

**STANDARDIZING A GLOBAL REGULATORY FRAMEWORK:
LESSONS LEARNED FROM A COMPARATIVE STUDY OF THE U.S.,
THE E.U., AND SOUTH KOREA'S REGULATION OF CRYPTO
ASSETS**

*Ji Woong Seok**

ABSTRACT

Since 2009, various crypto currency tokens (commonly called coins) have emerged, utilizing innovative technologies like blockchain and distributed ledger technology to establish decentralization of finance. The starting point of decentralization was Satoshi Nakamoto's Bitcoin paper about payment without intermediaries. Since Bitcoin boomed, many experts have predicted that blockchain-based crypto currencies such as Bitcoin, will replace current payment methods and facilitate a shift from centralized to distributed systems of transactions. Furthermore, the public recognizes crypto assets as new objects of investment.

In response to these changes, global market players are developing new financial instruments and systems, and governments have been establishing regulatory frameworks for over ten years. The United States (U.S.) has utilized existing regulations, such as commodities regulation, to respond quickly, while the European Union (E.U.) and South Korea have pursued regulation through new legislation to regulate crypto asset industries.

A fundamental inquiry arises as to whether these tokens, which failed as a payment method, should be regulated as commodities and securities. Suppose new and similar digital things, such as blockchain-based Pokémon or sports trading cards, emerge and are frequently traded in. Should they be subject to these commodities or securities regulations? In situations with uncertain regulatory direction, crypto assets regulation is necessary because huge transactions, similar to those of other financial instruments, are being made between global investors, and investors should be protected from various crimes, such as fraud.

Lastly, the regulatory direction should focus on stabilizing the market, preventing unfair practices, and ensuring investor protection. Moreover, continuous monitoring and international cooperation are needed for the evolving crypto asset industry.

In this paper, I argue that we need a standardized global framework to regulate crypto assets. This conclusion is drawn from analyzing cases in the U.S., the E.U., and South Korea with global

* LL.M. (International Business & Economic Law), Class of 2024; Ph.D. in Law, Feb. 2021, SungKyunKwan University School of Law, Seoul, South Korea; Master of Law, Feb. 2013, SungKyunKwan University; Bachelor of Law, Aug. 2010, SungKyunKwan University; Senior Manager, Korea Securities Depository, Jan. 2012 – Present, js5064@georgetown.edu, ORCID ID: 0009-0001-4690-3446.

regulatory approaches. Specifically, the pros and cons of each country's regulations covering the "creation and sale of crypto assets," "crypto asset-related business," and "investor protection" were examined.

TABLE OF CONTENTS

ABSTRACT	1
I. INTRODUCTION.....	3
II. HISTORY AND STATUS OF CRYPTO ASSETS.....	5
III. ANALYSIS OF THE DEFINITION AND LEGAL STATUS OF CRYPTO ASSETS	7
A. Comparison of Crypto Assets Definitions	7
B. Comparison of Crypto Assets Terminologies	8
C. Analysis of the Legal Status of Crypto Assets	9
IV. ANALYSIS OF REGULATORY FRAMEWORKS IN THE U.S., THE E.U., AND SOUTH KOREA	11
A. Regulatory Framework Problems.....	11
B. Utilizing the Existing Regulatory Frameworks System: The U.S.....	13
C. Introducing a New Regulatory Framework.....	19
D. Recommendations for Global Standardization of Crypto Asset Regulations	23
V. GLOBAL REGULATION OF THE CREATION AND SALE OF CRYPTO ASSETS	26
A. Initial Coin Offering Issues.....	26
B. Regulation of Offering Crypto Assets to the Public in the E.U.	28
C. Recommendations on the Regulation of Crypto Assets Offering	31
VI. GLOBAL REGULATION OF CRYPTO ASSET-RELATED BUSINESSES	33
A. Crypto Asset Market Problems	33
B. The United States.....	35
C. The European Union.....	38
D. South Korea.....	40
E. Recommendations for Regulating Crypto Asset-Related	

Businesses	42
VII. REGULATION OF INVESTOR PROTECTION IN CRYPTO ASSET INDUSTRIES	46
A. Lack of Protection Regulation for Crypto Asset Investors ...	46
B. The European Union	46
C. South Korea	48
D. Recommendations for Improvement of Investor and User Protection Regarding Crypto Assets	49
VIII. CONCLUSION	52

I. INTRODUCTION

Since 2009, various crypto currency tokens¹ (called “coins”) utilizing blockchain² and distributed ledger technology³ have emerged to establish decentralization of finance.⁴ The starting point was the Bitcoin paper by Satoshi Nakamoto about payment without intermediaries.⁵ Since Bitcoin boomed, many experts have predicted

¹ Tokens are “units designated by entries in a digital ledger that uses cryptographic techniques. These entries are numerical values incorporated to a ledger based on distributed ledger technology (DLT), such as blockchain. Tokens can be used as units of value and exchange in connection with smart contracts.” José M. Garrido, *Digital Tokens: A Legal Perspective* 7 (Int’l Monetary Fund, Working Paper No. 151, 2023).

² A blockchain is “a distributed ledger that cryptographically enables digital assets to be created, stored, transferred, and transacted in a real-time, immutable manner across a decentralized peer-to-peer network. Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and cutting costs for all involved.” *Defining Blockchain & Digital Assets*, DELOITTE, <https://www2.deloitte.com/us/en/pages/about-deloitte/solutions/blockchain-digital-assets-definition.html> [<https://perma.cc/7RG9-TVGF>] (last visited Nov. 20, 2023).

³ Distributed ledger technology is “a platform that uses ledgers stored on separate, connected devices in a network to ensure data accuracy and security. Distributed ledger technology is becoming necessary in modern businesses and enterprises that need to ensure accuracy in financial reporting, manage supply chains, prevent fraud, and identify inefficiencies.” Scott Nevil, *Distributed Ledger Technology (DLT): Definition and How It Works*, INVESTOPEDIA (May 31, 2023), <https://www.investopedia.com/terms/d/distributed-ledger-technology-dlt.asp> [<https://perma.cc/UQ6F-966N>].

⁴ “In the blockchain, decentralization alludes to the transfer of supervision and decision-making from a centralized association (individual, corporation, or group of people) to a dispersed network.” Anshika Bhalla, *What Is Decentralization in Blockchain?*, BLOCKCHAIN COUNCIL (Dec. 13, 2022), <https://www.blockchain-council.org/blockchain/what-is-decentralization-in-blockchain> [<https://perma.cc/NBN7-Y4BT>].

⁵ Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (2008),

that blockchain-based crypto currencies, such as Bitcoin, will replace current payment methods, shifting from centralized to distributed systems of transactions.⁶ However, Bitcoin, Ethereum, and similar currencies, seem to have failed as payment functions because the processing of crypto asset transactions is slow, and their versatility is low.⁷

In a situation where the legal status of crypto assets is ambiguous, the public has been interested in these assets as investment or speculation vehicles.⁸ Moreover, new developments, such as crypto asset exchanges,⁹ crypto custody (key storage services),¹⁰ and cold wallets,¹¹ are ironically instances of new centralization instead of decentralization. In response to these changes, global market players are developing new financial instruments and systems, with individual governments continuing to establish new regulatory frameworks over the past ten years.¹² The

<https://bitcoin.org/bitcoin.pdf> [<https://perma.cc/2N5Q-6RFV>].

⁶ See, e.g., *Can Bitcoin Replace the US Dollar as Global Reserve Currency?*, WOXA (July 2, 2023), <https://www.linkedin.com/pulse/can-bitcoin-replace-us-dollar-global-reserve-currency-woxaofficial/> [<https://perma.cc/Q9L3-FYD5>].

⁷ This is because Bitcoin can process only seven payments per second, while Visa can process 24,000 transactions per second. Jonathan Chester, *The Battle for Bitcoin: What You Need to Know About Bitcoin and Bitcoin Cash*, FORBES (Nov. 27, 2017), <https://www.forbes.com/sites/jonathanchester/2017/11/27/the-battle-for-bitcoin-what-you-need-to-know-about-bitcoin-and-bitcoin-cash/?sh=22cd6a6331f9> [<https://perma.cc/NA6C-DT9Y>].

⁸ Bob Legters, *Is Cryptocurrency a New Way to Pay or a New Way to Invest?*, FORBES (Nov. 11, 2021), <https://www.forbes.com/sites/boblegeters/2021/11/11/is-cryptocurrency-a-new-way-to-pay-or-a-new-way-to-invest/?sh=1770eb826470> [<https://perma.cc/C3GQ-FT93>].

⁹ As a platform for trading crypto assets, investors must deposit their funds and crypto assets with the exchange to engage in trading. Most crypto asset exchanges are more centralized than traditional stock exchanges because they handle everything from trading to settlement. See, e.g., *About Coinbase*, COINBASE, <https://www.coinbase.com/about> [<https://perma.cc/BKB8-78ZP>] (last visited Mar. 10, 2024).

¹⁰ A crypto custody means “securing the private key that proves you own of the funds held within your crypto wallet.” Krisztian Sandor, *What Is Crypto Custody?*, COINDESK (May 11, 2023), <https://www.coindesk.com/learn/what-is-crypto-custody/> [<https://perma.cc/8EGS-4CY8>].

¹¹ A cold wallet refers to “devices that store cryptocurrency private keys offline” and allow users to “take preventative measures against theft from hackers who might take control of their hot wallets via viruses, malware, ransomware, or other methods.” Jake Frankenfield, *Cold Storage: What It Is, How It Works, Theft Protection*, INVESTOPEDIA (Dec. 3, 2023), <https://www.investopedia.com/terms/c/cold-storage.asp> [<https://perma.cc/NZR8-8N2W>].

¹² Kevin George, *Cryptocurrency Regulations Around the World*, INVESTOPEDIA (Jan. 17, 2024), <https://www.investopedia.com/cryptocurrency-regulations-around-the-world-5202122> [<https://perma.cc/J9GC-WHFU>].

United States (U.S.) has responded quickly by modifying existing regulations, like commodity regulations, while the European Union (E.U.) and South Korea have enacted new regulations.¹³

A fundamental question arises as to whether these tokens should be regulated as commodities and securities, given their failure as a mainstream payment method. Does their reliance on blockchain technology justify regulating them as commodities and securities? If new and similar digital items, such as blockchain Pokémon or sports trading cards, emerge and are traded frequently, should they be subject to these commodity and securities regulations? Maybe crypto asset regulation is necessary because huge transactions are being carried out between global investors and investors should be protected from various crimes, such as fraud.

In this paper, I argue that we need a standardized global framework to regulate crypto assets. This conclusion is drawn from an analysis of cases in the U.S., the E.U., and South Korea with global regulatory approaches. Specifically, the pros and cons of each country's regulations covering the creation and sale of crypto assets, crypto asset-related business, and investor protection were examined. Based on this study's findings, I suggest recommendations for improving global crypto asset industry regulations.

II. HISTORY AND STATUS OF CRYPTO ASSETS

As of 2023, over 9,000 crypto assets, called “coins,” are being traded globally,¹⁴ marking a 136-times increase from the end of 2013, when only a little over 50 cryptocurrencies were being traded.¹⁵ Among these coins, Bitcoin and Ethereum have the most public recognition.¹⁶ Decades before the emergence of these coins, e-cash, the first encrypted currency, appeared in 1990 but was not widely used.¹⁷ Unlike contemporary coins that use participant

¹³ *Id.*

¹⁴ Raynor de Best, *Number of Cryptocurrencies Worldwide from 2013 to 2024*, STATISTA (Jan. 9, 2024), <https://www.statista.com/statistics/863917/number-crypto-coins-tokens> [<https://perma.cc/99CP-7SCC>].

¹⁵ Josh Howarth, *How Many Cryptocurrencies Are There In 2024?*, EXPLODING TOPICS (Nov. 3, 2023), <https://explodingtopics.com/blog/number-of-cryptocurrencies> [<https://perma.cc/CHP6-RJ2L>].

¹⁶ James Royal & Brian Baker, *12 Most Popular Types of Cryptocurrency*, BANKRATE (Mar. 20, 2024), <https://www.bankrate.com/investing/types-of-cryptocurrency/> [<https://perma.cc/MK7J-48AQ>].

¹⁷ Cryptographer David Chaum published an article titled “*Blind Signatures for Untraceable Payments*” in 1983 and attempted to distribute e-cash in 1990. Nathan Reiff, *What Was the First Cryptocurrency?*, INVESTOPEDIA (July 23, 2022), <https://www.investopedia.com/tech/were-there-cryptocurrencies-bitcoin>

consensus mechanisms,¹⁸ under the e-cash system, a central institution, such as a bank, verifies double-spending.¹⁹ Still, e-cash was the first attempt to develop a system that allows payments without personal information being tracked in electronic transactions.²⁰

After that, Bitcoin using blockchain technology appeared. The first payment using Bitcoin was made in 2010.²¹ Various altcoins continued to emerge, such as Ripple and Ethereum. In 2012, Ripple was developed for digital payments and remittances, primarily for financial institutions.²² In 2015, Ethereum was designed to record other information, such as smart contracts.²³ Currently, the market capitalization of these coins is \$1.016 trillion for Bitcoin, \$351 billion for Ethereum, and \$30 billion for Ripple.²⁴

In a situation where various coins appear without any regulations, investors must trust the crypto asset trading platform they use to invest their money or transfer their money or coins to a company whose name they have never heard of to purchase new coins. Regardless of a coin's current trading value, its intrinsic value

[<https://perma.cc/WT4G-2574>].

¹⁸ *What Are Consensus Mechanisms in Blockchain and Cryptocurrency?*, INVESTOPEDIA (Feb. 17, 2023), <https://www.investopedia.com/terms/c/consensus-mechanism-cryptocurrency.asp> [<https://perma.cc/Q87N-YMZA>].

¹⁹ Delton Rhodes, *The Double Spending Problem, Explained*, KOMODO (Aug. 31, 2023), <https://komodoplatform.com/en/academy/double-spending-problem/> [<https://perma.cc/8FBR-D57C>].

²⁰ Julia Kagan, *eCash: Overview, Rise and Fall*, INVESTOPEDIA (Mar. 31, 2021), <https://www.investopedia.com/terms/e/ecash.asp> [<https://perma.cc/988H-CWH9>].

²¹ “Bitcoin Pizza Day marks the day that Laszlo Hanyecz made the first recorded purchase of a physical good using Bitcoin. He spent 10,000 Bitcoin to purchase two Papa John’s pizzas on May 22, 2010.” Rufas Kamau, *What Is Bitcoin Pizza Day, and Why Does the Community Celebrate on May 22?*, FORBES (May 9, 2022), <https://www.forbes.com/sites/rufaskamau/2022/05/09/what-is-bitcoin-pizza-day-and-why-does-the-community-celebrate-on-may-22/?sh=6c986547fd68> [<https://perma.cc/3SCB-NU5N>].

²² *See Provide a Better Alternative to Bitcoin*, XRP LEDGER, <https://xrpl.org/about/history> [<https://perma.cc/HW4Z-GGKK>] (last visited Feb. 19, 2024).

²³ One of the biggest advantages of Ethereum is smart contracts. Smart contracts are “computer programs living on the Ethereum blockchain. They execute when triggered by a transaction from a user. They make Ethereum very flexible in what it can do. These programs act as building blocks for decentralized apps and organizations.” *What is Ethereum?*, ETHEREUM.ORG, <https://ethereum.org/en/what-is-ethereum/> [<https://perma.cc/9MRS-NZAW>] (last visited Feb. 27, 2024).

²⁴ *Today’s Cryptocurrency Prices by Market Cap*, COINMARKETCAP, <https://coinmarketcap.com> [<https://perma.cc/U9CM-53SP>] (last visited Mar. 10, 2024).

is nearly zero.²⁵ The market is overheated, and proper regulation is urgently needed.

III. ANALYSIS OF THE DEFINITION AND LEGAL STATUS OF CRYPTO ASSETS

A. Comparison of Crypto Assets Definitions

Different financial institutions and countries define these tokens and related terms differently. Some examples of definitional and terminological differences are as follows.

According to the Financial Action Task Force (FATF) on Money Laundering, “[v]irtual assets (crypto assets) refer to any digital representation of value that can be digitally traded, transferred or used for payment. It does not include a digital representation of fiat currencies.”²⁶ According to the International Organization of Securities Commissions, “The term ‘crypto asset,’ also sometimes called a ‘digital asset,’ refers to an asset that is issued and/or transferred using distributed ledger or blockchain technology (distributed ledger technology), including, but not limited to, so-called ‘virtual currencies,’ ‘coins,’ and ‘tokens.’”²⁷ The International Monetary Fund considers “crypto assets” as “a broad term encompassing many different products, [that] are privately issued digital representations of value that are cryptographically secured and deployed using distributed ledger technology.”²⁸

According to the U.S. Commodity Futures Trading Commission (CFTC), a ‘virtual currency’ is “a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value.”²⁹ According to the E.U.’s Market in Crypto-

²⁵ Eswar Prasad, *The Brutal Truth about Bitcoin*, THE BROOKINGS INST. (July 20, 2021), <https://www.brookings.edu/articles/the-brutal-truth-about-bitcoin/> [https://perma.cc/3ZFK-YL2W].

²⁶ *Virtual Assets*, THE FIN. ACTION TASK FORCE, <https://www.fatf-gafi.org/en/topics/virtual-assets.html> [https://perma.cc/L8YG-NU4T] (last visited Mar. 20, 2023).

²⁷ *Policy Recommendations for Crypto and Digital Asset Markets Consultation Report*, INT’L ORG. OF SEC. COMM’N 3 (2023), <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD734.pdf> [https://perma.cc/5RA5-U7DA].

²⁸ *Elements of Effective Policies for Crypto Assets*, INT’L MONETARY FUND 7 (2023), <https://www.imf.org/en/Publications/Policy-Papers/Issues/2023/02/23/Elements-of-Effective-Policies-for-Crypto-Assets-530092> [https://perma.cc/FA5E-RJR9].

²⁹ “‘Virtual currencies’ – sometimes called ‘coins,’ ‘native tokens,’ or ‘intrinsic tokens’ – continue to be an important part of the digital asset landscape, which include markets the CFTC oversees. A common feature of virtual currencies is their intended purpose to serve as a medium of exchange. Digital token refers to

Assets Regulation (MiCA), a ‘crypto asset’ is “a digital representation of a value or of a right that can be transferred and stored electronically using distributed ledger technology or similar technology.”³⁰ In South Korea, a ‘virtual asset’ is an electronic token, including all rights thereto, that has economic value and can be traded or transferred electronically.³¹

B. Comparison of Crypto Assets Terminologies

The term “crypto assets” is more appropriate than other terms. Other terms and definitions may mislead investors into thinking a crypto asset is a safe financial instrument or a new type of currency.

“Crypto,” “digital,” and “virtual” have been used from a technical perspective, and the terms “currency,” “assets,” and “coins” have been used from a functional perspective. “Digital” means recording or storing information as a series of the numbers 1 and 0 to show that a signal is present or absent; “crypto” is an abbreviation of “cryptography,” referring to the use of special codes to keep information secure in computer networks; “virtual” indicates the use of computer technology and a lack of substance in the real world.³² Among these most frequently used terms, “crypto” is appropriate for coins traded in the market because “digital” has a very broad meaning and is, therefore, inappropriate to express the characteristics of a coin. “Virtual” is inappropriate because coins are

a digital asset that requires another blockchain network to operate and may serve a variety of functions beyond virtual currency, e.g., utility tokens. Digital asset is a broader term that encompasses additional applications, including ownership, transaction tracking, identity management, and smart contracts. A digital asset may express characteristics of a commodity or commodity derivative.”

LabCFTC, *Digital Assets Primer*, CFTC (Dec. 2020).

³⁰ Commission Regulation 2023/1114, art. 3, 2023 O.J. (L 150) 63 (‘electronic money token’ or ‘e-money token’ means “a type of crypto-asset that purports to maintain a stable value by referencing the value of one official currency”).

³¹ In the case of game items, securities and legal currency are excluded from virtual assets under the Act on the Protection of Virtual Asset Users §2. *See* Act on the Protection of Virtual Asset Users, art. 2 ¶ 1 (S. Kor.), *translated in* Korea Law Translation Center’s online database,

https://elaw.klri.re.kr/eng_mobile/viewer.do?hseq=63752&type=part&key=23
<https://perma.cc/W88S-5U23>].

³² *Digital*, CAMBRIDGE DICTIONARY,

<https://dictionary.cambridge.org/us/dictionary/english/digital>

[<https://perma.cc/BT6B-UHBX>] (last visited Feb. 29, 2024); *Virtual*, CAMBRIDGE DICTIONARY,

<https://dictionary.cambridge.org/us/dictionary/english/virtual>

[<https://perma.cc/L7AW-KZNP>] (last visited Feb. 29, 2024); *Cryptography*,

CAMBRIDGE DICTIONARY,

<https://dictionary.cambridge.org/us/dictionary/english/cryptography>

[<https://perma.cc/6PV9-34GN>] (last visited Feb. 29, 2024).

being traded in the real economy.

Media and related industries have used the term “currencies” since crypto assets were first developed.³³ In addition, “coin” appears to have originated from Bitcoin.³⁴ However, these terms could mislead ordinary people to believe that Bitcoin or other altcoins are digitalized real currency and a new form of currency.³⁵ Therefore, given the actual function of crypto assets, referring to them as coins or currency is inappropriate.

In contrast, an asset is “something of value owned by an individual or organization. An asset can be physical property like a building or intangible property such as a patent.”³⁶ Although these tokens lack intrinsic value, they are traded at a certain price in the global market. Therefore, the term “assets” is more appropriate than “currencies” or “coins.”

C. Analysis of the Legal Status of Crypto Assets

Crypto assets are a new type of digital collection that the public wants to own or profit from their trade. Crypto assets have unique challenges to become widely adopted currencies due to their immutability, transaction fees, and processing speed.³⁷ Crypto assets do not have the status of legal tender in the U.S.³⁸ Each country has the authority to circulate legal tender in specific regions.³⁹ As a financial instrument not issued by a central bank, the pseudonymous nature of crypto assets can facilitate illicit transactions.⁴⁰ The U.S. Securities and Exchange Commission

³³ As explained previously, these cryptocurrency tokens started to aim for decentralization, unlike currencies that are based on the control of a government or a central institution.

³⁴ *Crypto Coins and Tokens: Their Use-Cases Explained*, THE CLASSROOM, <https://www.ledger.com/academy/crypto/what-is-the-difference-between-coins-and-tokens> [<https://perma.cc/6B4N-DPUZ>] (last visited Feb. 29, 2024).

³⁵ See 31 C.F.R. § 1010.100 (2010).

³⁶ *Asset*, LEGAL INFO. INST., <https://www.law.cornell.edu/wex/asset> [<https://perma.cc/9EET-HJAA>] (last visited Mar. 7, 2023).

³⁷ Dan Blystone, *Bitcoin vs. Credit Card Transactions: What's the Difference?*, INVESTOPEDIA (Nov. 9, 2023), <https://www.investopedia.com/articles/forex/042215/bitcoin-transactions-vs-credit-card-transactions.asp#:~:text=Bitcoin%20transactions%20are%20irreversible%20and,when%20taking%20payment%20via%20Bitcoin> [<https://perma.cc/H5HR-2LLD>].

³⁸ I.R.S. Notice 2023-34.

³⁹ *Legal Tender: Definition, Economic Functions, Examples*, INVESTOPEDIA (June 13, 2021), <https://www.investopedia.com/terms/l/legal-tender.asp> [<https://perma.cc/PMQ3-YYTZ>].

⁴⁰ Tom Sadon, *5 Reasons Why Criminals & Terrorists Turn to*

(SEC), for example, has issued enforcement actions against issuers using crypto assets to raise money.⁴¹

In addition, from an economic perspective, these tokens have high price volatility, which limits their potential to serve as a reliable store of value, the network available to them, and their use for measuring the value of products and services.⁴² However, the technical aspects of the blockchain industry's attempt to build a payment system that can guarantee the anonymity of transactions holds great significance.

Next, questions arise as to whether crypto asset tokens are financial instruments. A financial instrument is “an instrument that has monetary value or records a monetary transaction or any contract that imposes on one party a financial liability and represents to the other a financial asset or equity instrument.”⁴³ Tokens containing securities, bonds, or rights and obligations according to a certain investment contract can be classified as a financial instrument depending on their status.⁴⁴ In other words, according to the related securities regulations, they can be classified as stocks or bonds, or as investment contract securities.⁴⁵ However, the tokens covered in this article, such as Bitcoin, do not contain rights and obligations; thus, they are not easily recognized as financial instruments.

Crypto assets do not fit into existing systems well. However, when determining their legal status, viewing them as an asset with value is reasonable because they are transaction objects and have a transaction price.⁴⁶ The U.S. Internal Revenue Service (IRS) also

Cryptocurrencies, COGNYTE (Nov. 2, 2021), <https://www.cognyte.com/blog/5-reasons-why-criminals-are-turning-to-cryptocurrencies/> [<https://perma.cc/5EJR-M2QC>].

⁴¹ SEC v. Shavers, No. 4:13-CV-416, 2013 WL 4028182, at *2 (E.D. Tex. Aug. 6, 2013) (finding the use of Bitcoin satisfies the “investment of money” prong of *Howey* because it can be used as money).

⁴² DONG HE ET AL., INT'L MONETARY FUND, VIRTUAL CURRENCIES AND BEYOND: INITIAL CONSIDERATIONS 17 (2016).

⁴³ *Financial Instrument*, LEGAL INFO. INST., https://www.law.cornell.edu/wex/financial_instrument#:~:text=A%20financial%20instrument%20is%20an,some%20examples%20of%20financial%20instruments [<https://perma.cc/C58K-K3X6>] (last visited Feb. 16, 2024).

⁴⁴ 15 U.S.C. § 77b(a)(1); see also SEC v. W.J. Howey Co., 328 U.S. 293, 299-300 (1946) (establishing test for what constitutes an “investment contract”).

⁴⁵ 15 U.S.C. § 77b(a)(1); see also SEC v. Arbitrade Ltd., 2023 U.S. District LEXIS 59651, at *11-15 (Fla. S. Dist. Ct. Apr. 5, 2023) (finding that crypto assets satisfy the *Howey* test for investment contracts).

⁴⁶ Dong Won Ko, *Legal Analysis of a Crypto Asset in Korea*, 31(4) COMMERCIAL CASES REV. 291, 305 (2018).

views Bitcoin as property for tax purposes.⁴⁷ Furthermore, crypto assets are new types of digital collections that many investors want to trade for profit in the market. So, these crypto currency tokens should be unified under the term “crypto asset,” and a separate regulatory framework must apply. The next section covers issues and country-specific cases regarding the choice of regulatory framework, including regulations governing creation and sale, businesses related to the market, and investor protection.

IV. ANALYSIS OF REGULATORY FRAMEWORKS IN THE U.S., THE E.U., AND SOUTH KOREA

A. Regulatory Framework Problems

In the early emergence of crypto assets, countries did not promptly attempt to establish a specific regulatory system. However, the rapid development of the crypto assets market led to various illegal activities,⁴⁸ including hacking computer networks and demanding payment in crypto assets, financing terrorist groups, defrauding investors, evading taxes, hacking exchanges, and bankruptcy of exchanges such as FTX. These activities not only caused damage to investors but also negatively impacted global security.⁴⁹

The simplest way to address regulatory framework problems is to identify the legal status of crypto assets and apply the rules governing financial instruments with similar legal status; the U.S. is a representative example of this approach.⁵⁰ However, this method causes various authorities to apply unharmonized interpretations and standards simultaneously, reducing the industry regulatory efficiency.⁵¹

In contrast, designing and applying a new integrated regulatory framework allows for consistent and efficient regulation. However, preparing such a framework takes significant time, and predicting new types of related instruments to create comprehensive

⁴⁷ I.R.S. Notice 2014-21, 2014-16 I.R.B. 938; Adam Chodorow, *Rethinking Basis in the Age of Virtual Currencies*, 36 VA. TAX REV. 371, 371 (2017) (summarizing I.R.S. Notice 2014-21).

⁴⁸ Anshu Siripurapu & Noah Berman, *Cryptocurrencies, Digital Dollars, and the Future of Money*, COUNCIL ON FOREIGN RELATIONS (Feb. 28, 2023), <https://www.cfr.org/backgroundunder/cryptocurrencies-digital-dollars-and-future-money> [<https://perma.cc/676L-WWTM>].

⁴⁹ *Id.*

⁵⁰ Wayne Duggan & Michael Adams, *How Does the SEC Regulate Crypto?*, FORBES ADVISOR (June 30, 2023), <https://www.forbes.com/advisor/investing/cryptocurrency/sec-crypto-regulation/> [<https://perma.cc/BB3C-2XCJ>].

⁵¹ *Id.*

regulations is difficult. Recently, the E.U. and South Korea have enacted legislation related to crypto assets.⁵²

In addition, most cryptocurrencies are “pseudo-anonymous” — while cryptocurrency transactions are publicly recorded, users are known only by their “VC addresses,” which cannot be traced back to users’ real-world identities.⁵³ As such, cryptocurrency transactions are more transparent than cash but more anonymous than other forms of online payment.⁵⁴

Establishing regulatory frameworks for crypto assets will remain a challenge for governments. Crypto assets currently rely on blockchain technology for encryption, but the blockchain is an imperfect solution. Some studies have demonstrated that approximately 40% of Bitcoin users can be identified through these public transaction logs because of Bitcoin’s increased reliance on a few large accounts.⁵⁵ Hence, crypto assets based on new technologies may emerge. In addition, the currently common classifications of crypto assets,⁵⁶ such as payment, utility, and securities, are likely to diversify, making it difficult for regulators to respond quickly.

⁵² *Tightening Noose: Hong Kong Joins EU, South Korea and Singapore in Tightening Crypto Rules, Report Says*, S. CHINA MORNING POST (Jan. 8, 2024), <https://finance.yahoo.com/news/hong-kong-joins-eu-us-093000165.html?guccounter=1> [<https://perma.cc/UDW4-SWPX>].

⁵³ HE, *supra* note 42, at 9.

⁵⁴ *Id.*

⁵⁵ Preston Miller, *Virtual Currencies and Their Relevance to Digital Forensics*, MARSHALL UNIV. (Feb. 14, 2014), <https://www.marshall.edu/forensics/files/Miller-Spring-Seminar-Talk.pdf> [<https://perma.cc/4LYL-VNQ2>]; Elli Androulaki et al., *Evaluating User Privacy in Bitcoin* (Int’l Conf. on Fin. Cryptography and Data Sec., 2013), https://link.springer.com/chapter/10.1007/978-3-642-39884-1_4 [<https://perma.cc/VTU2-W7B8>].

⁵⁶ SWISS FINANCIAL MARKET SUPERVISORY AUTHORITY (FINMA), *Guidelines for Enquiries Regarding the Regulatory Framework for Initial Coin Offerings (ICOs)* (Feb. 16, 2018), <https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung> [<https://perma.cc/QL9Q-7TNH>]. According to The Swiss Financial Market Supervisory Authority’s (FINMA) guide, tokens are classified as: Payment tokens (synonymous with cryptocurrencies) are “tokens which are intended to be used, now or in the future, as a means of payment for acquiring goods or services or as a means of money or value transfer. Cryptocurrencies give rise to no claims on their issuer.” Utility tokens are “tokens which are intended to provide access digitally to an application or service by means of a blockchain-based infrastructure.” Asset tokens represent “assets such as a debt or equity claim on the issuer. Asset tokens promise, for example, a share in future company earnings or future capital flows. In terms of their economic function, therefore, these tokens are analogous to equities, bonds or derivatives. Tokens which enable physical assets to be traded on the blockchain also fall into this category.”

Furthermore, crypto assets can be traded without time or regional restrictions, but regulatory “blind spots” may occur due to regulation gaps between countries. A technology like blockchain gives investors confidence, which can overheat the crypto asset market. This raises questions about the universal value that can be gained from expanding the crypto market. However, too many investors who believe crypto is “too big to fail” are already trading;⁵⁷ such overreliance on crypto on the part of inexperienced investors has led to calls that investors need protection from fraud through appropriate regulations.⁵⁸

B. UTILIZING THE EXISTING REGULATORY FRAMEWORKS SYSTEM: THE U.S.

1. Overview

In the U.S., crypto assets are regulated under existing legislation rather than separate legislation. In other words, the existing regulatory authorities, the SEC, CFTC, Financial Crimes Enforcement Network (FinCEN), IRS, and others, each regulate their respective areas of supervision, which can result in regulatory jurisdiction conflicts, such as that between the SEC and CFTC.⁵⁹ Which authority has regulatory jurisdiction depends on the legal classification of crypto assets. If crypto assets are commodities or derivatives, the CFTC has regulatory authority. Meanwhile, if they are securities, the SEC has regulatory authority.

However, crypto assets are complex digital tokens that evade clear legal classification. For instance, Bitcoin futures are traded on the Chicago Mercantile Exchange (CME), but the SEC has continuously refused to approve spot Bitcoin exchange-traded funds (ETFs). Although the SEC recently approved spot Bitcoin ETFs, this refusal revealed how inconsistent the U.S. regulatory framework is. Clear standards regarding regulatory jurisdiction need to be established. Next, I examine how each U.S. authority regulates the crypto assets industry.

⁵⁷ Mark DeCambre, *Bitcoin is ‘Too Big to Fail’ Now, Says Official of Major U.K. Crypto Exchange*, MARKETWATCH (Dec. 2, 2020, 4:26 PM), <https://www.marketwatch.com/story/bitcoin-is-too-big-to-fail-now-says-official-of-major-u-k-crypto-exchange-11606940910> [https://perma.cc/RB8R-GQYG].

⁵⁸ See Ryan Browne, *Christine Lagarde Says Crypto is Worth Nothing*, CNBC (May 23, 2022, 7:49 AM), <https://www.cnbc.com/2022/05/23/ecb-chief-christine-lagarde-crypto-is-worth-nothing.html> [https://perma.cc/J4NS-BGNU].

⁵⁹ Soumen Datta, *SEC vs. CFTC: Inside the Battle for Control of the Crypto Landscape*, BSC NEWS (May 16, 2023), <https://www.bsc.news/post/sec-vs-cftc-inside-the-battle-for-control-of-the-crypto-landscape> [https://perma.cc/4RWR-K4GM].

2. Commodity Futures Trading Commission

The CFTC is a regulatory authority governing the derivatives market, including futures, forwards, options, and swaps.⁶⁰ The CFTC has continued to assert its regulatory jurisdiction over crypto assets actively.⁶¹ The CFTC classifies crypto assets as commodities⁶² and regulates them under the existing regulatory framework for commodities.

Specifically, for the CFTC, “digital assets” are “anything that can be stored and transmitted electronically, and has associated ownership or use rights.”⁶³ Digital assets can present the “characteristics of a commodity or commodity derivative.”⁶⁴ “Crypto assets” are “a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value” and are a type of digital token.⁶⁵ In other words, tokens are a type of digital asset. Hence, the CFTC regulates only fraud and abuse, “unfair and deceptive sales practices, market manipulation, pump and dump, and other fraudulent schemes” for crypto assets that are not derivatives.⁶⁶

Furthermore, recent legal precedents have also classified crypto assets as commodities. In *CFTC v. McDonnell*, the U.S. District Court of New York stated:

[V]irtual currencies can be regulated by CFTC as a commodity. Virtual currencies are ‘goods’ exchanged in a market for a uniform quality and value. . . . They fall well

⁶⁰ 7 U.S.C. § 2(a)(1).

⁶¹ In 2015, the CFTC found: “Bitcoin and other virtual currencies are encompassed in the [commodity] definition and properly defined as commodities.” *In re Coinflip, Inc., d/b/a Derivabit, and Francisco Riordan*, CFTC No. 15-29 (Sept. 17, 2015). In 2016, the CFTC took action against a bitcoin exchange that was offering futures in the U.S. without registering with the agency. *In re BFXNA Inc. d/b/a BITFINEX*, CFTC No. 16-19 (June 2, 2016). In 2017, the CFTC proposed guidance regarding its jurisdiction over certain types of retail transactions involving virtual currency. It finalized this guidance in 2020. *See Retail Commodity Transactions Involving Certain Digital Assets*, 85 Fed. Reg. 37,734 (June 24, 2020). Finally, “in 2019, CFTC Chairman Heath Tarbert expressed his view that ether is a commodity, as defined by the CEA.” LabCFTC, *supra* note 29, at 24.

⁶² *An Introduction to Virtual Currency*, CFTC, <https://www.cftc.gov/digitalassets/index.htm> [<https://perma.cc/P9SD-3XGF>] (last visited Mar. 1, 2024); *see also* 7 U.S.C. § 1a(9).

⁶³ LabCFTC, *supra* note 29, at 5.

⁶⁴ *Id.* at 9.

⁶⁵ *Id.* at 8-9.

⁶⁶ *Id.* at 25.

within the common definition of ‘commodity’ as well as the Commodity Exchange Act (CEA)’s definition of ‘commodities’ as ‘all other goods and articles . . . in which contracts for future delivery are presently or in the future dealt in’ . . . CFTC has jurisdictional authority to bring suit against defendants utilizing a scheme to defraud investors.⁶⁷

In *CFTC v. My Big Coin Pay, Inc.*, the U.S. District Court of Massachusetts also determined that “My Big Coin is a virtual currency, and it is undisputed that there is futures trading in virtual currencies (specifically involving Bitcoin). That is sufficient, especially at the pleading stage, for the plaintiff to allege that My Big Coin is a “commodity” under the Act.”⁶⁸ Therefore, the CFTC does not have the authority to regulate on- and off-market trading of derivatives, exchanges and market participants, or trading practices in the derivatives market⁶⁹ over spot transactions of virtual assets as it does over commodity transactions. However, it has the authority to regulate unfair trade practices under the Dodd-Frank Act.⁷⁰ The CFTC has general regulatory authority over the sale contracts of “commodities” that take place in interstate commerce, including price manipulation, fraudulent practices, and misrepresentations of material facts.⁷¹ Yet, if a commodity transaction falls under a “retail commodity transaction,” extensive regulations on derivatives trading on offshore transactions, exchanges and market participants, and unfair trading practices in the derivatives market, are applied.⁷² There are no amendments to commodity trading laws or regulations about virtual currencies, and the CFTC is supplementing them through authoritative interpretation when necessary.

However, with the significant expansion of the virtual asset market, the CFTC recognized the need for a more effective trader protection system for large-scale virtual asset markets.⁷³ Intangible

⁶⁷ *CFTC v. McDonnell*, 287 F. Supp. 3d 213, 228-29 (E.D.N.Y. 2018).

⁶⁸ *CFTC v. My Big Coin Pay*, 334 F. Supp. 3d 492, 498 (D. Mass. 2018).

⁶⁹ 7 U.S.C. § 6c.

⁷⁰ *McDonnell*, 287 F. Supp. at 227 (“The portion of the statute delegating oversight authority over “*contract of sale of any commodity in interstate commerce*” allows CFTC to enforce its mandate in cases not directly involving future trades.”); *see also* 17 C.F.R. § 180.1.

⁷¹ 7 U.S.C. § 9(1); 17 CFR §§ 180.1(a)(1-4).

⁷² 7 U.S.C. § 2(i)(2)(c)(D)(iii) (“Enforcement Sections 6(a), 6(b), and 6b of this title apply to any agreement, contract, or transaction described in clause (i), as if the agreement, contract, or transaction was a contract of sale of a commodity for future delivery.”).

⁷³ *Examining Digital Assets: Risks, Regulation, and Innovation: Hearing Before the S. Comm. on Agric., Nutrition, and Forestry* 117th Cong. (2022) (statement of Rostin Behnam, Chairman, CFTC).

assets can also be traded as commodities. Still, unlike gold or other commodities, they differ from general commodities because they do not have separate intrinsic use or values.⁷⁴ In response to this policy need, and to address regulatory gaps for non-security virtual assets, the Digital Commodity Exchange Act of 2022 (DCEA) was introduced in the U.S. House of Representatives in September of 2022 (H.R. 8373).⁷⁵ This legislation focuses on registering and supervising virtual asset exchanges and custodians, granting the CFTC regulatory authority over virtual asset exchanges.⁷⁶

3. Securities and Exchange Commission

The SEC regulates the securities market, from issuance to distribution of securities. The SEC did not view crypto assets like Bitcoin and Ethereum as securities, thus abstaining from regulating them or amending securities laws.⁷⁷ However, the SEC focuses on initial coin offerings (ICOs) rather than directly regulating the market. ICOs involve gathering money, mainly other crypto assets, from investors and providing new tokens (new crypto assets) through ongoing projects in return.⁷⁸ The SEC raised questions about this funding.

In July 2017, the SEC issued a Decentralized Autonomous Organization (DAO) report clarifying that some crypto asset sales

⁷⁴ Chris B. Murphy, *Tangible Assets vs. Intangible Assets: What's the Difference?*, INVESTOPEDIA (June 9, 2023), <https://www.investopedia.com/ask/answers/012815/what-difference-between-tangible-and-intangible-assets.asp#:~:text=buildings%2C%20and%20inventory.-,Tangible%20assets%20are%20the%20main%20type%20of%20asset%20that%20companies,copyrights%2C%20and%20a%20company%27s%20brand> [https://perma.cc/W2J6-UZHQ].

⁷⁵ STAFF OF H. COMM. ON AGRIC. REP., 117TH CONG., SUMMARY OF THE DIGITAL COMMODITY EXCHANGE ACT OF 2022 (Comm. Print 2022).

⁷⁶ *Id.*

⁷⁷ Kate Rooney, *SEC Chief Says Agency Won't Change Securities Laws to Cater to Cryptocurrencies*, CNBC (June 6, 2018), <https://www.cnn.com/2018/06/06/sec-chairman-clayton-says-agency-wont-change-definition-of-a-security.html#:~:text=t%20a%20security.-,%E2%80%9CWe%20are%20not%20going%20to%20do%20any%20violence%20to%20the,need%20to%20change%20the%20definition.%E2%80%9D> [https://perma.cc/E8BX-Z2QK].

⁷⁸ Usman W. Chohan, *Initial Coin Offerings (ICOs): Risks, Regulation, and Accountability*, SPRINGER NATURE SWITZ. 165, 166 (2019) (An ICO is “is the mechanism by which capital is raised from investors through the emission of cryptocurrency monetary units of ‘coins’” to investors as a percentage of total newly issued currency in exchange for capital that may be legal tender or another cryptocurrency) https://finsaitrade.com/wp-content/uploads/2023/07/Cryptofinance-And-Mechanisms-Of-Exchange_-The-Making-Of-Virtual-Currency.pdf#page=170 [https://perma.cc/F7AL-6LAW].

could be considered as an offer of securities and, therefore, subject to SEC regulations.⁷⁹ Unlike the E.U. and South Korea, which seek to regulate crypto asset trading through new legislation, the U.S. has regulated crypto asset trading through the interpretation of relevant laws by regulatory authorities.

Specifically, the SEC classifies crypto assets as securities within its regulatory framework by interpreting the definition of “investment contract” in the Securities Act of 1933 (the Securities Act) and the Securities Exchange Act of 1934.⁸⁰ However, the definition of an investment contract is ambiguous. Therefore, if an entity does not fall under the listed securities, the Supreme Court has created “the *Howey* test,” named for the *SEC v. W.J. Howey Company* case from which it came.⁸¹ The *Howey* test determines if an asset qualifies as an investment contract, and thus has treatment as a security. The *Howey* test has four requirements that must be met to determine whether the token is a security: (1) an investment of money; (2) in a common enterprise; (3) with the expectation of profits; (4) solely from the efforts of others.⁸²

As a result, if the token is determined to be a security, the issuer must comply with the legal requirements of the existing legal system, including submitting a registration statement when they sell the crypto assets.⁸³ The application of these current securities regulations has become a major obstacle to ICOs. Additionally, platforms (called exchanges) that trade crypto assets must be registered with the SEC or meet related exemption requirements.⁸⁴ The SEC has expressed regulatory jurisdiction over crypto assets, raising concerns about regulatory consistency with the CFTC.⁸⁵

⁷⁹ *What is a Decentralized Autonomous Organization, and How Does a DAO Work?*, COINTELEGRAPH <https://cointelegraph.com/learn/what-is-a-dao> [<https://perma.cc/HDZ7-Y95G>] (last visited Dec. 23, 2023) (a decentralized autonomous organization (DAO) is “an entity with no central leadership. . . . [d]ecisions get made from the bottom-up, governed by a community organized around a specific set of rules enforced on a blockchain”).

⁸⁰ 15 U.S.C. § 77b.

⁸¹ *SEC v. W.J. Howey Co.*, 328 U.S. 293 (1946).

⁸² *See id.*; *see also* *Reves v. Ernst & Young*, 494 U.S. 56, 66 (1990); *S.E.C. v. Edwards*, 540 U.S. 389, 392, 395 (2004).

⁸³ 15 U.S.C. § 77f.

⁸⁴ In accordance with these regulations, crypto asset exchanges are currently registering with the SEC and conducting business. *Cryptocurrency/ICOs*, SEC. & EXCH. COMM’N, <https://www.sec.gov/securities-topics/ICO> [<https://perma.cc/U4D5-56ZR>] (last modified June 23, 2023).

⁸⁵ Gary Gensler, Chair, Sec. & Exch. Comm’n, Speech on Kennedy and Crypto (Sept. 8, 2022), https://www.sec.gov/news/speech/gensler-sec-speaks-090822#_ftn2 [<https://perma.cc/A2KL-MKRH>].

4. Financial Crimes Enforcement Network

FinCEN, a bureau of the U.S. Department of the Treasury, was established to “safeguard the financial system from illicit use and combat money laundering and promote national security through the collection, analysis, and dissemination of financial intelligence and strategic use of financial authorities.”⁸⁶ As the crypto assets market grows, FinCEN announced the “Application of FinCEN’s Regulations to Persons Administering, Exchanging, or Using Virtual Currencies” guidelines to prevent crypto assets from being used in money laundering or other financial crimes.⁸⁷

In this publication, a “crypto asset (virtual currency)” is defined as “a medium of exchange that operates like a currency in some environments but does not have all the attributes of real currency.”⁸⁸ A money transmitter, which is an administrator or exchanger that “(1) accepts and transmits a convertible virtual currency or (2) buys or sells convertible virtual currency for any reason,” is subject to regulation.⁸⁹ In May 2013, the federal government seized the accounts of Mt. Gox, a coin exchange, because it had not registered as a money transmitter with FinCEN.⁹⁰ In January 2014, Charlie Shrem, CEO of BitInstant, was sentenced to two years in prison for conducting an unauthorized business as a money transmitter, including transferring more than one million dollars in Bitcoin to customers of Silk Road.⁹¹

In addition, FinCEN provided specific guidance for each

⁸⁶ *What We Do*, U.S. TREASURY FIN. CRIMES ENF’T NETWORK, <https://www.fincen.gov/what-we-do> [<https://perma.cc/F9L2-F83R>] (last visited Mar. 6, 2024).

⁸⁷ U.S. TREASURY FIN. CRIMES ENF’T NETWORK, FIN-2013-G001, APPLICATION OF FINCEN’S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES (2013).

⁸⁸ The publication classifies virtual currency into three types: “E-Currencies and E-Precious Metals,” “Centralized Virtual Currencies,” and “De-Centralized Virtual Currencies.” *Id.*

⁸⁹ *Id.*

⁹⁰ *U.S. Authorities Seize Accounts of Major Bitcoin Operator*, REUTERS (May 17, 2013), <https://www.reuters.com/article/uk-bitcoin-accounts/u-s-authorities-seize-accounts-of-major-bitcoin-operator-idUKBRE94G0LV20130517> [<https://perma.cc/LGA5-87J3>].

⁹¹ See Nathan Reiff, *Who Is Charlie Shrem?*, INVESTOPEDIA (Nov. 5, 2023), <https://www.investopedia.com/tech/who-charlie-shrem> [<https://perma.cc/5T73-ZS5A>]; Jake Frankenfield, *What Was the Silk Road Online? History and Closure by FBI*, INVESTOPEDIA (July 26, 2021), <https://www.investopedia.com/terms/s/silk-road.asp> [<https://perma.cc/RU9T-RU78>] (Silk Road was a “digital black-market platform that was popular for hosting money laundering activities and illegal drug transactions using Bitcoin”).

crypto asset business model, darknet marketplaces, peer-to-peer exchangers, unregistered money services businesses, and CVC kiosks.⁹² However, these regulations are focused on the money laundering of crypto assets, so it is not easy to view them as regulations for the crypto asset business.

5. Internal Revenue Service

In March 2014, the IRS announced that “[v]irtual currency may be used to pay for goods or services or held for investment. Virtual currency is a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value. . . . For federal tax purposes, virtual currency is treated as property.”⁹³ If crypto assets have value or can be exchanged for another asset, they are property subject to taxation. The IRS requires proof of the profit and loss calculations when transferring or acquiring virtual assets, and virtual asset business operators must record and store all virtual asset transaction information.⁹⁴

The IRS has stated that some taxpayers are not paying taxes or not properly reporting transactions related to crypto assets.⁹⁵ Accordingly, in 2019, the IRS expanded the 2014 guidance and issued additional detailed guidance to help taxpayers better understand their reporting obligations for certain transactions involving virtual currencies.⁹⁶ In addition, the existing guidelines were further supplemented in 2023.⁹⁷ Digital asset brokers must follow the same information reporting rules as brokers of securities and other financial instruments.⁹⁸ As seen thus far, the crypto asset industry is regulated according to the existing legal system and regulatory authorities in the U.S.

C. INTRODUCING A NEW REGULATORY FRAMEWORK

1. Enactment of the Markets in Crypto Assets Regulation in the E.U.

⁹² U.S. TREASURY FIN. CRIMES ENF’T NETWORK, FIN-2019-G001, APPLICATION OF FINCEN’S REGULATIONS TO CERTAIN BUSINESS MODELS INVOLVING CONVERTIBLE VIRTUAL CURRENCIES (2019).

⁹³ I.R.S. Notice 2014-21, I.R.B. 2014-16.

⁹⁴ *Id.*

⁹⁵ *Virtual Currency: IRS Issues Additional Guidance on Tax Treatment and Reminds Taxpayers of Reporting Obligations*, IRS (Oct. 9, 2019), <https://www.irs.gov/newsroom/virtual-currency-irs-issues-additional-guidance-on-tax-treatment-and-reminds-taxpayers-of-reporting-obligations> [<https://perma.cc/H2ZN-SFKH>].

⁹⁶ *Id.*

⁹⁷ *See generally* I.R.S. Notice 2023-34, I.R.B. 2023-19.

⁹⁸ *See generally id.*

Unlike the U.S., the E.U. has continued to create a new regulatory framework to regulate cryptocurrencies. The initiative began with a warning from the European Banking Authority (EBA) regarding the risks of crypto assets.⁹⁹ Markets in Crypto-Assets regulation (MiCA) was established as law by the heads of the European Parliament and the European Council of Ministers, who jointly signed it on May 31, 2023.¹⁰⁰ MiCA will be implemented in phases, with provisions becoming effective from June 30 to December 30, 2024.¹⁰¹ Afterward, crypto assets, non-financial investment instruments, will be subject to a uniform regulatory system across the E.U. member states.

The regulatory framework of the E.U. was applied to tokens differently depending on whether they were considered financial instruments because MiCA is based on the principle of the same activities, same risks, and same rules.¹⁰² When crypto assets are classified as financial instruments, the securities law is directly applied to the virtual asset, and it is placed under each country's strong securities regulations: Financial Instruments Directive II and Market Abuse Regulation.¹⁰³ Hence, whether crypto assets are

⁹⁹ *Warning to Consumers on Virtual Currencies*, EUR. BANKING AUTH. (Dec. 12, 2013),

<https://extranet.eba.europa.eu/sites/default/documents/files/documents/10180/598344/b99b0dd0-f253-47ee-82a5-c547e408948c/EBA%20Warning%20on%20Virtual%20Currencies.pdf?retry=1> [<https://perma.cc/3KTZ-49FT>].

¹⁰⁰ In 2020, the E.U. adopted a “digital finance package” that included a “digital finance strategy” and legislative proposals on “crypto-assets” and “digital resilience,” and a comprehensive draft of the MiCA has been created in conjunction. Directorate-General for Financial Stability, Financial Services and Capital Markets Union, *Digital Finance Package*, EUR. COMM’N (Sept. 24, 2020), https://finance.ec.europa.eu/publications/digital-finance-package_en [<https://perma.cc/VSJ7-NB52>].

¹⁰¹ *Implementation Timeline*, MiCA PAPERS, <https://micapapers.com/guide/timeline/> [<https://perma.cc/4L4G-URKU>] (last visited Mar. 20, 2024); see also *Cryptocurrencies in the EU: Deal Struck Between Parliament and Council*, EUR. PARLIAMENT (June 30, 2022), <https://www.europarl.europa.eu/news/en/press-room/20220613IPR32840/cryptocurrencies-in-the-eu-deal-struck-between-parliament-and-council> [<https://perma.cc/VPZ8-HH8D>].

¹⁰² Commission Regulation 2023/1114, of the European Parliament and Council of 31 May 2023 on markets in crypto-assets and amending Regulations (EU) No. 1093/2010 and (EU) No. 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, 2023 O.J. (L 150) 40, 42.

¹⁰³ MiCA preamble (6); ‘Financial instrument’ means financial instruments as defined in Article 4(1), point (15), of Directive 2014/65/EU. See Regulation 2023/1114 of the European Parliament and Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No. 1093/2010 and (EU) No. 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, 2023 O.J. (L 150) 40, 57 and 66. ‘Financial instrument’ means those instruments specified in

classified as “transferable securities”¹⁰⁴ has significant implications.¹⁰⁵ MiCA classifies the applicable crypto assets into one of three categories: (i) crypto-assets, (ii) asset-referenced tokens, and (iii) electronic money tokens.¹⁰⁶ It applies different levels of regulation for each crypto asset classification.¹⁰⁷ Although MiCA is the first crypto asset legislation in the world, it covers almost all aspects needed for the crypto asset industry. Moreover, a large number of countries are subject to MiCA, which therefore can

Section C of Annex I. Directive 2014/65/EU, of the European Parliament and of the Council of 15 May 2014, on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU, 2014 O.J. (L 173) 349, 382 (“Cryptographic assets that meet virtually the same standards and conditions as any of the financial investment products specified are considered financial investment products regardless of their form.”).

¹⁰⁴ Looking at the definition, it becomes clear that the focus is on the transfer rather than the nature of the investment: “(1) Transferable securities; (2) Money-market instruments. . .” Directive 2014/65/EU, of the European Parliament and of the Council of 15 May 2014, on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU, 2014 O.J. (L 173) 349, 481.

¹⁰⁵ For example, for security tokens that have the characteristics of investment instruments, regulation under the Securities Act is assumed, and the concept is not separately defined. Therefore, if the contents of a specific token are included in the definition of a security or financial product under the Securities Act, the Securities Act takes precedence. *Framework for “Investment Contract” Analysis of Digital Assets*, SEC. & EXCH. COMM’N, <https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets> [<https://perma.cc/ZJE7-N8T4>]; see also Philipp Maume & Mathias Fromberger, *Regulation of Initial Coin Offerings: Reconciling U.S. and E.U. Securities Laws*, 19(2) CHI. J. OF INT’L L. 548, 566 (2019).

¹⁰⁶ “‘Crypto-asset’ means a digital representation of a value or of a right that is able to be transferred and stored electronically using distributed ledger technology or similar technology; (6) ‘asset-referenced token’ means a type of crypto-asset that is not an electronic money token and that purports to maintain a stable value by referencing another value or right or a combination thereof, including one or more official currencies; (7) ‘electronic money token’ or ‘e-money token’ means a type of crypto-asset that purports to maintain a stable value by referencing the value of one official currency.” Regulation 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets and amending Regulations (EU) 1093/2010 and (EU) 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023R1114> [<https://perma.cc/6298-J9WP>].

¹⁰⁷ The structure of MiCA is as follows: Title I. Subject matter, scope and definitions, Title II. Crypto assets other than asset-referenced tokens or E-money tokens, Title III. Asset-referenced tokens, Title IV. E-money tokens, Title V. Authorization and operating conditions for crypto-asset service providers, Title VI. Prevention and prohibition of market abuse involving crypto-assets, Title VII. Competent authorities, EBA and ESMA, Title VIII. Delegated acts, Title IX. Transitional and final provisions. Regulation 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets and amending Regulations (EU) 1093/2010 and (EU) 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023R1114> [<https://perma.cc/6298-J9WP>].

be considered close to a global standard.

2. Enactment of the Act on the Protection of Virtual Asset Users in South Korea

The Financial Services Commission of South Korea (FSC) planned to gradually establish a regulatory framework for crypto assets and regulate them according to the principles of the same activities, same risks, and same rules, and reflect global trends and regulatory consistency in regulations.¹⁰⁸ Under this plan, considering the urgency of user protection, the first phase of legislation was promoted to prioritize the establishment of a minimum regulatory framework.¹⁰⁹ As a result, the Act on the Protection of Virtual Asset Users (Virtual Asset User Protection Act) was passed by the National Assembly on June 30, 2023, and the law is scheduled to go into effect in July 2024.

In the Virtual Asset User Protection Act, crypto assets are referred to as “virtual assets” and investors as “users.” The Virtual Asset User Protection Act aims to protect the rights and interests of users and establish a transparent and sound trading order in the virtual asset market by regulating matters related to the protection of virtual asset users’ assets and the regulation of unfair trading practices.¹¹⁰ This Act defines the concept of virtual assets and the virtual asset market, protects user assets, regulates unfair transactions, monitors abnormal transactions, and outlines the supervisory and sanction authority of financial authorities.¹¹¹

Although this legislation is only the first step, it lays the foundation for improving transparency and fairness in the virtual asset market by removing regulatory uncertainty in South Korea. It is expected that the following major issues, including solutions to legal problems, will be addressed in the future two-stage legislation: i) entry regulation and business activity regulation plan for virtual asset business operators; ii) regulatory system for stablecoins; iii) disciplinary system for virtual asset valuation business, advisory

¹⁰⁸ Press Release, Fin. Servs. Comm’n of S. Kor., Government to Ensure Virtual Asset User Protection, Transaction Transparency and Market Discipline (June 30, 2023), <https://www.fsc.go.kr/no010101/80309?srchCtgry=&curPage=&srchKey=sj&srchText=&srchBeginDt=2023-06-30&srchEndDt=2023-06-30> [https://perma.cc/BKE4-MNB9].

¹⁰⁹ *Id.*

¹¹⁰ Virtual Asset User Protection Act art. 1 (S. Kor.).

¹¹¹ According to this Act, a “virtual asset” is an electronic token that holds economic value and can be exchanged or transferred electronically. This definition excludes any electronic currency issued by the Central Bank, the Bank of Korea; Virtual Asset User Protection Act art. 1 (S. Kor.).

business, public disclosure business, etc.; iv) a plan to establish unified standards for the circulation and issuance volume of virtual assets and a plan for issuance, listing, and public announcement of virtual assets; v) conflicts in performance that a virtual asset business operator that opens and operates a virtual asset market may issue during the process of issuance and distribution of virtual assets; and vi) ways to build and operate an integrated computer system that provides digital asset information.¹¹²

D. Recommendations for Global Standardization of Crypto Asset Regulations

1. Introduce a New Regulatory Framework

As shown previously, consensus regarding the true nature of crypto assets is currently lacking. Additionally, each regulatory organization has its different approach to managing them. Due to their intricate properties, categorizing crypto assets as traditional standard forms of currency, securities, or commodities can be difficult.¹¹³ The jurisdictional dispute between the SEC and CFTC is a clear example of a regulatory gap regarding crypto assets in the United States.¹¹⁴

While the CFTC approved Bitcoin futures trading, the SEC has refused to approve spot Bitcoin spot ETFs for a long time.¹¹⁵ The U.S. Congress has recognized these problems and seeks to legislate clear standards for regulatory jurisdiction over crypto assets.¹¹⁶ They aim to clarify the boundaries of regulatory authorities

¹¹² Tae Seok Roh, *Meaning and Future Prospects of the Enactment: The Act on the Protection of Virtual Asset Users*, 4 INTERNET DIGIT. ECON. VIEW 24, 35 (2023).

¹¹³ Hossein Nabilou, *How to Regulate Bitcoin? Decentralized Regulation for a Decentralized Cryptocurrency*, 27 INT'L J. OF L. & INFO. TECH. 12 (2019).

¹¹⁴ Jason Brett, *Congress Creates a Storm Of Crypto Legislation*, FORBES (Aug. 3, 2023), <https://www.forbes.com/sites/jasonbrett/2023/08/03/congress-creates-a-storm-of-crypto-legislation/?sh=4effc7663aa4> [<https://perma.cc/4YW7-QP8N>].

¹¹⁵ “The SEC has consistently cited the safeguarding of investors against potential crypto market manipulations and concerns about Bitcoin market liquidity as the primary reasons for rejections.” Roomy Khan, *Spot Bitcoin ETF Launch Will Solidify Crypto as a Distinct Asset Class*, FORBES (Oct. 4, 2023, 2:12 PM), <https://www.forbes.com/sites/roomykhann/2023/10/04/spot-bitcoin-etf-launch-will-solidify-crypto-as-a-distinct-asset-class/?sh=73550be1321d> [<https://perma.cc/V7JU-KHH8>]; *but see* Matthew Fox, *SEC Approves Spot Bitcoin ETFs for Trading in the US*, MKTS. INSIDER (Jan. 10, 2024, 4:59 PM) <https://markets.businessinsider.com/news/currencies/spot-bitcoin-etf-sec-approval-us-trading-btc-price-outlook-2024-1> [<https://perma.cc/6BA5-E5FG>] (the SEC recently approved spot bitcoin ETFs on Jan. 10, 2024).

¹¹⁶ Brett, *supra* note 114.

and separate regulations, like those in the E.U. and South Korea, that take into account the characteristics of crypto assets that are needed. A new regulatory framework is necessary to reflect the functions of cryptocurrency, issuance and distribution transparency, business regulations, unfair trade regulations, and investor protection.

2. Establish a Global Regulatory Framework

Because crypto assets are connected and traded through global networks, the crypto asset market has no borders. Anyone with crypto assets in their wallet can use a platform for trading these assets through simple registration. When regulatory differences between countries arise, loopholes may emerge, and these loopholes could be exploited for criminal activity. Additionally, industries will be moved to less regulated regions for regulatory cherry-picking if the regulation levels differ between countries. As such, the “digital” and “global” nature of the crypto asset industry encourages regulatory cherry-picking and potential regulatory competition.¹¹⁷

After the New York BitLicense was implemented, many businesses affected by this licensing requirement relocated. Following China’s regulatory measures and prohibitions on initial coin offers in 2017, the highest trading volume shifted from the Chinese yuan to the Japanese yen and the U.S. dollar.¹¹⁸ These cases show that crypto asset regulation is effective only when based on cooperation between countries.

The Financial Stability Board (FSB), which leads international cooperation on crypto asset regulation, maintains three principles to establish a comprehensive regulatory framework: (i) same activity, same risk, same regulation;¹¹⁹ (ii) high-level and flexible;¹²⁰ and (iii) technology neutral.¹²¹ Furthermore, through the

¹¹⁷ Nabilou, *supra* note 113, at 15.

¹¹⁸ *Id.*

¹¹⁹ *Global Regulatory Framework for Crypto-Asset Activities*, FIN. STABILITY BD. 3 (July 17, 2023) (“Regulatory frameworks should also ensure that any crypto asset activities seeking to perform an equivalent economic function to one in the traditional financial system are subject to the same or equivalent regulation irrespective of the way crypto-asset activities are conducted or the way these activities are marketed.”).

¹²⁰ *Id.* (“The FSB recommendations are high-level and allow for sufficient flexibility for jurisdictional authorities to implement them by applying relevant current regulations or developing new domestic regulatory frameworks, and to adapt to a currently rapidly evolving market.”).

¹²¹ *Id.* at 4 (“The FSB recommendations focus on addressing financial stability risks associated with global stablecoin and crypto-asset activities and are designed to be applicable across the different technologies that may be employed. Crypto-asset activities must be regulated based on their economic

bankruptcy of FTX in 2022 and the failure of Terra USD/LUNA, the FSB became aware of the risks that arise when functions similar to traditional finance are performed without regulation. In response, the FSB strengthened its recommendations to a higher level in the following three areas: (i) safeguarding of client assets, (ii) conflicts of interest, and (iii) cross-border cooperation.¹²²

In a situation where global regulatory standards are needed, the E.U.'s MiCA, the first legislation in the world aimed specifically at regulating cryptocurrency, can be seen as the closest to providing international standards for the following reasons: (i) MiCA has a systematic regulatory framework similar to that regulating the existing financial market, from business regulation to investor protection, and (ii) the 27 member states belonging to the E.U. and foreign companies providing services to these member states are directly or indirectly subject to regulation under MiCA.¹²³ More detailed regulatory standards based on cooperation with international financial institutions will be needed. Additionally, efforts should be made to encourage countries that have not yet established crypto asset regulations to align with global standards, thereby preventing regulatory loopholes.

3. Regulatory Direction for Investor Protection

Distributed ledger and blockchain technology are innovative technologies that will promote the development of the financial and information security industry. Excessive industry regulation may hinder the development of these technologies. However, whether expanding the current crypto asset industry is an appropriate aim must be considered. Crypto assets lack intrinsic value compared to gold or other commodities, and their prices fluctuate significantly, rendering them unsuitable for use as payment methods.¹²⁴ However, given their lack of intrinsic value and the lack of accountability within a regulatory void, expanding and promoting the crypto asset

functions and the risks they pose, irrespective of the technological means used.”).

¹²² *Id.* (“Crypto-asset issuers and service providers may seek to evade regulation and oversight by migrating to places where regulation is lighter. This requires strong measures to address regulatory arbitrage. The FSB’s high-level recommendations have been strengthened on information sharing, including about the level of compliance of activities spanning multiple jurisdictions, especially those in jurisdictions that have not implemented international standards.”).

¹²³ Ryan Browne, *EU Lawmakers Approve World’s First Comprehensive Framework for Crypto Regulation*, CNBC (Apr. 20, 2023, 10:57 AM), <https://www.cnbc.com/2023/04/20/eu-lawmakers-approve-worlds-first-comprehensive-crypto-regulation.html> [<https://perma.cc/Q2VT-MSJF>].

¹²⁴ See Prasad, *supra* note 25.

market should not be the immediate goal.

A coin with no intrinsic value, whose worth has risen solely due to the “desire to own,” lacks a safety net to sustain it once its popularity wanes. The derivatives created based on these unstable assets evoke memories of the 2008 financial crisis and call us to remember the case thirteen years ago when two pizzas were bought with 10,000 bitcoins (which would be valued at approximately \$400 million as of December 24, 2023) in Florida.¹²⁵ More seriously, celebrities who have already invested in particular coins appear in the media and talk about the rosy prospects of those coins. They are not sanctioned for advertising these coins even when they sell the coins at a higher price after their followers purchase coins.

The regulatory direction should focus on stabilizing the crypto asset market and preventing unfair trading or scams. If the government enacts proactive legislation regarding crypto assets, it might appear to encourage investment in crypto assets. Then, investors may hold the government responsible for losses when the crypto asset market bubble bursts.¹²⁶ However, addressing these market problems through regulations, such as ensuring transparency and implementing investor protection measures for crypto asset transactions, would be preferable.¹²⁷

V. GLOBAL REGULATION OF THE CREATION AND SALE OF CRYPTO ASSETS

A. Initial Coin Offering Issues

For a crypto asset to be traded in the market or used as a payment method, someone must first create and distribute the crypto asset. The creation and sale of crypto assets is called an ICO, similar to an initial public offering (IPO), which is the issuance and sale of securities. Specifically, an ICO is a process in which a company raises funds, such as other crypto assets or currencies, from investors and provides newly issued crypto assets to carry out a specific project.¹²⁸

¹²⁵ See Kamau, *supra* note 21 (demonstrating the case of purchasing two pizzas with 10,000 Bitcoins in 2010 shows that the current Bitcoin price is likely to fall back to 1 in 10 million).

¹²⁶ Ko, *supra* note 46, at 308.

¹²⁷ *Id.* at 309.

¹²⁸ The general ICO procedure is as follows: (i) publishing a white paper detailing the company’s business plan and the purpose and format of the ICO, (ii) ICO investors purchase these crypto assets through online sales or on cryptocurrency exchanges with currency or crypto assets, (iii) after reaching the certain fundraising threshold, the company transfers these crypto assets to the

It is difficult to determine what regulations to apply and how to regulate them since crypto assets can be created electronically without physical presence. Sometimes, specifying the issuer and issuing jurisdiction can be difficult because no one needs to take any responsibility after initially creating a crypto asset. Thus, many irresponsible coins, ICO failures, and frauds will inevitably occur.¹²⁹ Between 2013 and 2022, there were 2,383 unused crypto assets; 66% were abandoned due to lack of trading volume, and 22% were fraudulent coins.¹³⁰ A study of more than 5,036 ICOs from August 2014 to December 2019 found that 57% (representing \$10.12 billion) were scams. The Petro scam,¹³¹ which cost investors \$735 million, was identified as the largest ICO scam to date.¹³²

In the U.S., the SEC applies the legal principles of investment contract securities to crypto assets, which are securities, through the DAO Report.¹³³ In the E.U. and South Korea, crypto

investor's crypto asset wallet. Iris M. Barsan, *Legal Challenges of Initial Coin Offerings (ICO)*, 3 REVUE TRIMESTRIELLE DE DROIT FINANCIER (RTDF) 54, 54 (2017); *Informed Investor Advisory: Initial Coin Offerings*, N. AM. SEC. ADM'RS ASS'N (NASAA), <https://www.nasaa.org/44836/informed-investor-advisory-initial-coin-offerings> [<https://perma.cc/R552-728E>] (last visited Dec. 16, 2023) (“An Initial Coin Offering (ICO), also sometimes referred to as an Initial Token Offering (ITO), is a method used by an individual, group of individuals or organization to raise capital for a planned project. Most ICO's involve projects that are at the “idea” stage and in many instances may lack a prototype or “real world” implementation of the idea. To finance the idea or project through an ICO, promoters create a new virtual “coin” or “token,” which is then sold online to participants in the ICO in exchange for fiat currency, such as the U.S. or Canadian dollar or Mexican peso.”).

¹²⁹ *Statement by the Divisions of Corporation Finance and Enforcement on the Report of Investigation on the DAO*, SEC. & EXCH. COMM'N (July 25, 2017), <https://www.sec.gov/news/public-statement/corpfm-enforcement-statement-report-investigation-dao> [<https://perma.cc/YW8J-MY6P>] [hereinafter “2017 SEC Statement”] “[W]e recognize that new technologies also present new opportunities for bad actors to engage in fraudulent schemes, including old schemes under new names and using new terminology. We urge the investing public to be mindful of traditional red flags when making any investment decision.”).

¹³⁰ Emily Dean, *70+ ICO Statistics You Need to Know in 2023*, ICO BENCH (Aug. 24, 2023), <https://icobench.com/stats/ico-statistics> [<https://perma.cc/CB3X-68Y5>].

¹³¹ Rakesh Sharma, *Why Venezuela's Cryptocurrency, Petro, is a Failure*, INVESTOPEDIA (Sept. 7, 2018), <https://www.investopedia.com/news/why-venezuelas-cryptocurrency-petro-failure> [<https://perma.cc/H3JQ-EBE3>] (describing a fraud case involving Petro, a government-issued crypto asset, in Venezuela in 2018).

¹³² Dean, *supra* note 130.

¹³³ See 2017 SEC Statement, *supra* note 129 (“The DAO sold tokens representing interests in its enterprise to investors in exchange for payment with virtual currency. Investors could hold these tokens as an investment with certain voting and ownership rights or could sell them on web-based secondary market platforms . . . DAO tokens are securities. . . . The definition of a security under

assets, which are securities, are also regulated as securities. South Korea is trying to “embrace security tokens as a form of security issuance under the Act on Electronic Registration of Stocks and Bonds.”¹³⁴ The SEC presents standards for crypto assets to qualify as securities through the DAO report, but these standards may be unclear from the perspective of users who want to raise funds through ICOs. The SEC also warns investors about the dangers of investing in initial coin offerings.¹³⁵

These circumstances lead to the question of what kind of rights and obligations crypto asset creators have to buyers. Securities crypto assets can be subject to the rights and obligations and applicable securities laws, but non-security crypto assets, such as Bitcoin, can be issued indiscriminately and are expected to cause damage to investors because of the lack of appropriate regulations. Next, I look to the E.U., which has a regulatory system for the creation and sale of crypto assets.¹³⁶

B. Regulation of Offering Crypto Assets to the Public in the E.U.

the federal securities laws is broad, covering traditional notions of a security, such as a stock or bond, as well as novel products or instruments where value may be represented and transferred in digital form. . . . A hallmark of a security is an investment of money or value in a business or operation where the investor has a reasonable expectation of profits based on the efforts of others . . .”).

¹³⁴ Press Release, Fin. Servs. Comm’n of S. Kor., FSC Unveils Measures to Overhaul Regulations to Permit Issuance and Circulation of Security Tokens (Feb. 6, 2023), <https://www.fsc.go.kr/eng/pr010101/79431> [<https://perma.cc/TY7N-D4SH>].

¹³⁵ *Cryptocurrency/ICOs*, U.S. SEC. & EXCH. COMM’N, <https://www.sec.gov/securities-topics/ICO> [<https://perma.cc/JSU7-VWD7>] (last visited Dec. 23, 2023) (the SEC warns investors with the following “Five Things to Know About ICOs” to guide them to be cautious in their investments: “1. ICOs, based on specific facts, may be securities offerings, and fall under the SEC’s jurisdiction of enforcing federal securities laws. 2. ICOs that are securities most likely need to be registered with the SEC or fall under an exemption to registration. 3. ICOs, or more specifically tokens, can be called a variety of names, but merely calling a token a “utility” token or structuring it to provide some utility does not prevent the token from being a security. 4. While some ICOs may be attempts at honest investment opportunities, many may be frauds, separating you from your hard-earned money with promises of guaranteed returns and future fortunes. They may also present substantial risks for loss or manipulation, including through hacking, with little recourse for victims after-the-fact. 5. If you choose to invest in these products, please ask questions and demand clear answer.”).

¹³⁶ Commission Regulation 2023/1114 of the European Parliament and of the Council on markets in crypto-assets and amending Regulations (EU) No. 1093/2010 and (EU) No. 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937. In South Korea, legislation is implemented in stages, and in the first stage, there are no regulations on creation of crypto assets.

Under MiCA, an “issuer” is “a natural or legal person, or other undertaking, who issues crypto-assets.”¹³⁷ An “offeror of crypto assets” is “a natural or legal person, or other undertaking, or the issuer, who offers crypto-assets to the public.”¹³⁸ Defining the issuance of crypto assets is difficult because identifying the crypto code’s author is challenging.¹³⁹ Crypto asset issuers do not require authorization or other actions.¹⁴⁰ Additionally, because the definition of an issuer is very broad, multiple issuers may be subject to regulation when offering the same crypto assets to the public or requiring approval on trading platforms for crypto assets.¹⁴¹

In addition, “offer to the public” means “a communication to persons in any form, and by any means, presenting sufficient information on the terms of the offer and the crypto-assets to be offered to enable prospective holders to decide whether to purchase those crypto-assets.”¹⁴² In short, the “issuance of crypto assets” is interpreted broadly to mean “the act of providing crypto assets to the public or seeking approval for trading crypto assets on a crypto asset trading platform.”¹⁴³ Therefore, unless exceptions exist, all actions related to providing crypto assets are subject to MiCA.¹⁴⁴

Under MiCA, “offerings to the public of cryptographic assets other than asset-referenced tokens or digital currency tokens,” that is, “crypto assets,” are regulated under Title II. The main content is disclosure regulations, such as the qualifications of the offeror and white paper issuance. To disclose crypto assets to the public, the issuer must be a legal person and meet certain

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ “The chosen approach was most likely taken due to the fact that, as opposed to the issuance of securities, with regards to crypto-assets it is often not trivial to pinpoint the person that wrote or can be attributed to the underlying code of the crypto asset, which would be the closest to the act of the creation and issuance of securities. Particularly, Bitcoin, the first known crypto asset created, was explicitly created in order to have no central authority as an issuer.” Beat König, *The Future of Crypto-Assets within the European Union – An Analysis of the European Commission’s Proposal for a Regulation on Markets in Crypto-Assets* 42 (Eur. Union L., Working Paper No. 55, 2021). MiCA regulates the issuance and issuer of cryptocurrency assets. However, it does not provide a distinct definition of ‘issuance,’ which is a crucial term. Therefore, it can only be inferred through the definitions of related concepts such as offer and issuer. Hongki Kim, *EU’s Crypto Asset Market Regulation (MiCA) and Proposal for Korea’s Digital Asset Act*, 41(2) KOR. COM. L. REV. 333, 345 (2022).

¹⁴⁰ “[A]sset-referenced tokens” and “digital currency tokens” required approval by the relevant authorities. Commission Regulation, *supra* note 136.

¹⁴¹ König, *supra* note 139, at 41, 42.

¹⁴² Commission Regulation, *supra* note 136.

¹⁴³ Kim, *supra* note 139, at 345, 46.

¹⁴⁴ *Id.*

qualifications, including regarding methods of writing and distributing white papers, and marketing communications.¹⁴⁵

A crypto assets white paper¹⁴⁶ must include information about the offeror, the issuer, the trading platform operator, the crypto asset project, and the crypto asset, among other details.¹⁴⁷ These white papers must be fair, clear, not misleading, written in a concise and understandable form, and contain no material omissions.¹⁴⁸ In addition, the white paper must contain prominent statements and the summary must contain warnings to protect investors. However, submission and publication of white papers are exempted in some cases. For example, exemptions may apply when crypto assets are provided free of charge, created through mining, lacking a particular number of investors or qualified investors, or valued at less than 1 million euros within 12 months after being issued.¹⁴⁹

¹⁴⁵ MiCA § 4(1) requires that the issuer “(a) is a legal person; (b) has drawn up a crypto-asset white paper in respect of that crypto-asset in accordance with Article 6 (Content and form of the crypto-asset white paper); (c) has notified the crypto-asset white paper in accordance with Article 8 (Notification of the crypto-asset white paper and of the marketing communications); (d) has published the crypto-asset white paper in accordance with Article 9 (Publication of the crypto-asset white paper and of the marketing communications); (e) has drafted the marketing communications, if any, in respect of that crypto-asset in accordance with Article 7 (Marketing communications); (f) has published, the marketing communications, if any, in respect of that crypto-asset in accordance with Article 9 (Publication of the crypto-asset white paper and of the marketing communications); [and] (g) complies with the requirements for offerors laid down in Article 14 (Obligations of offerors and persons seeking admission to trading of crypto-assets other than asset-referenced tokens or e-money tokens).” Commission Regulation 2023/1114 of May 31, 2023, Markets in Crypto-Assets Regulation, 2023 O.J. (L 150) 40, 67.

¹⁴⁶ “An information document similar to a prospectus according to the Prospectus Regulation with mandatory disclosure obligations, among others in relation to the issuer, the project, the risks, the rights and obligations attached to the crypto-assets.” König, *supra* note 139, at 43.

¹⁴⁷ Commission Regulation 2023/1114, of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets and amending Regulations (EU) No. 1093/2010 and EU No. 1095/2010 and Directives 2013/36/EU and (EU) 2010/1937, tit. I, art. 6, 2023 O.J. (L 150).

¹⁴⁸ *Id.* (“(a) information about the offeror or the person seeking admission to trading; (b) information about the issuer, if different from the offeror or person seeking admission to trading; (c) information about the operator of the trading platform in cases where it draws up the crypto-asset white paper; (d) information about the crypto-asset project; (e) information about the offer to the public of the crypto-asset or its admission to trading; (f) information about the crypto-asset; (g) information on the rights and obligations attached to the crypto-asset; (h) information on the underlying technology; (i) information on the risks; (ii) information on the principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism used to issue the crypto-asset.”).

¹⁴⁹ *Id.* at art. 4 (“Paragraph 1, points (b), (c), (d) and (f), shall not apply to any of

“Competent authorities”¹⁵⁰ do not require prior approval for cryptographic asset white papers,¹⁵¹ but the white paper must be submitted to the competent authorities at least 20 days before the white paper issuance date.¹⁵² After the publication of the white paper, the cryptocurrency assets can be traded on approved platforms and offerors must regularly inform the public about sales of cryptocurrency assets and other important changes.

C. Recommendations on the Regulation of Crypto Assets Offering

1. Strengthen a Disclosure Regulation: White Paper

Due to the technical characteristics of crypto assets, it is not easy to regulate the creation and sale of crypto assets.¹⁵³ However, the E.U. has attempted to regulate the creation and sale of crypto

the following offers to the public of crypto-assets other than asset-referenced tokens or e-money tokens: (a) an offer to fewer than 150 natural or legal persons per Member State where such persons are acting on their own account; (b) over a period of 12 months, starting with the beginning of the offer, the total consideration of an offer to the public of a crypto-asset in the Union does not exceed EUR 1,000,000, or the equivalent amount in another official currency or in crypto-assets; (c) an offer of a crypto-asset addressed solely to qualified investors where the crypto-asset can only be held by such qualified investors.”); *id.* (“This Title shall not apply to offers to the public of crypto-assets other than asset-referenced tokens or e-money tokens where any of the following apply: (a) the crypto-asset is offered for free; (b) the crypto-asset is automatically created as a reward for the maintenance of the distributed ledger or the validation of transactions; (c) the offer concerns a utility token providing access to a good or service that exists or is in operation; (d) the holder of the crypto-asset has the right to use it only in exchange for goods and services in a limited network of merchants with contractual arrangements with the offeror.”).

¹⁵⁰ Raquel Garcia Lobato, *Overview of the Competent Authorities under MiCAR*, CMS LEGAL (June 27, 2023), <https://cms.law/en/che/publication/legal-experts-on-markets-in-crypto-assets-MiCA-regulation/overview-of-the-competent-authorities-under-MiCAR> [<https://perma.cc/86G9-T6EK>] (“Member states will designate their responsible competent authorities to carry out the functions and duties provided for in MiCAR. . . . MiCAR determines the minimum supervisory and investigative powers of the competent authorities, which will cooperate and render assistance to the authorities of other member states, the EBA and the ESMA by exchanging information and cooperating in investigations, supervision, and enforcement activities.”).

¹⁵¹ Commission Regulation 2023/1114 of May 31, 2023, on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, art. 8, 2023 J.O. (L 150).

¹⁵² *Id.*

¹⁵³ *Demystifying Cryptocurrency and Digital Assets*, PwC, <https://www.pwc.com/us/en/tech-effect/emerging-tech/understanding-cryptocurrency-digital-assets.html> [<https://perma.cc/BD4L-VKLY>] (last visited March 7, 2024).

assets through the enactment of MiCA, and the core of this regulation is its requirement for crypto asset issuers to submit a “white paper.” In general, issuers disclose to the public a white paper similar to a business plan in the stock market during the ICO process. Investors then decide whether to purchase crypto assets based on this white paper. Therefore, the regulations must ensure that the essential content and format of the white paper provide important information to investors in an easily understandable manner. Additionally, if material information changes, that fact must be disclosed promptly. Moreover, if material information is misstated, omitted, or changed, appropriate sanctions must be taken.

This regulatory framework might gradually become similar to securities disclosure regulations because collecting funds from multiple investors has the same function as a public offering, and the risks to which investors are exposed are also similar.¹⁵⁴ However, legislation and systems such as securities public offerings cannot be prepared in a short period. Accurate information must be provided to investors by disclosing the white paper on the crypto asset exchange where trading is conducted or by separately disclosing its contents such as on the exchange’s website.

However, due to the nature of crypto asset issuance, identifying the issuer is difficult, as is exercising due diligence on the issuer and white paper is difficult. Therefore, a crypto asset white paper cannot guarantee rights to those who purchase the asset.¹⁵⁵ Ultimately, a supervision system and industry roles that can verify white papers and conduct due diligence on issuers must be established to guarantee rights to crypto asset purchasers.

2. Introduce a Registration Regulation of Crypto Assets

¹⁵⁴ Jay Clayton, *Statement on Cryptocurrencies and Initial Coin Offerings*, SEC. & EXCH. COMM’N (Dec. 11, 2017), <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11> [<https://perma.cc/426U-XY7K>] (“[T]he structures of initial coin offerings that I have seen promoted involve the offer and sale of securities and directly implicate the securities registration requirements and other investor protection provisions of our federal securities laws. Generally speaking, these laws provide that investors deserve to know what they are investing in and the relevant risks involved.”).

¹⁵⁵ According to the SEC, “[i]nvestors need to keep in mind that an attractive and alluring ICO website with seemingly friendly and reputable personnel biographies and well-prepared white papers can easily be fraudulent.” *Investor Bulletin: World Investor Week 2018*, INVESTOR.GOV (Oct. 1, 2018), <https://www.investor.gov/introduction-investing/general-resources/news-alerts/alerts-bulletins/investor-bulletins-23> [<https://perma.cc/7V7U-HXJK>].

Any person or entity with knowledge and technology can create crypto assets. Hence, effectively restricting issuers is not easy. Given these circumstances, ensuring that authorized or registered service providers trade only trustworthy crypto assets is reasonable. Of course, even in the case of traditional stocks, anyone can issue them if they meet the requirements for establishing incorporation. However, selling stocks to multiple investors is strictly regulated. Similarly, registration regulations need to be applied to the sale of crypto assets as investments rather than payment functions.

While applying registration rules poses difficulties due to unclear issuing of crypto assets and unfamiliar concepts like mining,¹⁵⁶ applying the same rules to the same function is reasonable. Therefore, crypto asset exchanges that profit from investors should disclose and track important information about crypto assets to protect their clients. In addition, a new agency could be created to oversee registration review, or the existing SEC's resources, which perform similar functions could be utilized. With this registration and disclosure system, authorities and exchanges could promptly and electronically provide investors with crucial information about crypto assets, such as a "hard fork" event.¹⁵⁷ Above all, to enhance the effectiveness of regulation, trading of unregistered coins through exchanges must be prevented.

VI. GLOBAL REGULATION OF CRYPTO ASSET-RELATED BUSINESSES

A. Crypto Asset Market Problems

The number of platforms (exchanges) for trading crypto assets worldwide is difficult to determine, but the top ten exchanges, which represent 95% of the total market, had a trading volume of approximately \$40.87 trillion in 2022.¹⁵⁸ Without proper regulation,

¹⁵⁶ Mining is "the process that Bitcoin and several other cryptocurrencies use to generate new coins and verify new transactions . . . in return for contributing their processing power, computers on the network are rewarded with new coins." *What is Mining?*, COINBASE, <https://www.coinbase.com/learn/crypto-basics/what-is-mining> [<https://perma.cc/Z55X-JDPF>] (last visited Mar. 7, 2023).

¹⁵⁷ A hard fork means that "a radical change to a network's protocol" that "effectively results in two branches, one that follows the previous protocol and one that follows the new version. In a hard fork, holders of tokens in the original blockchain will be granted tokens in the new fork as well. . . . a hard fork can occur in any blockchain, and not only Bitcoin." Jake Frankenfield, *Hard Fork: What It Is in Blockchain, How It Works, Why It Happens*, INVESTOPEdia (May 25, 2023), <https://www.investopedia.com/terms/h/hard-fork.asp> [<https://perma.cc/G3DA-H63P>].

¹⁵⁸ *Crypto Exchanges 2022 Annual Report*, TOKENINSIGHT (Jan. 16, 2023),

their trading volume has grown rapidly. When Bitcoin first emerged, the most notable feature of blockchain technology was its supposed security and resistance to hacking attempts. Even so, attacks on exchanges have occurred, representing a vulnerability in the blockchain industry. In 2022, hackers attacked cryptocurrency exchanges, stealing over \$3.8 billion in crypto assets.¹⁵⁹ In November 2022, FTX, the second-largest cryptocurrency exchange worldwide, declared bankruptcy due to a liquidity crisis, preventing investors from retrieving their investments.¹⁶⁰ FTX's internal controls have been questioned, and countless exchanges worldwide are speculated to have similar compliance system deficiencies.¹⁶¹

These cases reveal fundamental issues with crypto asset markets. The most significant problem with the crypto asset market is that it has evolved into a massive global market without sufficient regulatory preparation. From incidents involving investor asset management to system security issues, the mistakes experienced by the traditional financial market are being replicated in the crypto asset market. In particular, centralized exchanges become more susceptible to hacking and embezzlement because, unlike traditional stock exchanges, investors' assets are stored on the exchange before trading. Furthermore, investor harm can be anticipated if exchanges list substandard crypto assets without proper investigations or abruptly suspend trading in listed crypto assets. Next, I examine regulatory cases for solving these problems in each country and formulate a global standard for regulating crypto asset businesses.

<https://tokeninsight.com/en/research/reports/crypto-exchanges-2022-annual-report> [<https://perma.cc/ZWK2-UA23>].

¹⁵⁹ See Kevin George, *The Largest Cryptocurrency Hacks So Far*, INVESTOPEDIA (Dec. 2, 2023), <https://www.investopedia.com/news/largest-cryptocurrency-hacks-so-far-year> [<https://perma.cc/R952-DNMS>] (listing some of the largest hacks, including Ronin Network: \$625 million in March 2022; Poly Network: \$611 million in August 2021; FTX: \$600 million in November 2022; Binance BNB Bridge: \$586 million in October 2022; Coincheck: \$534 million in January 2018; Mt. Gox: \$473 million in 2011; Wormhole: \$325 million in February 2022; Euler Finance: \$197 million in March 2023; Nomad Bridge: \$190 million; Beanstalk: \$182 million; and Wintermute: \$162 million in September 2022).

¹⁶⁰ See Nathan Reiff, *The Collapse of FTX: What Went Wrong with the Crypto Exchange?*, INVESTOPEDIA (Nov. 15, 2023), <https://www.investopedia.com/what-went-wrong-with-ftx-6828447> [<https://perma.cc/HD5L-CNZT>].

¹⁶¹ See Charles Wert, *FTX Collapse: Establishing Governance & Internal Control Systems*, LINKEDIN (Dec. 27, 2022), <https://www.linkedin.com/pulse/ftx-collapse-establishing-governance-internal-control-charles-wert/> [<https://perma.cc/USR7-2YPB>]; Peter Whoriskey & Dalton Bennett, *Crypto's Free-Wheeling Firms Lured Millions. FTX Revealed the Dangers*, WASH. POST (Nov. 16, 2022, 3:58 PM), <https://www.washingtonpost.com/business/2022/11/16/ftx-collapse-crypto-exchanges-regulation/> [<https://perma.cc/3RKA-PDQ6>].

B. The United States

The ambiguity in the regulatory jurisdiction of crypto assets is a significant problem in the U.S. A jurisdictional disagreement exists between the SEC and the CFTC concerning crypto asset exchanges.¹⁶² The CFTC maintains authority over crypto assets as commodities.¹⁶³ Recently, Binance, the leading crypto asset exchange, and its executives were accused by the CFTC of breaching the CEA.¹⁶⁴ Meanwhile, according to the DAO report, the SEC contends that whether a coin is a security should be judged based on its characteristics.¹⁶⁵ They maintain that the crypto assets that service providers provide are securities, and the SEC has broad jurisdiction over business related to crypto assets.

1. Is the Application of Securities Laws Obvious?

Meanwhile, the SEC established standards for determining whether crypto assets are securities through the DAO Report. For instance, the SEC recognized that crypto assets such as Bitcoin do not fall under the security classification. However, determining whether various crypto assets are securities by individually testing

¹⁶² See Datta, *supra* note 59 (“In recent years, a heated turf war has been escalating between the [CFTC] and the [SEC] regarding the regulatory oversight of cryptocurrencies.”); John Joy, *The Race to Regulate Crypto: CFTC vs. SEC*, JURIST (Nov. 24, 2021, 7:44 AM), <https://www.jurist.org/commentary/2021/11/john-joy-crypto-sec> [<https://perma.cc/M7NQ-TVG3>] (“[B]oth the [SEC] and the [CFTC] vying for the role of the new crypto-sheriff in town.”).

¹⁶³ *The Commodity Futures Trading Commission: Effective Enforcement and The Future of Derivatives Regulation: Hearing Before the S. Comm. on Agric., Nutrition, and Forestry*, 113th Cong. 55 (2014) (statement of Timothy Massad, Chair, CFTC).

¹⁶⁴ Press Release, CFTC, CFTC Charges Binance and Its Founder, Changpeng Zhao, with Willful Evasion of Federal Law and Operating an Illegal Digital Asset Derivatives Exchange (Mar. 27, 2023), <https://www.cftc.gov/PressRoom/PressReleases/8680-23> [<https://perma.cc/3WCE-FUUV>] (the complaint alleges that Binance: engaged in off-exchange commodity futures transactions in violation of Section 4(a) and 4(b) of the CEA, enabled off-exchange transactions in commodity options in violation of Section 4c(b) of the CEA, solicited and accepted orders for commodity futures, options, swaps, and retail commodity transactions without being registered as a futures commission merchant (FCM) in violation of Section 4d of the CEA, solicited and facilitated transactions from retail individual market participants, a class of investors that includes the most vulnerable investors in our markets, while evading the protections that regulatory oversight provides, and operated a facility for the trading and processing of swaps without being registered as a swap execution facility (SEF) or designated contract market (DCM), in violation of Section 5h(a)(1) of the CEA).

¹⁶⁵ 2017 SEC Statement, *supra* note 129.

each of them would be complex. For example, in 2021, the SEC sued Ripple for failing to register its XRP token as a U.S. security. Ripple refuted this and argued that XRP is a cryptocurrency, not a security, and on July 13, 2023, Ripple won in New York District Court. The court ruled that the money paid by the buyers could not be an investment in Ripple and that it was not an investment with expectations of profits from Ripple's business efforts.¹⁶⁶ This ruling creates a problem not only for the U.S. but also for other countries with the same securities classification system.

Moreover, the SEC is paying close attention to ICOs, which are similar to the offering and selling of securities. Although ICOs can raise funds to support innovative projects or companies, "important disclosures, processes, and other investor protections" must be in place.¹⁶⁷ The Securities Act protects the market and investors when offering and selling securities, no matter what term the securities are called, and the offeror has "two options: (1) comply with an exemption from registration, or (2) register the offering with the SEC."¹⁶⁸ However, even this approach has no basis for regulating crypto assets that are not classified as securities. The SEC has publicly requested for Congress to help by giving the SEC more power to regulate crypto assets.

2. Is the CFTC's Regulatory Authority Sufficient?

Even if crypto assets are classified as commodities, regulation remains insufficient. With the approval of crypto asset derivatives trading on the Chicago Mercantile Exchange, the basis for CFTC's regulatory jurisdiction over crypto assets has been established because the underlying assets of futures traded on commodity exchanges are considered commodities.¹⁶⁹ Moreover, the SEC has recognized that crypto assets such as Bitcoin do not fall under the security classification.¹⁷⁰

¹⁶⁶ SEC v. Ripple Labs, Inc., 2023 WL 4507900, at *19 (S.D.N.Y. July 13, 2023).

¹⁶⁷ Clayton, *supra* note 154.

¹⁶⁸ *Oversight of the U.S. Securities and Exchange Commission: Hearing Before the S. Comm. on Banking, Hous., and Urb. Dev.*, 115th Cong. 57 (Dec. 11, 2018) (statement of Jay Clayton, Chair, Securities and Exchange Commission).

¹⁶⁹ Press Release, CME, CME Group Announces Launch of Bitcoin Futures (Oct. 31, 2017), https://www.cmegroup.com/media-room/press-releases/2017/10/31/cme_group_announceslaunchofbitcoinfutures.html [<https://perma.cc/ZCS6-9JTU>]; Press Release, CFTC, CFTC Statement on Self-Certification of Bitcoin Products by CME, CFE, and Cantor Exchange (Dec. 1, 2017), <https://www.cftc.gov/PressRoom/PressReleases/7654-17> [<https://perma.cc/N8H2-9PB8>].

¹⁷⁰ The former SEC Chairman said, "[c]ryptocurrencies: [t]hese are replacements for sovereign currencies, replace the dollar, the euro, the yen with

However, the CFTC's regulatory authority only allows for comprehensive regulation, including business regulation, when a crypto asset exchange deals with derivatives related to crypto assets or leveraged retail commodity transactions.¹⁷¹ Therefore, regarding unfair trading, the CFTC does not have broad authority to regulate spot trading of crypto assets, beyond preventing fraud or market manipulation.¹⁷² Platforms that only offer spot trading of crypto assets are not required to register with the CFTC.¹⁷³ Thus, as the CFTC's authority is insufficient for fully regulating crypto asset businesses; it is reasonable to say that the CFTC currently lacks a clear regulatory system for virtual asset exchanges. However, the CFTC utilizes its existing regulatory authority over crypto asset markets and actively advocates for legislation to establish a regulatory framework.¹⁷⁴

3. Reference Case: New York State Regulation

In August 2015, the New York Department of Financial Services (NYDFS) announced regulations under the New York Financial Services Law, requiring businesses that deal with any form of digital currency to apply for a license.¹⁷⁵ Virtual currency

bitcoin. . . . That type of currency is not a security.” Kate Rooney, *SEC Chief Says Agency Won't Change Securities Laws to Cater to Cryptocurrencies*, CNBC (June 11, 2018, 9:35 AM), <https://www.cnbc.com/amp/2018/06/06/sec-chairman-clayton-says-agency-wont-change-definition-of-a-security.html> [https://perma.cc/SDA8-NJC2].

¹⁷¹ 7 U.S.C. § 2(c)(2)(D)(i); LabCFTC, *supra* note 29, at 27, 31 (the Dodd-Frank Act extended CFTC jurisdiction to include “leveraged retail commodity transactions,” without “actual delivery” within 28 days, which shall be treated as futures); 7 U.S.C. § 2(c)(2)(D)(iii) (“Sections 4(a), 4(b), and 4b [7 USCS §§ 6(a), 6(b), and 6b] apply to any agreement, contract, or transaction described in clause (i), as if the agreement, contract, or transaction was a contract of sale of a commodity for future delivery.”).

¹⁷² *Virtual Currencies: The Oversight Role of the U.S. Securities and Exchange Commission and The U.S. Commodity Futures Trading Commission Before the S. Comm. on Banking, Hous., and Urb. Aff's.*, 115th Cong. 103 (2018) (statement of J. Christopher Giancarlo, Chair, Commodity Futures Trading Commission); Joy, *supra* note 162.

¹⁷³ *Registration FAQs: Where Should I Check if I Want to Trade Virtual Currencies?*, CFTC, <https://www.cftc.gov/check> [https://perma.cc/9949-HYNU] (last visited Mar. 12, 2023).

¹⁷⁴ See, e.g., *Legislative Hearing to Review S.4760, The Digital Commodities Consumer Protection Act Before the S. Comm. on Agric., Nutrition, and Forestry*, 117th Cong. (2022) (prepared testimony of Rostin Behnam, Chair, Commodity Futures Trading Commission).

¹⁷⁵ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.3(a) (2022) (“No person shall, without a license obtained from the superintendent as provided in this Part, engage in any virtual currency business activity. Licensees are not authorized to exercise fiduciary powers, as defined under section 100 of the Banking Law.”).

businesses are those:

(1) receiving virtual currency for transmission or transmitting virtual currency, except where the transaction is undertaken for non-financial purposes and does not involve the transfer of more than a nominal amount of virtual currency; (2) storing, holding, or maintaining custody or control of virtual currency on behalf of others; (3) buying and selling virtual currency as a customer business; (4) performing exchange services as a customer business; or (5) controlling, administering, or issuing a virtual currency.¹⁷⁶

Business operators must maintain adequate capital,¹⁷⁷ safely store customer assets,¹⁷⁸ make, keep, and preserve their books and records,¹⁷⁹ submit financial statements, and report law violations.¹⁸⁰

C. The European Union

1. Market Entry Regulation

In the E.U., a “crypto asset service provider”¹⁸¹ is “a legal person or other undertaking that has been authorized as a crypto-asset service provider” or “a credit institution, central securities depository, investment firm, market operator, electronic money institution, UCITS management company, or an alternative investment fund manager that is allowed to provide crypto-asset services.”¹⁸² There are also regional restrictions; a crypto asset

¹⁷⁶ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2(q) (2022).

¹⁷⁷ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.8(a) (2022).

¹⁷⁸ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.9(a) (2022).

¹⁷⁹ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.12(a) (2022).

¹⁸⁰ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.14(a) (2022).

¹⁸¹ Commission Regulation 2023/1114 of May 31, 2023, on Markets in Crypto-Assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, art. 3, 2023 J.O. (L 150) 64. (a crypto asset service provider is “a legal person or other undertaking whose occupation or business is the provision of one or more crypto-asset services to clients on a professional basis, and that is allowed to provide crypto-asset services in accordance with Article 59”). A crypto asset service is defined as follows: “any of the following services and activities relating to any crypto-asset: (a) providing custody and administration of crypto-assets on behalf of clients; (b) operation of a trading platform for crypto-assets; (c) exchange of crypto-assets for funds; (d) exchange of crypto-assets for other crypto-assets; (e) execution of orders for crypto-assets on behalf of clients; (f) placing of crypto-assets; (g) reception and transmission of orders for crypto-assets on behalf of clients; (h) providing advice on crypto-assets; (i) providing portfolio management on crypto-assets; (j) providing transfer services for crypto-assets on behalf of clients.” *Id.*

¹⁸² *Id.* at art. 59, 2023 J.O. (L 150) 114-15.

service provider must have a registered office in the E.U. Member States, and at least one of the directors shall reside in the E.U.¹⁸³

Applicants must submit to the competent authorities basic information such as their legal name, website, contact information, articles of incorporation, governance, separation of funds, customer complaint handling, and possession of appropriate knowledge,¹⁸⁴ and apply for approval from competent authorities.¹⁸⁵ Licensed crypto asset service providers must always meet licensing conditions.¹⁸⁶

2. The Regulation of Trading

The regulations of trading are necessary to prevent and prohibit market abuse involving crypto assets. The scope of application of this regulation covers “acts carried out by any person concerning crypto assets that are admitted to trading or in respect of which a request for admission to trading has been made.” The rules prohibiting market abuse apply regardless of whether the act occurred on a trading platform.¹⁸⁷

Persons with inside information are prohibited from acquiring or disposing of cryptographic assets related to the information,¹⁸⁸ and inside information must not be illegally disclosed to the outside.¹⁸⁹ Engaging in or attempting to engage in market manipulation is prohibited, and prohibited activities are listed.¹⁹⁰ In addition, “effective arrangements, systems, and

¹⁸³ *Id.*

¹⁸⁴ *Id.* at art. 62, 2023 J.O. (L 150) 118-19.

¹⁸⁵ *Id.* at art. 63, 2023 J.O. (L 150) 120.

¹⁸⁶ Commission Regulation 2023/1114 of May 31, 2023, on Markets in Crypto-Assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, art. 59, 2023 J.O. (L 150) 115.

¹⁸⁷ *Id.* at art. 86, 2023 J.O. (L 150) 140.

¹⁸⁸ *Id.* at art. 89, 2023 J.O. (L 150) 142.

¹⁸⁹ *Id.* at art. 90, 2023 J.O. (L 150) 142.

¹⁹⁰ *Id.* at art. 91, 2023 J.O. (L 150) 143 (“(2) For the purposes of this Regulation, market manipulation shall comprise any of the following activities: (a) unless carried out for legitimate reasons, entering into a transaction, placing an order to trade or engaging in any other behaviour which: (i) gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of, a crypto-asset; (ii) secures, or is likely to secure, the price of one or several crypto-assets at an abnormal or artificial level; (b) entering into a transaction, placing an order to trade or any other activity or behaviour which affects or is likely to affect the price of one or several crypto-assets, while employing a fictitious device or any other form of deception or contrivance; (c) disseminating information through the media, including the internet, or by any other means, which gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of one or several crypto-assets, or secures or is likely to secure, the price of

procedures to prevent and detect market abuse” are required, and all reasonable suspicions of market abuse or attempted market abuse must be reported to the competent authorities.¹⁹¹

D. South Korea

1. Market Entry Regulation

The Virtual Asset User Protection Act and the Act on Reporting and Using Specified Financial Transaction Information (The Specified Financial Information Act) regulate crypto asset services in South Korea. The Specified Financial Information Act functions as an anti-money laundering measure to prevent illicit financial activities and has been regulating crypto asset exchanges during the regulatory gap period for crypto assets. The definition of a “crypto asset service provider” is nearly identical under both laws.¹⁹² Due to the rapidly changing nature of the crypto asset

one or several crypto-assets, at an abnormal or artificial level, including the dissemination of rumours, where the person who engaged in the dissemination knew, or ought to have known, that the information was false or misleading. (3) The following behaviour shall, inter alia, be considered market manipulation: (a)securing a dominant position over the supply of, or demand for, a crypto-asset, which has, or is likely to have, the effect of fixing, directly or indirectly, purchase or sale prices or creates, or is likely to create, other unfair trading conditions; (b)the placing of orders to a trading platform for crypto-assets, including any cancellation or modification thereof, by any available means of trading, and which has one of the effects referred to in paragraph 2, point (a), by: (i)disrupting or delaying the functioning of the trading platform for crypto-assets or engaging into any activities that are likely to have that effect; (ii) making it more difficult for other persons to identify genuine orders on the trading platform for crypto-assets or engaging into any activities that are likely to have that effect, including by entering orders which result in the destabilisation of the normal functioning of the trading platform for crypto-assets;(iii) creating a false or misleading signal about the supply of, or demand for, or price of, a crypto-asset, in particular by entering orders to initiate or exacerbate a trend, or engaging into any activities that are likely to have that effect; (c) taking advantage of occasional or regular access to the traditional or electronic media by voicing an opinion about a crypto-asset, while having previously taken positions on that crypto-asset, and profiting subsequently from the impact of the opinions voiced on the price of that crypto-asset, without having simultaneously disclosed that conflict of interest to the public in a proper and effective way.”).

¹⁹¹ *Id.* at art. 92, 2023 J.O. (L 150) 143.

¹⁹² Act on Reporting and Using Specified Financial Transaction Information, Act No. 6516, Sept. 27, 2001, amended by Act No. 17299, May 19, 2020, art. 2.1 (n) (S. Kor.), translated in Korea Legislation Research Institute online database, https://elaw.klri.re.kr/kor_service/lawView.do?hseq=60111&lang=ENG [<https://perma.cc/C7L2-37C9>]. (“An entity which conducts any of the following activities in relation to virtual assets (hereinafter referred to as “virtual asset service provider[?]”): (i) Selling or purchasing any virtual asset; (ii) Exchanging a virtual asset for any other asset; (iii) Transferring virtual assets, which is prescribed by Presidential Decree; (iv) Keeping or managing virtual assets; (v) Acting as a broker, an intermediary, or an agent for the activities prescribed in

industry, flexibly expanding the scope of regulation as new business types emerge is necessary.¹⁹³

In March 2020, the Specific Financial Information Act was amended to prevent money laundering following the demands of international organizations such as the FATF to implement international standards.¹⁹⁴ According to the revised act, virtual asset business operators must report to the Korea Financial Intelligence Unit the name of the company and its representative, the location of its place of business and contact information, its articles of incorporation, information regarding equivalent business management regulations, a business promotion plan, its certification of information security management systems, a verified checking account, and more.¹⁹⁵

The Korea Financial Intelligence Unit may refuse to report the following cases: a person who fails to obtain certification of an information security management system; a person who does not conduct financial transactions through a deposit and withdrawal account in which a real name can be verified; and a person for whom five years have not elapsed since his or her sentence of a fine or heavier punishment declared by a court under finance-related statutes.¹⁹⁶ However, the existing entry regulations for virtual asset business operators appear to be limited to the purposes of preventing money laundering and protecting information rather than regulating crypto asset businesses.

(i) and (ii); (vi) Other activities prescribed by Presidential Decree, which are highly likely to be used in money laundering and financing of terrorism in connection with virtual assets.” The entity which conducts “[o]ther activities prescribed by Presidential Decree, which are highly likely to be used in money laundering and financing of terrorism in connection with virtual assets” is also included as a crypto asset service provider under the Specified Financial Information Act, which is a difference between these two laws.).

¹⁹³ Roh, *supra* note 112, at 26-27.

¹⁹⁴ Press Release, Fin. Servs. Comm’n of S. Kor., Amendment Bill to the Act on Reporting and Use of Specific Financial Transaction Information Regarding Virtual Assets Passed in the Plenary Session of the National Assembly (Mar. 5, 2020),

<https://www.fsc.go.kr/no010101/74177?srchCtgry=&curPage=&srchKey=sj&srchText=%EA%B0%80%EC%83%81%EC%9E%90%EC%82%B0&srchBeginDt=2020-01-01&srchEndDt=2020-12-31> [<https://perma.cc/65R2-KJ9D>].

¹⁹⁵ Act on Reporting and Using Specified Financial Transaction Information, art. 7 ¶ 1 (S. Kor.), *translated in* Korea Legislation Research Institute’s online database,

https://elaw.klri.re.kr/eng_mobile/viewer.do?hseq=60111&type=part&key=23 [<https://perma.cc/H9KR-7FBK>]; *id.* at art. 7 ¶ 3.

¹⁹⁶ *Id.*

2. The Regulation of Trading

The Virtual Asset User Protection Act prohibits anyone who has learned material nonpublic information¹⁹⁷ about virtual assets from using this information or allowing others to use this information to trade virtual assets.¹⁹⁸ Moreover, any act that interferes with fair price formation through artificial manipulation is prohibited.¹⁹⁹ This is because prices are determined based on supply and demand in a market with multiple participants.

The Virtual Asset User Protection Act prohibits any person from engaging in the following fraudulent activities related to trading and other transactions of virtual assets: i) using illegitimate means, plans, or schemes, ii) engaging in activities to obtain monetary or other property benefits using false entries, representations, or omissions of material facts necessary to avoid misunderstanding by others about significant matters, iii) utilizing false market prices to entice the trading or other transactions of virtual assets, and iv) entrusting or commissioning acts prohibited under parts I to iii.²⁰⁰ The Virtual Asset User Protection Act more stringently prohibits the sale or other transactions of virtual assets issued by virtual asset business operators or their related parties than the Specified Financial Information Act regulations.²⁰¹

E. Recommendations for Regulating Crypto Asset-Related Businesses

1. Establish Unambiguous Regulatory Jurisdiction and Scope

When a new industry emerges, various discussions are necessary to establish an appropriate regulatory framework. While regulating new industries using existing regulations offers efficiency, this approach may not suit the crypto assets industry. In the U.S., the CFTC struggles to perfectly regulate spot trading, and

¹⁹⁷ Act on the Protection of Virtual Asset Users, *supra* note 31, at art. 10 ¶ 1 (S. Kor.). (Material Nonpublic Information refers to information that can have a significant impact on users' investment decisions before it is disclosed to the public.).

¹⁹⁸ *Id.*

¹⁹⁹ *Id.* ¶¶ 2-3.

²⁰⁰ *Id.* ¶ 4.

²⁰¹ *Id.* ¶ 5. In the background of this legislation, strong legislative measures were taken after FTX, a global Crypto Assets Exchange, went bankrupt in November 2022 due to a liquidity crisis while raising funds through self-issued coins. See Roh, *supra* note 112, at 33; see also Nik Popli, *Why FTX Users May Not Get Their Money Back*, TIME (Nov. 25, 2022), <https://time.com/6236610/ftx-account-holders-money-back/> [<https://perma.cc/NYH8-MPJA>].

the SEC must always argue whether assets are securities.²⁰² Therefore, regulatory jurisdiction and scope must be clearly defined through new legislation for crypto assets, as seen in the efforts from the E.U. and South Korea.

In the U.S., when the CFTC and SEC assert jurisdiction and encounter conflicts, New York State's attempt to treat crypto assets as a distinct industry with a new regulatory framework is meaningful.²⁰³ The regulatory measures for these businesses are highly progressive and systematic. Currently, 31 companies are registered and operating in New York.²⁰⁴ More efficient regulation could be achieved by defining regulatory jurisdiction and scope through federal legislation, such as the Securities Act or the CEA. Moreover, establishing a separate authority to regulate crypto assets would enable effective responses to emerging types of crypto or digital assets.

2. Classify Service Providers and Strengthen Entry Regulation

Crypto asset service providers provide services similar to existing financial market service providers, though the services they provide may evolve. Because various new businesses may appear, appropriate regulations suited to the type of business must be applied. For example, the level of regulation should differ between a service that provides advice and one that conducts the custody and operation of customer assets. Introducing such a regulatory system requires first defining the types of crypto asset services, but comprehensive regulations are also needed to accommodate new services that may arise.

A registration or authorization of business regulation should be introduced as a requirement to become a crypto asset service provider.²⁰⁵ Additionally, whether appropriate capital, human

²⁰² See Joy, *supra* note 162; see also Susan I. Gault-Brown et al., *The SEC's Position on Digital Assets*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Apr. 27, 2019), <https://corpgov.law.harvard.edu/2019/04/27/analysis-of-secs-current-position-on-digital-assets/> [<https://perma.cc/4AV5-47NR>].

²⁰³ See, e.g., *Virtual Currency Businesses*, N.Y. Dep't Fin. Servs., https://www.dfs.ny.gov/virtual_currency_businesses [<https://perma.cc/4ZQB-3BEZ>] (last visited Feb. 27, 2024).

²⁰⁴ *Id.*

²⁰⁵ In cases where investor protection and the asset soundness of service providers are required, an authorization of business regulation is proper. See James Debono & Mark Caruana Scicluna, *The Regime for Crypto-Asset Service Providers under the Markets in Crypto-Assets Regulation*, CHAMBERS & PARTNERS (Feb. 27, 2023), <https://chambers.com/articles/the-regime-for-crypto-asset-service-providers-under-the-markets-in-crypto-assets-regulation>

resources, and internal control regulations have been established must be confirmed. Obligations for service provision and responsibility for non-performance of obligations must also be clearly defined. If crypto asset service providers perform similar roles to traditional financial companies, they should be subject to the same regulatory approach.

3. Strengthen Self-Regulatory Organization and Internal Controls

The crypto asset business is a fintech industry that develops and changes rapidly and requires a high level of technical understanding. Responding to crypto asset businesses is a complex task for governments and authorities. For instance, platforms for trading crypto assets are diversifying into centralized²⁰⁶ and decentralized platforms.²⁰⁷ Therefore, preventive self-regulatory mechanisms must be systematized through an organization that best understands these industries.²⁰⁸

Self-regulatory organizations have authority guaranteed by law and employ disciplinary powers, such as fines and expulsion.²⁰⁹ The U.S. government lacks appropriate regulatory authorities or means for ICOs and spot trading of crypto assets.²¹⁰ Therefore, given the lack of a single regulatory authority in the U.S. for crypto assets, one solution is to establish a unified self-regulatory

[<https://perma.cc/T55J-XFPY>].

²⁰⁶ See Nathan Reiff, *What Are Centralized Cryptocurrency Exchanges?*, INVESTOPEDIA (July 31, 2023), <https://www.investopedia.com/tech/what-are-centralized-cryptocurrency-exchanges> [<https://perma.cc/LP96-V5E7>] (“In the term “centralized cryptocurrency exchange,” the idea of centralization refers to using an intermediary or third party to help conduct transactions. Buyers and sellers alike trust this entity to handle their assets. This is common in a bank setup, where a customer trusts the bank to hold their money.” This is similar to a traditional stock exchange).

²⁰⁷ *What is a DEX?*, COINBASE, <https://www.coinbase.com/learn/crypto-basics/what-is-a-dex> [<https://perma.cc/5EAU-Q77K>] (last visited Nov. 17, 2023) (a decentralized exchange (DEX) is “a peer-to-peer marketplace where transactions occur directly between crypto traders. DEXs fulfill one of crypto’s core possibilities: fostering financial transactions that aren’t officiated by banks, brokers, or any other intermediary. Many popular DEXs, like Uniswap and Sushiswap, run on the Ethereum blockchain.” Through smart contracts, when all specific conditions are met, the contract is automatically executed).

²⁰⁸ FINRA and the NFA have delegated authority and are supervised by the SEC and CFTC. Financial companies are required to join these self-regulatory organizations and adhere to standard regulations. Timothy G. Massad & Howell E. Jackson, *How to Improve Regulation of Crypto Today—Without Congressional Action—and Make the Industry Pay for It* (Hutchins Ctr. on Fiscal & Monetary Pol’y at Brookings, Working Paper No. 79, 2022).

²⁰⁹ *Id.* at 6.

²¹⁰ *Id.* at 8-9.

organization under the jurisdiction of the SEC and CFTC.²¹¹ Securing a clear basis for delegating regulatory authority from the government or Congress through legislation is essential.²¹²

In addition, crypto asset service providers should establish appropriate internal controls because financial institutions manage customer assets.²¹³ Internal control regulation is significant for crypto asset service providers because they have similar functions to financial institutions, which are customer services. Moreover, if crypto asset service providers run out of capital or violate laws, such as those related to embezzlement or fraud, customers may struggle to recover damages. A representative example is FTX, a prominent crypto asset exchange that filed for bankruptcy in 2022.²¹⁴ Therefore, to prevent such incidents, the internal control of each crypto asset service provider must be strengthened, and relevant authorities must inspect compliance.

²¹¹ *Id.* at 15-16.

²¹² There are business associations without legal authority, but because these organizations lack enforcement power, their ability to sanction members is limited.

²¹³ “Internal controls are processes designed and implemented to provide reasonable assurance regarding the achievement of objectives in the following categories: (i) Effectiveness and efficiency of operations; (ii) Reliability of reporting for internal and external use; (iii) Compliance with applicable laws and regulations.” OFF. OF JUST. PROGRAMS TERRITORIES FIN. SUPPORT CTR., INTERNAL CONTROLS GUIDE SHEET (2023), <https://www.ojp.gov/search/results?keys=internal+controls> [https://perma.cc/45M7-L7VW].

²¹⁴ On November 11, 2022, FTX, a cryptocurrency exchange valued at \$32 billion, filed for bankruptcy due to a management crisis and a liquidity crisis such as a sudden influx of customer withdrawal requests. *What Happened to Crypto Giant FTX? A Detailed Summary of What We Actually Know So Far*, FORBES (Dec. 13, 2022, 12:48 PM), <https://www.forbes.com/sites/qai/2022/12/13/what-happened-to-crypto-giant-ftx-a-detailed-summary-of-what-we-actually-know-here/?sh=6452046c60fa> [https://perma.cc/25AE-K4BZ]. In October 2023, FTX founder Sam Bankman-Fried “await[ed] trial on two substantive counts alleging wire fraud as well as five counts charging conspiracies to commit wire fraud, securities fraud, commodities fraud, and money laundering.” *United States v. Bankman-Fried*, 2023 WL 6392718, at *1 (S.D.N.Y. Oct. 1, 2023). On November 2, 2023, Sam Bankman-Fried was convicted by a jury on seven counts of fraud and conspiracy related to the collapse of FTX. Subsequently, on March 28, 2024, he was sentenced to 25 years in prison in the United States District Court for the Southern District of New York. *Bankman-Fried Sentenced to 25 Years for Multi-Billion Dollar FTX Fraud*, REUTERS (May 28, 2024), <https://www.reuters.com/technology/sam-bankman-fried-be-sentenced-multi-billion-dollar-ftx-fraud-2024-03-28/> [https://perma.cc/8YQS-RJ8T].

VII. REGULATION OF INVESTOR PROTECTION IN CRYPTO ASSET INDUSTRIES

A. Lack of Protection Regulation for Crypto Asset Investors

Crypto assets emerged to replace centralized currencies as a new payment method. However, since most crypto assets are highly volatile and have less versatility than centralized currencies, they are recognized as investment assets in the market. However, whether crypto assets are securities or commodities remains controversial, and regulations to protect investors are unclear.

For an investor to invest in the traditional stock market, the feasibility of investment is determined based on the investor's net worth, income, and experience.²¹⁵ Moreover, in the case of crowdfunding, regulations under the SEC rule limit the investment amount based on the investor's income and assets.²¹⁶ Crypto assets as investment objects are highly volatile, have no intrinsic value, and are higher-risk investment instruments than normal securities. However, investors are not subject to any "suitability rule" when buying crypto assets on crypto asset exchanges. Additionally, exchanges are exposed to the risk of theft and bankruptcy. Although crypto assets emerged more than ten years ago, related regulations are only now being enacted. Next, I examine regulations related to investor protection in the E.U. and South Korea, deriving the necessary elements for the global regulatory system.

B. The European Union

One of the important aspects of crypto assets regulated under MiCA is investor property protection. MiCA stipulates that appropriate measures should be established to protect the client's virtual assets, and the client's funds should be deposited with a credit institution or central bank within one day of receipt.²¹⁷ Crypto-asset service providers are responsible for losses from

²¹⁵ See *Rules & Guidance*, FINRA, <https://www.finra.org/rules-guidance/key-topics/suitability> [<https://perma.cc/MM76-6DYX>] (last visited Dec. 23, 2023); James J. Angel & Douglas McCabe, *Ethical Standards for Stockbrokers: Fiduciary or Suitability?*, J. BUS. ETHICS 115, 187 (2012) ("The first part is that the broker has [']reasonable grounds['] to believe that the recommended security is suitable. The second part imposes an affirmative obligation on the broker to find out information from the client to be able to make a suitable recommendation.").

²¹⁶ 17 C.F.R. § 227.100(a).

²¹⁷ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No. 1093/2010 and (EU) No. 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 O.J. (L 150) 2023, art. 70.

incidents involving information and communication technologies, such as cyber-attacks, theft, or malfunctions.²¹⁸ In addition, they should maintain funds or insurance to compensate for losses arising from failing to meet their duties to clients, system errors, and gross negligence.²¹⁹

Crypto asset service providers who provide advice on crypto assets or manage crypto asset portfolios shall assess whether crypto asset services or crypto assets are appropriate for their customers and prospective customers, by considering “their knowledge and experience in investing in crypto-assets, their investment objectives, including risk tolerance, and their financial situation including their ability to bear losses.”²²⁰ Furthermore, crypto asset service providers shall warn clients about the risks of investing in crypto assets.²²¹

“Crypto-asset service providers shall implement and maintain effective policies and procedures . . . to identify, prevent, manage, and disclose conflicts of interest,” considering the scale, nature, and scope of the cryptocurrency services,²²² and they shall clearly disclose this information on their websites.²²³ This information should be disclosed electronically and include enough details about conflicts of interest for clients to make informed decisions about crypto asset services.²²⁴

“Retail holders who purchase crypto-assets . . . from an offeror or from a crypto-asset service provider . . . on behalf of that offeror shall have the right of withdrawal.”²²⁵ Retail holders can exercise this right within 14 calendar days without paying any fees or costs or providing reasons.²²⁶ Crypto asset service providers are

²¹⁸ *Id.*

²¹⁹ Markets in Crypto-Assets, tit. II art. 67 §§ 4, 5, 6, 66 OFF. J. OF THE EUR. UNION 40 (2023).

²²⁰ *Id.* at art. 81 § 1.

²²¹ *Id.* § 9 (“(a) the value of crypto-assets might fluctuate; (b) the crypto-assets might be subject to full or partial losses; (c) the crypto-assets might not be liquid; (d) where applicable, the crypto-assets are not covered by the investor compensation schemes under Directive 97/9/EC; (e) the crypto-assets are not covered by the deposit guarantee schemes under Directive 2014/49/EU.”).

²²² Markets in Crypto-Assets, tit. V ch. 2 art. 72 §1, 66 OFF. OF THE EUR. UNION 40 (2023) (“conflicts of interest between: (a) themselves and: (i) their shareholders or members; (ii) any person directly or indirectly linked to the crypto-asset service providers or their shareholders or members by control; (iii) members of their management body; (iv) their employees; or (v) their clients; or (b) two or more clients whose mutual interests conflict.”).

²²³ *Id.* § 2.

²²⁴ *Id.* § 3.

²²⁵ Markets in Crypto-Assets, tit. II art 13 § 1, 66 OFF. J. OF THE EUR. UNION 40 (2023).

²²⁶ *Id.* § 2.

obligated to establish, publicize, and maintain clear, efficient procedures for the timely and impartial resolution of customer complaints.²²⁷ Clients can also submit complaints to crypto asset service providers without any fees.²²⁸

C. South Korea

To protect users, crypto asset business providers shall separate users' funds from the crypto asset exchange's assets and deposit them in banks or trusts.²²⁹ Seizure of user deposits, which are stored in a separate location, is strictly prohibited.²³⁰ When crypto asset business providers dissolve, liquidate, merge, or go bankrupt, the deposit management agency prioritizes paying users' deposits.²³¹

Crypto asset business providers must maintain a user list to accurately identify the types and quantities of crypto assets each user holds.²³² Users' crypto assets and crypto asset business providers' crypto assets must be stored separately.²³³ Furthermore, crypto asset business providers must securely store a designated percentage of crypto assets offline²³⁴ to safeguard against external risks, such as theft.²³⁵ They can also entrust users' crypto assets to external organizations for storage.²³⁶

Crypto-asset service providers shall prepare for the compensation of user losses arising from incidents such as theft or malfunctions by obtaining insurance or establishing sufficient reserves.²³⁷ Additionally, transaction records should be retained for 15 years to track transactions and rectify errors.²³⁸

²²⁷ Markets in Crypto-Assets, tit. II art 71 § 1, 66 OFF. J. OF THE EUR. UNION 40 (2023).

²²⁸ *Id.* § 2.

²²⁹ Act on the Protection of Virtual Asset Users, *supra* note 31, at art. 6, ¶ 1 (S. Kor.).

²³⁰ *Id.* ¶ 3 (S. Kor.).

²³¹ *Id.* ¶ 4.

²³² Act on the Protection of Virtual Asset Users, *supra* note 31, at art. 7, ¶ 1 (S. Kor.).

²³³ *Id.* ¶ 2.

²³⁴ Frankenfield, *supra* note 11 (identifying the practice of storing crypto assets offline as maintaining a "cold wallet").

²³⁵ Act on the Protection of Virtual Asset Users, *supra* note 31, at art. 7, § 3 (S. Kor.).

²³⁶ *Id.* § 4.

²³⁷ Act on the Protection of Virtual Asset Users, *supra* note 31, at art. 8.

²³⁸ *Id.* at art. 9.

D. Recommendations for Improvement of Investor and User Protection Regarding Crypto Assets

1. Protect Client Assets from Embezzlement and Bankruptcy of Crypto Asset Service Providers and Accidents such as Cyber-Attacks

Since mixing the crypto asset service provider's assets with the client's assets is a problem, three steps can be taken to improve the protection of client assets. The first step is establishing a specific method of segregation. The most basic obligation of financial services that manages customers' funds and assets is safe storage. The laws governing crypto assets in the E.U. and South Korea require crypto asset service providers to deposit clients' funds and crypto assets separately. These asset segregation rules have been emphasized in the aftermath of events such as the FTX bankruptcy.²³⁹ Asset segregation is already obligatory in the securities market to prevent issues like embezzlement or bankruptcy. In the crypto asset market, a specific method of segregation should be established rather than simply requiring custody because, unlike traditional financial markets, crypto asset markets have no separation of business roles, so there is no mutual monitoring function. This structure exposes these markets to embezzlement and liquidity risks.

The next step is that legislation is needed to keep investors' assets separate from the company's assets, even if the company goes bankrupt.²⁴⁰ Clients face significant risk if their crypto asset service provider goes bankrupt and has not separated their assets from their clients'. Unlike the protection system in the stock or derivatives market, if a crypto asset exchange goes bankrupt, customers become general unsecured creditors, and their assets on the exchange are considered part of the overall estate so that customers can lose all their crypto assets.²⁴¹ Bankruptcy laws vary from country to country, but we can refer to the legislative example of South Korea. South Korea has enacted laws to explicitly prevent anyone from seizing client assets that have been deposited.

²³⁹ See Sandali Handagama, *In Wake of FTX, New York Reminds Crypto Firms to Segregate Customer Funds*, COINDESK, <https://www.coindesk.com/policy/2023/01/23/nydfs-publishes-guidance-on-crypto-insolvency-targeting-separation-of-customer-funds/> [<https://perma.cc/4BAY-PY7J>] (last updated Jan. 23, 2023).

²⁴⁰ Massad & Jackson, *supra* note 208, at 12 ("While an SRO could not create a SIPC-like federal insurance scheme, which would require new legislation, it could consider protections that do not require legislative action, such as requiring segregation of assets in bankruptcy remote trusts.").

²⁴¹ *Id.* at 11.

Lastly, the crypto asset service providers must be required to prepare methods to compensate their clients. In general, hacking crypto assets is virtually impossible; still, assets deposited on exchanges are different because exchanges use normal networks such as other financial companies. Cyber-attacks or errors can also occur on the exchange's network.²⁴² However, after depositing assets with the crypto assets service provider, investors cannot independently control risks such as theft or error. Therefore, in preparation for the potential damage caused by such incidents, the crypto asset service providers must be required to prepare ways to compensate customers such as preparing a reserve fund and insuring funds.²⁴³

2. Create Investment Limits According to Investor Classification

The appropriate level of regulation must be determined by considering these two perspectives: suitability and investment restriction. Financial companies generally check investors' suitability when offering financial instruments. Whether crypto assets qualify as financial instruments remains controversial, but investors consider them financial instruments in some cases.²⁴⁴ The price fluctuations of crypto assets are large and difficult to predict based on the information available.²⁴⁵ Therefore, as a financial instrument with high investment risk, applying the suitability rule is appropriate.

In the E.U., under MiCA, a crypto asset service provider can recommend crypto assets only if they are suitable for the client's interests, considering the client's knowledge, experience, objectives, and financial situation. In addition, the provider shall warn their clients if the asset promoter refuses to provide information or they do not sufficiently understand the information provided.²⁴⁶

²⁴² See discussion *supra* Section VI.A.

²⁴³ Both the E.U. and South Korea have mandated this requirement.

²⁴⁴ Edoardo D. Martino, *Comparative Cryptocurrencies and Stablecoins Regulation: A Framework for a Functional Comparative Analysis* 14 (Eur. Banking Inst. Working Paper No. 145, 2023); Sandali Handagama, *UK Lawmakers Vote to Recognize Crypto as Regulated Financial Instruments*, COINDESK (Oct. 25, 2022), <https://finance.yahoo.com/news/uk-lawmakers-vote-recognize-crypto-153128469.html> [<https://perma.cc/E7SH-UMKK>].

²⁴⁵ Cheyenne DeVon, *Bitcoin Lost Over 60% of Its Value in 2022—Here's How Much 6 Other Popular Cryptocurrencies Lost*, CNBC (Dec. 23, 2022), <https://www.cnbc.com/2022/12/23/bitcoin-lost-over-60-percent-of-its-value-in-2022.html> [<https://perma.cc/P28F-89R9>].

²⁴⁶ See Markets in Crypto-Assets, tit. V ch. 2 art. 72 § 1, 66 OFF. J. OF THE EUR.

In addition, it is necessary to introduce investment restrictions for ICOs depending on the investor's financial circumstances, such as crowdfunding regulations and the suitability rule.²⁴⁷ If the suitability rule and investment restrictions are applied, investor accessibility may be reduced, but investors can prevent unbearable losses.

3. Strengthen the Disclosure Regulation

The white paper is a crucial foundation for customer decision-making when accepting offers to buy crypto assets. It also plays an important role in guiding customer decisions while trading crypto assets in the market. Therefore, white paper disclosure should not be a one-time regulation; it should be monitored and managed throughout trading crypto assets in the market.

For instance, if significant information in the white paper is omitted or altered, such details must be promptly disclosed to ensure investor awareness. Not only information on the white paper but also information on important matters that occur in the market should be disclosed immediately. Moreover, there may be cases where crypto assets are issued and distributed more than the scheduled quantity, a hard fork is planned, or the issuer's financial situation deteriorates, affecting the trading of crypto assets.

Standards for important information and legal sanctions for delayed disclosure are necessary to enhance the effectiveness of disclosure regulations. Additionally, responsibility should be reinforced by imposing disclosure obligations on crypto asset exchanges. These regulations may bring an effect in listing only crypto assets issued by credible issuers on exchanges rather than indiscriminate crypto assets.

4. Strengthen Customer Rights Relief Methods

There may be cases where customers cannot make a prudent decision due to inaccurate information or a lack of understanding. Therefore, customers should be protected by regulation granting a specific period after purchasing from the issuer, during which the customer can withdraw the transaction.²⁴⁸ When exercising this

UNION 40 (2023).

²⁴⁷ *Regulation Crowdfunding*, SEC. & EXCH. COMM'N, <https://www.sec.gov/education/smallbusiness/exemptofferings/regcrowdfunding> [<https://perma.cc/WN2R-T4QP>] (last visited Dec. 23, 2023).

²⁴⁸ *Markets in Crypto-Assets*, tit. II art. 13 § 1, 66 OFF. J. OF THE EUR. UNION 40 (2023) ("Retail holders who purchase crypto-assets other than asset-referenced

right, they should be recognized only by expressing intent without additional reasons or costs. This is because the customers are in a worse position than the service provider, so if the burden of proof is imposed, the right of withdrawal may be less effective.

In addition, even if a dispute arises between a customer and a service provider, the mediation method related to existing financial product disputes cannot be used because crypto assets are not financial instruments. Therefore, there is a need for alternative dispute resolution methods that make it easier for customers to resolve disputes rather than complex litigation.²⁴⁹

VIII. CONCLUSION

So far, I have discussed ways to establish an effective crypto asset market regulatory framework for the crypto asset industry. Despite the uncertain regulatory direction, crypto asset regulation is necessary because substantial transactions, similar to financial instruments, occur among global investors. Investors should be protected from financial crimes, such as fraud.

The first step, understanding the legal status of crypto assets, is essential for establishing a regulatory framework. Crypto assets are a new type of digital collection that the public wants to trade for profit. Two approaches are discussed to regulate the new industry: applying existing legal rules governing devices with similar legal status or creating a new integrated regulatory framework akin to the E.U. and South Korea. Any new regulatory framework must be effective and establish clear regulatory jurisdiction and scope.

Next, introducing a unified global regulatory framework for efficient and consistent regulation is crucial for preventing criminal exploitation of regulatory differences between countries. Hence, international cooperation is essential to develop detailed regulatory standards. In addition, considering the nature of crypto assets being traded globally, it is necessary to strengthen disclosure regulations regarding the creation and sale of crypto assets and establish a

tokens and e-money tokens either directly from an offeror or from a crypto-asset service provider placing crypto-assets on behalf of that offeror shall have a right of withdrawal. Retail holders shall have a period of 14 calendar days within which to withdraw from their agreement to purchase crypto-assets other than asset-referenced tokens and e-money tokens without incurring any fees or costs and without being required to give reasons. The period of withdrawal shall begin from the date of the agreement of the retail holder to purchase those crypto-assets.”).

²⁴⁹ Roh, *supra* note 112, at 35.

registration system. Additionally, crypto asset exchanges should be prohibited from providing services for unregistered crypto assets.

Moreover, to enhance the soundness of crypto asset service providers, compliance systems for businesses should be strengthened, and self-regulatory organizations should be established. Capital, human resources, and internal control regulations should be confirmed by introducing entry regulations. To protect investors, segregation of investor assets, classification of investor types, strengthening of crypto asset disclosure regulations, and redress methods for investor rights must be implemented.

Last but not least, the regulatory direction should focus on stabilizing the market, preventing unfair practices, and ensuring investor protection. Continuous monitoring, international cooperation, and the establishment of clear regulatory frameworks are needed to regulate the evolving crypto asset industry appropriately.