Trading Securities as Digital Tokens: is a Secondary Market Practicable for Tokenized Exempt Securities?

Chen Wang

Follow this and additional works at: https://scholars.unh.edu/unh_lr

Repository Citation

This Article is brought to you for free and open access by the University of New Hampshire – Franklin Pierce School of Law at University of New Hampshire Scholars’ Repository. It has been accepted for inclusion in The University of New Hampshire Law Review by an authorized editor of University of New Hampshire Scholars' Repository. For more information, please contact sue.zago@law.unh.edu.
Chen Wang

Trading Securities as Digital Tokens: is a Secondary Market Practicable for Tokenized Exempt Securities?

22 U.N.H. L. Rev. 39 (2023)

ABSTRACT. Securities offered under exemptions such as Regulation Crowdfunding, Regulation A, and Rule 506 without registering with the Securities and Exchange Commission (SEC) are classified as exempt securities. These securities typically lack liquidity in the secondary market. However, the growing popularity of blockchain technology and smart contracts has made token offerings increasingly prevalent. Fintech firms like tZERO and Securitize provide services to tokenize securities that have already been offered, while numerous crypto trading platforms facilitate the trading of digital tokens. In theory, tokenizing exempt securities and making the resulting tokens available for resale on digital token trading platforms could grant these securities access to the massive crypto market and enhance their liquidity.

This article examines the multifaceted dimensions of such a market, employing a combination of real-world examples and rigorous investigation to illustrate the transformative potential of blockchain technology in revolutionizing the trading and management of exempt securities.

The article begins with a systematic exploration of the technological feasibility of establishing a secondary market for tokenized exempt securities, delving into the intricacies of blockchain technology, digital tokens, token offerings, and smart contracts. By drawing upon real-world examples, the article demonstrates the potential of these emerging technologies to empower investors in exempt securities.

Subsequently, the focus shifts to the complex regulatory landscape surrounding token offerings, dissecting key developments and concerns related to securities laws. By examining crucial events such as the Hinman speech, the Framework for “Investment Contract” Analysis of Digital Assets, and Coinbase’s petition to the SEC for a new regulatory framework, the article offers a panoramic view of the challenges and opportunities that the secondary market for tokenized exempt securities faces.

The article then proposes a structure for a secondary market for tokenized exempt securities, revisits the voluntary disclosure nature of token offerings, and engages in discussions of the SEC’s application of federal securities laws to digital tokens. It posits that tokens resulting from the tokenization of exempt securities are merely digital representations of these securities and should not be treated as independent securities.

The article proceeds to synthesize various threads of discussion to focus on reinforcing and refining existing regulations pertaining to the secondary market for tokenized exempt securities. It suggests enhancements to the disclosure regime, such as the introduction of white papers emphasizing technical details and regularly updated warning boxes and indicating a disclosure-focused approach to regulating offerings of tokenized exempt securities. Moreover, the article
examines current regulatory and market practices of digital token trading platforms and investigates the roles of the SEC and the CFTC in regulating tokenized assets.

In conclusion, this article’s comprehensive discussion on the regulatory landscape for tokenized exempt securities serves to elucidate the challenges and opportunities that lie ahead in this rapidly evolving domain.

AUTHOR. Chen Wang, JSD ‘21, LLM ‘14, UC Berkeley School of Law. I extend my heartfelt gratitude to Mr. Cohen of DLX Law and Professor Prasad Krishnamurthy of Berkeley Law, whose inspiration and invaluable advice were instrumental throughout the process of completing this article, and to the University of New Hampshire Law Review Editorial Board for their dedication and efforts throughout the editing process.
INTRODUCTION ........................................................................................................ 43

I. TECHNICAL FEASIBILITY OF A SECONDARY MARKET FOR TOKENIZED EXEMPT SECURITIES .................................................................................. 49
   A. Introduction to Blockchain and Related Financial Transactions .......... 49
   B. Building a Secondary Market for Tokenized Exempt Securities .......... 52
   C. Advantages and Challenges of a Secondary Market for Tokenized Exempt Securities ........................................................................................................ 56
   D. Conclusion .................................................................................................. 58

II. NAVIGATING THE REGULATORY FRAMEWORK OF THE SEC .......... 58
   A. The Hinman Speech .................................................................................. 59
   C. Coinbase’s Call for a New Regulatory Scheme ...................................... 63
   D. Conclusion ............................................................................................... 65

III. THE STRUCTURE OF A SECONDARY MARKET FOR TOKENIZED EXEMPT SECURITIES AND ITS LEGAL FEASIBILITY ........................................... 65
   A. Proposed Structure of the Secondary Market ....................................... 65
   B. Voluntary-Based Disclosures for the Secondary Market ...................... 67
   C. Separating Tokens from Investment Contract Securities .................... 70
   D. Why Tokens Embodying Legal Rights Could Still Not Be a Security .... 76
   E. Conclusion .................................................................................................. 79

IV. PROPOSED REGULATORY OVERHAUL OF A SECONDARY MARKET FOR TOKENIZED EXEMPT SECURITIES ..................................................... 80
   A. Enhancing Investor Protection through Targeted Amendments to the SEC’s Existing Regulations ................................................................. 80
   B. Regulations of White Papers .................................................................. 82
   C. Regulations of Digital Token Trading Platforms .................................... 86
   D. The Role of the SEC and the CFTC In Regulating Tokenized Assets ..... 90
   E. Conclusion .................................................................................................. 91

CONCLUSION .................................................................................................... 91
INTRODUCTION

In the U.S., an issuer intending to offer to sell or sell securities in the public market should either file a registration statement with the SEC1 or find an exemption from the registration requirement.2 One type of exemption allows securities to be offered privately. Typically, securities offered under a private exemption from registration are considered restricted securities.3 Restricted securities cannot be freely traded unless they are registered with the SEC or qualify for an exemption from the registration for resale.4 Although there is no limit on the amount of capital raised, securities offered under the popular private exemption Rule 506 are subject to strict requirements for resale exemptions.5 In the 2021 fiscal year, companies that utilized Rule 5066 raised $124 billion,7 making it the most crucial exemption for private placements.8

Another set of exemptions allows issuers to offer unregistered securities to the public. Regulation Crowdfunding (Regulation CF) permits issuers to offer securities to the public with a maximum of $5 million in one year.9 Meanwhile, Regulation A allows issuers to offer securities to the public for up to $20 million (Tier 1) or $75 million (Tier 2) in one year.10 These two offering exemptions (collectively “small offering exemptions”) provided to small and mid-sized enterprises contain less restrictive requirements on resale. Securities offered under Regulation CF can be resold to the public after one year from their issuance.11 Securities offered under

---

1 Securities Act of 1993, 15 U.S.C. §77e(c) (bars an issuer from offering to sell or selling a security until a registration statement has been filed with the SEC); Securities Act of 1993, 15 U.S.C. § 77e(a)(1) (prohibits sales of a security until the registration statement of that security has become effective).
2 Id. at §77d(a)(4) (provides exemptions from the Section 5 registration requirement).
4 Id. at § 230.144 (is such a resale exemption from the registration requirement).
5 See id. at §230.144(a)(3)(ii).
6 Id. at § 230.506.
11 Id.
Regulation A, on the other hand, can be freely resold as soon as they are issued.\textsuperscript{12} Regulation CF is a popular choice among founders of startups and small businesses who require financing. In 2022, at least $494 million was raised through Regulation CF offerings.\textsuperscript{13} Additionally, at least $431.8 million was raised through Regulation A offerings.\textsuperscript{14} The amount of capital raised under Regulation CF and Regulation A is undoubtedly dwarfed by that raised under Rule 506. However, since Rule 506 offerings are primarily issued to accredited investors,\textsuperscript{15} early-stage small businesses can rely on Regulation CF and Regulation A offerings to raise capital from the public before growing larger.

There are three primary crowdfunding funding platforms: Wefunder, StartEngine, and Republic. These platforms were responsible for approximately 80\% of all funds raised in 2022 through Regulation CF offerings.\textsuperscript{16} Additionally, these three platforms also facilitate Regulation A offerings.

Investors who purchase securities in the primary market may want to sell or trade them on the secondary market. However, there are very few platforms available for trading securities that are offered under small offering exemptions.

StartEngine, as a leading crowdfunding platform in the U.S., was a pioneer in creating a secondary marketplace for securities offered under small offering exemptions in the U.S. called StartEngine Secondary\textsuperscript{17} in 2020. According to StartEngine, StartEngine Secondary is an alternative trading system (“ATS”) regulated by the SEC and operated by StartEngine Primary, LLC, a broker dealer registered with the SEC and the Financial Industry Regulatory Authority (“FINRA”).\textsuperscript{18}

An alternative trading system (“ATS”) is a regulated electronic trading system that matches orders between buyers and sellers of securities under the supervision of the SEC.\textsuperscript{19} An ATS functions similarly to a stock exchange\textsuperscript{20} but may be exempt

\textsuperscript{12} Id.
\textsuperscript{14} Id.
\textsuperscript{15} U.S. SEC. AND EXCH. COMM‘N, supra note 9, Overview of Capital Raising Exemptions (“Offerings under Rule 506(b) can be issued to up to 35 sophisticated but non-accredited investors in a 90-day period and to an unlimited number of accredited investors”... “Offerings under Rule 506(c) are only allowed to be issued to accredited investors.”); see 17 C.F.R. §§ 230.501(a)(3), (a)(5) (defines accredited investors as wealthy individual investors and institutional investors).
\textsuperscript{16} See Belley, supra note 13.
\textsuperscript{17} Secondary - StartEngine, STARTENGINE, https://www.startengine.com/trade [https://perma.cc/KNZ6-JUYC].
\textsuperscript{18} Id.
TRADING SECURITIES AS DIGITAL TOKENS

from registering with the SEC as a stock exchange if it complies with Regulation ATS. However, an ATS should be registered with the SEC as a broker-dealer.23

Despite being launched for a couple of years, StartEngine Secondary has seen very little activity in terms of companies listing themselves on the platform and actual trading. This lack of activity highlights the illiquidity of securities offered under small offering exemptions.

StartEngine Secondary’s underwhelming performance has not deterred other funding platforms from pursuing the creation of their own secondary marketplaces. In January 2023, Netcapital, the operator of a registered funding portal called Netcapital Funding Portal, announced a partnership with Templum Markets LLC, an ATS operator, to establish a secondary marketplace for investors who purchase securities offered under Regulation CF on the Netcapital Funding Portal.26

Republic, another leading crowdfunding platform, has gone further than just developing a secondary marketplace for securities offered under small offering exemptions. In October 2021, Republic publicly announced that it was actively seeking a partner or considering building a secondary market for “digital securities.”27 As StartEngine Secondary has been inactive, Republic’s secondary marketplace should have provided us with insight into what a secondary market for digital securities might look like. However, as Republic has not yet built such a marketplace and few details about its progress have been disclosed, we can only imagine how such a marketplace would function.

The liquidity problem associated with trading securities offered under small offering exemptions is evident from the example of StartEngine Secondary. This

---

21 See id. at § 240.3a1–1(a)(2).
22 Id. at 17 C.F.R. §§ 242.300–304.
23 See id. at § 242.301(b)(1).
24 See STARTENGINE CROWDFUNDING, INC., Form 10-Q (Quarterly report), filed on 2022-11–14, at 21 (“In the first half of 2021, the company itself was the only one quoted on this platform. Additional companies were quoted on the platform beginning in August 2021.”), and at 22 See StartEngine Crowdfunding Inc., Quarterly Report (Form 10-Q) (Sept. 30, 2022) (“In the first half of 2021, the company itself was the only one quoted on this platform. Additional companies were quoted on the platform beginning in August 2021.”); StartEngine Crowdfunding Inc., Quarterly Report (Form 10-Q) (Sept. 30, 2022) at 22 (“As of December 31, 2021, four additional issuers were quoted on the platform.”).
25 Id. at 23 (“StartEngine Secondary which did not have any trades in Q3 2022”).
dilemma could stem from information asymmetry related to exempt securities. Unlike publicly traded companies, issuers of exempt securities are not required to disclose as much information about their financial performance and operations.\textsuperscript{28} This can make it challenging for investors on the secondary market to accurately value the securities and assess the associated investment risks. In the case of small offerings, the liquidity problem could be more pronounced. Small offering exemptions are meant for smaller companies, and the securities offered through these exemptions may be less attractive to institutional investors and other large investors seeking more substantial investments with greater liquidity.\textsuperscript{29}

An efficient secondary market could enhance liquidity for trading securities offered under Regulation CF, and potentially increase the success rate of crowdfunding offerings. Additionally, crowdfunding platforms are permitted to receive a portion of the securities issued on their platform as compensation for their services.\textsuperscript{30} Therefore, crowdfunding platforms are incentivized to establish liquid, efficient, and effective secondary marketplaces.

Estonia is a Baltic country known for pioneering digital innovation.\textsuperscript{31} In 2020, the Estonian Parliament amended the country’s commercial code to allow shares of a private limited company\textsuperscript{32} with at least €10,000 of fully paid share capital to be transferred using a format that can be reproduced in writing.\textsuperscript{33} The Estonian Civil Code defines “forms which can be reproduced in writing” as a form “enabling repeated written reproduction.”\textsuperscript{34} Under this definition, transfers of shares in the form of digital tokens are treated as valid transfers satisfying the in-writing format requirement.\textsuperscript{35}

The amendment to the Estonian Commercial Code has created opportunities

\textsuperscript{28} See U.S. SEC. AND EXCH. COMM’N., supra note 8 (”[U]nlike with a publicly traded company, information about a private company is not typically available to the public, and a private company may not provide information to you or your buyer. Any restricted status of your securities may also transfer to your buyer.”).

\textsuperscript{29} See Belley, supra note 13. (In 2022, investors invested an average of $1,256 in offerings under Regulation CF and $4,470 in offerings under Regulation A. Thus, investments in these offerings are typically of a smaller magnitude.)

\textsuperscript{30} See 17 C.F.R. § 227.300(b) (2023).

\textsuperscript{31} See This Is the Story of the World’s Most Advanced Digital Society, E-ESTONIA, https://e-estonia.com/story/ [https://perma.cc/F74H-9QZ6], for the history of how Estonia has digitized its economy.

\textsuperscript{32} COMMERCIAL CODE [COM. CODE] § 135(1) (Estonia) § 135(1) (defines a private limited company as “a company which has share capital divided into private limited company shares”).

\textsuperscript{33} Id. at § 149(6).


for creating a digital secondary market for securities transactions. Fundwise, a crowdfunding portal based in Estonia, has partnered with Ignium, a security token issuance and settlement platform also based in Estonia, to assist issuers on Fundwise in tokenizing their securities and enabling holders of these tokenized securities to trade them on Ignium.\footnote{See \textit{Everything You Should Know About Our Secondary Market Solutions}, FUNDWISE (Dec. 17, 2020), https://fundwise.me/et/node/467 [https://perma.cc/6QAE-WQR8].} According to Fundwise, buyers and sellers of tokenized securities can post their bids and quotations on Ignium’s discussion board.\footnote{Id.} If they reach an agreement, they can confirm the closing of the deal and Ignium will settle the transaction instantly. Parties can choose to make payments outside the Ignium system or use Ignium digital coins anchored with fiat currency.\footnote{Id.}

At first glance, Fundwise’s experiment offers crowdfunding issuers and investors easy access to the vast world of digital asset investment, making crowdfunding financing and investing more appealing. For holders of crowdfunding securities, they can tokenize their securities and resell them to investors on digital asset trading platforms if they choose to do so. The resale can be autonomously settled and recorded on the blockchain.

The Fundwise–Ignium partnership provides us with a glimpse of what the Republic’s secondary marketplace for digital securities might look like if it comes to fruition someday. In fact, the establishment of an efficient secondary market for digital securities in the U.S. is not an impossible dream. As early as July 2017, the Delaware General Assembly amended Delaware General Corporation Law to permit Delaware corporations to keep their stock ledgers on blockchain networks.\footnote{See \
\textit{Delaware General Corporation Law} sec. 7 §224 (2017), https://legis.delaware.gov/SessionLaws/Chapter?id=15151 [https://perma.cc/3EJQ-CVNR].} The enabling state corporation law, along with the technological capabilities of U.S. companies, should pave the way for the adoption and trading of tokenized securities by U.S. companies.\footnote{See \textit{About the Division of Corporations}, DELAWARE.GOV, https://corp.delaware.gov/aboutagency/ [https://perma.cc/GHX8-GCJ5] ("Over one million U.S. corporations and 66% of Fortune 500 companies, have been incorporated in Delaware and are subject to the Delaware General Corporation Law.").}

However, there are still legal uncertainties that need to be addressed. For example, if a secondary market is established for tokenized securities offered under small offering exemptions in the U.S. and token holders sell tokens resulting from tokenizing their securities on this market, it raises questions about whether they are launching Initial Coin Offerings ("ICOs") on the market. Additionally, should the token issuers make new disclosures, and how should this secondary market be regulated? These are some of the legal issues that need to be resolved.

This article discusses the practicability of establishing a secondary market for
tokenized exempt securities in the U.S. as a matter of law and practice. This article will primarily focus on tokenized securities offered under Regulation CF and Regulation A. However, this discussion would also benefit trading of tokenized exempt securities offered under other exemptions, such as Rule 506.

Section 2 will discuss the technological feasibility of a secondary market for tokenized exempt securities in the U.S. First, the section will provide a primer on blockchain, digital tokens, and token offerings. Then, the section will explore how complex legal documents, such as Simple Agreements for Future Equity (“SAFE”), can be programmed and executed automatically by smart contracts. This section will also provide real-world examples of securities tokenization service providers, such as tZERO and Securitize. After demonstrating the technological feasibility of such a secondary market, the section will discuss the benefits and challenges of the market with a particular focus on legal and regulatory challenges.

Section 3 will examine the complex regulatory landscape surrounding token offerings and their compliance with the securities laws. The section will discuss key developments, including the Hinman speech, which provided insights on applying the Howey Test to digital assets, and the Framework for “Investment Contract” Analysis of Digital Assets, providing factors for applying the Howey Test to digital tokens. This section will also explore Coinbase’s call for a tailored regulatory scheme for digital tokens, highlighting concerns with the current regulation’s applicability and effectiveness.

Section 4 will focus on the structure of the market and the legal issues that surround it. Section 4.1 will explore the market’s structure and its participants, concluding that tokens resulting from the tokenization of exempt securities offered under exemptions are simply digital representations of these securities. Offering these tokens does not constitute a new fundraising transaction. This section will also note that the current digital token market is based on voluntary disclosure and suggest the addition of a warning box to the voluntary disclosure regime. Next, the section will discuss the SEC’s treatment of numerous token offerings as securities offerings. It will examine arguments that the SEC should differentiate tokens from the transactions that involve these tokens, focus only on fundraising transactions involving tokens, and stop treating tokens without identifiable legal rights as securities. After reviewing the SEC’s embodiment theory, the section will argue that issuers offering tokens resulting from the tokenization of exempt securities offered under exemptions do not raise capital from token offerings or issue new securities to the primary market. Instead, the tokens are merely digital representations of previously issued securities and should not be treated as securities independent of their underlying securities.

Section 5 will concentrate on reinforcing and refining existing regulations related to the secondary market for tokenized exempt securities, rather than introducing an entirely new regulatory framework. The discussion will begin by stressing the importance of a well-structured, organized, and efficient regulatory approach that accommodates tokenized assets. This section will then propose enhancements to the current disclosure regime for tokenized exempt securities by
mandating white papers that particularly emphasize disclosing technical details of tokens and regularly updated warning boxes. Following that, the section will examine current regulatory and market practices for digital token trading platforms and suggest additions to existing rules on this matter. Lastly, the section will investigate the roles of the SEC and the Commodity Futures Trading Commission (“CFTC”) in regulating tokenized assets and how their jurisdictional boundaries should be delineated, providing a comprehensive perspective on the regulatory landscape for tokenized exempt securities.

I. TECHNICAL FEASIBILITY OF A SECONDARY MARKET FOR TOKENIZED EXEMPT SECURITIES

A. Introduction to Blockchain and Related Financial Transactions

Before delving into the legal aspects of a secondary market for tokenized exempt securities, it is crucial to have a fundamental understanding of digital assets and the technological infrastructure that underpins them.

As a hotly discussed object, there have been abundant introductions to blockchain.41 Typically, blockchain is a decentralized digital ledger that is distributed across a network of computers.42 Each block in the chain contains a record of transactions or data and is linked to the previous block in the chain.43 This creates a secure and tamper-proof record of all the activity on the network, making blockchain ideal for applications where security and transparency are essential.44 Bitcoin and Ethereum are two well-known examples of blockchain networks.

Blockchain networks can be centralized or decentralized.45 Centralized blockchain networks are those in which a single entity or group controls the network. This entity has the power to validate transactions, create new blocks, and modify the blockchain’s history.46 Examples of centralized blockchain networks include Ripple and EOS. Decentralized blockchain networks are those in which the

41 See, e.g., JOSEPH J. BAMBARA & PAUL R. ALLEN, BLOCKCHAIN: A PRACTICAL GUIDE TO DEVELOPING BUSINESS, LAW, AND TECHNOLOGY SOLUTIONS (2018); IMRAN BASHIR, MASTERING BLOCKCHAIN (3d ed. 2020); YAGA ET AL., BLOCKCHAIN TECHNOLOGY OVERVIEW (2018).
42 See, e.g., BAMBARA & ALLEN, supra note 41; BASHIR, supra note 41; Yaga et al., supra note 41.
43 See, e.g., BAMBARA & ALLEN, supra note 41; BASHIR, supra note 41; Yaga et al., supra note 41.
46 See Patrizio, supra note 45; Tran, supra note 45.
network is distributed among numerous nodes or computers with no single entity controlling the network.47 In a decentralized blockchain network, each node has a copy of the blockchain and is responsible for validating and processing transactions. Examples of decentralized blockchain networks include Bitcoin and Ethereum.48

There are various financial products built on blockchain networks. Two of them are cryptocurrencies and digital tokens. Cryptocurrencies, such as Bitcoin, Ethereum, and Ripple, are decentralized digital currencies built on their own blockchain networks that operate independently of a central bank or government.49 Meanwhile, digital tokens are digital assets that are built on top of an existing blockchain platform, such as Ethereum. Tokens often represent assets like company shares, or utilities like access to specific services.50 Tokens can be created through a process called ICO or Security Token Offering (“STO”) and traded on digital asset exchanges.51

Tokens can be categorized based on their fungibility into fungible tokens and non-fungible tokens (“NFTs”). Fungible tokens are interchangeable, much like traditional currencies.52 Examples include cryptocurrencies like Bitcoin or Ethereum, and stablecoins like Tether or USD Coin.53 NFTs are unique and non-interchangeable, typically used to represent digital assets such as artwork, collectibles, or in-game items.54

Functionally, tokens can be classified into three types: security tokens, utility tokens, and payment tokens. Security tokens represent investment products, such as equity or debt, on blockchain networks and are generally subject to securities

47 See Patrizio, supra note 45.
50 See Making Crypto and DeFi Accessible and Useable For Everyone, Basic Attention Token, https://basicattentiontoken.org/#bat-utility [https://perma.cc/A87U-C6VQ] (which is a digital token integrated into the Brave browser, a web browser that blocks third-party ads and trackers by default. Users who opt to view advertisements are paid in BAT and can use BAT to tip content creators. On the other hand, advertisers use BAT to pay users for viewing ads, or “users’ attention).
53 Bhalla, supra note 51; Cuban supra note 51.
54 Bhalla, supra note 51; Cuban supra note 51.
laws. Utility tokens grant digital rights to specific products or services on blockchain-based platforms, and they can be used to purchase goods or services within the platform. Payment tokens serve as a means of payment or store of value, facilitating transactions on blockchain-based platforms. All three types of tokens can be traded on digital asset trading platforms.

ICOs typically issue utility tokens and payment tokens, while STOs offer security tokens. STOs are primarily associated with the tokenization of new securities, which involves combining a tokenization process with a capital-raising process. This means that companies can issue security tokens to raise capital from investors, while investors can purchase these tokens to invest in the company or project. Since security tokens are digital representations of traditional securities, STOs that involve the issuance and sale of these tokens must comply with the same regulations as traditional securities. Put differently, a STO should either be registered with the SEC or structured under an exemption. However, in the case of ICOs, the regulatory landscape is more ambiguous with regulators struggling to determine how to classify these tokens and what type of regulatory framework should be applied to them.

It is important to distinguish between security tokens and tokenized securities. Security tokens are native to the blockchain and considered securities but do not exist outside of the blockchain. In contrast, tokenized securities are representations...
of real-world securities embedded within the blockchain. Put differently, all tokenized securities fall under the category of security tokens, but not all security tokens are tokenized securities. Security tokens are created specifically for blockchain platforms and cannot exist outside of the blockchain, while tokenized securities are traditional securities adapted for trading on a blockchain platform but can still be traded outside of it. Some security tokens may represent privileges that are not associated with traditional securities and may not necessarily be tokenized versions of existing securities.

### B. Building a Secondary Market for Tokenized Exempt Securities

A key technology to automate transactions under Regulation CF is smart contract technology. Smart contracts are machine-readable codes run on a blockchain platform, event-driven programs, and autonomous once they are created. In other words, smart contracts are automated based on pre-set rules and do not allow user intervention once activated. Transactions initiated by a user are executed automatically according to these rules, and once completed, they are irreversible and immutable.

Smart contracts are widely developed on the Ethereum network because of its Ethereum Virtual Machine ("EVM"), a virtual machine network. Ethereum smart contract protocols, including a programming language, Solidarity, and ERC standards, provide guidelines for creating, executing, and interacting with smart contracts on the network. Ethereum Request for Comment ("ERC") is a standard protocol used for creating and implementing smart contracts on the Ethereum network. ERC standards define how tokens, including cryptocurrencies, are created, transferred, and managed on the Ethereum network. Some ERC standards also include governance features that allow smart contract developers to incorporate

---

63 Smith et al., *Tokenized Securities and Commercial Real Estate*, SSRN 9–10 (May 14, 2019), https://ssrn.com/abstract=3438286 [https://perma.cc/4AAY-Q2C3] ("We believe it is important to make a distinction between two types of blockchain-based representations of securities: "security tokens," which are blockchain-native tokens that are securities but do not exist outside of the blockchain, versus "tokenized securities," which are blockchain-embedded representations of real world securities.").


65 See Zou et al., *Smart Contract Development: Challenges and Opportunities*, 47 IEEE TRANSACTIONS ON SOFTWARE ENG’G., 2084 (2021) ("The self-executing nature of smart contracts provides a tremendous opportunity for use in many fields that rely on data to drive transactions.").

66 See Mohanta et al., *An Overview of Smart Contract and Use Cases in Blockchain Technology* 1 (Int’l Conf. on Computing and Networking Tech., 2018) (The most-used programing language used to write smart contracts is Solidarity).

code-based governance mechanisms into their contracts.\textsuperscript{68}

Table 1: Summary of Ethereum Smart Contract Protocols

<table>
<thead>
<tr>
<th>Protocol</th>
<th>Functionality</th>
<th>Governance Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC-20</td>
<td>Fungible tokens; standard for token-based projects</td>
<td>Token-based governance,\textsuperscript{69} often used for governance tokens; can be used in Decentralized Autonomous Organizations\textsuperscript{70}</td>
</tr>
<tr>
<td>ERC-721</td>
<td>NFTs; unique, indivisible tokens</td>
<td>Token-based governance, NFTs can represent voting power or membership in DAOs</td>
</tr>
<tr>
<td>ERC-1155</td>
<td>Combines fungible and non-fungible tokens in one contract</td>
<td>Token-based governance, both fungible and non-fungible tokens; can be used for voting in DAOs</td>
</tr>
<tr>
<td>ERC-777</td>
<td>Upgraded ERC-20 with hooks,\textsuperscript{71} and operator functionality\textsuperscript{72}</td>
<td>Token-based governance, operators can manage tokens on behalf of users; can be used in DAOs</td>
</tr>
<tr>
<td>ERC-223</td>
<td>Addresses lost tokens and optimizes gas usage in ERC-20</td>
<td>Token-based governance, similar to ERC-20 but with additional safety features; can be used in DAOs</td>
</tr>
<tr>
<td>ERC-884\textsuperscript{73}</td>
<td>Equity tokens representing shares in a company</td>
<td>Token-based governance, allows for decentralized management of shareholder rights and voting in companies</td>
</tr>
</tbody>
</table>


\textsuperscript{69} Token-based governance is a governance system where token holders can propose and vote on changes to the project, with voting power proportional to the number of tokens they hold.

\textsuperscript{70} Decentralized Autonomous Organizations (DAOs) refer to organizations run by smart contracts and governed by their members, who can vote on proposals and changes.

\textsuperscript{71} Hooks are customizable actions that occur before or after token transfers in a smart contract.

\textsuperscript{72} Operator functionality refers to a feature that enables third-party management of tokens on behalf of users.

\textsuperscript{73} This standard was created in response to Delaware Senate Bill no.69, with the purpose of allowing a company “to raise funds through an initial public offering (IPO) or private equity sale in compliance with Delaware Corporations Law, without requiring a customized share registry or involving a traditional stock exchange or transfer agent.” See source cited supra note 39 and accompanying text. Dave Sag, Tokenising Shares: Introducing ERC-884, Medium (Apr. 16, 2018), https://medium.com/coinmonks/tokenising-shares-introducing-erc-884-cc491258e413, [https://perma.cc/5P9X-Q45H].
Smart contract technology can be employed to execute complex legal instruments. For instance, a popular convertible security—simple agreement for future equity or the SAFE issued in the offerings under Regulation CF can be encoded and self-executing using the smart contract according to a paper authored by Hemang Subramanian.

To build a self-executing SAFE contract, the author first examines the rules contained in a 2018 Y-Combinator Safe template and then pinpoints four events that the rules are to be applied, including equity financing, liquidity, dissolution, and termination. Once an event takes place and the corresponding rules are triggered, the EVM will implement the rules and the execution information will be recorded in the blockchain network. After executing the rules, the blockchain network will then move to settle the transaction.

The author further proposes a layered technology structure, under which various kinds of instruments can be tokenized and structured as smart contracts,

---

74 The SAFE is one of the most issued types of securities among offerings under Regulation CF. The SAFE was created by Y Combinator, a leading startup incubator, and has been adapted by major crowdfunding platforms. For example, Wefunder has introduced its own Crowd SAFE instrument. For a more detailed explanation of the SAFE, please refer to Chen Wang’s The Way to Revive Crowdfunding in China: Based on the Rules and Practices in the U.S. See Chen Wang, The Way to Revive Crowdfunding in China: Based on the Rules and Practices in the U.S., 23 UC DAVIS BUS. L.J. 240, 271–78 (2023), https://blj.ucdavis.edu/archives/vol-23-no-2/wang-article.html, [https://perma.cc/VGM2-TV5A].

75 See Hemang Subramanian, Security tokens: architecture, smart contract applications and illustrations using SAFE, 46 MANAGERIAL FIN. 735, 737–38, no. 6 (2020).


77 An “equity financing” is defined as a transaction or a series of transactions aimed at raising capital by the issuer company issuing and selling preferred stock at a fixed valuation. Id. at 3 (“Equity Financing” of Section 2 “Definitions”).

78 A liquidity event means a Change of Control, a Direct Listing or an Initial Public Offering. Id. (“Liquidity Event” of Section 2 “Definitions”). Change of control, direct listing and initial public offering are all defined in the corresponding provisions of Section 2 “Definitions”. Id. at 2-3.

79 A “dissolution event” means termination of the company’s operations, or any other liquidation, dissolution or winding up of the company. Id. at 3 (“Dissolution Event” of Section 2 “Definitions”).

80 Events refers to the termination of the SAFE when the conditions for the equity financing, liquidity event or dissolution event are satisfied. Id. at 2 (“Termination” of Section 1(e)). In Subramanian’s article, a termination happens when a Safe offering failed, i.e., the Safe offering does not meet its minimum raising target, then the Safe issuer returns the purchase amount to investors. Subramanian, supra note 75, at 738, 743.

81 Subramanian, supra note 75, at 739.

82 Id. at 738–740.
such as ICOs and Simple Agreement for Future Tokens. The author argues that an integral SAFE contract can be broken down into four independent sub-contracts: equity financing, liquidity, dissolution, and termination. The author discusses the utility maximization in these four sub-contracts and argues building smart SAFE contracts could reach maximum utility where investors and issuers reach consensus in equity financing, and in some instances, reducing investors’ information asymmetry.

Various academic studies have explored the possibility of using smart contracts to program and automate the execution of the SAFE and other legal instruments on blockchain networks. Overall, the possibility of a smart contract-driven secondary market for tokenized exempt securities is promising. By utilizing smart contracts, legal instruments can be programmed to be self-executing while preserving their governance rights. Once legal instruments have been successfully programmed, the resulting tokenized securities can be traded on digital asset transaction platforms utilizing existing infrastructure for payment and settlement. Therefore, such a secondary market is realizable with respect to technology.

In fact, there are some established platforms that provide securities tokenization services. One of them is tZERO. tZERO offers securities tokenization services, including digitizing various types of securities such as equity and debt. Companies can choose a blockchain network and access smart contract features through tZERO’s digitization services. Additionally, tZERO provides advanced features such as post-issuance management (e.g., paying dividends), and

---

83 Id. at 740. A Simple Agreement for Future Tokens (SAFT) is a contractual investment agreement resembling the SAFE, but investors will receive issuer’s future tokens in return, instead of future equity securities in the case of the SAFE. See Corporate Finance Institute, Simple Agreement for Future Tokens (SAFT) (updated Jan. 8, 2023), https://corporatefinanceinstitute.com/resources/cryptocurrency/simple-agreement-for-future-tokens-saft/, [https://perma.cc/UG9Z-HD6Q].

84 Subramanian, supra note 75, at 742.

85 Id. at 745.


89 Id.
implementing trading restrictions, making its services more attractive.\textsuperscript{90} Another company that provides similar services is Securitize.\textsuperscript{91}

Real-world examples have shown the technological feasibility of a secondary market for tokenized exempt securities. Companies like tZERO and Securitize have already established the necessary technological infrastructure or are actively developing it. Their efforts could contribute to establishing a well-functioning market that provides investors with access to broad liquidity for exempt securities.

\section*{C. Advantages and Challenges of a Secondary Market for Tokenized Exempt Securities}

Creating a secondary market for tokenized securities offered under Regulation CF and Regulation A using smart contracts offers several advantages, including enhanced liquidity, improved efficiency, and increased transparency.

Enabling the trading of securities offered under Regulation CF and Regulation A on the global digital asset market has the potential to increase liquidity. As of March 2023, the global digital asset market is valued at over $1.1 trillion, with daily trading volumes exceeding $30 billion.\textsuperscript{92} While this is a small fraction of the multitrillion U.S. stock market, it is still significantly larger and more liquid than the null transaction market on StartEngine Secondary. As exempt securities are not permitted to be traded on national stock exchanges like NYSE or Nasdaq, accessing the sizable digital asset market could provide a substantial boost to their liquidity.

Another advantage of allowing such secondary transitions is efficiency. The efficiency of smart contracts stems from their ability to streamline the transaction process by automating the execution of contractual terms, reducing the need for intermediaries, and minimizing manual errors.\textsuperscript{93} This automation can lead to the simplification of complicated transaction processes,\textsuperscript{94} particularly in secondary transactions of crowdfunding securities where multiple parties and complex legal instruments are involved.

Transparency is also a significant advantage of using smart contracts in secondary transactions of exempt securities. Smart contracts provide a tamper-
proof and transparent record of all transaction information, including contract terms and conditions. Each party’s equal access to information helps mitigate information asymmetry, thus increasing transparency for all parties involved. Moreover, smart contracts prevent one party from modifying the contract terms and conditions without the other party’s consent, further enhancing transparency in the transaction. This enhanced transparency promotes trust in the transaction process, as parties to the transactions can easily verify agreements and track transactions histories and outcomes.

Legal and regulatory issues pose a significant challenge for creating a smart contract-driven secondary transaction of tokenized exempt crowdfunding securities. It is challenging to make this secondary market comply with existing securities law and rules. For instance, should tokenized securities be subject to the same requirements as those on the original securities, such as a one-year limit on resale? Should transactions of resulting tokens be registered with the SEC? Moreover, existing regulatory frameworks may need to be revised to accommodate this new technology-driven market. Notably, Coinbase, a major digital asset exchange platform, recently issued a defiant response to the SEC staff’s Wells notice, a notice informing the recipient that the staff recommended the SEC take enforcement actions. The notice further alleged that “regulatory uncertainty in the crypto industry is getting worse” and the SEC should engage in making new rules specific to the digital asset market.

Another serious challenge to this transaction setting is fraud in connection with smart contracts. To effectively navigate such transactions, investors and issuers must understand the technology and its implications. However, as blockchain and smart contracts are unfamiliar to many investors, fraudulent activity may arise by taking advantage of this knowledge gap. Since 2020, over 18,000 scams using smart contracts have been reported, resulting in more than $910 million in losses. These scams involve creating fake smart contracts or digital asset transaction


96 See Gavin Clarkson et al., Information Asymmetry and Information Sharing, 24 GOV’T INFO. Q. 827, 827 (2007) (“Information asymmetry often stems from inadequate information sharing. . .”).

97 Rupareliya, supra note 94.


99 Id. (alleging “The U.S. crypto regulatory environment needs more guidance, not more enforcement.”).

platforms to defraud investors.\textsuperscript{101} If fraud prevails, such fraudulent activities may deter investors from participating in the tokenized securities market for restricted investors. Therefore, regulators should take necessary actions, including enacting necessary rules, to prevent fraud in connection with smart contracts.

Balancing the benefits against the challenges and creating a secondary market for tokenized Regulation CF and Regulation A securities on smart contracts can enhance liquidity, efficiency, and transparency by leveraging the global digital asset market. However, revisiting legal and regulatory frameworks and mitigating the risk of fraud are crucial challenges to overcome. As such, a careful examination of the application of the current securities law to the issue and regulatory initiatives is essential to building such a market.

\textbf{D. Conclusion}

In conclusion, the potential of a secondary market for tokenized exempt securities is supported by technological advancements in blockchain and smart contracts. The development of this market can bring about much needed liquidity to the trading of Regulation CF and Regulation A securities by capitalizing on the global digital asset market. The feasibility of this secondary market is highly dependent on the successful implementation of smart contracts. As various academic studies and some real-world examples have shown, smart contract-driven secondary markets are promising, with the technology enabling legal instruments to be programmed, self-executing, and preserving their governance rights.

While the technological feasibility of a secondary market for tokenized exempt securities is promising, it is essential to recognize that technology alone is not sufficient for the successful development of such a market. Addressing legal and regulatory challenges is crucial alongside technological advancements. Nonetheless, the solid technological foundation for a secondary market for tokenized securities has the potential to revolutionize securities trading in the future.

\section*{II. NAVIGATING THE REGULATORY FRAMEWORK OF THE SEC}

STOs are usually structured to comply with securities laws. This means that an STO is either registered with the SEC as a public offering\textsuperscript{102} or finds an exemption

\textsuperscript{101} See \textit{An Overview of Smart Contracts Scams}, Crypto Adventure (Feb. 16, 2023), https://cryptoadventure.com/community/articles/an-overview-of-smart-contracts-scams/#:~:text=Token%20Sale%20Scams%3A%20This%20type,high%20value%20in%20the%20future, [https://perma.cc/DCH2-PH8K].

\textsuperscript{102} For instance, INX Limited, a crypto token exchange firm, publicly offered 130,000,000 INX tokens for $0.9 per token in 2020. Holders of INX tokens are entitled to receive pro-rata distribution of INX’s 40% cumulative adjusted operating net cash flow. INX registered its token offering with the SEC. See INX Ltd., Prospectus Reg. No. 333-233363 (Aug. 20, 2020),
TRADING SECURITIES AS DIGITAL TOKENS

and is structured as an exempt offering. If an STO is conducted legally and has filed the required forms with the SEC, it is considered compliant with the law. Therefore, the question of legal and regulatory compliance typically pertains to public token offerings that are not registered with the SEC.

Officials and staff of the SEC have provided their views on how digital tokens should be treated under federal securities laws. Among them, William Hinman’s speech and the Framework for “Investment Contract” Analysis of Digital Assets issued by the SEC’s Division of Corporate Finance (“the Division”) is of notable significance.

A. The Hinman Speech

In 2018, William Hinman, the then-Director of the Division, delivered a speech titled Digital Asset Transactions: When Howey Met Gary (Plastic).103 In this speech, Hinman discussed the application of U.S. federal securities laws to digital assets, such as cryptocurrencies and tokens issued in ICOs104. Specifically, he addressed the circumstances under which such digital assets should or should not be regulated under the Securities Act and Securities Exchange Act (collectively, “Securities Acts.”)105

To do so, he referred to the Howey Test, which is derived from the famous 1946 Supreme Court case SEC v. W.J. Howey Co.106 The Howey Test is used to determine whether a financial instrument qualifies as an “investment contract”107 and,


104 Id.

105 Id.

106 328 U.S. 293, 301 (1946). In Howey, The Howey Company owned a Florida citrus grove. It proposed to sell a land interest to investors in conjunction with a service contract provided by Howey-in-the-Hills Service Inc., a company under direct common control and management with the Howey Company. Id. at 295. The investors, who were comprised primarily of non-Florida residents, would then enter contract with the two Howey-affiliated companies so that the service company would tend to the trees and harvest the resulting produce on investors’ behalf. Id. Investors had no intention to use the land themselves but were promised that any profit made from selling the fruit would be shared between the investor and the service company. The Supreme Court held that the contractual arrangements in Howey constituted an investment contract under the Securities Act of 1933 and were therefore subject to federal securities regulations. Id. at 296. Howey is the cornerstone of deciding whether an investment contract exists.

107 Section 2(a)(1) of the Securities Act and Section 3(a)(10) of the Securities Exchange Act of
therefore, a security under the Securities Acts. The test consists of four prongs: (1) an investment of money; (2) in a common enterprise; (3) with a reasonable expectation of profits; and (4) derived from the efforts of others.  

Howey Test

Hinman provided his insights on the application of the Howey Test to digital assets. He argued that tokens or coins sold in ICOs are not securities, but the way they are sold often makes them securities offerings. This is because they are often sold by promoters to non-users as part of an investment, with the intention to develop a common enterprise with purchasers. As such, Hinman argued it is proper to regulate most ICOs as securities transactions.

However, Hinman used Bitcoin and Ethereum as examples to argue that digital asset transactions may not be considered security offerings if the network on which the token or coin operates is sufficiently decentralized. In such cases, the efforts of a third party are no longer crucial for the enterprise’s success, and the need for disclosure under federal securities laws becomes less meaningful.

Further, he emphasized that the analysis of whether a digital asset is a security is not static. Thus, the legal analysis of transactions involving those assets depends on the transactions’ specific facts and circumstances, or economic substance, instead of their labels.


109 Hinman, supra note 103.

110 Id. (“The digital asset itself is simply code. But the way it is sold – as part of an investment; to non-users; by promoters to develop the enterprise – can be, and, in that context, most often is, a security – because it evidences an investment contract.”).

111 Id. (“And regulating these transactions as securities transactions makes sense . . . In a public distribution, the Securities Act prescribes the information investors need to make an informed investment decision, and the promoter is liable for material misstatements in the offering materials. These are important safeguards, and they are appropriate for most ICOs.”).

112 Id.

113 Id.

114 Id. (“I would like to emphasize that the analysis of whether something is a security is not static
Hinman’s speech is significant because it offered insights from a senior official heading the Division regarding the classification of digital assets as securities under federal law. However, because the speech only reflected Hinman’s personal views and did not carry the force of law, it did not establish new legal requirements or modify existing regulations. While the speech provided valuable principles and guidance, the market may require more detailed and precise rules.


In April 2019, the Division issued the Framework for “Investment Contract” Analysis of Digital Assets (the “Framework”). In this Framework, the Division provided a comprehensive, non-exhaustive list of factors affecting how the Howey Test would be applied to digital assets. The Division intended this Framework to be an analytical tool to help market participants assess “whether the federal securities laws apply to the offer, sale, or resale of a particular digital asset.”

While asserting that “investment of money” and “common enterprise” prongs are always present in the cases of digital asset transactions, the Framework specifically addresses the facts and circumstances related to “reasonable expectation of profits” and “derived from efforts of others” prongs of the Howey test.

As to the Howey Test’s “reliance on the efforts of others” prong, the Framework contends that the degree of substantial managerial services provided by an active participant (“AP”) affecting the success of the common enterprise is proportional to the likelihood of a purchaser of a digital asset relying on the AP’s efforts. Such managerial services include an AP’s responsibility for developing or promoting the network or digital asset and playing a crucial role in making decisions regarding the network or digital asset.

Regarding the Howey Test’s “reasonable expectation of profits” prong, the...
Framework suggests the profits could come from capital appreciation of the original investment or a participation in earnings stemming from using purchasers’ funds.\textsuperscript{121} The characteristics that suggest a reasonable expectation of profit in a digital asset include the digital asset giving the holder rights to share in the enterprise’s income or profits, being transferable or traded on a secondary market, having little correlation between its price and the market price of goods or services underlying the digital asset, being marketed as an investment, and emphasizing potential profitability.\textsuperscript{122}

After listing factors that suggest the \textit{Howey Test} is met, the Framework then provides some characteristics of a digital asset that can decrease the likelihood of the \textit{Howey Test} being met when determining if the digital asset is a security. These characteristics include a fully operational distributed ledger network and digital asset, immediate usability for its intended purpose with incentives, a design focused on meeting user needs rather than speculation, limited potential for appreciation in value, immediate use as a virtual currency, redemption options for goods or services that correlate with the purchase price, incidental economic benefit from appreciation in value, marketing that emphasizes functionality, and consistent restrictions on transferability. If a secondary market is created, only platform users should be allowed to transfer the digital asset.\textsuperscript{123}

The Framework states that digital assets with use or consumption characteristics, such as those used to purchase products on a specific network, are less likely to be considered investment contracts. However, the Framework also notes that in certain situations, a digital asset with a functional use may still be considered a security, particularly if it is offered at a discount, sold in excessive quantities, or has limited restrictions on resale. Additionally, if the issuer continues to develop or improve the network or digital asset’s functionality, it may also be considered a security.\textsuperscript{124}

Notably, the Framework only reflects the viewpoints of staff of the Division and is not a binding rule issued by the SEC. The Framework received mixed comments even within the SEC. SEC Commissioner Hester Peirce expressed concerns that the Framework’s list of thirty-eight separate considerations, many of which include several sub-points, could daunt token issuers and even lawyers, and may “raise more questions and concerns than it answers”.\textsuperscript{125}

Along with the Framework, the Division issued a no-action letter, which recommended no enforcement action against an unregistered token offering by

\begin{itemize}
\item \textsuperscript{121} \textit{Id.}
\item \textsuperscript{122} \textit{Id.}
\item \textsuperscript{123} \textit{Id.}
\item \textsuperscript{124} \textit{Id.}
\end{itemize}
TurnKey Jet, Inc.\textsuperscript{126} The company, which provides air charter services, offered tokens for sale to consumers at a fixed price of $1 per token, which could be used to purchase its services. The staff found that the tokens were intended for consumptive purposes, and that TurnKey Jet, Inc. would not use funds from token sales to develop its token offering and trading platform. Additionally, the tokens would be sold at a fixed price and transfers would be restricted to wallets within the platform.\textsuperscript{127}

Commissioner Peirce also expressed concerns about this no-action letter, arguing “the letter effectively imposed conditions on a non-security.”\textsuperscript{128} She highlighted, for example, that the letter prohibited the company from repurchasing the tokens unless it does so at a discount, and precluded a secondary market that includes non-members.\textsuperscript{129}

The Framework represents an important step toward a more nuanced understanding of digital assets through the lens of securities laws. However, the Framework’s complexity may deter issuers from pursuing new token offerings. Additionally, tokens deemed to be non-securities under the Framework may face restrictions on public trading across platforms and blockchain networks, impeding the development of a secondary market for tokenized exempt securities accessible for crypto investors.

**C. Coinbase's Call for a New Regulatory Scheme**

With the rapid development of digital token offerings and trading on digital token platforms, there have been calls for the SEC to develop new legal frameworks that specifically address the unique characteristics of digital token transactions rather than relying on existing rules and regulations.\textsuperscript{130}

In July 2022, Coinbase, one of the largest cryptocurrency exchange platforms, submitted a petition to the SEC, requesting that the Commission establish rules specifically addressing crypto tokens.\textsuperscript{131} Coinbase argued that the existing regulatory rules, if unchanged, did not fit transactions involving digital tokens.\textsuperscript{132}
Coinbase stressed the differences between traditional securities and digital tokens. Traditional securities represent a claim to assets and profits of a corporation, and management’s decisions could influence investor returns. In contrast, digital assets involve decentralized groups of developers, making investors’ reliance on promoters of digital tokens less clear. Further, digital tokens have non-investment uses, such as providing functionality, utility, or consumptive use, and investors do not necessarily expect to profit from these digital tokens. As such, Coinbase asked the SEC to consider whether the Howey Test is still appropriate for determining whether digital tokens are securities.

Coinbase subsequently expressed its opinions related to the registration and disclosure of transactions involving digital assets. Coinbase argued that the Framework, discussed in the previous subsection, fails to provide a definitive standard for identifying individuals or entities that qualify as APs. Additionally, the Framework does not specify whether individuals or entities qualifying as APs are obligated to register with the SEC under the Securities Act. Coinbase then asked the SEC to consider whether digital tokens, given their typical decentralized nature and potential non-investment uses, should be required to register with the SEC.

Coinbase also asked the SEC to consider that the existing disclosure requirements for traditional securities offerings may not meet the needs of investors in decentralized and open-sourced digital tokens, regardless of whether digital tokens should be registered. Additionally, the rest of the petition discusses the regulation of digital token trading platforms. Coinbase urged the SEC to establish specific regulations and rules for digital token trading platforms.

In sum, Coinbase’s petition has raised three crucial questions concerning transactions involving digital tokens: (1) whether all digital tokens are securities and whether the Howey Test is still applicable to determine whether digital tokens constitute an investment contract; (2) what should be the disclosure requirements for digital tokens that are deemed to be securities; and (3) regulations of digital token trading platforms.

The preceding three questions are interrelated. If a digital token is not considered a security, its transaction will not fall under the Securities Acts and will not be regulated by the SEC. The crux of determining whether a digital token is a security lies in applying the four-pronged Howey Test. If a digital token satisfies the

---

133 Id. at 8.
134 Id. at 8–9.
135 Id. at 9–12.
136 Id. at 13 (“But the framework does not itself provide a determinative test for identifying who qualifies as an AP, or specify if these APs are subject to the registration requirements of Section 5 and Section 12.”).
137 Letter, supra note 131, at 14.
138 See, Letter, supra note 131, at 15.
139 See, Letter, supra note 131, at 17–22.
Howey Test and is considered an investment contract, then the next questions relate to the registration and disclosure requirements of offerings of such a token. Registration and disclosure pertain to who is required to register with the SEC and when, as well as the type and extent of information that should be disclosed. The answers to the questions can impact the attractiveness of issuing and promoting digital tokens for APs and investors’ ability to make informed decisions. The final question addresses the development of efficient and trustworthy transaction platforms.

D. Conclusion

In conclusion, the regulatory landscape surrounding digital tokens and the securities laws remains complex and evolving. As the SEC and its officials have offered insights, the lack of binding rules and the complexity of existing guidance have left many unanswered questions. The questions raised by Coinbase, such as the applicability of the Howey Test to digital tokens, the registration and disclosure requirements for digital assets deemed to be securities, and regulations of digital token trading platforms, not only warrant careful consideration by regulators, but will be further discussed in the remainder of this article.

III. THE STRUCTURE OF A SECONDARY MARKET FOR TOKENIZED EXEMPT SECURITIES AND ITS LEGAL FEASIBILITY

A. Proposed Structure of the Secondary Market

Let’s consider the following process. First, issuers offer securities under Regulation CF. Then, the holders of these securities tokenize them on a blockchain network, which results in the creation of tokens. These token holders can then trade the tokens on a digital asset trading platform, allowing for fast and efficient transactions, while the underlying securities remain with the original holders. It’s important to note that the transfer of the underlying securities to the token holders will only occur after the one-year resale embargo has elapsed. At this point, the token holders will become securities holders and token holders simultaneously. The use of smart contract technology enables the execution of this scheme autonomously.

140 Under the Securities Act, an offering of securities should either be registered with the SEC by filing a registration statement or exempt from registration. The registration statement contains material information for investors to make informed decisions. See David Michael Loev & John Gillies, What Constitutes a Security and Requirements Relating to the Offer and Sales of Securities and Exemptions From Registration Associated Therewith, AMERICAN BAR ASSOCIATION (Apr. 27, 2017), https://www.americanbar.org/groups/business_law/resources/business-law-today/2017-april/what-constitutes-a-security-and-requirements-relating-to-the-off/ [https://perma.cc/GQ6F-FJ82].
Chart 1: The Structure of Trading Tokenized Securities Offered under Exemptions

The chart illustrating the tokenization of securities offered under exemptions shows that the issuer’s fundraising transaction ends when investors purchase the securities offered under an exemption, such as Regulation CF. This is because issuers of these exempt securities will not raise additional funds through the tokenization process since the securities have already been offered and purchased.

To comply with Regulation CF, issuers of common stock, debt instruments, or SAFEs, file Form D with the SEC and fulfill other requirements. Once the offering of exempt securities is complete, investors in the securities can either demand that the issuer transfer the securities in tokenized form or tokenize the securities themselves. This decision pertains solely to the allocation of tokenization costs. If the issuer bears the costs of tokenizing the securities being offered at the request of securities investors and transfers them in tokenized form, the resulting tokens will be owned by the securities investors, not the issuer. This tokenization process can be facilitated by a digital asset exchange, such as Fundwise and Ignium alliance, or completed independently. Following tokenization, the securities investors, now token owners, may opt to trade their tokens on digital asset exchanges.

There are legal issues to consider in the tokenization and trading process outlined above. Firstly, should the resulting tokens be treated as securities? If so, token owners trading these tokens would need to register token sales with the SEC or find a resale exemption. This could be costly for token owners and limit who can buy these tokens, reducing the appeal of tokenizing exempt securities. Secondly, as potential tokenization infrastructure providers and trading exchanges of the resulting tokens, digital asset trading platforms play a crucial role in the proposed
The FTX collapse highlights the need for strict oversight on trading platforms to protect digital asset investors. Thirdly, should these tokens also be subject to resale limits like the original securities? For instance, should tokens resulting from tokenizing securities offered under Regulation CF be subject to the one-year resale embargo? Finally, given the technical nature of tokenization, are additional regulations needed to protect investors of the resulting tokens? The answers to these questions could determine the feasibility and legality of the proposed structure.

B. Voluntary-Based Disclosures for the Secondary Market

In digital token offerings, issuers typically present voluntary disclosures to potential investors. These disclosures may encompass white papers, GitHub repositories, project websites or social media accounts. White papers offer insights into the project’s objectives, technical specifications, and the team involved, in order to help investors make informed decisions. A legal article has come up with a novel idea that a warning box disclosure in association with the information provided by ICO issuers’ voluntary disclosures

---

141 FTX, a major cryptocurrency exchange, collapsed in November 2022, causing shockwaves throughout the entire cryptocurrency space. The collapse was due to a liquidity crunch caused by the sudden withdrawal of $6 billion in funds in just 72 hours, leading to the exchange being unable to fulfill withdrawal requests. Binance, a rival exchange, attempted to buy FTX to help with the liquidity crunch but abandoned the acquisition agreement due to mishandling customer funds and an alleged U.S. agency investigation. FTX was then forced to file for bankruptcy, leaving many investors with nothing to show for their investments. There are ongoing investigations into the situation, including suspicions that FTX broke the law by lending customer money to Alameda Research, which was owned by FTX founder Sam Bankman-Fried. Sam Bankman-Fried has lost nearly all his personal wealth, which peaked at $26 billion, and been facing civil and criminal charges. See Igor Bonifacic, Here’s Everything Sam Bankman-Fried is Accused of by the US Government, ENGADGET (Dec. 14, 2022, 3:04 PM), https://www.engadget.com/ftx-sam-bankman-fried-criminal-and-civil-charges-200410951.html [https://perma.cc/E8E9-QX5D]. Prior to its collapse, FTX was the third-largest cryptocurrency exchange by volume and had over one million users. FTX, at one point valued at $32 billion, was one of the most significant casualties of crypto’s wavering fortunes. See Thomas Kingsley, The Collapse of FTX, American Action Forum (Nov. 16, 2022), https://www.americanactionforum.org/insight/the-collapse-of-ftx/ [https://perma.cc/7K9J-RY6N]; See Q.ai, 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=2076d4d560fa [https://perma.cc/4MZG-DV5Y]; See Kalley Huang, Why Did FTX Collapse? Here’s What to Know, N.Y. TIMES (updated Nov. 18, 2022), https://www.nytimes.com/2022/11/10/technology/ftx-binance-crypto-explained.html [https://perma.cc/8UXN-YVVD].

142 See infra, note 227 (finding disclosure channels in token offerings include white papers, code repositories, social media platforms, etc.).

could adequately serve the interests of coin buyers. Professor Ibrahim of William and Mary Law School observes that most trading of coins takes place in the secondary market. To help coin investors understand the ever-changing nature of coin transactions, he argues the warning box is suggested to be required and updated routinely.

Professor Ibrahim proposes two candidates for which a warning box is necessary. The first candidate for the warning box to apply is the stablecoin. For stablecoins alleged to be backed by fiat currencies, the shortage of their fiat reserves that could lead to a virtual bank run should be included in their warning boxes. He illustrates such a situation by USD Tether’s pricey settlement with the CFTC in 2019.

The second candidate for the warning box is the Ethereum network. Ethereum charges gas fees that are highly variable and substantially higher than other blockchain networks. This unique and costly fee policy should be disclosed in a

---

144 Darian M. Ibrahim, A Tokenized Future: Regulatory Lessons from Crowdfunding and Standard Form Contracts, 74 HASTINGS L. J. 45, 69 (2022) (stating “[a]nd this combination of disclosures-white papers and warning boxes—should substitute the entire 1933 and 1934 Securities Acts as a means of regulating crypto”).

145 Ibrahim, supra note 144, at 45, 69.

146 Id. at 69.

147 Id. at 72–74.

148 Stablecoins are cryptocurrencies whose prices are pegged to another underlying safe asset. For instance, the most popular stablecoin, Tether, is priced $1 for each Tether coin.

149 Ibrahim, supra note 144, at 73. The author uses Tether as an example. From June 1, 2016, to February 25, 2019, Tether, the issuer of the USD Tether coin (USDT), claimed “Every tether is always backed 1-to-1 by traditional currency held in our reserves. So 1 USDT is always equivalent to 1 USD.” In re Tether Holdings Ltd., Tether Operations Ltd., Tether Ltd., and Tether Int’l Ltd., CFTC No. 22–04 (Oct. 15, 2021). However, the CFTC found that USDT was always not fully backed by US dollars held in the Tether bank accounts. In fact, only for a portion of time the USDT was fully backed by Tether’s US dollar reserves. Id. at 5–7. In response, CFTC argued that USDT falls within the definition of “commodity” provided in Section 1(a)(9) of the Commodity Exchange Act, “[C]ommodities, with limited exceptions, includes all manner of ‘other goods and articles . . . and all services, rights and interests . . . in which contracts for future delivery are presently or in the future dealt in.’ Digital assets are commodities and subject to applicable provisions of the Act and Regulations . . . .” Id. at 8. As a result, Tether paid the CFTC for $41 million in civil penalties. Id. at 10.


151 See Daniel Phillips, Sick of High Ethereum Gas Fees? Do This Instead, COINMARKETCAP,
warning box as it could be unknown to many common users on the network.\textsuperscript{152} However, Professor Ibrahim hesitated to decide whether the transition of Ethereum’s validation process from proof-of-work to proof-of-stake, called the “Merge,”\textsuperscript{153} warrants a warning-box disclosure. He argued though it was a substantial change of the Ethereum network, it was well-known through informal channels.\textsuperscript{154}

In conclusion, Professor Ibrahim argues that information disclosed in the warning box should not be as burdensome as a “risk-factors” section in an IPO prospectus;\textsuperscript{155} by contrast, the warning box should only include “specific features of a particular crypto that buyers would be unpleasantly surprised to learn.”\textsuperscript{156}

For which body takes charge of regulating the warning box disclosure, he contends that a warning box can be self-regulated by the crypto community and the SEC if token offerings satisfy the Howey Test. Additionally, the CFTC, which already has authority over crypto-derivatives and fraud in spot markets, could be the appropriate regulator for non-security cryptocurrencies, which are considered commodities by default.\textsuperscript{157}

A warning box is unquestionably necessary when a stablecoin is under-reserved by safe assets to which it is linked, as stablecoins are vulnerable to runs.\textsuperscript{158} In fact,

\begin{itemize}
\item Ibrahim, supra note 144, at 73–74.
\item The Ethereum Merge is a network update designed to transition Ethereum from a proof-of-work (PoW) to a proof-of-stake (PoS) consensus mechanism. In Ethereum’s PoS system, validators create new blocks and validate transactions based on the amount of cryptocurrency they hold, referred to as their “stake.” The larger the stake a validator holds, the higher the likelihood of being chosen to create new blocks and validate transactions. This contrasts with PoW-based cryptocurrencies like Bitcoin, which rely on mining, the process of solving computationally intensive puzzles, to validate transactions and generate new blocks. \textit{See The Merge}, Ethereum.org, \url{https://ethereum.org/en/upgrades/merge/} [\url{https://perma.cc/U6PQ-EFZJ}] (last visited Apr. 11, 2023).
\item Ibrahim, supra note 144, at 74.
\item Item 105 of Regulation S-K requires the “Risk Factors” section in an IPO prospectus to discuss concisely and logically “the material factors that make an investment in the registrant or offering speculative or risky.” 17 C.F.R. § 229.105 (2023).
\item Ibrahim, supra note 144, at 74.
\item \textit{Id.} 75–76.
\item Gary B. Gorton & Jeffery Zhang, \textit{Taming Wildcat Stablecoins}, 90 University of Chicago L. R., (forthcoming) (manuscript at 915) (on file at SSRN: https://ssrn.com/abstract=3888752) [\url{https://perma.cc/U2MF-G27R}]. This article defines stablecoins as “digital form of circulating private money where each coin is supposed to be backed with safe assets” and finds that stablecoins does not satisfy the NQA (no-question-asked) principle and thus are not always accepted at par and are subject to run.
\end{itemize}
IRON, an algorithmic stablecoin, experienced a run in mid-July 2021.\textsuperscript{159} However, warning boxes should not be limited to reporting under-reserves of a stablecoin or transaction fee policies of a network. The crypto world is full of sudden information that investors may find surprisingly unpleasant. For instance, if regulators bring an enforcement action against a crypto firm or a change in the backing assets of a stable coin, a warning box should be used to alert investors and help prevent potential losses.

However, the author does not address the issue of regulating white papers, which is a more fundamental concern than regulating the warning box. The warning box is intended to supplement the information provided in the white paper, rather than to replace or serve as a separate disclosure material. It seems contradictory that the SEC can regulate the warning box when the underlying digital assets meet the \textit{Howey Test} yet leave the more critical white paper unregulated. A more logical proposal would be for the SEC to regulate both the white paper and the warning box if a digital token meets the \textit{Howey Test} and is thus considered a security.

A white paper that contains material information for investors of digital assets to make informed decisions, plus a timely updated warning box, could be the ideal disclosure method for issuance and transactions of digital assets and the answer to Coinbase’s question regarding disclosure in its above-mentioned petition.

\textbf{C. Separating Tokens from Investment Contract Securities}

A group of four practicing lawyers, including the first author Lewis Cohen, have authored a substantial paper titled “The Ineluctable Modality of Securities Law: Why Fungible Crypto Assets Are Not Securities” (referred to as the “Cohen Paper”), which spans over one hundred pages. The paper has come up with a novel idea: separating crypto tokens from investment contracts that involve these tokens.\textsuperscript{160} This approach could lead to the creation of a tokenized, regulation-light secondary market for crowdfunding.

The article proposes the Securities Acts apply to transactions involving crypto assets only if the transaction meets the four prongs of the \textit{Howey Test} or the crypto asset itself is considered a security independent of the transaction that offers it.\textsuperscript{161} The author argues this application addresses fundraising activities and crypto assets with the character of a security while avoiding confusion regarding the status of crypto assets in secondary transactions and custodial situations.\textsuperscript{162}


\textsuperscript{160} See Lewis R. Cohen, et al., \textit{The Ineluctable Modality of Securities Law: Why Fungible Crypto Assets Are Not Securities} (Discussion Draft, November 10, 2022), https://ssrn.com/abstract=4282385 [https://perma.cc/XL8L-SRTU] (permission to cite this article has been granted by the authors).

\textsuperscript{161} \textit{Id.} at 9.

\textsuperscript{162} \textit{Id.}
To illustrate their proposals, the authors analyze multiple Howey-line of appellate and Supreme Court decisions. They note that the “investment contract” is a catch-all category of security that complements other categories of securities enumerated in the statutory definitions of Securities Acts. Furthermore, courts’ interpretation of the term “investment contract” is flexible to encompass evolving financial instruments not commonly known as a security when created. The authors note that courts have recognized a type of investment contract that includes contractual agreements, marketing materials, oral statements, and other instruments that document the parties’ intent, but does not have a legal document typically associated with a security. This type of arrangement is common in transactions involving crypto assets.

The authors also find that courts consistently stress the application of the Howey Test should evaluate all applicable facts and circumstances at the time the transaction occurred. This finding resonates with Hinman’s argument that analyzing digital asset transactions under the Howey Test should focus on the transactions’ economic substance.

After demonstrating that the application of the Howey Test should be specific, the authors move to demonstrate that non-financial objects of an investment contract transaction are not themselves securities just because they are sold as part of such a transaction. The authors highlight that, when applying the Howey Test, courts consistently differentiate between the investment scheme and the object being sold in accordance with that scheme. Simply transferring the object to another investor without the underlying promises does not constitute another

---

163 They found ninety-seven cases that federal appellate courts and the Supreme Court found an investment contract in applying Howey. Cohen et al., supra note 160, at 116–29. For instance, in Fedance v. Harris, 1 F.4th 1278 (11th Cir. 2021), the Eleventh Circuit affirmed a trial court ruling that a token issued by FliK to purchase movies and other entertainment content on FliK’s platform constituted an unregistered offering of securities under Howey, even though at the time of the token sale, FliK’s platform did not exist and there was no guarantee that it would ever be created.

164 Cohen et al., supra note 160, at 37.

165 Id. at 38-39.

166 Id. at 40.

167 Id. at 42.

168 See Hinman, supra note 103.

169 See Cohen et al., supra note 160, at 55–58.

170 See e.g., Bailey v. J.W.K. Properties, Inc., 904 F.2d 918, 924–25 (4th Cir. 1990) (finding a cattle breeding program involving the selection of embryos and crossbreeding constituted an investment contract, stating that “[i]f the investment scheme had been merely to raise cattle for slaughter, the interests purchased by the plaintiffs may not have constituted investment contracts. . . . However, the Albemarle Farms program also involved the selection of embryos and crossbreeding”).
Having established how the Howey Test should be applied to transactions involving digital assets, the authors then turn to the question of whether crypto assets that do not meet the Howey Test could be considered a new type of security. They explore the nature of a security by examining the characteristics of enumerated securities in the Securities Act, such as notes, stocks, and bonds. The authors conclude that a fundamental element of a security is that it creates a legal relationship between security holders and issuers. An issuer is an individual or entity that creates a security and against whom the security holder’s rights can be enforced. Once a security is issued, securities laws and regulations typically impose various obligations and potential liabilities on its issuer. Thus, the authors assert that under current law, there is no such thing as an “issuer-independent security”, which means a security that exists without a clearly identifiable issuer. This is essential for the proper functioning of financial markets and the protection of investors. The authors further note that securities holders are granted a “bundle of rights” through legal arrangements. Therefore, a security is a legal arrangement that is offered by its issuer and provides a bundle of rights to security holders. It cannot exist independently of its issuer, as the legal rights embedded in a security cannot be enforced without an identifiable issuer.

The authors then apply their findings to transactions involving digital assets. A crypto asset does not create a legal relationship between an identifiable issuer and the owners of the asset even in investment contract transactions, due to the lack of established legal rights and duties on a specific issuer in smart contract code and metadata. Meanwhile, crypto assets involve multiple parties with varying levels of influence and responsibility for the asset’s value and performance.

---

171 See Cohen et al., supra note 160, at 58. The authors use the Howey case (S.E.C. v. W.J. Howey Co., 328 U.S. 293 (1946)) as an example to illustrate courts’ distinguishing investment scheme and the object being sold. See id. at 56. The Howey investment scheme consisted of the combination of the land sale, the service agreement, and purchasers’ right to profits, while citrus groves were the object of the Howey investment scheme. See id.

172 Id. at 62–63.

173 Id. at 62 (“The one critical quality that can be found across each of the enumerated categories is the presence of a legal relationship volitionally established by an identifiable legal entity that acts as the issuer of the security and the various other parties who, from time to time, are owners of that security.”).

174 For example, a debt security like a bond requires the issuer to pay back the principal amount and any interest due to the security holder. Similarly, an equity security like a stock gives the shareholder certain rights, such as voting on corporate matters and receiving dividends. Id. at 63–64.

175 Id. at 65.

176 Id. at 66.

177 Id. at 66–68.

178 Id. at 68–70.
involvement of multiple parties can change over time or vary in importance. This “distributed responsibility” makes it difficult to pinpoint a specific legal relationship between the involved parties and the asset holders.\textsuperscript{179} Additionally, the value of most crypto assets is derived from a combination of their utility or functionality and their scarcity, rather than from a bundle of rights and duties within a legal relationship between an owner and an identifiable issuer.\textsuperscript{180} As a result, applying the \textit{Howey Test} to crypto asset transactions can be challenging, as it may not be possible to clarify all the specific facts and circumstances or economic substance when a digital token offering occurs.\textsuperscript{181} This is because the application of the \textit{Howey Test} is fact-intensive and token investors do not rely on efforts of others to derive profits. Meanwhile, a digital asset in secondary transactions may not be a security as there is not an identifiable issuer to create a legal relationship with token holders.

The article discusses the applicability of the \textit{Howey Test} in determining cases involving transactions with crypto assets. While some argue that the test is outdated, the article argues that it remains relevant.\textsuperscript{182} Tokens issued in investment arrangements that satisfy the four-pronged \textit{Howey Test} should be regulated as investment contracts under the Securities Acts. Tokens that do not meet the \textit{Howey Test} and lack identifiable issuers against whom contract rights can be enforced should not be considered a distinct type of security. Therefore, transactions of such tokens should not be exempt from the Securities Acts.

Industry practitioners, such as Jai Massari, have shown support for the Cohen Paper’s approach.\textsuperscript{183} Massari specifically highlights the Cohen Paper’s distinction between capital-raising transactions by blockchain project sponsors, which meet the \textit{Howey Test} and are considered securities transactions, and the treatment of the crypto asset itself, which is not a security.\textsuperscript{184}

In summary, according to the Cohen Paper, a token offering that meets the \textit{Howey Test} should be considered a fundraising securities transaction. Additionally, a token traded in secondary transactions may be classified as a security only if it

\begin{itemize}
\item \textsuperscript{179} Id. at 70–71.
\item \textsuperscript{180} Id. at 71.
\item \textsuperscript{181} Id. (“Without knowing \textit{all of the facts and circumstances applicable at the time a given transaction in an asset occurs}, it is simply not possible to apply Howey.”).
\item \textsuperscript{182} See id. at 54.
\item \textsuperscript{183} See Jai Massari, \textit{Why Cryptoassets Are Not Securities}, HARVARD L. SCHOOL F. ON CORP. GOVERNANCE (Dec. 6, 2022), https://corpgov.law.harvard.edu/2022/12/06/why-cryptoassets-are-not-securities/#1 [https://perma.cc/QZ3P-XECY] [arguing the approach “would appropriately capture capital-raising activities by blockchain project insiders . . . It also appropriately allocates regulatory responsibility for those capital raising activities to the SEC while avoiding subjecting all dealings in cryptoassets to laws that were not designed to regulate commercial activities not involving securities”].
\item \textsuperscript{184} Id. (“The paper separates capital raising transactions by blockchain project sponsors or other insiders in which a cryptoasset may be sold—which are typically securities transactions—from the treatment of the cryptoasset, which is not a security.”).
\end{itemize}
provides token owners with an identifiable bundle of legal rights created by a specific issuer. If a token does not have an identifiable issuer that creates a bundle of legal rights, it should not be considered a security and should be exempt from securities regulation. As such, by focusing on the nature of the transactions rather than treating the tokens as securities, the approach presented in the Cohen Paper clearly distinguishes between token transactions and the token itself.

The approach set forth in the Cohen Paper is not the first one in claiming similar positions. In November 2019, after William Hinman delivered his speech and the Division published the Framework, Basil Godellas, a partner at the law firm Winston & Straw, issued a series of opinions critical of the SEC’s approach. In his first opinion, he argues that a utility token is fundamentally different from a security, as it is a consumptive item that represents a right to purchase goods and services, and therefore cannot be an investment contract in its own right. The author contends that even if a utility token may be sold in an investment contract or an investment scheme, the utility itself is no different than any other right to acquire goods or services, such as a gift card, and therefore should not be considered an “investment contract.”

In his second opinion, Godellas further argues that if an issuer of a utility token and an investor enter a contract where the investor expects profits from token sales, that contract may be an investment contract. However, the utility token offered under that contract is not an investment contract or any other form of security. In his third opinion, he explains that it is the utility token issuer’s marketing efforts, such as promises and representations, that lead investors to develop an objective expectation that they are investing in investment contracts defined by the Howey Test. As a result, such token offerings should be regulated by Securities Acts, even

---


186 Id.

187 Id.


189 Id.

190 See Basil Godellas, When it Comes to Analyzing Utility Tokens, the SEC Staff’s “Framework for ‘Investment Contract’ Analysis of Digital Assets” May Be the Emperor Without Clothes (Or, Sometimes an Orange) (Part III), WINSTON & STRAWN LLP BLOG (Nov. 26, 2019),
though the utility token itself is not a security.191

In his fourth opinion, Godellas argues that the application of the Howey Test should be an objective analysis of all specific facts and circumstances related to the transaction when it occurred.192

The Cohen Paper and Godellas’s series of opinions share many similar views. They both agree that tokens should be considered separately from the transactions involving them and that tokens themselves are not securities. They both believe that token offerings are regulated by Securities Acts only if they are part of investment contract transactions resulting from token issuers’ marketing efforts (Godellas) or the transactions’ investment schemes (the Cohen Paper). Additionally, they both argue that the application of the Howey Test should be based on an objective analysis of all the specific facts and circumstances of the transaction in question.

However, the Cohen Paper presents a more comprehensive and persuasive approach compared to Godellas’s singular focus on a utility token’s consumptive use. The Cohen Paper emphasizes the legal relationship between investors and issuers. As the development and trading of tokens involve decentralized participants and distributed responsibility, it is challenging to identify an issuer in the token setting. Meanwhile, if a token itself does not grant a bundle of legal rights, such as rights to dividends like equity securities or rights to receive fixed returns like debt securities to investors, it is not a security. By focusing on a bundle of legal rights resembling those contained in enumerated securities and an identifiable issuer against whom the rights are to be enforced, the Cohen Paper provides a convincing explanation as to why a token itself is typically not a security, and why transactions of such tokens that do not meet the Howey Test should not be regulated by Securities Acts.

But the structure proposed in Section 4.1 of this article is more unique. The securities are offered under an exemption and fulfill the requirements of the Securities Acts, including the submission of necessary forms. The question then becomes: how should the resulting tokens from tokenizing these legally offered securities be treated?

The answer to the above question is that the resulting tokens tokenizing these securities on crypto exchanges are not securities and the tokenization is not an offer


191 Id.

to sell securities, and thus are not required to register with the SEC. In the same
vein, the trading of these tokens is also not trading of securities. The subsequent
subsection will explain the rationale behind this answer.

D. Why Tokens Embodying Legal Rights Could Still Not Be a Security

Ripple Labs, Inc. ("Ripple") is a technology company that develops blockchain-
based payment solutions for financial institutions. It created and manages XRP, a
cryptocurrency. The SEC filed a complaint on December 22, 2020, against Ripple, its
CEO, and its executive chairman. The complaint alleges that Ripple and its
executives conducted an unregistered securities offering of XRP and engaged in
ongoing sales of XRP as an unregistered security. According to the SEC’s lawsuit,
from at least 2013 until the filing of the lawsuit, the defendants sold over 14.6 billion
units of XRP and raised more than $1.38 billion.

In the complaint, the SEC expressly classifies XRP as a digital asset security. The SEC argues that “XRP was an investment contract and therefore a security subject to the registration requirements of the federal securities laws” and applies the Howey Test.

Following the SEC’s lawsuit against Ripple, a group of investors who traded XRP
on digital asset platforms filed a motion to intervene as third-party defendants. The SEC filed a memorandum opposing these investors’ motion. In this memorandum, the SEC pushed back at these investors’ claim that XRP is not itself a security. The SEC argues the question is not whether XRP is a security itself, rather “it is all the facts and circumstances surrounding the digital asset and the manner in which it is offered and sold (including the entirety of the representations Ripple made and purchasers’ resulting expectations) that made the offers and sales of XRP

193 See Press Release, U.S. Securities and Exchange Commission, SEC Charges Ripple and Two
Executives with Conducting $1.3 Billion Unregistered Securities Offering (Dec. 22, 2020),
194 Complaint, at 1, Sec. and Exch. Comm’n v. Ripple Labs, Inc., No. 20 Civ. 10832 (S.D.N.Y. Dec.
22, 2020), ECF No. 4. The SEC argues that “From at least 2013 through the present, Defendants
sold over 14.6 billion units of a digital asset security called ‘XRP’ . . .” and that Ripple raised at least
$1.38 billion by selling XRP.
195 Id.
196 Id. at 1 (“From at least 2013 through the present, Defendants sold over 14.6 billion units of a
digital asset security called “XRP,” . . .
197 Id. at 34–56.
198 See Motion to Intervene, Sec. and Exch. Comm’n v. Ripple Labs, Inc., No. 20 Civ. 10832
(S.D.N.Y. March 14, 2021).
199 Memorandum of Law in Opposition to the Motion to Intervene, Sec. and Exch. Comm’n v. Ripple
200 Id. at 24 (“Movants claim they must intervene to convince the Court that XRP is not per se a
security . . . But this case presents no such question.”).
The offers and sales of an investment contract.” The SEC further argues “[T]he XRP traded, even in the secondary market, is the embodiment of those facts, circumstances, promises, and expectations, and today represents that investment contract.”

The memorandum represents a shift in the SEC’s position from that in its initial complaint. While the complaint classified XRP as a “digital asset security,” the memorandum argues that it is the facts, circumstances, promises made by the token issuer, and expectations of the investors that turn XRP into an investment contract.

At first glance, the SEC’s approach may seem similar to Godellas’s view that it is token issuers’ investment contract marketing efforts that turn token offerings into securities transactions. However, according to Godellas, even if a token offering is considered a securities transaction, the token itself will not be transformed into an investment contract under the Howey Test.

The Cohen Paper refers to the SEC’s position stated in the memorandum as “embodiment theory.” The Cohen Paper argues that the embodiment theory requires crypto investors in the secondary market to evaluate the facts and circumstances on an ongoing basis. It is highly improbable for the investors not involved in the initial scheme to do so with certainty, as crypto assets usually lack definitive written contracts that identify a bundle of legal rights. Furthermore, some critical information may only be available through private communications between the original parties, leaving investors in the secondary market with limited means of accessing the information.

The SEC’s embodiment theory can be perplexing and potentially damaging to investors in crypto assets as it suggests that the legal status of a digital token may change in the secondary market. For instance, the SEC may choose not to take enforcement action against a token after its initial offering because, at that time, the token does not represent an investment contract. However, the SEC could later determine that the token has become an investment contract due to changes in the embodied facts, circumstances, promises, and expectations. Investors who do not evaluate these factors similarly to the SEC may suffer significant losses if the SEC

---

201 Id.
202 Id.
203 Cohen et al., supra note 160, at 96.
204 Id.
205 Id. at 96–98. The authors argue that “This is compounded by the reality that many relevant ‘facts and circumstances’ may be private matters between the original parties and not capable of discovery by third parties who lack the SEC’s subpoena power to access e-mail messages...” Id. at 97. Meanwhile, “Crypto assets are not written instruments that set forth the obligations of an issuer and the rights of a holder. Instead, crypto assets are merely strings of numbers that allows the person controlling the private key associated with the public blockchain address....” Id. at 98. Thus, investors on the secondary market who lack the private communications between the original parties cannot simply look to the crypto assets to learn of the relevant facts and circumstances.
However, the Cohen Paper’s objection to the embodiment theory does not apply to digital assets that consist of a bundle of identifiable legal rights. As discussed in Section 3 of this article, smart contracts can execute complex legal instruments that include a bundle of legal rights. Even if smart contracts in association with tokenized securities have only basic information and need to refer to the original legal instruments for further reference, an identifiable legal relationship can still be easily discerned.

If the above-mentioned scenario occurs in the proposed secondary market, the tokens with identifiable legal instruments should not be treated as securities, and transactions of such tokens should not be treated as securities transactions, either. In this proposed structure, token issuers do not raise funds by tokenizing their securities. Instead, the sole fundraising event occurs through securities offerings preceding the token offerings in question. Token issuers tokenize already offered securities under exemptions, making them available on crypto asset exchanges without raising additional funds and offering additional securities to the primary market. This process simply enhances the liquidity of the underlying securities and expands their accessibility to a wider investor base. It is crucial to note that the token issuers are not the same as the issuing companies involved in the previously exempted offerings. Rather, token issuers are holders of the issued securities. Investors in these tokens do not rely on the token issuers’ efforts to generate profits. Instead, they depend on issuers of original securities for profit generation. Therefore, neither the token issued nor the token transactions in this context meet the Howey Test.

The Ripple lawsuit is fundamentally distinct from our proposed structure in key aspects. In the Ripple case, the SEC pursued legal action against the company for conducting unregistered securities offerings. The SEC subsequently alleged that XRP traded on crypto exchanges embodied the company’s marketing efforts and investors’ expectations, which makes XRP a security.

In contrast, our proposed transaction framework involves the tokenization of the underlying securities that have already been legally offered under exemptions. Should these tokens also be deemed securities that require registration, it would render the initial registration process futile and equate the resale of already offered securities with new securities offerings. This would significantly obfuscate the distinction between primary and secondary markets, leading to unintended consequences for both issuers and investors.


208 See Memorandum of Law in Opposition to the Motion to Intervene, supra note 199, at 24.
E. Conclusion

In July 2023, the federal district court for the Southern District of New York (S.D.N.Y.) delivered the much-anticipated judgment in the Ripple lawsuit.209 The court decided that, in relation to XRP sales made to institutional investors, all the criteria of the Howey Test have been met. Notably, institutional purchasers of XRP were aware that their capital was invested with speculative intent, and they consented to a range of contractual stipulations, such as lock-up provisions and resale restrictions. These stipulations are inconsistent with the consumptive use of XRP.210 Thus, the court held that Ripple’s sale of XRP to these institutional investors meets the requirements of the Howey Test, necessitating registration with the SEC under § 5 of the Securities Act.211

However, the court draws a clear distinction between the institutional sales of XRP and what it termed as “pragmatic” sales, i.e., transactions of XRP on cryptocurrency exchanges by public investors. The court reasoned that these pragmatic investors may not have clear knowledge about the party or entity to which they were transferring their funds in the secondary market.212 Many of these investors, the court noted, might not even be aware of Ripple’s existence.213 Moreover, unlike institutional buyers of XRP, pragmatic investors are not subject to lockup provisions or resale restrictions and are not provided with the marketing materials circulated to institutional buyers of XRP.214 As such, the court concluded that “Ripple’s programmatic sales of XRP did not constitute the offer and sale of investment contracts.”215

In this high-stake ruling, the court focused on the economic reality of transactions involving digital tokens, refusing to recognize a standalone digital asset security. Instead, the court held that transactions of XRP on the public secondary market did not meet the Howey Test. The disparate treatment of XRP between institutional buyers and public investors underscores the complexity of analyzing the economic reality of transactions involving digital tokens.

However, it is unnecessary to distinguish institutional and public investors in the proposed secondary market for tokenized securities offered under exemptions. The proposed secondary market involves token issuers tokenizing previously offered securities under exemptions and making them available on crypto asset exchanges without raising additional funds or offering additional securities to the primary market. These tokens represent the original securities in digital form and serve as

210 Id. at *11.
211 Id.
212 Id.
213 Id. at *12.
214 Id.
215 Id. at *13.
digital representations for them without creating a new bundle of identifiable legal rights for token investors. Consequently, these tokens cannot exist independently of the original securities. Additionally, the offerings of these tokens do not qualify as investment contract transactions under the Howey Test, as token investors do not rely on token issuers to derive profit. Therefore, treating the tokenized form of these securities as an independent and standalone type of security and transactions involving these tokens as securities transactions, would unfairly burden securities investors-turned token issuers and limit their access to the digital asset market.

As these tokens are essentially digital representations for already offered securities, the same resale limits that apply to the original securities should also apply to these tokens. For example, if the original securities are only allowed to be sold to accredited investors, the tokens should also only be sold to accredited investors.

IV. PROPOSED REGULATORY OVERHAUL OF A SECONDARY MARKET FOR TOKENIZED EXEMPT SECURITIES

A. Enhancing Investor Protection through Targeted Amendments to the SEC’s Existing Regulations

The SEC has admitted investor protection needs to be enhanced in token offering and transaction markets. So far, the SEC has not issued any major crypto regulation. Instead, the SEC has stressed crypto firms should comply with existing rules and regulations and put emphasis on taking enforcement actions in the crypto tokens market. The SEC has brought 116 enforcement actions since 2018, 76 of which are litigations. In 2022 alone, the SEC brought 30 enforcement actions, 24 of which were litigations. The two most common accusations claimed by the SEC in its enforcement actions against crypto wrongdoers are unregistered securities offerings and fraud in the offer or sale of securities.

216 See Gary Gensler, Sec. & Exch. Comm’r, Remarks Before the Aspen Security Forum (Aug. 3, 2021) [transcript available https://www.sec.gov/news/speech/gensler-aspen-security-forum-2021-08-03 [https://perma.cc/TTW3-Q7GF]. In this remark, Chair Gensler admitted, “Right now, we just don’t have enough investor protection in crypto. Frankly, at this time, it’s more like the Wild West.”


219 Id.

220 Fraud accusations under Section 17(a) of the Securities Act and/or Section 10(b) and Rule 10b-5 of the Exchange Act were brought in 21(70%) of all the 30 enforcement actions; accusations
The SEC’s current approach to regulating token offerings relies on applying the Howey Test to analyze transactions involving digital assets and aggressively pursuing legal action against crypto asset issuers and associated parties. As previously discussed, from the perspective of the staff in the Division, a token offering that satisfies the four-pronged Howey Test is considered an offering of securities and should comply with the Securities Acts. Furthermore, as also discussed earlier, there have been appeals and proposals made to the SEC to revise the current regulatory framework for digital asset transactions.

However, the tokens described in Section 4.1 serve merely as digital representations for their underlying securities. In other words, the issuance of these tokens does not constitute an offering of new securities. Instead, the tokens serve as digital representations to represent securities that were previously offered under small offering exemptions or private exemptions, much like stock certificates. Consequently, these tokens do not satisfy the Howey Test criteria and fall outside the SEC’s regulatory purview.

Nonetheless, this does not suggest that the issuance of such utility tokens should be entirely exempt from regulation. Since these tokens represent already offered securities, their transactions ultimately result in the transfer of underlying securities. Moreover, the turnover speed of digital tokens can be significantly faster than that of securities issued by non-public companies, leading to more frequent transactions of these tokens. The increased turnover speed of tokens may amplify the risks associated with transactions involving exempt securities. Additionally, as tokenization and transacting through smart contracts are relatively new concepts for many investors, the potential for fraudulent activity related to the technology used could expose investors to significant risks. For example, if an issuing company provides false information regarding the terms of the smart contracts that facilitate transactions of its tokens, investors could face considerable losses.

In fact, some proposals suggest that instead of creating a completely new regulatory framework, the SEC could refine its disclosure requirements to address the distinctive nature of digital asset transactions. For instance, a paper suggests that, in addition to classifying ICOs as securities, disclosure requirements should be

---

221 See Yuliya Guseva, The SEC, Digital Assets and Game Theory, 46 THE J. OF CORP. L. 629 (2021) (arguing instead of making a formal rule, the SEC has chosen an approach of enforcement actions in reliance on the Supreme Court’s Howey decision interpreting the term “investment contract.”).

222 A stock certificate is a physical document that represents a shareholder’s ownership in a company and includes information like the number of shares owned, the date of purchase, an identification number, usually a corporate seal, and signatures. See Will Kenton, Stock Certificate: Definition and History, INVESTOPEDIA https://www.investopedia.com/terms/s/stockcertificate.asp#:~:text=their%20financial%20lives.-%2C%20What%20is%20a%20Stock%20Certificate%3F,a%20corporate%20seal%2C%20and%20signatures [https://perma.cc/ZL5X-VYB5] (last updated Mar. 27, 2022).

223 Smart contracts are hotbeds for frauds. See CRYPTO ADVENTURE, supra note 101.
customized to tackle the challenges posed by blockchain technology, such as those related to governance, technical specifications, and cybersecurity of the blockchain network on which the digital asset transaction is launched.\textsuperscript{224}

Our proposal to regulate the secondary market for tokenized securities offered under exemptions is also based on specific amendments to existing rules, rather than creating a new regulatory framework. The SEC could introduce specific amendments or additions to existing exemptions, such as Regulation CF. These modifications could outline specific disclosure requirements for the tokenization of previously offered securities in order to mitigate technology-related risks for investors. For instance, the amendments could mandate comprehensive disclosure of smart contract design, token mechanics, and cyber risks in white papers released in association with the tokenization of such securities. Additionally, the amendments could establish additional requirements for digital token trading platforms, ensuring the security of investors’ funds and fostering a safer trading environment.

\textbf{B. Regulations of White Papers}

Since white paper is the most essential tool for voluntary disclosure in token offerings,\textsuperscript{225} providing truthful and accurate information to investors through white papers can be instrumental for investors in detecting potential frauds and making informed decisions in transactions of digital assets.\textsuperscript{226} Therefore, the regulation of a secondary market for tokenized exempt securities logically begins with regulating the white paper.

As a white paper is voluntarily provided by token issuers to potential investors, there is no clear guidance directing white paper writers as to what information should be included in a white paper. As a result, white papers associated with token


\textsuperscript{225} See, e.g., eSabrina T. Howell et al., \textit{Initial Coin Offerings: Financing Growth with Cryptocurrency Token Sales}, 33 \textit{Rev. Fin. Stud.} 3925 (2020) (finding 86% of its 1,520 observed ICOs have a white paper); Maksim Belitski & Dmitri Boreiko, \textit{Success factors of initial coin offerings}, 47 \textit{J. Tech. Transfer} 1690 (2022) (finding the release of a white paper increases the number of investors in a token offering).

TRADING SECURITIES AS DIGITAL TOKENS

offerings exhibit significant variation in length and quality.

The quality of white papers could be shaped by market forces. As STOs are treated as offerings of securities by the SEC, white papers published in STOs are more likely to deliberately disclose material information to avoid violating securities laws. If offerings of utility and payment tokens are not subject to mandatory disclosure requirements contained in securities laws, the quality of their information disclosure could be lower than that of STOs. An empirical study finds ICOs with white papers whose disclose contents approach those in STOs are more likely to succeed.

However, even if market forces can drive ICO campaigners to enhance the quality of their information disclosure in white papers in their ICO projects, the lack of protection by the securities laws anti-fraud provision still could result in investors suffering monetary losses if white papers information contains material misrepresentations or omissions. Therefore, in response to the quality variance and likely fraud inherent in white papers, some scholars argue that white papers should be regulated to ensure adequate and accurate information is to be provided to investors, and to promote transparency and accountability in the market of token offerings.

See Thomas Bourvea, et al., *The Role of Disclosure and Information Intermediaries in an Unregulated Capital Market: Evidence from Initial Coin Offerings*, 60 J. ACCT. RSCH. 129, 132, 140 (2022) (analyzes over 2,100 international ICOs from March 2014 to October 2018, finding white papers range 2–127 pages in length with a median of 26 pages. The average (median) words of white papers are 6,000 (5000). The article also finds white papers' length is significantly positively correlated to the amount raised of ICOs). See also Shadi Samieifar & Dirk G. Baur, *Read Me if You Can! An Analysis of ICO White Papers*, 38 FIN. RSCH. LETTERS 101427, at 3 (2021) (analyzing 1,258 ICO white papers and finding the average of white papers' length is 33.47 pages, that the length and complexity of white papers increase over the article's sample period, and the length and complexity of white papers positively impact ICOs’ amount raised).

228 See Lennart Ante et al., *Blockchain-based ICOs: Pure hype or the dawn of a new era of startup financing?*, 11 J. RISK FIN. MGMT. 80, at 10 (2018). This article examines a sample of 278 ICOs and develops a scoring system to assess the quality of their whitepapers based on white papers’ length and references. The resulting “whitepaper: score” variable exhibits a mean score of 13.230, a median score of 2.5, and a range of 0 to 131. Additionally, the standard deviation of 17.601 indicates a wide dispersion of scores, suggesting significant variation in whitepaper quality across the ICO projects analyzed.

229 See Shih-Chu Chou et al., *How the Quality of Initial Coin Offering White Papers Influences Fundraising: Using Security Token Offerings White Papers as a Benchmark*, 30 INTELL. SYS. ACCT. FIN. MGMT. 3, 3–18 (2023) (This research benchmarks the quality of ICO white papers against their similarity with white paper content for STOs, and finds that ICOs having white papers more similar to STO white papers are more likely to raise funds successfully.).

230 See e.g., James Thewissen, et al., *Unpacking the Black Box of ICO White Papers: A Topic Modeling Approach*, 75 J. CORP. FIN. 102225, at 1-35 (2022)(finding the informativeness of white papers substantially diminishes after tokens are listed on crypto exchanges and that token investors see the information disclosed in white papers as more credible when the ICO market is regulated).

231 See Jose Campino, et al., *Initial Coin Offerings (ICOs): Why do they Succeed?*, 8 FIN. INNOVATION,
A comprehensive white paper for a token offering should cover several important topics such as company description, blockchain technology or network details, and financial and legal issues. Apart from the techniques of the blockchain network, other information disclosed and discussed could be similar to that provided in a prospectus of an IPO. Among all the information disclosed in white papers, technical details of the coin being offered significantly positively affect the success or amount raised of the ICO project. As such, a white paper should adequately disclose technical details of a token offering, including a detailed description of the underlying blockchain technology, design of smart contracts, technical diagrams, and data management. In addition, the disclosure should be unique and specific to each token issuance, distinguishable from existing white papers of other token offerings.

An actual example illustrates the disclosure of technical details in a token offering. INX Limited (“INX”) provides a comprehensive description of the technical aspects of INX tokens in the prospectus accompanying the token offering, including a detailed explanation of the smart contract deployment (built on the ERC 20 token standard).

---

233 Bourvea, supra note 227 (finding information disclosed and discussed in ICO white papers are broadly similar to information disclosed and discussed in prospectuses in initial public offerings, such as management, business model, executive compensation and governance, and offering-related information).
234 See e.g., Chen Feng et al., INITIAL COIN OFFERINGS, BLOCKCHAIN TECHNOLOGY, AND WHITE PAPER DISCLOSURES (2019) (finding providing technical details in white papers is positively correlated to the amount raised of high-quality ICO projects); Saman Adhami et al., Why do Businesses Go Crypto? An Empirical Analysis of Initial Coin Offerings, 100 J. Econ. & Bus. 64 (2018) (finding the disclosure of source codes, even partially, of ICO projects being promoted, is strongly and positively correlated to their success); Lambert et al., supra note 55, at 314 (finding “voluntary disclosing source code on GitHub may enable potential investors to better assess the underlying quality of security tokens and their potential financial payoff in the future.”); Thewissen et al, supra note 231 (finding that the length and content of the whitepaper in an ICO project can positively impact investor perception and success of the project, particularly with regards to the disclosure of team members and technical details).
235 See Benoît Deveux, The Informativeness of ICO Whitepapers, A Topic Modeling Approach (Louvain School of Management, Université Catholique de Louvain 2021) (finding “First, we note that when referring to blockchain, it impacts positively the success, the amount raised, and it reduces the volatility”, and examining technical topics discussed and disclosed in ICO white papers.).
236 See Ju-Chun Yen, et al., Different is Better: How Unique Initial Coin Offering Language in White Papers Enhances Success, 61 ACCT. & FIN 5309 (2021) (finding token offerings with more unique and less common contents in their white papers “raise more funds during the ICO campaign, and their tokens are more actively traded and have higher value afterwards.”).
standard), functionality, compliance features, and the process of holding and transferring the token. INX also provides technical details about its tokens, including its smart contract address, on its website. Although the INX token offering is a public offering registered with the SEC, its disclosure of technical aspects related to smart contract building, functionality, and features is useful as a reference for other token offerings, including offering tokenized exempt securities to the secondary market. Tokenization service providers, such as tZERO, can assist in preparing such disclosures.

As for other information, such as details about the issuing corporation, its management, financials, and operations, it can be included in the white paper as appendices with references to the issuer’s corresponding SEC filings. It is important to note that tokens issued under the framework proposed in this article are not new securities offerings, but rather represent securities already offered under Regulation CF or other exemptions. Therefore, in this context, white papers do not need to disclose the issuer’s business and managerial information as required in IPO prospectuses. Instead, they can incorporate information already publicly available through SEC filings. For instance, when tokenizing securities offered under Regulation CF, token issuers can incorporate information already disclosed in their prior Form C filings by securities issuers into the relevant sections of the white paper.

Adding an easy-to-update warning box to mandatory white papers can be a useful tool in providing investors with real-time disclosures of critical information. This warning box can serve as a timely reminder of unexpected events that could significantly affect the rights of token investors. Examples of such events may include changes to the technological structure of tokens (e.g., switching to different ERC standards), regulatory actions or warnings, and major security breaches or hacks. Token issuers can work with trading platforms to manage these warning boxes and utilize their technology infrastructure.

In conclusion, as offerings of tokenized exempt securities do not require new registration or filing of new forms with the SEC, white papers play a crucial role in providing essential information to token investors. Therefore, the SEC should mandate the provision of white papers in offerings of tokenized exempt securities and provide clear guidance on the required contents and quality of these white papers. This guidance should primarily focus on disclosing technical details related to tokens, such as smart contract building and features and data management. The SEC should also take enforcement actions against token issuers who provide false

---

237 See INX, Ltd., Prospectus Supplement (Form 424(b)(1)) (Aug. 20, 2020), at 100-104.
239 Regulation CF requires issuers to file Form C as an initial offering statement and Form C/A for material changes. Issuers must also file an annual report on Form C-AR within 120 days after the end of each fiscal year. 17 C.F.R. § 227.203 (2023).
information in their white papers. Moreover, token issuers should promptly disclose any events or actions related to them that could significantly affect token investors through regularly updated warning boxes.

C. Regulations of Digital Token Trading Platforms

Trading tokenized public securities has gained popularity in recent years. In early May 2021, the daily trading volume for digital tokens representing traditional stocks like TSLA and AAPL on crypto trading platforms Binance and FTX reached over $4 million.240 This daily trading volume surpassed the combined volume of all security tokens traded on four popular digital token trading platforms. These four trading platforms include tZERO, Merj, Open Finance Network, and TokenSoft, which had a total trading volume of $3.9 million in April.241

However, the epic collapse of FTX242 exposed the risks of trading digital tokens on fraudulent platforms. In light of these risks, it is necessary to regulate and oversee the operations of crypto token trading platforms.

In March 2018, at the height of the ICO boom,243 the SEC’s Divisions of Enforcement and Trading and Markets issued a statement urging crypto investors to use a platform or entity registered with the SEC as a national securities exchange, ATS, or broker-dealer.244 The SEC staff warned that many online crypto trading platforms appeared to investors as SEC registered and regulated marketplaces, but in fact they were not.245

SEC officials also stressed that crypto trading firms should register with the SEC. In July 2022, SEC Chair Gary Gensler released a video on his official Twitter account, stating that he has asked the agency’s staff to work with digital-asset exchanges so that they are “regulated much like securities exchanges.”246 He claimed there is no way to “treat the crypto market differently just because a different technology is


241 Id.

242 See Bonifacic, Kingsley, Forbes, & Huang, supra note 141 regarding the account of the FTX collapse.


245 Id.

246 Gary Gensler (@GaryGensler), TWITTER (July 28, 2022, 1:00 PM), https://twitter.com/GaryGensler/status/1552700562533236739.
Despite the SEC’s prior efforts, after the FTX debacle, a lot of comments revisiting the SEC’s approach to regulating the crypto token market have emerged. For instance, Senator Elizabeth Warren asked the SEC to enforce securities laws “before more people get cheated.” Moreover, some scholars accuse the SEC of focusing only on enforcement actions against exempt offerings of crypto tokens for lack of disclosure while failing to regulate crypto exchanges.

In response, Chair Gary Gensler defended the SEC by alleging the SEC has brought more than one hundred enforcement cases in the crypto space, and the SEC has successfully deterred other suspicious crypto firm activities.

But undeniably, since the FTX collapse, the SEC has watched crypto trading firms closely and vigilantly. On March 9, 2023, Chair Gary Gensler penned an opinion entitled “Getting Crypto Firms to do Their Work Within the Bounds of the Law.” In this piece, Chair Gensler stated that the law is clear and stressed that crypto intermediaries should comply with laws governing securities exchanges, broker-dealers, and clearinghouses, as well as make required disclosures. On March 23, 2023, the SEC issued an investor alert entitled “Exercise Caution with Crypto Asset Securities” reiterating that firms providing crypto trading services should register with the SEC as a national exchange, broker, or ATS. In this bulletin, the SEC noted that “no crypto asset entity is registered with the SEC as a national securities exchange” and “no existing national securities exchange currently trades crypto asset securities.” On March 29, 2023, the SEC charged beaxy.com, a crypto trading platform, for failing to register as a national securities exchange, broker, and

---

247 Id.
252 Id.
254 Id.
The SEC’s recent intensive enforcement actions and repeated appeals to crypto trading firms to register with the agency demonstrate its resolve to regulate digital token trading activities. However, a closer examination of real-world trading platforms for tokenized exempt securities could help regulators identify specific areas where existing rules may need to be overhauled.

There are a few crypto token trading platforms that are registered with the SEC as ATSSs where tokenized securities can be traded. For instance, tZERO ATS is a registered ATS and a subsidiary of tZERO. There are only few tokens traded on tZERO ATS, including TZROP which is a preferred equity token issued by tZERO itself. According to its public market data, trading volumes on tZERO ATS are quite low.

Meanwhile, Securitize also runs a registered ATS called Securitize Markets, where eight tokens are currently being traded, including tokens representing investment fund interests (e.g., 22x, Cosimo X, etc.).

Exchanges are centralized marketplaces where buyers and sellers trade securities. A “national securities exchange” is a securities exchange that has registered with the SEC under § 6 of the Exchange Act. Registered national securities exchanges are self-regulatory organizations and are responsible for supervising and ensuring compliance of its members with applicable regulations. As such, it has an obligation to develop and maintain inspection and disciplinary programs, as well as monitor and conduct appropriate surveillance of the activities of its members.

---


256 See Danny Nelson, Overstock Wants to Trade Traditional Stocks on tZERO Crypto App, YAHOO!FINANCE (May 1, 2020), https://finance.yahoo.com/news/overstock-wants-trade-traditional-stocks-130000302.html#:~:text=Only%20two%20tokens%20are%20currently,digital%20securities%20with%20tZERO%20ATS [https://perma.cc/DV3T-KXCS] (last visited October 17, 2023) (“Only two tokens are currently listed but a third is waiting for regulators’ OK...”).


259 The Securities Exchange Act of 1934 Exchange Act defines the term “exchange” as “any organization...which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities....” See 15 U.S.C. § 78c(a)(1).

260 See Jennifer A Connors et al., Understanding the Regulatory Concerns of Cryptocurrency
The extensive oversight and compliance responsibilities of being a national securities exchange can be costly, which may be a reason why crypto trading platforms are reluctant to register as national securities exchanges. ATSSs are exempted from registering as national securities exchanges if they comply with Regulation ATS, but must register as a broker-dealer and are subject to regulatory oversight by the SEC. In contrast with national exchanges that are required to publicly display order books and provide real-time price and volume information to the public, ATSs are not required to provide this level of transparency and the extent of information available to the public may vary depending on the ATS.

As there are real-world examples of registered ATSSs facilitating digital token trading, there is no need for the SEC to compel digital token trading firms to register as national securities exchanges. Furthermore, as low trading volumes could hurt the appeal of trading platforms for issuers and investors, the SEC should clarify that digital tokens resulting from tokenizing exempt securities offered under exemptions can be legally traded on crypto trading firms registered with the SEC. This is provided the platforms properly execute the applicable resale restrictions.

For partnerships between funding platforms and crypto trading platforms, such as Fundwise-Ignium, the SEC may require funding platforms to disclose the reasons for their selection process, including their evaluation of the technological structure and trading practices of the trading platforms. Additionally, funding platforms could be required to monitor any fraudulent activities committed by their partnered crypto trading platforms in relation to their collaborations. If a crypto trading platform engages in fraudulent activities and the funding portal knew or had reason to know about it during the course of their partnership, the funding portal must report related evidence to the SEC.

To facilitate the use of warning boxes, the SEC could require that all digital token trading platforms provide necessary technical mechanisms and assistance to token issuers that enable them to update the information in real-time and make it easily accessible to investors. In addition, trading platforms should be required to implement alerts and notifications that inform investors of any significant updates through warning boxes.

---

263 17 C.F.R. § 242.603(b) (2023) (requiring national securities exchanges to disclose all data necessary to make consolidated market data to all competing consolidators and self-aggregators).
264 For information on how ATSSs are subject to a less stringent regulatory environment and disclosure requirements, see generally Gabriel Rauterberg, Alternative Trading Venues in the United States, Incentives for Innovation in the US Stock Market, in Financial Market Infrastructures, Law & Regulation 196, 199-212 (Jens-Hinrich Binder and Paolo Saguato, eds. 2021).
D. The Role of the SEC and the CFTC In Regulating Tokenized Assets

In addition to the SEC, the CFTC is a federal agency that, in theory and in practice, can exercise regulatory powers over the trading of digital tokens.

The CFTC regulates the trading of commodities as defined by the Commodity Exchange Act and has interpreted the definition to include cryptocurrencies and digital assets. The CFTC has established authority to prosecute fraud with respect to cryptocurrencies like Bitcoin. In summary, the CFTC’s jurisdiction over cryptocurrencies and digital assets in the spot market is limited to policing fraudulent and manipulative activities in interstate commerce. The CFTC does not have general oversight of cryptocurrency transactions or exchanges that do not involve margin, leverage, or financing in the spot market.

SEC Chair Gary Gensler signaled support for the CFTC to oversee commodity tokens while maintaining that most digital tokens are securities and should be regulated by the SEC. Even the CFTC Chair believes that there could be more security tokens than commodity tokens.

Clarifying the relative jurisdiction of the SEC and the CFTC over digital tokens is not the focal point of this article. As proposed, the primary purpose of tokenization is to facilitate liquidity for securities offered under exemptions, not to create new types of investment products or utilities. Therefore, tokens resulting from tokenizing exempt securities should be regulated by the SEC rather than the CFTC. The SEC’s regulatory authority over the trading of these tokens is an extension of its power over the underlying original exempt securities and not derived from its power to regulate digital tokens in general.

In conclusion, the roles of the SEC and the CFTC in regulating tokenized assets

---

265 See 7 U.S.C. § 1a(9) (defines a commodity that includes “...all other goods and articles, ...and all services,...in which contracts for future delivery are presently or in the future dealt in.”)

266 See e.g., In re Coinflip, Inc, CFTC no. 15-29, 2015 WL 5535736 (Sept. 17, 2015) (asserting “Bitcoin and other virtual currencies are encompassed in the definition and properly defined as commodities”); In re Tether Holdings Ltd., CFTC no. 22-04 (alleging USD Tether is a commodity).

267 See Commodity Futures Trading Comm’n v. My Big Coin Pay, Inc. 334 F.Supp.3d 492, 497 (D.N.H. 2018) (finding that the broad definition of commodities under the CEA gives the CFTC authority to “comprehensively protect and police the markets” involving cryptocurrencies).


269 See Andrew Ackerman, SEC’s Gensler Signals Support for Commodities Regulator Having Bitcoin Oversight, WALL ST. J. (Sept. 8, 2022, 3:40 PM), https://www.wsj.com/articles/secs-gensler-supports-commodities-regulator-having-bitcoin-oversight-11662641115 [https://perma.cc/V8M5-R2TG] (“While Mr. Gensler’s comments suggest that his agency shouldn’t oversee bitcoin, he said the majority of crypto tokens are securities that fall under his agency’s jurisdiction.”).

should be determined by the nature and purpose of the tokens. For tokens representing exempt securities, the SEC should have jurisdiction as they are an extension of the underlying securities. The CFTC should continue to regulate cryptocurrencies and other digital tokens that fall under the category of commodities. This clear delineation of roles will help maintain a coherent and effective regulatory framework for digital tokens in the secondary market.

E. Conclusion

In conclusion, the SEC should continue to regulate tokens resulting from the tokenization of exempt securities. The focus should be on improving and enforcing existing rules and regulations, including mandating white papers that disclose technical details of tokens and requiring regularly updated warning boxes to alert investors of unexpected events that could affect their investments. Additionally, funding platforms that form partnerships with digital token trading platforms to establish secondary marketplaces should disclose their selection criteria, and report trading platforms’ fraudulent activities in relation to their collaborations to the SEC. These proposals are only a starting point for ongoing discussions to improve the regulatory framework of the SEC.

CONCLUSION

Offering securities under exemptions is crucial for businesses seeking to raise capital. Small offering exemptions, including Regulation CF and Regulation A, are frequently employed by small and mid-sized issuers. However, these exempt securities face illiquidity in the secondary market, a challenge that is particularly pronounced for securities offered under small offering exemptions.

Tokenizing these securities and trading them on digital token trading platforms could be a possible solution for the illiquidity of exempt securities. In practice, some platforms already facilitate the trading of such tokenized securities, and academic research supports the technological feasibility of programming complex legal instruments and tokenizing various securities, suggesting that a secondary market for these assets is a realistic possibility.

Nevertheless, the SEC tends to categorize digital tokens as securities, requiring offerings of these tokens be registered. According to the non-binding framework provided by the Division, determining if a digital asset is a security involves complex legal analysis. Consequently, market participants are advocating for clearer guidance and a new regulatory framework.

There are arguments suggesting that most digital tokens are not securities. Some claim that the primary use of digital tokens is for utility and consumption, rather than investment. Others argue digital tokens featuring distributed responsibilities lack an identifiable issuer, and their smart contracts do not include specific legal rights. As securities are typically characterized by identifiable legal rights created by an identifiable issuer, most tokens do not meet this definition.
These arguments generally agree that transactions involving digital tokens could be regulated as securities transactions, but the underlying tokens should not be considered securities.

This article posits that tokens derived from tokenizing exempt securities should not be classified as securities. These tokens essentially serve as digital representations of underlying exempt securities and cannot exist independently. Furthermore, the offerings of these tokens should not be regarded as new fundraising transactions. As long as the trading of these tokens complies with restrictions on the resale of the underlying exempt securities, they should not be required to register with the SEC, regardless of the specific facts and circumstances, issuers’ efforts, or investors’ expectations.

The article also contends that the focus should be on refining existing SEC regulations. The SEC’s authority to regulate the trading of these tokens stems from its power to regulate their underlying exempt securities, not from regulating digital tokens in general or because these tokens are independent securities. Mandatory white papers should be introduced to disclose vital technical details of these tokens, along with required timely warning boxes. Additionally, further requirements should be imposed on digital token trading platforms, even if they are registered as ATSs.