no “central third party” even existed to meet the profit-seeking expectation of investors.⁸⁶ In addition, the SEC considered that applying the disclosure regime of the securities laws to the offers and resale of bitcoin “would seem to add little value.”⁸⁷

*4. The CFTC Characterizes Virtual Currency as a Form of Commodity.*⁸⁸

In an action against Coinflip, Inc. in 2015, the Commodity Futures Trading Commission (“CFTC”) determined that bitcoin and other virtual currencies are commodities, under the inclusive definition of Section 1a(9) of the Commodity Exchange Act (“CEA”) that “commodity” includes,

82 *Id.* (citing *SEC v. W.J. Howey*, 328 U.S. 293, 298–99 (1946)); *Shavers*, No. 4:13–CV–416, 2013 WL 4028182, at *2 (citing *Long v. Shultz Cattle Co.*, 881 F.2d 129, 132 (1989)).

83 *See* 15 U.S.C. §771(a) (2018); 15 U.S.C. §77e(a) (2018).

84 William Hinman, Dir., SEC Div. of Corp. Fin., Remarks at the Yahoo Finance All Markets Summit: Crypto (June 14, 2018) [hereinafter *The Hinman Speech*], <https://www.sec.gov/news/speech/speech-hinman-061418>.

85 *Id.*

86 *Id.*

87 *Id.*

88 Initially, CFTC Commissioner Bart Chilton called bitcoin a “shadow currency” and potential “house of cards.” Interview by CNBC with Bart Chilton, Comm’r, Commodities Futures Trading Comm’n (May 7, 2013), <http://video.cnbc.com/gallery/?video=3000166533&play=1>. Later, the CFTC granted registration to three swap execution facilities. *See* Press Release, Commodities Futures Trading Comm’n, CFTC Grants Registration to 3 Swap Execution Facilities (May 26, 2016), <http://www.cftc.gov/PressRoom/PressReleases/pr7375-16>.

among other things, “all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in.”⁸⁹ In 2016, the CFTC took action against Bitfinex, because the company operated an online exchange and trading platform of cryptocurrencies without registration and failed to meet the “actual delivery” requirement that would otherwise have excepted the transactions from CFTC’s jurisdiction under Section 2(c)(2)(D)(ii)(III)(aa) of the CEA.⁹⁰

To clarify its jurisdiction, the CFTC explicitly declined any authority to conduct regulatory oversight over “cash or ‘spot’ transactions in virtual currencies or . . . over participants on such platforms.”⁹¹ While the CFTC oversees futures, swaps and other derivatives markets, its jurisdiction does not extend to currency exchange platforms or other cash commodities, “including imposing registration requirements, surveillance and monitoring”⁹² However, this limitation does not preclude the CFTC’s enforcement jurisdiction over police fraud and manipulation in both derivatives markets and in the underlying spot markets. For instance, the CFTC charged Entrepreneurs Headquarters Limited, a UK-registered company, with engaging in a fraudulent scheme whereby the company solicited at least \$1.1 million worth of bitcoin from the investing public, misrepresented that the funds would be pooled and invested in products including binary options, made Ponzi-style payments to commodity pool participants from other participants’ funds, misappropriated pool participants’ funds, and failed to register with the CFTC as required.⁹³

89 Coinflip, Inc., CFTC No. 15-29, 2015 WL 5535736, *3 (Sept. 17, 2015) (order making findings & imposing remedial sanctions); 7 U.S.C. § 1a(9) (2018).

90 BXFNA Inc., CFTC No. 16-19 (June 2, 2016) (order making findings & imposing remedial sanctions).

91 *Written Testimony Before the S. Banking Comm.*, (2018) (testimony of J. Christopher Giancarlo, Chairman, Commodity Futures Trading Comm’n), https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo37#P48_15664.

92 *Id.*

93 Complaint for Injunctive & Other Equitable Relief, Restitution, & Civil Monetary Penalties Under the Commodity Exchange Act at ¶¶ 1-2, 5-6, *Commodity Futures Trading Comm’n v. Entrepreneurs Headquarters*, No. 18-cv-00345 (E.D.N.Y. Jan. 18, 2018).

5. The IRS Characterizes Virtual Currency as Property.

On March 25, 2014, the IRS issued Notice 2014-21, which established that for federal tax purposes, all virtual currency is treated as property, not as currency.⁹⁴ According to the Notice, virtual currency is not legal tender in the US or any other jurisdiction.⁹⁵ When cryptocurrency has an equivalent value in real currency or acts as a substitute for real currency, it is referred to as convertible virtual currency.⁹⁶ Therefore, the fair market value of convertible virtual currency “paid as wages is subject to federal income tax withholding, federal Insurance Contributions Act (FICA) tax, and Federal Unemployment Tax Act (FUTA) tax.”⁹⁷

B. In Addition to Its Heightened Control over Currency and Virtual Currency, China Announced Cryptocurrency-Specific Regulations.

1. China Has Long Forbidden Private Issuance of Token Tickets and Imposed Stringent Control Over Overseas Cash Transactions.

The Law on People’s Bank of China designates the People’s Bank of China (“PBoC”) the sole authority to issue currency and manage the currency circulation.⁹⁸ Article 20 forbids any unit or person other than the PBoC from printing or issuing token tickets that could replace renminbi.⁹⁹ Article 16 emphasizes that renminbi is the only “legally mandatory currency” that no person or unit can refuse payment in renminbi especially to repay either public or private debt.¹⁰⁰

In addition, the State Administration of Foreign Exchange (“SAFE”) has imposed a \$50,000 annual cap on total amount of foreign exchange that an

⁹⁴ *IRS Virtual Currency Guidance*, 2014 I.R.B. 21, § 4 (2014), https://www.irs.gov/irb/2014-16_IRB#NOT-2014-21 (noting that Bitcoin shall be treated as property for tax purposes and will not be treated as a currency).

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Zhonghua Renmin Yinhang Fa (中国人民银行法)* [Law on People’s Bank of China] (promulgated by the Standing Comm. Nat’l People’s Cong., Mar. 18, 1995; rev’d by the Standing Comm. Nat’l People’s Cong., Dec. 27, 2003, effective Dec. 27, 2003), arts. 4, 20, P.R.C. Laws.

⁹⁹ *Id.* art. 20.

¹⁰⁰ *Id.* art. 16.

individual may acquire.¹⁰¹ To enforce these limitations, the SAFE appoints foreign exchange banks to examine, validate, and track each transaction.¹⁰² Both the PBoC and the SAFE explicitly forbid individuals from directly investing in foreign capital markets without approval from local foreign exchange departments.¹⁰³ Violation of such rules may result in criminal liability.¹⁰⁴

*2. China Established Disclosure-Based Regulations on “Virtual Currency” in the Online Gaming Industry.*¹⁰⁵

China permits two types of entities to engage in the virtual currency businesses: online gaming operators (“Game Operators”), and online gaming virtual currency exchange service providers (“Service Providers”).¹⁰⁶ Game Operators are “companies that operate online games and issue/provide Virtual Currency,” and Service Providers “are companies that provide platform services for online game users to exchange Virtual Currency.”¹⁰⁷ A single entity cannot be both a Game Operator and a Service Provider at the same time.¹⁰⁸ Before the 2017 amendment, the prior Interim

¹⁰¹ Guojia Waihui Guanliju Guanyu Yinfu (“Geren Waihui Guanli Banfa Shishi Xize” de Tongzhi [Yibei Xiugai]) (国家外汇管理局关于印发《个人外汇管理办法实施细则》的通知 [已被修订]) [Notice of the State Administration of Foreign Exchange on Issuing the Detailed Rules for the Implementation of the Measures for the Administration of Individual Foreign Exchange (Revised)] (promulgated by State Administration of Foreign Exchange on Jan. 5, 2017, effective Feb. 1, 2017), arts. 2, 11, CLI.4.82957(EN) (Pkulaw).

¹⁰² *Id.* art. 6.

¹⁰³ *Id.* art. 16.; Geren Waihui Guanli Banfa (个人外汇管理办法) [Measures for the Administration of Individual Foreign Exchange] (promulgated by People’s Bank of China on Dec. 25, 2006, effective Feb. 1, 2007), art. 34, CLI.4.82813(EN) (Pkulaw).

¹⁰⁴ Geren Waihui Guanli Banfa (个人外汇管理办法) [Measures for the Administration of Individual Foreign Exchange] (promulgated by People’s Bank of China on Dec. 25, 2006, effective Feb. 1, 2007), art. 39, CLI.4.82813(EN) (Pkulaw).

¹⁰⁵ “Virtual currency” is defined as a medium of exchange existing in intangible form, but it used to be uncertain whether it may substitute a legal tender status. *See* Nikolei M. Kaplanov, Note, *Nerdy Money: Bitcoin, The Private Digital Currency, and the Case Against Its Regulation*, 25 LOY. CONSUMER L. REV. 111, 127-28 (2012).

¹⁰⁶ PILLSBURY WINTHROP SHAW PITTMAN LLP, MARKET ENTRY: VIRTUAL CURRENCY, ELECTRONIC MONEY AND ELECTRONIC PAYMENTS, <https://www.pillsburylaw.com/images/content/6/1/v2/613/MarketEntryVirtualCurrency.pdf>.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*; *see also* Wangluo Youxi Guanli Zanxing Banfa (网络游戏管理暂行办法) [Interim Measures for the Administration of Online Games] (promulgated by the Ministry of Culture, June 3, 2010, effective Aug. 1, 2010; rev’d by the Ministry of Culture, Dec. 15, 2017, effective Dec. 15, 2017) [hereinafter Interim Measures for the Administration of Online Games], art 6.

Measures for the Administration of Online Games imposed a minimum registered capital requirement of RMB 10 million (about U.S. \$1.6 million in 2013) on Game Operators and Service Providers,¹⁰⁹ and required an Internet Content Provider License.¹¹⁰ A Game Operator is also required to obtain an Internet Culture Operation Permit, where it must disclose to prospective users the virtual currency, unit price, method of purchase, and security measures that it will establish to protect the interests of the users.¹¹¹

3. In 2013, China Permitted Exchanges of “Online Commodities,” Only Prohibiting Financial Institutions from Engaging in Bitcoin-Related Businesses.

In December 2013, PoBC and four other ministries together released a statement regarding bitcoin and other virtual currencies (“the 2013 Announcement”), declaring that bitcoin is not a currency, but it would be treated as a “virtual asset or digital commodity.”¹¹² The 2013 Announcement explicitly disallowed financial institutions and payment companies from engaging in bitcoin-related businesses.¹¹³ While the 2013 Announcement prohibited bitcoin as a payment instrument for goods and services, the investing public was free to buy and sell “online commodities,”

¹⁰⁹ However, the most recent amendment eliminated the capital registration requirement. *See* Wenhuabu Guanyu Feizhi he Xiugai Bufen Guizhang de Jueding (文化部关于废止和修改部分部门规章的决定) [Ministry of Culture’s Decision to Amend and Abolish Certain Departmental Rules] (promulgated by the Ministry of Culture, Dec. 15, 2017, effective Dec. 15, 2017) [hereinafter Ministry of Culture’s Decision to Amend and Abolish Certain Departmental Rules], art. 2, CLI4.308365 (Pkulaw).

¹¹⁰ *See* Interim Measures for the Administration of Online Games, *supra* note 109, art. 6; *see generally* Wangluo Youxi Xuni Huobi Faxing Qiye, Wangluo Youxi Xuni Huobi Jiaoyi Qiye Shenbao Zhinan (网络游戏虚拟货币发行企业、网络游戏虚拟货币交易企业申报指南) [Registration Guidance for Issuers of Online Gaming Virtual Currency, Online Gaming Virtual Currency Exchange Enterprises] (promulgated by the Ministry of Culture, July 20, 2009, effectively July 20, 2009), art. 2, CLI 4.119606 (Pkulaw) (China).

¹¹¹ *Id.*

¹¹² Zhongguo Renmin Yinhang, Gonye he Xinxihua Bu, Zhongguo Yinhangye Jiandu Guanli Weiyuanhui deng Guanyu Fangfan Bitebi de Tongzhi (中国人民银行、工业和信息化部、中国银行业监督管理委员会等关于防范比特币风险的通知) [Announcement of Preventing Risks of Bitcoin by People’s Bank of China, Ministry of Industry and Information Technology, China’s Banking Regulatory Comm. and Other Departments] (promulgated by People’s Bank of China, Ministry of Industry and Information Technology, China’s Banking Regulatory Comm., China’s Securities Regulatory Comm., & China’s Insurance Regulatory Com. Dec. 3, 2013, effective Dec. 3, 2013) [hereinafter 2013 Announcement], art. 1, CLI4.214081 (Pkulaw).

¹¹³ *Id.* art. 2.

implying that exchanges among bitcoin and cryptocurrencies were not prohibited.¹¹⁴ Meanwhile, the 2013 Announcement warned the public about the anonymous nature of bitcoin and declared it a “speculative asset.”¹¹⁵ The Chinese government also claimed to increase oversight of bitcoin-related websites and reduce money laundering risks associated with bitcoin.¹¹⁶ Although the 2013 Announcement only claimed to broadly regulate cryptocurrency “from a very macro-level, not [to] blindly try to regulate a market in its infancy,”¹¹⁷ the price of bitcoin still dropped by about 50% afterwards.¹¹⁸

4. In 2017, China Banned Cryptocurrency Financing and ICOs, and Shut Down Crypto-Exchange Platforms.

Twelve months before the crackdown, China dominated the bitcoin exchanges market, accounting for more than 90% of trade volume.¹¹⁹ The heyday did not last. In September of 2017, the PBoC and five other ministries announced that financings using cryptocurrency, such as ICOs, are “in nature unauthorized illegal public financing , and [are] suspected of [being involved] in the illegal sale of coins, illegal issuance of securities, illegal fundraising, financial fraud, pyramid sale and other illegal and criminal activities.”¹²⁰ This 2017 Announcement also restated the

114 *Id.*

115 *Id.* arts. 4, 5.

116 *Id.* art. 3.

117 Jack Wang, *China's Statement on Bitcoin Is Open to Interpretation*, COINDESK (Dec. 16, 2013), <http://www.coindesk.com/bitcoin-china-statement-interpretation/> (quoting S, one of the owners of Yibite, a Bitcoin media operated by some of the top miners and holders in China).

118 Eric Mu, *China's Bitcoin Exchanges Survived the Crackdown and Did Battle in the Aftermath*, COINDESK (Jan. 12, 2014), <https://www.coindesk.com/chinas-bitcoin-exchanges-survived-the-crackdown-battle-aftermath/>.

119 See Samuel Haig, *JPY, USD, and KRW Accounts for Over 90% of Bitcoin Traded on Exchanges*, BITCOIN.COM (Oct. 17, 2017), <https://news.bitcoin.com/jpy-usd-krw-accounts-90-bitcoin-traded-exchanges/>.

120 Gongshang Zongju deng Qibumen Guanyu Fangfan Daibi (工商总局等七部门关于防范代币发行融资风险的公告) [Announcement of the People's Bank of China, the Office of the Central Leading Group for Cyberspace Affairs, the Ministry of Industry and Information Technology and Other Departments on Preventing the Financing Risks of Initial Coin Offerings] (promulgated by People's Bank of China, the Office of the Central Leading Group for Cyberspace Affairs, the Ministry of Industry and Information Technology etc. Sept. 4, 2017, effective Sept. 4, 2017) [hereinafter The 2017 Announcement], art. 1, CLL4.301348 (Pkulaw) (“代币发行融资是指融资主体通过代币的违规发售、流通，向投资者筹集比特币、以太币等所谓“虚拟货币”，本质上是一种未经批准非法公开融资的行为，涉嫌非法发售代币票券、非法发行证券以及非法集资、金融诈骗、传销等违法犯罪

government's position in the 2013 Announcement that bitcoin, ether, and other cryptocurrencies do not function as money because they have no "legal tender status" and their use "is not legally mandatory."¹²¹

Although the 2017 Announcement categorized bitcoin as "coin substitution" or "virtual currency" without addressing the cryptographic aspect of the currency,¹²² it explicitly banned any exchange between fiat money and "coin substitution," and the circulation of such "coin substitution."¹²³ The Announcement also explicitly prohibited any offering or financing activities of cryptocurrency,¹²⁴ and required organizations or individuals that "completed" the crypto-financing to terminate the investment contracts and "dispose of risks in an appropriate manner."¹²⁵

The 2017 Announcement also delegitimized "the so-called coin financing exchange platform[s]."¹²⁶ It not only restated the position in the 2013 Announcement, but also further limited financial institutions from trading, pricing, or acting as an agency for crypto exchanges.¹²⁷ Unlike the 2013 Announcement, the 2017 Announcement articulated that a violation of the regulation would result in revocation of the financial institution's business license.¹²⁸ Nevertheless, the 2017 Announcement did not mention any pecuniary or criminal liabilities for any regulatory noncompliance,

活动") [ICO means that the major financing mechanism is through token sales and exchanges, collecting so-called "virtual currency" such as bitcoin and ether from investors; in essence it is an unauthorized public financing activity, which is suspected of illegal sale of tokens, illegal offering of securities, illegal crowdfunding, financial fraud, multi-level marketing and other illegal, criminal activities].

121 *Id.*

122 *Id.* The literal meaning of the word "代币" is coin substitution.

123 *Id.* However, this sweeping ban does not explicitly mention blockchain technology, mining or other cryptocurrency-related developments. It only bans initial coin offering and cryptocurrency transactions.

124 *Id.*

125 *Id.* art. 2. However, the 2017 Announcement does not require relevant trading platforms to return bitcoins or other cryptocurrencies to individual investors. See Xiao Wei (来源), *Lushi Guardian: ICO Xiangmu Qing Tui=Tui Bi ma?* (律师观点ICO项目清退="退市"吗?), SOHU (Sept. 9, 2017) [hereinafter *Attorney's Opinion: Does Discharge from Initial Coin Offering Equal Return of Bitcoins?*], http://www.sohu.com/a/190791942_355147. In reality, Chinese crypto companies offered investors options to obtain refund, but almost no investors have requested one. See Laura Shin, *From Blockchains To Mooncakes: Two Chinese Crypto Founders On The ICO And Bitcoin Exchanges Ban*, FORBES (Sept. 19, 2017), <https://www.forbes.com/sites/laurashin/2017/09/19/from-blockchains-to-mooncakes-two-chinese-crypto-founders-on-the-ico-and-bitcoin-exchanges-ban/#7f91489d6a3d>.

126 The 2017 Announcement, *supra* note 121, art. 3.

127 *Id.* art. 4.

128 *Id.*

especially against entities that are not registered as “financial institutions.”¹²⁹ The Announcement also did not explicitly forbid exchanges or transactions among cryptocurrencies, nor did it ban mining or attempt to place any blockchain development under surveillance.

The market response to the 2017 Announcement was intriguing. Although bitcoin price dropped over \$1,000 within a few days after the crackdown, its price resurged a few days after.¹³⁰ Bitcoin China closed its transaction platform allegedly “responding to the ‘spirit of the Announcement,’”¹³¹ and some Chinese crypto-trading platform founders not only anticipated but also strategically planned for the crackdown. For instance, Qtum, a Chinese blockchain smart contract application company was founded in Singapore.¹³² NEO, a similar blockchain project explored the most favorable jurisdiction for its smart contracts projects, and hoped to enable its users to transact bitcoins legally across borders.¹³³

III. WHY DID CHINA PRESUME CRYPTOCURRENCY TO BE “BAD,” BUT THE U.S DID NOT?

A. While the U.S. Recognizes Certain Cryptocurrencies as Functional Equivalents to Fiats, China Explicitly, Yet Only Nominally, Delegitimizes Such Function in Order to Preserve Its Regulatory Strength in Capital Control.

Like every major economy, following the collapse of the gold standard, both the U.S. and China issued paper fiat currency, the value of which relies on public belief that the sovereign government will always stabilize the supply of new banknotes.¹³⁴ However, the U.S. adopted a flexible approach

¹²⁹ *Id.* art. 1.

¹³⁰ Frank Chaparro, *Here’s Why the Crackdown on Bitcoin in China Is ‘Not a Real Problem’ for the Digital Currency*, BUSINESS INSIDER (Sept. 19, 2017), <http://www.businessinsider.com/bitcoin-price-stable-despite-china-crackdown-2017-9>.

¹³¹ See *Attorney’s Opinion: Does Discharge from Initial Coin Offering Equal Return of Bitcoins?*, *supra* note 126.

¹³² See QTUM, <https://qtum.org/en/>; see also CRUNCHBASE, <https://www.crunchbase.com/organization/qtum>.

¹³³ See NEO, <https://neo.org/>.

¹³⁴ See David Yermack, *Is Bitcoin a Real Currency? An Economic Appraisal*, in HANDBOOK OF DIGITAL CURRENCY: BITCOIN, INNOVATION, FINANCIAL INSTRUMENTS, AND BIG DATA 31 (David Lee Kuo Chuen ed., 2015).

recognizing bitcoin as a functional *substitute* for “real” currency.¹³⁵ Although FinCEN limited the definition of “real” currency to those with legal tender, it openly recognized virtual currency as a substitute for real currency.¹³⁶ In contrast, irrespective of its technological reality (or potential),¹³⁷ China disregarded the cryptocurrency’s function as “currency,” explicitly declaring that bitcoin simply could not function like a currency in the absence of legal tender.¹³⁸

Categorizing cryptocurrency as a functional equivalent to fiat currency allowed U.S. regulators to place cryptocurrency into its existing regulatory framework. Practically, without such recognition, FinCEN would not be able to require a bitcoin administrator or exchanger to be subject to the Bank Secrecy Act.¹³⁹ In contrast, Chinese regulators were less concerned with jurisdiction; rather, they assert direct control, nominally eliminating any likelihood that would undermine their *existing* regulatory efficiency. Given China’s capital control policy, if the State Administration of Foreign Exchange (“SAFE”) had placed cryptocurrency into its existing supervision of monetary services and capital flow, its appointed banks would have burdened itself to a technologically impossible mission of tracking and imposing limitations upon each encrypted, anonymous cryptocurrency transaction from every Chinese user.¹⁴⁰ Since the appointed banks only monitor capital outflow from an individual’s bank account, the SAFE and

135 FINCEN GUIDANCE, *supra* note 72; SEC v. Shavers, No. 4:13–CV–416, 2013 WL 4028182, at *1 (E.D. Tex. Aug. 6, 2013) (citing Derek A. Dion, *I’ll Gladly Trade You Two Bits on Tuesday for a Byte Today: Bitcoin, Regulating Fraud in the E–Economy of Hacker–Cash*, 2013 U. ILL. J.L. TECH & POL’Y 165, 167 (2013)).

136 See FINCEN GUIDANCE, *supra* note 72.

137 See Hughes & Middlebrook, *supra* note 7, at 504.

138 Ministry of Culture’s Decision to Amend and Abolish Certain Departmental Rules, *supra* note 110. Bitcoin cannot function as money because it has no “legal tender status” and its use is not legally mandatory.

139 See Douglas King, *Banking Bitcoin-Related Businesses: A Primer for Managing BSA/AML Risks* (Oct. 2015, revised Feb. 2016) (Fed. Reserve Bank of Atlanta, Retail Payments Risk Forum Working Paper), https://www.frbatlanta.org/-/media/documents/rprf/rprf_pubs/2016/banking-bitcoin-related-businesses.pdf.

140 Nicholas Godlove, *Regulatory Overview of Virtual Currency*, 10 OKLA. J.L. & TECH. 1, 21, 39 (2014). Another explanation is that because of the stringent capital control policy, China does not have any equivalent regulatory framework of monetary services business. However, China’s central bank has proposed to develop its state-owned, centralized cryptocurrency. See *infra* Part IV.A.2.

appointed banks were unlikely to have the supervisory capacity to monitor crypto transactions that can take place without a Chinese bank account.¹⁴¹

Knowing the potential challenges from cryptocurrency on current monetary regulation, while China is even less willing to loosen control, the U.S. is more tolerant of technological uncertainty.¹⁴² Contrary to China’s nominal declaration that bitcoin is not a legitimate currency in the 2017 Announcement, the U.S. Federal Reserve claims that it “doesn’t have authority to supervise or regulate bitcoin in any way.”¹⁴³ Instead of being cynical about market risks, the Federal Reserve was “trying to understand the nature” of bitcoin because of its belief that “innovation using these technologies could be extremely helpful and bring benefits to society.”¹⁴⁴

B. With Respect to Financial Applications, While the U.S. Attempts to Distinguish Non-Security Cryptocurrencies from Securities Tokens, China Drops a Blanket Ban Because Existing Law Might Not Effectively Provide Investor Protection.

Unlike China’s rather abrupt crackdown, the SEC evaluated the application of the *Howey* test on a case by case basis,¹⁴⁵ and the Hinman Speech drew a distinction in the treatment of cryptocurrency, such as ether,

141 See *supra* note 112.

142 *Id.*

143 The 2017 Announcement, *supra* note 121; cf. Ryan Tracy, *Yellen: Bitcoin ‘Doesn’t Touch’ Banks the Fed Oversees*, WALL ST. J. (Feb. 27, 2014), <https://www.wsj.com/amp/articles/no-headline-available-1393521584>.

144 Rakesh Sharma, *Federal Reserve May Introduce a Cryptocurrency in the Future*, INVESTOPEDIA (Dec. 12, 2017), <https://www.investopedia.com/news/federal-reserve-may-introduce-cryptocurrency-future/#ixzz55zIzZAF9>. In addition, former Chairwoman Janice Yellen recognized that:

[Blockchain] is a very important, new technology that could have implications for the way in which transactions are handled throughout the financial system. We’re looking at it in terms of its promise in some of the technologies we use ourselves and many financial institutions are looking at it. It could make a big difference to the way in which transactions are cleared and settled in the global economy.

Stan Higgins, *Fed Chair Yellen: Blockchain is an ‘Important Technology’*, COINDESK (Jan. 18, 2017), <http://www.coindesk.com/fed-yellen-blockchain-important-tech/>. However, William Dudley, president of the Federal Reserve Bank of New York, only hinted at the prospect of a Fed-issued cryptocurrency in the future. “It’s really very premature to be talking about the Federal Reserve offering digital currencies, but it is something we are thinking about,” he said. See Sharma, *Federal Reserve May Introduce a Cryptocurrency in the Future*, *supra*.

145 *Shavers*, No. 4:13–CV–416, 2013 WL 4028182, at *3; see, e.g., *Munchee, Inc.*, S.E.C. Release No. 10445 (Dec. 11, 2017) [hereinafter *The Munchee Order*] (order instituting cease-and-desist proceedings).

and other tokens that entered the market through ICOs.¹⁴⁶ While the Hinman Speech, in effect, relieved Ethereum from a costly registration requirement under the Securities Act,¹⁴⁷ it did not offer a categorical answer to the question of whether certain “utility tokens” are securities.¹⁴⁸ The claimed technological divergence between “utility tokens” and “security tokens” might theoretically challenge the legal definition of securities because the consumptive motive in using such tokens potentially trumps the profit-making expectation, failing the expectation of profits prong under *Howey*.¹⁴⁹ Alternatively, if token investors expect to profit from resale on secondary markets, such profit would not likely be “from the efforts of others” because, absent central control, the price at secondary market is merely determined by market fluctuations.¹⁵⁰

Despite this alleged “divergence,” the SEC has consistently insisted on a broad definition of “security,” stating that securities law has always focused on the economic realities of the underlying transactions rather than

¹⁴⁶ The Hinman Speech, *supra* note 85.

¹⁴⁷ *Id.*

¹⁴⁸ Micha Beniofiel, *Understanding the Difference Between Coins, Utility Tokens and Tokenized Securities*, MEDIUM (Aug. 8, 2017), <https://medium.com/startup-grind/understanding-the-difference-between-coins-utility-tokens-and-tokenized-securities-a6522655fb91>. It appears that the cryptocurrency ecology has developed at least two different types of tokens: security tokens and utility tokens. *See id.*; Josiah Wilmoth, *ICO 101: Utility Tokens vs. Security Tokens*, STRATEGIC COIN (Dec. 17, 2017), <http://strategiccoin.com/ico-101-utility-tokens-vs-security-tokens/>. For instance, Overstock announced that its subsidiary, tZERO acknowledged that “issuing digital tokens as securities gives issuers and purchasers the greatest certainty about the legal regime that applies to the sale and the widest range of options to provide an attractive return for investors.” *ICO Market Transformed by ATS Security Token Joint Venture Forged by tZERO, RenGen and the Argon Group* (Sept. 27, 2017), http://investors.overstock.com/phoenix.zhtml?c=131091&p=RssLanding_pf&cat=news&id=2303094. In comparison, Filecoin, though using a Rule 506(c) exemption under the Securities Act, aimed to provide a decentralized data storage service rather than profit-making securities. FILECOIN, <https://filecoin.io/>; Protocol Labs Inc., Notice of Exempt Offering of Securities (Form D) (Aug. 7, 2017).

¹⁴⁹ *See* Protocol Labs, Juan Batiz-Benet et al., *The SAFT Project: Toward a Compliant Token Sale Framework* (Oct. 2, 2017) (Whitepaper), <https://saftproject.com/#saft-whitepaper>.

¹⁵⁰ *Id.* (citing *Noa v. Key Futures*, 638 F.2d 77, 79 (9th Cir. 1980) (finding “no expectation of profit from the efforts of others because once the purchase for silver bars was made, the profits to the investor depended primarily upon the fluctuations of the silver market, not the managerial efforts of the [defendants]”)); *SEC v. Belmont Reid*, 794 F.2d 1388, 1391 (9th Cir. 1986) (finding that the expectation of profits were not from “the efforts of others” because profits to gold coin purchasers depend primarily upon the fluctuations of the gold market). Nevertheless, a counterargument against this interpretation would be that “profits,” in reference to expectation-of-profits, can mean “capital appreciation resulting from the development of the initial investment.” *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 852 (1975).

the mere “label” of individual instrument.¹⁵¹ In contrast, China’s Securities Law defines “security” narrowly, limiting it to “*securities investment fund* through public or non-public raise of capital . . . , fund by a *fund management institution*, . . . fund [held] by a fund custodian, and securities investment activities conducted for the benefit of the fund shareholders.”¹⁵² To qualify as a fund management institution, an entity must have “paid-in capital of no less than RMB 100 million.”¹⁵³ This minimum capital cap suggests that most domestic crypto-enterprises do not constitute “fund management institutions,” and subsequently, a transaction between investors and these non-fund management institutions does not qualify as a “security.”¹⁵⁴

At first glance, China’s narrow definition of “security” seems to contradict its paternalistic tendency evidenced in the crackdown of the allegedly illegal cryptocurrency transactions. However, unlike the SEC’s mission,¹⁵⁵ China’s Securities Regulatory Committee (“CSRC”) battles with the duality of both creating a securities market and maintaining active control over the relatively nascent market.¹⁵⁶ The enactment of the

151 See *S.E.C. v. Edwards*, 540 U.S. 389, 393 (2004); The Hinman Speech, *supra* note 85.

152 See Zhengquan Fa (证券法) [Securities Law] (promulgated by the Standing Comm. Nat’l People’s Cong., Jan. 1, 2006, rev’d by the Standing Comm. Nat’l People’s Cong., Aug. 31, 2014, effective Aug. 31, 2014), art. 16, CLL1.233280 (Pkulaw) (emphasis added).

153 *Id.*

154 *Id.* §129A “设立证券公司，必须经国务院证券监督管理机构审查批准。未经国务院证券监督管理机构批准，任何单位和个人不得经营证券业务 [“The establishment or closure of branches of a securities company, change in its scope of business, registered capital or articles of association, and merger, division, change in its corporate form, and its dissolution shall be subject to approval by the securities regulatory authority under the State Council.”]. Therefore, non-security companies, including crowdfunding startups, do not fall within the scope of the registration requirement. See *The Reasonable Definition of “Securities” Should Be the Focus of the Securities Law Amendment* [“证券”的合理界定应是《证券法》修订重点], SINA FINANCE (Apr. 12, 2017) <http://finance.sina.com.cn/roll/2017-04-12/doc-ifeyayzu7660647.shtml>.

155 See *What We Do*, SEC (June 10, 2013), <https://www.sec.gov/Article/whatwedo.html> (last visited Sept. 20, 2018) (“The mission of the U.S. Securities and Exchange Commission is to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.”).

156 See Alicia García-Herrero et al., *What Explains the Low Profitability of Chinese Banks?*, 33 J. BANKING & FIN. 2080, 2081 (2009) (Capital market reform has focused on the restructuring of the four largest and state-owned commercial banks, “which ha[s] long served as lending arm of state-owned enterprises.”). As the marketization progressed, at the end of 2004, China had 133 securities companies, and 188 future brokerage houses, and in 2016, China had 4,088 financial institutions including banks. *Some Opinions of the State Council on Promoting the Reform, Opening up and Steady Growth of Capital Market*, CHINA SEC. REG. COMMISSION (Jan. 31, 2004), http://www.csrc.gov.cn/pub/csrc_en/laws/rfdm/AdministrativeLaws/200907/t20090729_119391.html.

Securities Law aims to reform the previously state-owned financial structure and to gradually transition to a market economy. One purpose of the Securities Law is to “restructure and consolidate the securities industry, by building up a supervisory framework following international norms by developing a multi-tier capital market system, including the development of new financial products, and by expanding the role of institutional investors in the market.”¹⁵⁷

China’s paternalistic approach seems to be further undermined because, unlike the SEC, the CSRC does not even explicitly aim to protect investors or assert jurisdiction in combating securities fraud.¹⁵⁸ Instead, the CSRC aims to promote “new financial products,” presumably including instruments based on cryptocurrency if the crypto-market were not so volatile or if it did not join other Chinese regulators in the 2017 Announcement to delegitimize cryptocurrency transactions.¹⁵⁹ Perhaps the CSRC’s silence in not characterizing cryptocurrencies as securities, at least temporarily, like the PBoC’s denial of cryptocurrency as a functional equivalent of fiats, preserves its regulatory consistency and resources, at least temporarily.

If it is not the CSRC’s priority to protect the investing public and no other Chinese regulator has specialized in detecting securities fraud, China’s 2017 Announcement at least nominally deters potential fraud.¹⁶⁰ In light of such a limited and different institutional capacity compared to the SEC, by creating an impression of high risk and fraud, the 2017 Announcement at least attempts to discourage the investing public from engaging in

Following the Chinese market reform of 1984, the Shanghai Stock Exchange was reopened in 1990 after more than 40 years of shutdown, signaling the opening of China’s capital market. Lena H. Sun, *China’s Stock Markets Find Foreign Investors Cooling Off*, THE WASH. POST (Oct. 13, 1992), <https://www.washingtonpost.com/archive/business/1992/10/13/chinas-stock-markets-find-foreign-investors-cooling-off/1bf1f8e8-9d35-4351-8589-dd38db583ccc/?>.

¹⁵⁷ See *What We Do*, *supra* note 156. Also, for instance, in 2001, the CSRC and the State Economic and Trade Commission jointly initiated a program inspecting the establishment and development of a model corporate governance system in listed companies. Interestingly, China’s securities regulators have stepped in corporate governance. Such extension of authority was rarely witnessed in equivalent institutions like the SEC. Wei Yuwa, *The Development of the Securities Market and Regulation in China*, 27 LOY. L.A. INT’L & COMP. L. REV. 479, 496 (2005).

¹⁵⁸ See *What We Do*, *supra* note 156.

¹⁵⁹ *Id.*; The 2017 Announcement, *supra* note 121.

¹⁶⁰ The 2017 Announcement, *supra* note 121.

cryptocurrency-related transactions. Of course, the efficiency of such warning is subject to debate, but one might always argue that some alarm is better than none.

C. While Both Countries Characterized Cryptocurrency as a Form of Commodity, Only the U.S. Applied Commodities Law to Regulate Cryptocurrency Market.

China’s 2013 Announcement used the language “special virtual commodity” to define cryptocurrency.¹⁶¹ This term encompassed reloadable cards, which enable users to purchase goods and services online.¹⁶² When applying the definition on cryptocurrency in general, the 2013 Announcement temporarily disregarded the transactional anonymity of cryptocurrency and treated cryptocurrency as an equivalent to in-game currencies—the legitimacy of which were left untouched in the 2017 Announcement.¹⁶³ This definition, however, had little resemblance to

161 See Guanyu Yinfa “Zhifu Jigou hulianwang Zhifu Yewu Fengxian Fangfan Zhiyin” (中国支付清算协会网络支付应用工作委员会关于印发《支付机构互联网支付业务风险防范指引》的通知) [Announcement of Publicizing Payment Institution Guidance of Risk Prevention in Online Payment Services] (promulgated by China’s Payment & Clearing Association of China, Mar. 7, 2013, effective Mar. 7, 2013) [hereinafter Announcement of Publicizing Payment Institution Guidance of Risk Prevention in Online Payment Services], §4.12. Previously, Tencent, one of the largest telecommunication companies in China, offered a virtual currency, Q-coin, as a way of purchasing its goods and services via QQ, an instant messaging service. Unlike cryptocurrency, Q-coin design was a unidirectional transaction because the intention was for users to only buy Q-coins using the fiat money, RMB. Even though the initial design’s purpose was to establish unidirectional transaction, as QQ gained its popularity Q-coin became so popular that users and merchants began to use it among themselves in the transactions of real-world goods and services. Chinese authorities discovered that in a given year the Q-coin transactions amounted to billions of RMB with annual growth estimated at 20%. In June 2009, the Chinese authorities decided to ban this currency for trading in real goods in order to “limit its possible impact on the real financial system.” See Godlove, *supra* note 141, at 53. Bitcoin could allow China to see the similarity between the digital currency and cryptocurrency. As Q-coin was recognized as a form of digital commodity, it was logical to treat cryptocurrency initially as commodity as well. *Id.*

162 Announcement of Publicizing Payment Institution Guidance of Risk Prevention in Online Payment Services, *supra* note 162.

163 See *id.*; see also The 2017 Announcement, *supra* note 121. Typical in-game currencies include World of Warcraft Gold, Linden Dollars, or vendor-specific currencies like Microsoft Points, airline miles etc. While China treated cryptocurrency as a form of commodity, no record indicated whether blockchain participants were compelled to comply with China’s regulation on commodity futures. Nevertheless, the Regulation on the Administration of Futures Trading has always applied a limited definition where the “futures trading” was characterized as “future contracts or option contracts . . . in the manner of centralized public trading or any other manner approved by the futures regulatory authority of the State Council.” Qihuo Jiaoyi Guanli Tiaoli (期货交易管理条例) [Regulation on the

China's Commodities Futures Law, which narrowly defines "commodity futures" as only "agriculture products, industrial products, energy and other commodities and associated index products."¹⁶⁴ In contrast, the CFTC placed cryptocurrency within its broad definition of a commodity.¹⁶⁵ CFTC has classified bitcoin as a commodity, defining it as "a digital representative of value that functions as a medium of exchange, a unit of account, and/or a store of value, but does not have legal tender status."¹⁶⁶

However, unlike the U.S. securities law, the broad definition of commodity does not grant the CFTC broad jurisdiction in cryptocurrency market. The CFTC in fact acknowledges that "[w]here market participants are simply buying and selling bitcoin on an exchange, we wouldn't have oversight responsibilities for those exchanges."¹⁶⁷ Though such limitations do not limit the CFTC's enforcement authority against fraud, the CFTC seems to only have supervisory authority over "contracts for sale of

Administration of Futures Trading] (promulgated by St. Council, Mar. 1, 2017, effective Mar. 1, 2017) [hereinafter Regulation on the Administration of Futures Trading], art. 1, CLI.2.293183.

164 See Regulation on the Administration of Futures Trading, *supra* note 164, art. 85 (1) ("Futures contract (*qihuo heyue*) refers to a standard contract uniformly formulated by futures exchange which stipulates for deliveries of a thing of a certain quantity at a certain time and place in the future. According to the different things involved in a contract, futures contract is divided into commodity futures contract and financial futures contract. The objects of commodity futures contracts include agriculture products, industrial products, energy and other commodities and associated index products; the objects of financial futures contracts include financial products like securities, interest rate, exchange rate and so on and associated index products.").

165 In 1974, Congress enacted the Commodity Futures Trading Commission Act, which amended the CEA's definition of "commodity" to include "all other goods and articles, except onions . . . and all services, rights, and interests in which contracts for future delivery are presently or in the future" CEA § 2(a)(1), 7 U.S.C. § 1(a) (1974). By this amendment, literally anything other than onions could become a "commodity" and thereby subject to CFTC regulation simply by its futures being traded on some exchange. The legislative history shows that the purpose of the enlarged definition was to allow regulation of futures contracts and other transactions in a growing number of commodities such as coffee, sugar, and foreign currencies that were then being traded on and off commodity exchanges and that had been unregulated under the prior version of the CEA.

166 See *United States v. Murgio*, 209 F. Supp. 3d 698, 709-710 (2016) (citing *Coinflip, Inc.*, CFTC No. 15-29, 2015 WL 5535736 (Sept. 17, 2015)).

167 See Pete Rizzo, *CFTC Commissioner: Market Manipulation Could Shape Bitcoin's Future*, COINDESK (Jan. 8, 2015), <http://www.coindesk.com/cftc-commissioner-mark-wetjen-bitcoin/>. Mark Wetjen, CFTC Commissioner, said the following statutory language provides the strongest support for the inclusion of Bitcoin futures contracts within the CEA: "[A] commodity includes any 'rights or interests in which a contract for future delivery is or will be dealt in,' and it's that part of the definition that I think best captures something like bitcoin." *Id.*

[cryptocurrency];” and “those contracts that are traded on exchanges”—in other words, options and futures contracts.¹⁶⁸

Interestingly, even though China adopts a narrow definition of commodity securities, like the CFTC, China has, in fact, incorporated option contracts in the 2007 Regulations on the Administration of Futures Trading, defining them as “a standard contract uniformly formulated by futures exchange which stipulates that buyer has right to purchase or sell an object agreed upon (including futures contracts) at a certain time and a specified price in the futures.”¹⁶⁹ Under this definition, the CSRC could have placed certain cryptocurrency offerings within its regulatory framework of commodity futures, imposing disclosure rules and the RMB 30 million minimum registered capital requirement.¹⁷⁰ Why didn’t it? Perhaps the CSRC already deals with too many regulatory issues, and therefore faces constraints in resources. Unlike the CFTC, the CSRC is tasked with regulating both the securities and commodity futures markets, while providing corporate governance rules.¹⁷¹

IV. CHINA’S BAN IS NOT THE END, AND TOLERANCE IS NOT FLAWLESS.

A. China’s 2017 Announcement Allows the State to Substitute the Market in Developing Blockchain Technology and Even a State-Initiated Cryptocurrency.

From the regulator’s perspective, China’s seemingly sweeping ban saved the CSRC’s limited resources in dealing with uncertain technological innovation. More importantly, by disallowing financial institutions in cryptocurrency transactions, China might have carved out space in the market to allow state-owned banks to launch their own blockchain

168 Jerry Brito, *Bitcoin Financial Regulations: Securities, Derivatives, Prediction Markets, and Gambling*, 16 COLUM. SCI. & TECH. L. REV. 144, 162 (2014).

169 Zhu Sanzhu, *Legal Aspects of the Commodity and Financial Futures Market in China*, 3 BROOK. J. CORP. FIN. & COM. L. 377, 397 n.122 (2009).

170 Regulation on the Administration of Futures Trading, *supra* note 164, arts. 16, 22, 25.

171 The 1999 Provisional Regulations required that futures trading be conducted in a futures exchange, the establishment of which required approval by the CSRC. Before these regulations, futures exchanges were established upon approval by local government. Provisional Regulations on the Admin. of Futures Trading (promulgated by the St. Council, June 2, 1999, effective Sept. 1, 1999), arts. 4, 6.

projects.¹⁷² Since the announcement did not prohibit mining or censor miners, the PBoC, together with other state-owned commercial banks, has initiated projects developing encrypted transaction systems based on blockchain technology since early 2017, separating the blockchain technology from the speculative financial applications of cryptocurrency.¹⁷³ For instance, China Zheshang Bank has proposed its block-chain based receivables chain platform to its corporate clients.¹⁷⁴ Postal Savings Bank of China has cooperated with IBM to develop its asset custody system using the Hyperledger Fabric.¹⁷⁵ No evidence suggests that these endeavors were negatively affected by the 2017 Announcement.

By closing the door on cryptocurrency transactions, China attempts to open another one namely a state-initiated, “centralized” crypto-fiat.¹⁷⁶ While denying cryptocurrency as a form of currency due to the lack of a legal tender, the PBoC later proposed that the state-initiated cryptocurrency

172 Xia Zhihua & Liu Liaoqiao (夏智华、刘蓼乔), Weilai Yi Lai: Qu Kuai Lian Rechao Xia de Falu Sikao (未来已来：区块链热潮下的法律思考) [The Future Has Come: Legal Thinking under the Upsurge of Blockchain], HEXUN (和讯网) (Jan. 4, 2018), <http://iof.hexun.com/2018-01-04/192158902.html>

173 See *id.*; see also Sujha Sundararajan, *PBoC Research Lead: ‘Crucial’ to Issue Central Bank Cryptocurrency Soon*, COINDESK (Nov. 6, 2017), <https://www.coindesk.com/pboc-research-lead-crucial-to-issue-central-bank-cryptocurrency-soon/>. Qian Yao, the Director of the Digital Currency Research Institute of People’s Bank of China explained the importance of introducing digital legal tender at a forum in Beijing. Such a move, he said, would help in cutting transaction costs and expanding financial services to rural areas, while also increasing the efficiency of the PBoC’s monetary policies. Qian remarked at the event that “the development of digital economy needs central bank-issued electronic currency more than ever.” *Id.*

174 *Zhengshang Yinhang Tui Yenei Shou Kuan Qu Kuai Lian Ying Shou Kuan Lian Pingtai* (浙商银行推业内首款区块链应收款链平台) [Zhengshang Bank Pushed for the First Receivable Chain Platform in the Industry], SCTN (Aug. 17, 2017), <http://www.stcn.com/2017/0817/13563075.shtml>.

175 *Postal Savings Bank of China Teams with IBM to Build Blockchain-Based Asset Custody System*, IBM (Jan. 10, 2017), <https://www-03.ibm.com/press/us/en/pressrelease/51358.wss>. According to IBM’s report,

PSBC’s blockchain solution enables the real-time sharing of information by multiple parties, eliminates repeated credit verifications, which reduces the operation process by about 60% - 80% and helps make information exchanges more efficient. The smart contract and consensus mechanism integrates investment compliance verification regulations into the blockchain, and ensures that transactions are completed after contracts are satisfied and a consensus is reached. The immutability and encryption built into the blockchain ensures that account information remains secure while allowing the quick sharing of necessary information by transaction participants.

Id.

176 Zhao, *PBoC Digital Currency Director Calls for Centralized State Cryptocurrency*, *supra* note 50.

or token could compensate for cryptocurrency’s lack of anchoring in values.¹⁷⁷ Additionally, a state-initiated cryptocurrency would also be designed to stabilize and strengthen China’s fiat money.¹⁷⁸ There, in addition to supplying fiat, the PBoC will provide algorithms,¹⁷⁹ and such digitalized legal tender would allow the central bank to monitor the velocity of digital transactions more closely.¹⁸⁰ Also, the launch of digital legal tenders will help to reduce transactional costs and expand financial services to rural areas.¹⁸¹ If the launch were successful, it would allow the central bank to implement more effective monetary policies.¹⁸²

B. However, from the Perspective of Investor Protection, China’s Sweeping Ban Only Nominally, Rather than Effectively, Deters Fraud.

The 2017 Announcement would be in vain when a cryptocurrency transaction “could be [created and] solely maintained by foreign users and in a manner that does not disclose all transactions publicly.”¹⁸³ As the 2017 Announcement does not address any cryptocurrency transactions abroad, Chinese entrepreneurs or fraudsters have established many cryptocurrency transaction platforms overseas, cloaking themselves as foreign enterprises but targeting China’s investing public.¹⁸⁴ Some offer unregistered option contracts, which would be under the jurisdiction of the CSRC, except that

177 See Lawrence Lessig, *The Zones of Cyberspace*, 48 STAN. L. REV. 1403, 1408 (1996) (“Regulation in cyberspace is, or can be, different. If the regulator wants to induce a certain behavior, she need not threaten, or cajole, to inspire the change. She need only change the code—the software that defines the terms upon which the individual gains access to the system, or uses assets on the system”) see also Sara Hsu, *After Cracking Down on Bitcoin, China Contemplates Its Own Digital Currency*, FORBES (Oct. 19, 2017), <https://www.forbes.com/sites/sarahsu/2017/10/19/will-china-host-the-worlds-biggest-state-backed-digital-currency/#50cf0de01231>.

178 *Id.*

179 *Id.*

180 *Id.*

181 Polina Chernykh, *China’s Central Bank Plans to Launch Its Own State-Backed Digital Currency*, COINSPEAKER (Nov. 6, 2017), <https://www.coinspeaker.com/2017/11/06/chinas-central-bank-plans-launch-state-backed-digital-currency/>.

182 Sarah Dai, *China’s Central Bank Is Developing Its Own Digital Currency, Even As It Bans Bitcoin and Private Cryptos*, SOUTH CHINA MORNING POST (Nov. 5, 2017), <http://www.scmp.com/business/companies/article/2118468/chinas-central-bank-studying-its-own-digital-currency-even-it>.

183 Kaplanov, Note, *supra* note 106, at 169.

184 Mengyan Ren, 数字货币系列调查] 禁而不绝的交易所 [Digital Currency Survey – Forbidden yet not Eliminated Exchange Platforms], CNR (May 3, 2018), http://china.cnr.cn/yaowen/20180503/t20180503_524220165.shtml.

the CSRC failed to prioritize investor protection by asserting strenuous enforcement efforts to ensure compliance and curb fraud.¹⁸⁵

Such a loophole, in addition to a weak enforcement mechanism, leaves investors vulnerable to Ponzi schemes and scams. With no effective measure to tame the Wild West, the blanket ban on cryptocurrency transactions fosters a premature perception among the public as if cryptocurrency were by its nature fraudulent.¹⁸⁶ Such norms not only hinder meritorious technological improvement, but potentially also undermine China's state-led efforts in offering its own crypto-fiat. It is also uncertain whether China's reliance on state-led initiatives in both blockchain and cryptocurrency would be immune from fraud or hacks.

C. In Comparison, the U.S. Approach Is Better Equipped to Balance Investor Protection and Facilitate Technological Improvement.

Instead of attaching a premature judgment on cryptocurrency transactions as a whole, the U.S. approach provides, at least, some procedural clarity. For instance, the SEC does not question the merits of underlying cryptocurrency transactions as long as the underlying securities are registered or obtained through adequate exemptions.¹⁸⁷ Although regulatory compliance involves costs, the U.S. approach does not stop meritorious projects from raising capital. Meanwhile, both the SEC and the CFTC have been actively weeding out fraud. Soon after China's 2017 announcement, the SEC established a Cyber Unit, targeting at cyber-related misconduct, including fraud, market abuse related to cryptocurrency transactions.¹⁸⁸ Unlike China's arguably unsubstantiated criticism against

¹⁸⁵ *Id.*

¹⁸⁶ *Bite Bi Shang Weibo Re Soule Dan Zhexie Yulun Que Rang Ren Kaixian Bu Qilai* (比特币上微博热搜了但这些舆论却让人开心不起来) [*Bitcoin Is One of the Most Searched Hashtags on Weibo, But the Public Comments Are Upsetting*], HECAIJING (Sept. 12, 2018), <http://hecaijing.com/article/show/1536731080743294.html>.

¹⁸⁷ See 15 U.S.C. § 771(a) (2018); 15 U.S.C. § 77e(a) (2018).

¹⁸⁸ SEC, *SEC Announces Enforcement Initiatives to Combat Cyber-Based Threats and Protect Retail Investors*, SEC PRESS RELEASE (Sept. 25, 2017), <https://www.sec.gov/news/press-release/2017-176>.

cryptocurrency, the SEC has issued investors alerts to educate retailer investors and warn the public about what is too good to be true.¹⁸⁹

D. However, Reliance on a Disclosure-Based Regime Might Be Both Over- and Under-Inclusive.

One might argue that applying the U.S. definition of security to all cryptocurrency-related transactions could be over-inclusive because certain tokens only intend to provide blockchain-based products for consumptive rather than profit-making purposes.¹⁹⁰ Requiring these transactions to register as securities would increase costs and stifle the potential benefits to the extent that utility-providing projects would forgo the option of issuing any tokens altogether.¹⁹¹ Nevertheless, it is too early to tell whether such effects will constitute an unwanted market distortion.

Meanwhile, since the SEC has announced that Ether does not constitute a security, what are these cryptocurrencies?¹⁹² Perhaps Bitcoin and Ether are allowed to remain in the lawless frontier—at least temporarily beyond the reach of the Securities Act. Even though other cryptocurrencies and utility tokens are regulated under federal securities regulations, the current disclosure-based regime might have overly relied on the “prudence of investors,”¹⁹³ potentially underestimating unprecedented risks such as cybersecurity breach and large-scale hacking attacks.¹⁹⁴ As institutional investors, including Goldman Sachs, become involved in cryptocurrency trading, it is uncertain whether the disclosure-based approach will be

¹⁸⁹ See *id.*; SEC, *SEC Issues Investigative Report Concluding DAO Tokens, a Digital Asset, Were Securities*, SEC PRESS RELEASE (July 25, 2017), <https://www.sec.gov/news/press-release/2017-131>.

¹⁹⁰ See Stan Higgins, *SEC: U.S. Securities Laws “May Apply” to Token Sales*, COINDESK (July 25, 2017), <https://www.coindesk.com/securities-exchange-commission-us-securities-laws-may-apply-token-sales/> (“[The Commission deems it appropriate and in the public interest to issue this Report in order to stress that the U.S. federal securities law may apply to various activities, including distributed ledger technology, depending on the particular facts and circumstances, without regard to the form of the organization or technology used to effectuate a particular offer or sale.”).

¹⁹¹ Primavera De Filippi, *We Must Regulate Bitcoin. Problem Is, We Don’t Understand It*, WIRED (Mar. 1, 2016), <https://www.wired.com/2016/03/must-understand-bitcoin-regulate/>.

¹⁹² The Hinman Speech, *supra* note 85.

¹⁹³ See Daniel J. Morrissey, *The Road Not Taken: Rethinking Securities Regulation and the Case for Federal Review*, 44 U. RICH. L. REV. 647, 649 (2010).

¹⁹⁴ See, e.g., Steven Russolillo & Eun-Young Jeong, *Cryptocurrency Exchanges Are Getting Hacked Because It’s Easy*, WALL ST. J. (July 16, 2018), <https://www.wsj.com/articles/why-cryptocurrency-exchange-hacks-keep-happening-1531656000>.

sufficient in addressing inherent risks in the anonymity of cryptocurrencies.¹⁹⁵

Interestingly, China would likely face the same challenges had the CSRC regulated rather than outlawed token offerings. Since 2015, China has attempted to amend its Securities Law, replacing the former merit review with a disclosure-based framework and enacting a registration system that resembles the U.S. federal securities regulation.¹⁹⁶ Given the fact that Chinese individual investors rather than institutional investors have predominated in stock trading volume in recent years,¹⁹⁷ the new disclosure-based regulatory framework, if fully adopted, could expose inexperienced retail investors to the unprecedented risks of cryptocurrency trading and token offerings with arguably even less recourse against securities fraud than in the U.S.¹⁹⁸

V. CONCLUSION

Although cryptocurrency seemed to force countries to choose between banning, tolerating, or cooperating with innovation,¹⁹⁹ this Note argues that the reasons behind the different regulatory approaches and the effects on both the market and the investing public deserve a much more nuanced

¹⁹⁵ Kenneth Rapoza, *Goldman Sachs Caves: Bitcoin Is Money*, FORBES (Jan. 10, 2018), <https://www.forbes.com/sites/kenrapoza/2018/01/10/goldman-sachs-caves-bitcoin-is-money/#33a0c7e674b7>; see also Andrew Hinkes, *Beyond Regulation: Why Bitcoin's Pressing Problem Is Civil Law*, COINDESK (Feb. 4, 2016), <https://www.coindesk.com/beyond-regulation-bitcoin-common-law-problem/>.

¹⁹⁶ See Stuart R. Cohn & Yinzhi Miao, *The Dragon and the Eagle: Reforming China's Securities IPO Laws in the U.S. Model, Pros and Cons*, 17 WASH. U. GLOBAL STUD. L. REV. 327, 341-345 (2018); see also Decision of the Standing Committee of the National People's Congress on Authorizing the State Council to Adjust the Relevant Applicable Provisions of the Securities Law of the People's Republic of China in the Implementation of Stock Issuance Registration System Reform (promulgated by the Standing Comm. Nat'l People's Cong., Dec. 27, 2015, effective Mar. 1, 2016), CLI.I.261784 (EN) (Pkulaw).

¹⁹⁷ See Cohn & Miao, *supra* note 197, at 348 (“The data released by the Shenzhen Stock Exchange showed that in 2012 natural person investors held 42.8% of floated capitalization, while professional institutional investors . . . held only 18%.”).

¹⁹⁸ Comparing to the high percentage of civil actions following SEC enforcement actions in the U.S., even in the cases of CSRC-sanctioned companies with actual factual findings of wrongdoing, approximately 85% of such companies faced no civil actions by consumers from 2001 to 2006. See Cohn & Miao, *supra* note 197, at 358. From 2002 to 2011, securities civil actions “represent[ed] only about 25.7% of all the eligible criminal/administrative sanctions . . .” Robin Hui Huang, *Private Enforcement of Securities Law in China*, 61 AM. J. COMP. L. 757, 766 (2013).

¹⁹⁹ See Max Raskin & David Yermack, *Digital Currencies, Decentralized Ledgers, and the Future of Central Banking*, in RESEARCH HANDBOOK ON CENTRAL BANKING 474 (Peter Conti-Brown & Rosa Lastra eds., 2018).

analysis. This Note attempts to explain that, compared to the U.S. approach, what stands behind China’s seemingly drastic crackdown was a government’s efforts to maintain existing regulatory consistency and conserve institutional resources. In such circumstances, China’s presumption of cryptocurrency as an evil Pandora’s Box at least nominally warns retailer investors, potentially mitigating crypto-mania.

Though sympathetic, this Note argues that China’s approach in nominally banning cryptocurrencies has proven to be inefficient. Nevertheless, this Note also observes China’s state-initiated efforts in creating blockchain projects and potentially its own crypto-fiat. In contrast, the U.S. refrains from prescribing any premature judgment upon cryptocurrency as a whole. At the moment, the U.S. approach seems to strike a better balance between investor protection and financing technological development, presuming a functional, efficient capital market.

This Note hopes that China will actively combat fraud and market abuse with or without reversing the 2017 ban. This Note strongly advises that the CSRC, perhaps with the aid of other regulatory agencies to properly enforce the commodities futures law. If the underlying technology were more mature, the Note would potentially propose a regulation-through-code approach, asking regulators of both countries to cooperate with industry members in an interactive process discussing how to translate the regulatory purposes into codes.²⁰⁰ While appearing theoretical, China’s state-led blockchain project might have already incorporated certain collaboration between regulation and coding to mitigate risks of anonymity in conventional public ledger.²⁰¹ If the regulation-through-code approach was successful, it might promote further innovation and enable regulators to keep up with such advancement. Potentially, solving the riddle of how to

200 See *supra* note 178 and accompanying quote.

201 See Carla L. Reyes, *Moving Beyond Bitcoin to an Endogenous Theory of Decentralized Ledger Technology Regulation: An Initial Proposal*, 61 VILL. L. REV. 191, 241 (2016) (stating that “[w]riting regulation into the code is not only possible, but is organic to the system. It is possible that an interaction between the decentralized ledger technology industry and regulators could be coordinated through a centralized entity representing the community, such as the Bitcoin Foundation, the Digital Asset Transfer Authority (DATA), or a similar organization created specifically for this purpose.”).

regulate the blockchain in this way will have far more significant impact than alleviating the immediate regulatory quagmire.

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