This is Not a Game: Blockchain Regulation and Its Application to Video Games

DIANA QIAO[*]

The use of blockchain technology as a financial instrument is often viewed with the same skepticism as emails from a foreign prince promising a portion of his inheritance for a "small" fee the recipient must pay for banking fees. Contrary to popular belief, there are various useful applications of blockchain technology, namely through the issuance and utilization of coins and tokens. "Tokens" are digital assets built on top of a particular blockchain, stored within the blockchain rather than through a central bank or regulatory authority, and provide a wider range of functions than that of Initial Coin Offerings. One of such functions include a potential utility in video games.

This Article explains the basics of blockchain technology, the many types of blockchain tokens, coins, and the current blockchain regulations between the SEC and CFTC, including an analysis and discussion of the potential issues that arise from the gaps in regulation, and how the current regulations (and gaps) may be adjusted to suit the various types of tokens in a way that encourages the development of technology. Furthermore, the Article also provides other uses for blockchain technology such as improving aspects of a video game's in-game economy, taking lessons from game developers who utilize certain tokens such as KarmaGames and Forte, as well as providing video game developers an alternative to monetizing video games long-term without using unsatisfactory monetization tactics such as "pay-to-win" or loot boxes.[**]

    **   As this Article went to press, the Cryptocurrency Act 2020 ("Crypto Act") bill was introduced. This is an interesting development and reflects some of the predictions of this Article—namely the categorization of the different types of cryptoassets as well as designating which federal agencies would provide regulatory oversight. Similar to the predictions of this Article, the Cryptocurrency Act 2020 categorizes cryptoassets as crypto-securities, and crypto-commodities, overseen by the SEC and the CFTC, respectively. How-

ever, the Cryptocurrency Act also provides a third category of cryptoassets, which it refers to as "cryptocurrency" as a catch-all, designates the Secretary of the Treasury, acting through the Financial Crimes Enforcement Network to regulate cryptocurrencies. Whereas this Article refers to cryptocurrency as an umbrella term that covers all cryptoassets, but does not provide a catch-all category for any cryptoassets that are not classified as commodities nor securities, rather, suggests that uncategorized tokens remain unregulated, unless federal intervention is necessary to intervene or investigate the commission of a crime.

Under the Crypto Act, cryptocurrency is defined as representations of United States currency or synthetic derivatives resting on a blockchain or decentralized cryptographic ledger, including (a) such representations or synthetic derivatives that are reserve-backed digital assets that are fully collateralized in a correspondent banking account, such as stablecoins, and (b) synthetic derivatives that are (i) determined by decentralized oracles or smart contracts; and (ii) collateralized by crypto-commodities, other crypto-currencies, or crypto-securities.

A "decentralized oracle" is defined as "service that sends and verifies real world data from external sources outside of a blockchain and submits such information to smart contracts that rest on the blockchain, thus triggering the execution of predefined functions of the smart contract." This definition is broad enough to cover any cryptoassets that are not a crypto-security nor crypto-commodity, with reasonable federal oversight. While I still believe the best test for determining whether a token is a security is the *Howey* test, the Crypto Act provides a specific and adequate definition of how a token is classified as a crypto-commodity.

INTRODUCTION

On August 13, 2018, KamaGames announced its integration of existing blockchain technology into its social casino game *Pokerist*, and the launch of its Ethereum-based in-game token, the KamaGames Token ("KGT").[1] The KGTs were not sold as a fundraising mechanism, but rather were offered as a collection of in-game chips sold in bulk at the best price possible. The company's goal was to attract new players and to retain and engage current players. "These chips . . . gr[ew] in value every day[, and] players [were] rewarded for leaving their tokens untouched."[2] If players logged in every day, they could be rewarded with extra currency. "Players [could] then use their account to redeem the free chips awarded daily along with any other discounts, bonuses, or services that the company made available exclusively to token holders" that were redeemable at a later date.[3] Each KGT cost $1, which converted to "7 million in-game chips that players can then spend in any of KamaGames' social casino games."[4] CEO of KamaGames, Andrey Kuznetsov, emphasized that these tokens were not

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    1.   Dean Takahashi, *KamaGames Will Sell Cryptocurrency Tokens for Social Casino Games*, VENTUREBEAT (Aug. 13, 2018, 7:01 AM), https://venturebeat.com/2018/08/13/kamagames-will-sell-cryptocurrency-tokens-for-social-casino-games/ [https://perma.cc/5FD4-NKLG].
    2.   Dean Takahashi, *What KamaGames Learned from its Failed Cryptocurrency Experiment*, VENTUREBEAT (Feb. 8, 2019, 7:05 AM), https://venturebeat.com/2019/02/08/what-kamagames-learned-from-its-failed-cryptocurrency-experiment/ [https://perma.cc/2JGD-PEMQ].
    3.   *Takahashi*, *supra* note 1.
    4.   Jon Jordan, *KamaGames' Audacious Blockchain-Based $25 Million UA Experiment*, BLOCKCHAINGAMER.BIZ (Sept. 3, 2018), https://www.blockchaingamer.biz/features/interviews/5565/kamagames-blockchain-experiment/ [https://perma.cc/7Y9G-9R9N].

an investment, but rather "a way for . . . players to buy in-game currency more cheaply."[5] Although the company risked possible inflation due to the introduction of additional currency to the game, KamaGames "collect[ed] a fee (in virtual currency), or rake, when players play the games" in order to drain currency from the player base and keep the economy of the game stable.[6] At worst, if all players were token buyers, all held their tokens for thirty-six months, and redeemed all their bonuses, the players would receive eleven times more chips than they could have obtained if they sold the token the same day they bought it. This inflation would be huge, but Kama-Games believed it could mitigate this dilemma by introducing five new games and slots which would remove more chips from the economy. The company also assumed that players "[would] exchange tokens for chips regularly" given how they already play.[7]

Aside from the gambling issues that KamaGames is able to avoid in its games, the company also addresses securities regulation issues with the sale of its tokens. KamaGames referred to KGTs as "utility tokens," as the tokens served as a "proxy" for chips.[8] To remedy the gambling issue, as well as the blockchain regulation issue, none of the company's games, including *Pokerist*, allowed a player to cash out in-game chips for real money. However, because the token exists on a decentralized network, token buyers still had the opportunity to exchange KGT on decentralized exchanges, and players could earn more tokens if they encouraged their friends to buy tokens. Yet, do these elements subject the tokens to regulation, and more importantly, should this aspect make the token subject to regulation?

The implementation of blockchain technology, the company's games, and release of KGTs eventually proved unfruitful as KamaGames did not attract more players, nor improve retention of current ones, despite initial player demand to accept cryptocurrencies as a payment for in-game virtual currencies. Additionally, the blockchain technology that was implemented was unable to process the large amounts of transactions the company encountered daily—1.5 million transactions per minute. Players wanted simplicity, quick transactions, and the ability to exchange the tokens. Kama-Games did not list its tokens on any exchange, explicitly explaining to players the purpose of the tokens; however, players kept inquiring on where they could sell/exchange the tokens.

Despite KamaGames' failed experiment with implementing blockchain technology in games, there are still some benefits to utilizing blockchain in video games. This Article does not dispute whether blockchain

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5.   Takahashi, *supra* note 1.
6.   *Id.*
7.   *Id.*
8.   *Id.*

technology is the best or most efficient technology, especially when similar decentralized encryption technology for data already exists such as Apache Cassandra. Rather, the Article will discuss current blockchain regulation, the potential benefits of implementing blockchain technology in games, and how blockchain technology should be regulated, especially in games.

This Article discusses the current issues with token and coin classification: (1) whether a token is a security; (2) if that token is a security, whether it is exempt from registration; (3) if the token is not a security, whether it is a commodity; (4) if it is a commodity, whether it is exempt from commodity classification; and (5) how these classifications would apply to video games.

Part I describes the term virtual currency, the different types of cryptocurrency that exist, and an explanation of the blockchain technology that powers cryptocurrency, as well as the different types of cryptocurrency. This part describes what the different tokens are, how they function, and why an individual would want to purchase them.

Part II then explains the current regulatory regime the Securities Exchange Commission ("SEC") and the Commodity Futures Trading Commission ("CFTC") has established so far. This section addresses the threshold question: whether a token is a security, expounding the SEC's guidance on the application of the *Howey* test to digital assets. This section additionally addresses relevant security registration exemptions that may apply to Initial Coin Offerings ("ICOs"). This part reviews when payment tokens (i.e., coins) are classified as commodities and whether certain tokens are exempt from CFTC oversight. Part II concludes with applicable securities and commodities case law applied to virtual currency.

Part III introduces a theory of spectrum of regulation, with SEC regulation on one end, and CFTC regulation on the other end, and where each token lies on the spectrum. This part also evaluates how each different type of token could fall on either end of the spectrum, and how each should be regulated.

Part IV discusses how SEC and CFTC regulations should not apply to virtual currency in video games.

Finally, Part V explains how implementing blockchain technology could not only improve gameplay experience, but also provide a more sustainable business model and in-game economy for video game developers.

PART I: AN EXPLANATION OF VIRTUAL CURRENCY, THE DIFFERENT
                TYPES OF TOKENS, AND CRYPTOCURRENCY STRUCTURES

The term "virtual currency" is an umbrella term that includes cryptocurrency. Cryptocurrency is a digital asset that utilizes cryptography to secure transactions, control the creation of additional units, and verify the transfer of assets. It operates as a medium of exchange, independently of a

central bank. Cryptocurrencies exist on platforms such as Bitcoin, Ethereum, Litecoin, and Ripple. These platforms are all different due to the differences in purpose, capability, and technology. For example, while both Bitcoin and Ethereum are distributed public blockchain networks, "Ethereum is an open software platform based on blockchain technology that enables developers to build and deploy decentralized applications," whereas "Bitcoin offers one particular application of blockchain technology, a peer[-]to[-]peer electronic cash system that enables online Bitcoin payments" and is mostly "used to track ownership of digital currency."[9]

Blockchain is a decentralized distribution data structure that posts transactions made to a public ledger.[10] To summarize, blockchain is simply a chain of blocks. Each block contains digital pieces of information: (1) data; (2) a "hash," a string of random numbers and letters which identifies the specific block and distinguishes it from others; and (3) the hash of the previous block connected by nodes (computers).[11] The data that is stored in the "block depends on the type of blockchain."[12] For example, the data within the block on the Bitcoin blockchain stores information surrounding a transaction such as the sender, the receiver, and the amount of coins. If the data inside the block is changed, the hash also changes. The effect of each block containing the hash of the previous block (aside from the "first" block in the chain, i.e., the "genesis block") creates a chain between all of the blocks. This mechanism makes blockchain particularly secure because if the data is changed in one block, that hash will also change, thus invalidating the block immediately after the changed one as it still contains the old hash, as well as invalidating every subsequent block following that one. However, it is still possible for a computer to tamper with a block, and recalculate its hash and the previous hash in the subsequent blocks. To counter this, blockchains have a mechanism called "proof of work" which slows down the creation of new blocks. For example, to calculate the required proof of work and to add a new block to the chain in Bitcoin, the process takes ten minutes. Thus, not only would a hacker have to recalculate all the previous hashes of the blocks subsequent to the one he or she changed, they must also recalculate the proof of work of all the following blocks as well.

9.   Ameer Rosic, *What is Ethereum? The Most Updated Step-by-Step-Guide!*, BLOCKGEEKS   (2016),   https://blockgeeks.com/guides/what-is-ethereum/ [https://perma.cc/F9DU-AYRH].

10.   Nathan   Reiff,   *Blockchain   Explained*,   INVESTOPEDIA, https://www.investopedia.com/terms/b/blockchain.asp   (last   updated   Feb.   1,   2020) [https://perma.cc/2PTU-JXAY].

11.   Simply Explained – Savjee, *How Does a Blockchain Work*, YOUTUBE (Nov. 13, 2017), https://www.youtube.com/watch?v=SSo_EIwHSd4.

12.   Anastasiia Lastovetska, *Blockchain Architecture Basics: Components, Structure, Benefits & Creation*, MLSDEV (Jan. 31, 2019), https://mlsdev.com/blog/156-how-to-build-your-own-blockchain-architecture [https://perma.cc/86AZ-N6W9].

Finally, the decentralized nature of blockchain adds an additional security mechanism. Instead of a central entity managing the chain, the decentralized nature of blockchain creates a peer-to-peer ("P2P") network. Every new peer (node) has a copy of the blockchain, and every new node that joins will also receive a copy. When a node creates a new block, "[t]he new block is sent to everyone [on] the network."[13] "Each node then verifies the block [to] make[] sure [the block] has [not] been tampered with."[14] After the block has been verified, it is added to every node's blockchain. The P2P network thus creates a consensus, where every node agrees on the validity of the blocks within the blockchain. Therefore, on top of changing all of the previous hashes and proof of works in the following blocks, the hacker must also take control of more than 50% of the network.[15]

There are different forms of cryptocurrencies that may exist on those platforms, such as coins and tokens. A crypto coin is simply a coin: a means of payment. Coins act "as a unit of account, [a] store of value and medium of transfer," and "tend to take the form of native blockchain tokens," also known as "currency" or "asset" tokens, such as Bitcoin, Litecoin, and Monero.[16] Tokens are digital assets built on top of the blockchain, stored within the blockchain,[17] instead of through a central bank or regulatory authority, and have a wider range of functionality.[18] Each crypto exchange is not connected, which means an exchange market that allows for the exchange of Bitcoin will not allow a user to exchange Litecoin on that exchange.[19] Price of the coin is calculated based on the trade value of the coins and through supply and demand of the purchasers.[20] Thus, "the bigger

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13.   Kiana Danial, *What is a Blockchain, and How Does it Work?*, DUMMIES, https://www.dummies.com/personal-finance/investing/what-is-a-blockchain-and-how-does-it-work/ [https://perma.cc/V2VD-3ZB3].

14.   *Id.*

15.   Simply Explained—Savjee, *supra* note 11.

16.   *Token vs. Coin—What's the Difference?*, CHRONO.TECH (Sept. 1, 2017), https://blog.chronobank.io/token-vs-coin-whats-the-difference-5ef7580d1199 [https://perma.cc/WF7D-5UBW].

17.   Luis-Daniel Ibanez, Michal R. Hoffman & Taufiq Choudry, *Blockchains and Digital Assets*, EUBLOCKCHAIN, https://www.eublockchainforum.eu/sites/default/files/research-paper/blockchains_and_digital_assets_june_version.pdf?width=1024&height=800&iframe=true [https://perma.cc/G5F6-J39X].

18.   Ameer Rosic, *What is Blockchain Technology? A Step-by-Step Guide for Beginners*, BLOCKGEEKS (2016), https://blockgeeks.com/guides/what-is-blockchain-technology/ [https://perma.cc/22R9-EUVN].

19.   Kira Egorova, *Crypto Exchanges, Explained*, COINTELEGRAPH (July 10, 2018), https://cointelegraph.com/explained/crypto-exchanges-explained [https://perma.cc/2TS9-GTLL].

20.   *Id.*

the exchange, the more market-relevant price" a purchaser receives.[21] Purchasers of payment tokens such as Bitcoin, Litecoin, or Monero often expect to profit off of buying and selling the coin at certain price points. The exception is stablecoins, which act as a "bridge" between cryptocurrency and fiat currency.[22] Stablecoins exist on current existing blockchains (such as Bitcoin's blockchain) and are either algorithmic, crypto-based, or asset-backed.[23] "[A]lgorithmic stablecoins employ a set of rules in their code that aim to match the supply of the token with the demand."[24] Crypto-based stablecoins are collateralized by another cryptocurrency.[25] Asset-backed stablecoins are pegged to another stable asset such as gold or the U.S. dollar (usually at a 1:1 ratio) that are traded at a fixed price.[26] Purchasers of stablecoins do not expect to profit from the stablecoins themselves, but rather the stablecoins allow for a digital token purchaser to trade or transfer its digital tokens (such as Bitcoin) to stablecoins, and then later to a fiat currency. This is important because cryptocurrency value is volatile and transaction speed may sometimes be slow. For example, if a Bitcoin purchaser wants to sell their coins in exchange for fiat currency because the value of Bitcoin is declining, many other purchasers may be doing the same thing. The blockchain may become overloaded with payments, and the payments may be stuck for days to go through. Not to mention that the purchaser cannot just go to a bank and exchange their cryptocurrency for fiat currency. Thus, purchasers of stablecoins utilize stablecoins as a quick way to switch from another digital token to stablecoin, and will hold the stablecoins until trading for another digital coin, or convert the stablecoin to fiat currency without delay, and without concern for transaction fees and fluctuation of prices during conversion.

There are two types of tokens: fungible and non-fungible. There are many types of fungible token standards, with new standards being created frequently. The most prevalent standards are payment tokens, including stablecoins, security tokens, equity tokens, debt tokens, and utility tokens.[27] A company may license the technology of these standards by building their applications on top of the specific blockchain (such as Ethereum).

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21. *Id.*

22. *Why Stablecoins Continues to Become Increasingly Popular?*, DEVELOPCOINS, https://www.developcoins.com/why-stablecoins-becoming-popular [https://perma.cc/X23Z-ZZG8].

23. *Id.*

24. Dennis Sahlstrom, *What is a Stable Coin?*, TOSHI TIMES (Dec. 16, 2018), https://toshitimes.com/what-is-a-stable-coin/ [https://perma.cc/S28V-5ALG].

25. *Why Stablecoins Continues to Become Increasingly Popular?*, *supra* note 22.

26. *Id.*

27. Eric Reed, *Equity Tokens vs. Security Tokens: What's the Difference?*, BITCOIN MKT. J. (Feb. 13, 2019, 12:00 AM), https://www.bitcoinmarketjournal.com/equity-token/ [https://perma.cc/3D6X-7KQD].

A security token usually represents "a stake in the wealth created by a third party and take their value from that party's success or failure."[28] Unlike equity tokens, "no ownership [value in] the underlying venture is created."[29] Equity tokens are a part of the security class, and were "initially created with the purpose of providing early access to capital for start-ups and growth companies."[30] These tokens function as a traditional stock asset and represent a "third-party asset or venture and take their value from that *property's* success or failure."[31] "There is no access to the services provided by the developed program; instead, investors earn 'dividends,'" and "[i]n most cases, [the] equity token holders also have the right to vote on major company proposals."[32] However, equity tokens "are classified as securities in most jurisdictions."[33] Because equity tokens, like other tokens, live on a blockchain, equity/security tokens trade in exchanges with blockchain facilities located in jurisdictions that permit their existence and trading.[34] When a purchaser buys these tokens, they are expecting a larger return. The tokens sometimes have a static pre-determined price, but often, the token's value will appreciate or depreciate depending on how the crowd sale is going.

Debt tokens represent short-term loans issued at an interest rate on the principal amount loaned to the company.[35] Such debt instruments include corporate bonds and real estate mortgages, and derive their value from the underlying instrument, through its interest and the creditworthiness of the debtor party.[36] One example of a debt token is the cryptocurrency Steem,

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28.   *Id.*

29*.   Id.*

30.   Jay Pazos, *Valuation Method of Equity-Based Security Token Offerings (STO) for Start-Up Companies*, J. BRIT. BLOCKCHAIN ASS'N, May 2019, at 27.

31.   Reed, *supra* note 27.

32.   Mealtoken, *Mealtoken, the Latest Utility Token is on its Way to Reform the Franchise Sector,* MEDIUM (Apr. 27, 2018), https://medium.com/nostrum-cryptofranchise-system/mealtoken-the-latest-utility-token-is-on-its-way-to-reform-the-franchise-sector-437653a61b4 [https://perma.cc/B2TE-QSJ8].

33.   Pazos, *supra* note 30.

34.   Rajarshi Mitra, *Utility Tokens vs Security Tokens: Learn the Difference—Ultimate Guide*, BLOCKGEEKS (2019), https://blockgeeks.com/guides/utility-tokens-vs-security-tokens/ [https://perma.cc/7FLY-XKGM].

35.   Paolo Casarella & Chris Manfre, *Capital Raises, Initial Coin Offerings, and Token Sales*, 22 GRAZIADIO BUS. REV., no. 1, 2019, https://gbr.pepperdine.edu/2019/03/capital-raises-initial-coin-offerings-and-token-sales/ [https://perma.cc/83HS-AKA5].

36.   Paolo Tasca et al., *Risks and Challenges of Initial Coin Offerings*, 3 J. DIGITAL BANKING 81, 96 (2018). *See also* Reed, *supra* note 27.

which can be used to purchase Steem Dollars. The users who hold Steem Dollars "receive a 10% interest."[37]

When a new cryptocurrency startup firm wants to begin raising capital, it will usually do so through an ICO. ICOs are a fundraising event that usually offer the sale of security, equity, or debt tokens. In order to start an ICO, the startup will create a plan on a whitepaper. The whitepaper describes "what the project is about, the need the project will fulfill upon completion, how much money is needed, how many of the virtual tokens the founders will keep, what type of money will be accepted, and how long the ICO campaign will run for."[38] The ICO process typically occurs in the following steps: first, promoters announce and promote ICOs through online channels. Instead of issuing prospectuses, the platform will then issue the whitepaper for potential investors to view.[39] Second, the platform "conduct[s] a presale, often limited to large investors or people close to the project team."[40] Finally, "the actual ICO takes place at a preannounced date where the public can purchase tokens in order to participate in the project and in some cases, have a stake in the project."[41] During this step, "ICO participants buy . . . a 'token' [] that enables [them] to use or govern a network that the promoters plan to develop with the funds raised through the sale."[42] The term ICO is a reference to the term Initial Public Offering ("IPO"), as the tokens offered for sale are usually security, equity, or in some rare instances, debt tokens.[43] Similar to IPOs, ICOs are not a permanent status. "However, . . . IPOs deal with investors [whereas] ICOs deal with supporters that are keen to invest in a new project much like a crowd-

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37.   *What's the Difference Between Coins, Tokens and Shares?*, COINSPEAKER (Aug. 24, 2019, 7:57 PM), https://www.coinspeaker.com/guides/coins-tokens-shares-difference/ [https://perma.cc/NMF8-VXEV].

38.   Gilbert Fridgen et al., *Don't Slip on the ICO – A Taxonomy for a Blockchain-enabled Form of Crowdfunding*, RES. CTR. FIN. & INFO. MGMT. (2018), https://www.fim-rc.de/Paperbibliothek/Veroeffentlicht/730/wi-730.pdf [https://perma.cc/5V8Y-7GKP]. *See also* Jake Frakenfield, *Initial Coin Offering (ICO)*, INVESTOPEDIA (Nov. 4, 2019), https://www.investopedia.com/terms/i/initial-coin-offering-ico.asp [https://perma.cc/T2KH-SAX3].

39.   John Reed Stark, *Judge Reverses Blockvest Decision: ICOs Are Securities*, LINKEDIN (Feb. 15, 2019), https://www.linkedin.com/pulse/judge-reverses-blockvest-decision-icos-securities-john-reed-stark/ [https://perma.cc/KY4W-3RUT].

40.   Fridgen et al., *supra* note 38, at 5.

41.   *Id.*

42.   Shaanan Cohney et al., *Coin-Operated Capitalism*, 119 COLUM. L. REV. 591, 593 (2018).

43.   Lucas K., *ERC Standards to Move Ethereum Forward? ERC-20, ERC-223, ERC-721.*, MEDIUM WE POWER (Dec. 19, 2017), https://medium.com/wepower/erc-standards-to-move-ethereum-forward-erc-20-erc-223-erc-721-e1712456449d [https://perma.cc/TN2T-HD2W].

funding event."[44] Conversely, ICOs differ from a crowdfunding project because supporters of an ICO expect a return on their investments whereas supporters of a crowdfunding project are not—the money that is spent is basically a donation.

Alternatively, during an ICO launch, the blockchain platform may release utility tokens instead of security or equity tokens. Utility token ICOs are comparable to crowdfunding presales on a platform such as Kickstarter. Utility tokens provide users with future access to a product or service. [45] "Through utility token ICOs, startups can raise capital to fund the development of their blockchain projects, and users can purchase future access to that service, sometimes at a discount off the finished product's final price."[46] A utility token's sole purpose is to be used within a closed exchange system. "As stated in the previous article about Ethereum, utility tokens are at their core not a good investment."[47] Instead of guaranteeing a person's name in the credits, early access to a feature of the product or services after contributing a certain amount of money like in many crowdfunded projects, the consumer is given a utility token in exchange for their "contribution" (the purchase of the utility token(s)). These tokens can function as "coupons," providing "the holder [with] the right to [the] issuer's product or service" once it becomes available, or as a means of payment in the new marketplace, thus a utility token purchaser does not expect to profit, but rather early access to a future service at a discounted price.[48]

Another standard of tokens is non-fungible tokens ("NFTs"). Non-fungible tokens are unique—similar to real property, artwork, or baseball cards.[49] Similar to baseball cards, for example, each non-fungible token is different, and are therefore, not interchangeable. Each token carries "unique information and varying levels of rarity," meaning that the value of one

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44.   *Definition   of   ICO—Initial   Coin   Offering*,   FINTECH   WEEKLY, https://fintechweekly.com/ico-definition [https://perma.cc/TZ7U-W5UV].

45.   Sabrina T. Howell et al., *Initial Coin Offerings: Financing Growth With Cryptocurrency Token Sales* (European Corp. Governance Inst. (ECGI) Fin., Working Paper No. 564, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3206449.

46.   *The Difference Between Utility Tokens and Equity Tokens*, ALOAHA BLOCKCHAIN PROVIDER, https://www.chain-provider.com/the-difference-between-utility-tokens-and-equity-tokens/ [https://perma.cc/5TMU-TJST].

47.   Max Middelman, *Why Utility Tokens Will Not Make You Rich*, MEDIUM CRYPTO DIGEST (Sep. 25, 2018), https://cryptodigestnews.com/why-utility-tokens-will-not-make-you-rich-70e0e4e2e0ff [https://perma.cc/K8VG-6VUF].

48.   Howell et al., *supra* note 45.

49.   Martin Westerkamp et al., *Blockchain-Based Supply Chain Traceability: Token Recipes Model Manufacturing Processes*, TELEKOM INNOVATION LABS. (2018), https://arxiv.org/pdf/1810.09843.pdf [https://perma.cc/5W7B-PD24].

NFT is not equivalent to the value of another.[50] A NFT purchaser expects the token(s) to appreciate in value and to sell the token to realize a profit.

Unlike the other tokens mentioned, dGoods is a standard of token that supports sub-tokens within one contract. Developers can decide to make some of the tokens fungible and others non-fungible, and is used more so for token management purposes.[51] The dGoods standard is open source and handles different types of virtual items on the EOS blockchain such as metadata templates for 3d and 2d assets in a game, or represents coupon, music file, piece of art, tickets, etc.[52] Mythical Games in particular anticipates that through the dGoods standard, it will be able to support a development community that creates, manages, and distributes digital products via the EOS blockchain. The dGoods standard is designed to enable users to integrate and easily display virtual items, which is attributed to functionality improvements.[53] dGoods are likely not meant to be sold or purchased but are more likely to be used as a management tool.

PART II: CURRENT BLOCKCHAIN REGULATION

A.   GENERAL REGULATING BODIES & REGULATIONS

Virtual currency is not legal tender in the United States,[54] and the standard by which it is regulated depends on individual states. As a result, the United States does not seem to have very much, if at all, general regulation on the exchange of virtual currency, nor does the United States provide a uniform definition of the term "blockchain." However, individual governmental and/or industry-specific self-regulating agencies such as the SEC and Internal Revenue Service ("IRS") have published parameters on how ICOs are classified and how virtual currencies may be taxed. Currently, there are six regulating bodies that oversee cryptocurrency issues: the SEC, the CFTC, the Financial Industry Regulatory Authority ("FINRA"), the IRS, and the Financial Crimes Enforcement Network ("FinCEN"). Each authority regulates different legal and financial aspects of cryptocurrency.

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50.   Connor Blenkinsop, *Nonfungible Tokens, Explained*, COINTELEGRAPH (July 26, 2018),   https://cointelegraph.com/explained/non-fungible-tokens-explained [https://perma.cc/B3PS-CMSJ].

51.   Bitcoin Exchange Guide News Team, *dGoods Digital Goods Standard: Mythical Games' Blockchain Project*, BITCOIN EXCHANGE GUIDE (Mar. 3, 2019), https://bitcoinexchangeguide.com/dgoods-digital-goods-standard/   [https://perma.cc/CLV6-BUHF].

52.   DGOODS, https://dgoods.org/ [https://perma.cc/MW8M-WYY3].

53.   *Id.*

54.   I.R.S.   Notice   2014-21,   https://www.irs.gov/pub/irs-drop/n-14-21.pdf [https://perma.cc/LT67-ZP5N].

The SEC "is the primary overseer and regulator of U.S. securities markets, [but does] work[] closely with . . . other institutions, [such as] Congress, other federal . . . agencies, [and/or other] self-regulatory organizations" in order to ensure fair dealing and to protect against fraud.[55] The bureau regulates "securities" and other assets that may be considered "securities" under the Securities Act. "[T]he CFTC aims to protect market users and their funds, consumers, and the public from fraud, manipulation, and abusive practices related to derivatives and other products that are subject to the [Commodity Exchange Act] (CEA)."[56] "[T]he amendments to the CEA under the Dodd-Frank Act permit the CFTC to exercise its jurisdiction over fraud that does not directly involve the sale of futures or derivative contracts, including fraud related to virtual currencies sold in interstate commerce."[57]

Both the SEC and CFTC have overlapping authority over cryptocurrency regulation.[58] Although "the CFTC has exclusive jurisdiction over 'contracts of sale of a commodity for future delivery,'" this "does not limit the CFTC's broad authority to regulate price manipulation of any commodity in interstate commerce."[59] This, in effect, would deprive the CFTC of jurisdiction over physical or actual trades of natural gas, as opposed to sale of futures contracts for natural gas, although term "future delivery," as used in the CEA, did not include "any sale of any cash commodity for future shipment or delivery."[60] "[T]he CEA granted CFTC exclusive jurisdiction over both futures contracts and over certain conduct involving or affecting cash markets, including broad authority to take action against individuals who manipulate or attempt to manipulate the market price of 'any commodity in interstate commerce or for future delivery.'"[61]

A public statement made by the SEC on "Potentially Unlawful Online Platforms for Trading Digital Assets" provides that "[i]f a platform offers

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55. *What We Do*, U.S. SEC. & EXCHANGE COMMISSION, https://www.sec.gov/Article/whatwedo.html (last modified June 10, 2013) [https://perma.cc/489T-H3YW].

56. *CFTC, NASAA Sign Agreement for Greater Information Sharing Between Federal Commodities Regulator and State Securities Regulators*, COMMODITY FUTURES TRADING COMMISSION (May 21, 2018), https://www.cftc.gov/PressRoom/PressReleases/7730-18 [https://perma.cc/J3ET-WPEJ].

57. Commodity Futures Trading Comm'n v. McDonnell, 287 F. Supp. 3d 213, 217 (E.D.N.Y. 2018).

58. *Id.*

59. U.S. Commodity Futures Trading Comm'n v. Reed, 481 F. Supp. 2d 1190, 1196 (D. Colo 2007).

60. Commodity Futures Trading Comm'n v. My Big Coin Pay, Inc., 334 F. Supp. 3d 492 (D. Mass. 2018).

61. Commodity Exchange Act, 7 U.S.C. §§ 1a(19), 2(a)(1)(A), 9(a)(2), 13(a)(2) (2012). *See also Reed*, 481 F. Supp. 2d 1190 (D. Colo. 2007) (citing Commodity Exchange Act, 7 U.S.C. §§ 1a(19), 2(a)(1)(A), 9(a)(2), 13(a)(2) (2012)).

trading of digital assets that are securities and operates as an 'exchange,' as defined by the federal securities laws, then the platform must register with the SEC as a national securities exchange or be exempt from registration."[62] Pursuant to § 3(a)(1) of the Exchange Act, an "exchange" means "any . . . association . . . which maintains . . . or provides a market place or facilities for bringing together purchasers and sellers of securities."[63] In effect, this establishes the SEC's authority to regulate ICOs that are classified as security offerings.

B.   SECURITIES REGULATION

Chairman Jay Clayton of the U.S. Securities and Exchange Commission sought to simplify differentiating between what is classified as a security and what is classified as a commodity by identifying and explaining two common standards of virtual currency: (i) a "pure medium of exchange," e.g., a commodity such as gold where profitability fluctuates depending on market value, which he indicated is not considered a security, such as Bitcoin; and (ii) tokens, which are used to finance projects and can be exchanged for legal tender or other virtual currency.[64] While the SEC has offered a clear framework for the exchange of digital assets as investment contracts (i.e., what the *Howey* test applies to), the SEC has not offered a framework for the exchange of digital assets as notes, which may prove problematic for debt tokens.

To determine whether an ICO, and/or an investment contract is considered a security offering, the SEC looks to the *Howey* test from *SEC v. W.J. Howey Co.*[65] An investment contract becomes a security, and thus is subject to the security guidelines of the SEC if the following four elements are met:

1) There is an investment of money;

2) in a common enterprise;

3) with an expectation of profits;

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62.   *Statement on Potentially Unlawful Online Platforms for Trading Digital Assets*, U.S. SEC. & EXCHANGE COMMISSION (Mar. 7, 2018), https://www.sec.gov/news/public-statement/enforcement-tm-statement-potentially-unlawful-online-platforms-trading [https://perma.cc/G55Q-8X2F].

63.   15 U.S.C. § 78(a)(1) (2019).

64.   SEC Chairman Jay Clayton, *Statement on Cryptocurrencies and Initial Coin Offerings*, U.S. SEC. & EXCHANGE COMMISSION (Dec. 11, 2017), https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11 [https://perma.cc/3HVM-72BW].

65.   S.E.C. v. W.J. Howey Co., 328 U.S. 293 (1946).

4) derived from the efforts of a promoter or third party.[66]

The *Howey* test is an "objective inquiry into the character of the instrument or transaction offered based on what the purchasers were 'led to expect.'"[67] On April 3, 2019, the SEC provided a framework on how the *Howey* test would apply specifically to digital assets.

In regards to the first prong, the SEC states that this element is satisfied when a "digital asset is purchased or otherwise acquired in exchange for value . . . in the form of real (or fiat) currency, [other] digital asset[s], or" another consideration during an offer and sale of a digital asset.[68]

Next, the SEC briefly summarizes the second prong addressing whether a common enterprise exists. By stating common enterprises exist in its evaluations of digital assets, how do we determine whether an investment of money goes toward a common enterprise when a company licenses blockchain technology that exists on a separate platform? What if money is raised through the funds of the platform, and are held on that platform (and not the common enterprise)? The circuit courts are fragmented in evaluating the "common enterprise" element with three approaches: (1) broad vertical commonality, (2) strict vertical commonality, and (3) horizontal commonality.[69] Both vertical commonality tests focus on the relationship between the investor and the promoter.[70] "Under this test, a common enterprise exists where the investor is dependent on the promoter's efforts or expertise for investment returns."[71] Under "broad vertical commonality, some courts look to the uniformity of the impact of the promoter, and require only a connection between the promoter's efforts and the investor's collective successes or losses."[72] "Mere dependency on the continued solvency of the promoter [is] sufficient for some courts to find the presence of a common

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66. *Id.*

67. Warfield v. Alaniz, 569 F.3d 1015, 1021 (9th Cir. 2009).

68. *Framework for "Investment Contract" Analysis of Digital Assets*, U.S. SEC. & EXCHANGE   COMMISSION, https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets   (last modified Apr. 3, 2019) [https://perma.cc/6ACH-DGGK].

69. JAMES D. COX ET AL., SECURITIES REGULATION: CASES AND MATERIALS 42-43 (9th ed. 2019) (ebook).

70. Letter from Paul D. Chestovich, Esquire, to Jeffrey Riedler, Assistant Director, Division of Corporation Finance, Securities and Exchange Commission (July 25, 2011), https://www.sec.gov/Archives/edgar/data/1522690/000119312511196626/filename8.htm [https://perma.cc/Y67B-QGJH].

71. Stan Sater & Jeffrey Bekiares, *What is a Common Enterprise and is Bitcoin Ethereum One?*, SMARTUP LEGAL (Aug. 9, 2018), https://www.smartuplegal.com/learn-center/what-is-a-common-enterprise-and-is-bitcoin-or-ethereum-one/ [https://perma.cc/B9SH-Q72Y].

72. COX ET AL., *supra* note 69.

enterprise under broad vertical commonality."[73] The strict vertical commonality test requires a direct relationship between the success (as opposed to the "efforts") of the promoters and that of the investors; this requires the promoters and investors to share the risks of the revenue.[74] "The horizontal commonality test is relatively straightforward,"[75] but more restrictive. Although the test requires a pooling of investor funds in a common venture and a pro rata distribution of profits, commonality may still exist when promised returns are fixed rather than variable as long as there is a pooling of investor funds.[76] Unlike the vertical commonality tests, this test does not focus on promoters (the issuer and its principal(s)), but rather, emphasizes the common enterprise between investors.[77] The horizontal commonality test presupposes multiple investors due to the requirement of "pooling" investment funds, thus a common enterprise does not exist when there is only a single investor.[78] The First, Second, Third, Fourth, Sixth, and Seventh Circuits follow the horizontal commonality test.[79] The Fifth and Eleventh Circuits follow the broad vertical commonality test, and only one circuit, the Ninth Circuit, follows the strict vertical commonality test.[80] Thus, the answer to the first two questions depends on whether broad vertical commonality, strict vertical commonality, or horizontal commonality is being used.

Under broad vertical commonality, when a company licenses blockchain technology that exists on a separate platform, and an investment is made on that platform, the courts may find a that a common enterprise ex-

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73.   *Id.*

74.   *Id.*

75.   Sater & Bekiares, *supra* note 71.

76.   COX ET AL., *supra* note 69 (citing U.S. S.E.C. v. Infinity Group Co., 212 F.3d 180 (3d Cir. 2000) (common enterprise existed even though investors were promised fixed rates of return ranging from 138 to 181%)).

77.   *Id.*

78.   COX ET AL., *supra* note 69.

79.   However, the Seventh Circuit found in *S.E.C. v. Lauer*, 52 F.3d 667 (7th Cir. 1995), that a horizontal commonality may still exist with one investor because horizontal commonality is determined by "the character of the investment vehicle, not the presence of multiple investors . . . Otherwise, a defrauder . . . content to defraud a single investor . . . would have immunity from the federal securities laws." *Lauer*, 52 F.3d at 670. The court was influenced by the original intention to involve multiple investors and the communication of that intention to the single investor. But if it was clear from the beginning that there would be a single investor, how could there be a requisite pooling—planned or actual—that the Seventh Circuit seems to require for a common enterprise? *See generally* James D. Gordon, *Defining a Common Enterprise in Investment Contracts*, 72 OHIO ST. L.J. 59 (2011) (arguing a common enterprise requires multiple investors).

80.   Ryan Borneman, *Why the Common Enterprise Test Lacks a Common Definition: a Look into the Supreme Court's Decision of* SEC v. Edwards, 5 U.C. DAVIS BUS. L.J. 16 (2005), https://blj.ucdavis.edu/archives/vol-5-no-2/why-the-common-enterprise-test.html [https://perma.cc/AGQ9-ZLLB].

ists.[81] In summary, a "promoter" is any individual or organization that "directly or indirectly takes initiative in founding and organizing the business or enterprise of an issuer," or any individual or organization that "directly or indirectly receives in consideration of services or property, or both services and property, 10 [percent] or more of any class of securities of the issuer or 10 [percent] or more of the proceeds from the sale of any class of such securities."[82] Here, if the company were to license a blockchain platform to release security tokens, while the blockchain platform seems like a promoter because it is behaving as a securities issuer, it is the company that indirectly takes initiative in founding and organizing the enterprise of an issuer. Therefore, in this case, a common enterprise exists if there is a connection between the company's efforts, likely releasing security tokens on a blockchain platform, and the successes of the investor, regardless of whether the funds are held on the blockchain platform or by the licensing company.[83] What constitutes the company's "efforts" is described later in the Article. Under strict vertical commonality, as long as a direct relationship can be identified between the investor's success and the promoter's success, a common enterprise exists.[84] Thus, if the company or its agents are succeeding, and so are its investors, a common enterprise exists.

Given the same facts, under the horizontal commonality test, a common enterprise exists if there is more than one investor, i.e., more than one holder of the company's security tokens. Thus, assuming that more than one person purchased security tokens from the company through the blockchain platform, a common enterprise exists.

Furthermore, both the Securities Act of 1933 ("Securities Act") and the Securities Exchange Act of 1934 ("Exchange Act") provide a definition for "security," but both of "the definitions are substantially similar, and are not intended to be treated differently in application."[85] Section 2(a)(1) of the Securities Act defines "security" as inter alia, a "note, stock, treasury

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81.   COX ET AL., *supra* note 69, at 42-43.
82.   *Guide to Definitions of Terms Used in Form D,* U.S. SEC. & EXCHANGE COMMISSION, https://www.sec.gov/info/smallbus/formddefinitions.htm (last modified Sept. 12, 2008) [https://perma.cc/YW2X-RGLT].
83.   However, a company that licenses a blockchain platform has yet to be prosecuted, as most SEC blockchain prosecution cases involve blockchain start-up companies that hold initial coin offerings. In the case of blockchain start-up companies that have agents to promote and raise funds for the blockchain company, the identification of the promoter is clear cut.
84.   COX ET AL., *supra* note 69.
85.   Laura Anthony, *What is A Security? The* Howey *Test* and Reves *Test*, SEC. L. BLOG (Nov. 25, 2014), http://securities-law-blog.com/2014/11/25/what-is-a-security-the-howey-test-and-reves-test/ [https://perma.cc/7X72-RWVF].

stock, . . . bond, . . . or investment contract."[86] Congress defined "security" to be "sufficiently broad to encompass virtually any instrument that might be sold as an investment" but did not "intend to provide a broad federal remedy for all fraud."[87] However, *United Housing Foundation v. Forman* concluded some types of stock, for example, in that case, stock in a non-profit housing cooperative, are not securities.[88] Courts should look not to the form but to the economic substance of the transaction to determine whether the *Howey* test has been met.[89] Section 5 of the Securities Act makes it unlawful to offer or sell any security unless a registration statement is in effect as to that security or there is an available exemption from registration.

Finally, when determining whether the third and fourth prongs of the *Howey* test are satisfied, the SEC looks to a few defining characteristics: (1) reliance on the effort of others, (2) reasonable expectation of profits, or (3) other relevant considerations. According to the SEC, "the main issue in analyzing a digital asset under the *Howey* test is whether a purchaser has a reasonable expectation of profits (or other financial returns) derived from the efforts of others."[90] The SEC further elaborates: "[a] purchaser may expect to realize a return through participating in distributions or through other methods . . . such as selling at a gain in a secondary market."[91] "When a promoter, sponsor, or other third party (or affiliated group of third parties), [referred to as "Active Participant" ("AP")] provides essential managerial efforts that affect the success of the enterprise, and investors reasonably expect to derive profit from those efforts, then this prong of the test is met."[92] No one of these factors is determinative, but rather, "the stronger the[] presence [of the factors], the more likely" an AP will be seen as profiting from the efforts of others.[93]

When determining whether the purchaser relies on the efforts of others, the SEC looks to two issues: "[1] [d]oes the purchaser reasonably ex-

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86.   15 U.S.C. § 77b(a)(1) (2012). *See* Reves v. Ernst & Young, 494 U.S. 56 (1990). Section 3(a)(10) of the Exchange Act has a substantially similar definition and is not intended to be treated differently in application. There was congressional intent that the definition of security be very broad to encompass all forms of investment instruments and contracts that may be used in the commercial world.

87.   *Reves*, 494 U.S. at 61 (internal quotations omitted).

88.   COX ET AL., *supra* note 69.

89.   United Hous. Found. v. Forman, 421 U.S. 837, 838 (1975). *See also* Sec. & Exch. Comm'n v. Blockvest, LLC., No. 18-CV-2287-GPB, 2019 WL 625163 (S.D. Cal. Feb. 14, 2019).

90.   *Framework for "Investment Contract" Analysis of Digital Assets*, *supra* note 68.

91.   *Id.*

92.   *Id.*

93.   *Id.*

pect to rely on the efforts of an AP [and] [2] [a]re those efforts 'the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise,' as opposed to efforts that are more ministerial in nature?"[94] In regards to what the purchaser reasonably expects, regardless of how far along in development the digital asset is and even if the digital asset still is not fully functional, "purchasers would reasonably expect an AP to further develop the functionality of the network or digital asset (directly or indirectly)."[95]

> An AP is responsible for the development, improvement (or enhancement), operation, or promotion of the network, particularly if purchasers of the digital asset expect an AP to be performing or overseeing tasks that are necessary for the network or digital asset to achieve or retain its intended purpose or functionality.[96]

Here, the emphasis is on the AP's activities, control, and responsibilities, "rather than [those of] an unaffiliated, dispersed community of network users" (peers) from a decentralized network.[97] A few examples of undeniably significant managerial efforts an AP may perform are "control[ling] the creation and issuance of the digital asset, . . . tak[ing] actions to support [the] market price of the digital asset, such as . . . limiting supply or ensuring scarcity through, for example, buybacks, 'burning,'" implementing managerial roles that "[d]etermin[e] whether and how to compensate persons providing services to the network or to the entity or entities charged with oversight of the network," "whether and where the digital asset[s] will trade," "who will receive additional digital assets and under what conditions," etc.[98]

In regards to the reasonable expectation of profits, "profits can mean, among other things, capital appreciation resulting from the development of the initial investment or business enterprise or a participation in earnings resulting from the use of purchasers' funds," excluding "[p]rice appreciation resulting solely from external market forces (such as general inflationary trends or the economy) impacting the supply and demand for an underlying asset generally is not considered 'profit' under the *Howey* test."[99] There are several other characteristics that the SEC will consider, and "the more . . .

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94.   *Id.*
95.   *Framework for "Investment Contract" Analysis of Digital Assets, supra* note 68.
96.   *Id.*
97.   *Id.*
98.   *Id.*
99.   *Id.*

characteristics . . . present, the more likely . . . there is a reasonable expectation of profit."[100] For example, if "[t]he digital asset gives the holder rights to share in the enterprise's income or profits or to realize gain from capital appreciation of the digital asset," "is transferable or traded [either on a primary market or] on or through a secondary market or platform," "offered broadly to potential [buyers]," and is marketed directly or indirectly (advertising "[t]he expertise of an AP or its ability to build or grow the value of the network or digital asset," and so on), the more the token sale satisfies the reasonable expectation of profits prong.[101]

However, there are relevant considerations that the SEC will look to that would weaken the *Howey* test. No one factor is determinative, but

> the stronger their presence, the less likely the *Howey* test is met:
>
> - The distributed ledger network and digital asset are fully developed and operational.
>
> - Holders of the digital asset are immediately able to use it for its intended functionality on the network, particularly where there are built-in incentives to encourage such use.
>
> - The digital assets' creation and structure is designed and implemented to meet the needs of its users, rather than to feed speculation as to its value or development of its network. For example, the digital asset can only be used on the network and generally can be held or transferred only in amounts that correspond to a purchaser's expected use.
>
> - Prospects for appreciation in the value of the digital asset are limited. For example, the design of the digital asset provides that its value will remain constant or even degrade over time, and, therefore, a reasonable purchaser would not be expected to hold the digital asset for extended periods as an investment.

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100.   *Framework for "Investment Contract" Analysis of Digital Assets, supra* note 68.

101.   *Id.*

- With respect to a digital asset referred to as a virtual currency, it can immediately be used to make payments in a wide variety of contexts, or acts as a substitute for real (or fiat) currency.

    o This means that it is possible to pay for goods or services with the digital asset without first having to convert it to another digital asset or real currency.

    o If it is characterized as a virtual currency, the digital asset actually operates as a store of value that can be saved, retrieved, and exchanged for something of value at a later time.

- With respect to a digital asset that represents rights to a good or service, it currently can be redeemed within a developed network or platform to acquire or otherwise use those goods or services. Relevant factors may include:

    o There is a correlation between the purchase price of the digital asset and a market price of the particular good or service for which it may be redeemed or exchanged.

    o The digital asset is available in increments that correlate with a consumptive intent versus an investment or speculative purpose.

    o An intent to consume the digital asset may also be more evident if the good or service underlying the digital asset can only be acquired, or more efficiently acquired, through the use of the digital asset on the network.

- Any economic benefit that may be derived from appreciation in the value of the digital asset is incidental to obtaining the right to use it for its intended functionality.

- The digital asset is marketed in a manner that emphasizes the functionality of the digital asset, and not the potential for the increase in market value of the digital asset.

- Potential purchasers have the ability to use the network and use (or have used) the digital asset for its intended functionality.

- Restrictions on the transferability of the digital asset are consistent with the asset's use and not facilitating a speculative market.

- If the AP facilitates the creation of a secondary market, transfers of the digital asset may only be made by and among users of the platform.[102]

Another securities test held by the U.S. Supreme Court is the *Reves* "Family Resemblance Test" which establishes when a promissory note is considered a security. Although the term "note" is specifically included in the securities definition under both the Securities Act and Exchange Act, not every "note" is considered a security as determined through case law.[103] "The Exchange Act and SEC specifically exclude notes with a term of less than nine months, the proceeds of which are used for a current transaction, from the definition of a 'security.'"[104] The test begins with a presumption that a note is "a security unless [the note] bears a strong ['family] resemblance,['] determined by examining four specified factors, to one of a judicially crafted list of categories of instruments that are not securities."[105] Courts will consider the (1) motivation of the seller and buyer; (2) "'plan of distribution' of the instrument"; (3) "reasonable expectations of the investing public"; and (4) presence of an alternative regulatory regime.[106] Under the first factor, "[i]f the seller's purpose is to raise money for the . . . business" and the buyer's motivation is to earn profits, then the note is likely a security.[107] The second factor establishes whether "common trading for speculation or investment" exists.[108] If so, the factor weighs towards the note being a security. The third factor means that an instrument will be deemed a security where the reasonable expectation of the investing public is that the securities laws (and accompanying anti-fraud provisions) apply to the investment. Finally, the fourth factor determines whether another

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102.   *Id.*
103.   Reves v. Ernst & Young, 494 U.S. 56 (1990).
104.   Anthony, *supra* note 85.
105.   *Reves*, 494 U.S. at 56.
106.   *Id.* at 66.
107.   *Id.* at 66.
108.   *In re* Application of Alvin Gebhart, Jr., Exchange Act Release No. 34-53136, 87 SEC Docket 403, 411 (Aug. 21, 2006).

regulatory scheme "significantly reduces the risk of the instrument, thereby rendering the application of the Securities Act unnecessary." [109]

In addition to the factors, courts additionally compare the "note" in question to a list of notes that have judicially been determined to fall outside the definition of a "security":

> (i) a note delivered in consumer financing;

> (ii) a note secured by a mortgage on a home;

> (iii) a short-term note secured by a lien on a small business or some of its assets;

> (iv) a note evidencing a character loan to a bank customer;

> (v) a short-term note secured by an assignment of accounts receivable;

> (vi) a note which simply formalizes an open-account debt incurred in the ordinary course of business (particularly if, as in the case of the customer of a broker, it is collateralized); and

> (vii) a note evidencing loans by commercial banks for current operations. [110]

The Court here rejects the application of the *Howey* test to notes because "to hold that a 'note' is not a 'security' unless it meets a test designed for an entirely different variety of instrument would make the [Securities Act's] and [Exchange Act's] enumeration of many types of instruments superfluous and would be inconsistent with Congress' intent in enacting the laws." [111]

Token issuers who intend to sell their tokens throughout the United States and believe they are not subject to the SEC's rules and regulations may still be subject to each state's securities laws (i.e., "Blue Sky" laws). For example, in California, courts have used the Risk Capital Test for analysis. The Risk Capital Test determines whether an investment is a security based on four factors:

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109.   *Reves*, 494 U.S. at 67.
110.   In re Gerald James Stoiber, Exchange Act Relase No. 3-8992, 53 SEC Docket 171, 175 n. 11 (Sept. 27, 1997).
111.   *Reves,* 494 U.S. at 57.

> (1) whether funds are being raised for a business venture or enterprise, (2) whether the transaction is offered indiscriminately to the public at large, (3) whether the investors are substantially powerless to effect the success of the enterprise, and (4) whether the investors' money is substantially at risk because it is inadequately secured.[112]

The threshold question in this Article is whether cryptocurrencies may be classified as securities. Even if the token is deemed a security, it may be exempt from registration. This Article reviews a few relevant securities registration exemptions that may apply to certain ICOs, such as limited offerings, private placements, and crowdfunding.

C. SECURITIES REGISTRATION EXEMPTIONS

In regard to token offerings, even if the offering is exempt from registration, the offering must adhere to a range of important restrictions, including that the sale be made to accredited investors, that the tokens be subject to limitations on resales or transfers, and that there be no general solicitation involved. Regardless of whether the offering is registered or exempt, careful consideration would also have to be given to ensure that prospective investors receive sufficient disclosure about the offering, including associated risks.[113]

There are two types of exemptions: exempt securities and exempt transactions.[114] Securities exempt from registration are usually securities issued "by a government authority, such as . . . municipal bonds" or certificates of deposit, "securities . . . restricted to a [specific] geographic area, usually . . . a state," or most importantly, "the securities [that] are sold to accredited investors."[115] "An exempt transaction is a securities exchange that would otherwise have to register with the . . . SEC but does not because of the nature of the transaction in question."[116]

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112.   Reiswig v. Dept. of Corp., 50 Cal. Rptr. 3d 386, 391 (Cal. Ct. App. 2006).

113.   Reed Stark, *supra* note 39.

114.   John Walsh, *What Are Exempt Securities and Transactions?,* STUDY.COM (Nov. 29, 2017), https://study.com/academy/lesson/what-are-exempt-securities-and-transactions-definition-types.html [https://perma.cc/G3AV-2MNB].

115.   *Securities Exempt from Registration under the Securities Act of 1933*, THIS MATTER,   https://thismatter.com/money/stocks/exempt-securities.htm [https://perma.cc/AQ9F-2EA2].

116.   Will Kenton, *Exempt Transaction*, INVESTOPEDIA (Sept. 23, 2019), https://www.investopedia.com/terms/e/exempttransaction.asp   [https://perma.cc/NYR3-Q6VW].

1. Exempt Securities

Limited Offerings

"Rule 504 of Regulation D provides an exemption from registration . . . for the offer and sale of up to $5,000,000 of securities [(less the aggregate offering price for all securities)] [within] a [twelve]-month period."[117] "A company must file [a] notice [with the Commission on Form D] within [fifteen] days after the first sale of securities in the offering"[118] and "must comply with state securities laws and regulations in the states in which securities are offered or sold."[119] Companies that are ineligible from a limited offerings exemption are "Exchange Act reporting companies; investment companies; companies that have no specific business plan or have indicated their business plan is to engage in a merger or acquisition with an unidentified company or companies; and companies that are disqualified under Rule 504's 'bad actor' disqualification provisions."[120]

2. Exempt Transactions

Private Placements

"Section 4(a)(2) of the Securities Act exempts . . . transactions by an issuer not involving any public offering" from reservation.[121] In order to qualify under this exemption, the securities purchasers must either be "sophisticated buyers" by having enough knowledge and experience in finance and business matters to be able to evaluate the risks and merits of the investment, be able to bear the investment's economic risk, or have access to the type of information normally provided in a prospectus for a registered

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117.   *Rule 504 of Regulation D: A Small Entity Compliance Guide for Issuers*, U.S. SEC. & EXCHANGE COMMISSION (Jan. 20, 2017), https://www.sec.gov/divisions/corpfin/guidance/rule504-issuer-small-entity-compliance.html [https://perma.cc/FPG8-K946].

118.   *Filing a Form D Notice*, U.S. SEC. & EXCHANGE COMMISSION, https://www.sec.gov/smallbusiness/exemptofferings/formd (last modified July 12, 2019) [https://perma.cc/8R7P-PWDM].

119.   *Rule 504 of Regulation D: A Small Entity Compliance Guide for Issuers, supra* note 117.

120.   *Exemption for Limited Offerings not Exceeding $5 Million—Rule 504 of Regulation D,* U.S. SEC. & EXCHANGE COMMISSION, https://www.sec.gov/smallbusiness/exemptofferings/rule504 (last modified Mar. 12, 2020) [https://perma.cc/GUR3-B7UC].

121.   *Private Placements—Rule 506(b)*, U.S. SEC. & EXCHANGE COMMISSION, https://www.sec.gov/smallbusiness/exemptofferings/rule506b (last modified Mar. 12, 2020) [https://perma.cc/2H7K-R9UX].

securities offering.[122] There must be no public advertising of the offering or general solicitation of investors.[123]

"Rule 506(b) of Regulation D is considered a 'safe harbor' under [§] 4(a)(2)" and allows for "companies . . . [to] raise an unlimited amount of [capital] . . . to an unlimited number of accredited investors" as long as there is "no general solicit[ing] or advertising to market the securities" and that the securities are sold to less than thirty-five non-accredited investors.[124] If non-accredited investors participate in the offering, the company must provide documents that disclose the same information provided in registered offerings: financial statement information according to Rule 506 and services "to answer questions from prospective purchasers who are not accredited investors."[125]

Regulation Crowdfunding

Section 4(a)(6) of the Securities Act provides an exemption from registration for issuers that "raise a[n] . . . aggregate amount of $1,070,000 in a [twelve]-month period."[126] The amount an individual may invest is limited to "the greater of $2,200 or 5[%] of the lesser of the investor's annual income or net worth" if the investor's annual income or net worth is less than $107,000.[127] All transactions must occur "online through an SEC-registered intermediary, either a broker-dealer or a funding portal,"[128] and the issuer must disclose information included in Form C.[129]

D. COMMODITIES REGULATION AND COMMODITIES EXEMPTION

The CFTC has regulatory authority over payment tokens and other "pure mediums of exchange" such as Bitcoin under the classification of

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122. *Id.*
123. *Id.*
124. *Id.*
125. *Id.*
126. *Regulation Crowdfunding: A Small Entity Compliance Guide for Issuers*, U.S. SEC. & EXCHANGE COMMISSION (May 13, 2016), https://www.sec.gov/info/smallbus/secg/rccomplianceguide-051316.htm (last modified Apr. 5, 2017) [https://perma.cc/V2CA-TLD7]. ("An issuer [may] not aggregate amounts sold in other exempt (non-crowdfunding) offerings during the preceding [twelve]-month period for purposes of determining the amount that may be sold in a particular Regulation Crowdfunding offering.").
127. *Id.*
128. *Regulation Crowdfunding*, U.S. SEC. & EXCHANGE COMMISSION, https://www.sec.gov/smallbusiness/exemptofferings/regcrowdfunding (last modified Mar. 12, 2020) [https://perma.cc/5SQR-FQWD].
129. *Regulation Crowdfunding: A Small Entity Compliance Guide for Issuers, supra* note 126.

"commodity." The CEA defines a "commodity" as a list of agricultural products such as "wheat, cotton, rice, corn, oats, barley, rye, flaxseed, grain sorghums, mill feeds, butter, eggs," along with "all services, rights, and interests . . . in which contracts for future delivery are presently or in the future dealt in." [130] This definition allows for the CFTC to have broad regulatory authority over agricultural goods, intangible commodities,[131] and other fungible goods moving in interstate commerce,[132] regardless of an underlying futures contract. In *CFTC v. Gelfman Blueprint, Inc.*, the CFTC relied on the broad statutory authority in § 9(1) of the CEA, and regulatory authority under 17 C.F.R. § 180.1.[133] "Specifically, the language in § 180.1 prohibiting 'any person, directly or indirectly, in connection with any . . . contract of sale of any commodity in interstate commerce' from using a 'manipulative device, scheme, or artifice to defraud,' or making 'any untrue or misleading statement of a material fact.'"[134] The portion of the statute delegating oversight authority over "contract of sale of any commodity in interstate commerce" allows the CFTC to enforce its mandate in cases not directly involving future trades.[135] "[W]here a futures market exists for a good, service, right, or interest, it may be regulated by the CFTC, as a commodity, without regard to whether the dispute involves futures contracts."[136] A commodity futures contract is an agreement to buy or sell a commodity for delivery at a future date: "(1) at a price that is determined at

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130.   7 U.S.C. § 1a(9) (2012).
131.   Commodity Futures Trading Comm'n v. McDonnell, 287 F. Supp. 3d 213, 225 (E.D.N.Y. 2018).
132.   *See* United States v. Brooks, 681 F.3d 678, 695 (5th Cir. 2012).
133.   Complaint, Commodity Futures Trading Comm'n v. Gelfman Blueprint, Inc., No. 17-7181, 2017 WL 4228737 (S.D.N.Y. Sept. 21, 2017).
134.   *McDonnell*, 287 F. Supp. 3d at 226.
135.   17 C.F.R. § 180.1 (2020).
136.   Robert A. Schwinger, *Federal Court Holds that CFTC Can Regulate Virtual Currencies as Commodities*, NORTON ROSE FULBRIGHT (Mar. 14, 2018), https://www.nortonrosefulbright.com/en-us/knowledge/publications/6c7bcc30/federal-court-holds-that-cftc-can-regulate-virtual-currencies-as-commodities [https://perma.cc/2KJ8-DLQE]. *See, e.g.*, *Brooks*, 681 F.3d at 694-95.

> [F]utures contracts for natural gas are traded on NYMEX, and those futures are derivative of natural gas traded at Henry Hub. Nonetheless, the record shows that natural gas may be moved from any location to Henry Hub through the national pipeline system. Thus, it would be peculiar that natural gas at another hub is not a commodity, but suddenly becomes a commodity solely on the basis that it passes through Henry Hub, and ceases to be a commodity once it moves onto some other locale. While the price of that commodity may fluctuate with its location, and the forces of supply and demand at that location, the actual nature of the "good" does not change.

Id.

initiation of the contract; (2) that obligates each party to the contract to fulfill the contract at the specified price; (3) that is used to assume or shift price risk; and (4) that may be satisfied by delivery or offset."[137] Such contracts are standardized so they may be traded on exchanges.[138] *CFTC v. Erskine* differentiates a futures contract from a forward contract, as the CFTC does not have jurisdiction over forward contracts.[139] "[A] futures contract is a contract for a future transaction, while a forward contract is a contract for a present transaction with future delivery."[140] The CEA generally grants CFTC exclusive jurisdiction over futures contracts and the exchanges where they are traded.[141] The "CFTC has additional powers under the statute, including the general anti-fraud and anti-manipulation authority over 'any . . . contract of sale of any commodity in interstate commerce' pursuant to which it brings the claims in this case."[142] However, futures contracts are: "(1) neither standardized nor traded on an exchange, and is (2) an individual agreement to buy or sell (3) some agreed-upon quantity of (4) some commodity (5) at some agreed-upon price (6) at some agreed-upon time in the future."[143]

Although Congress has yet to authorize CFTC regulation over cryptocurrency, *CFTC v. McDonnell* formally expanded and established CFTC authority. According to a CFTC press release, the CFTC "primarily regulates commodity derivatives contracts that are based on underlying commodities. While its regulatory oversight authority over commodity cash markets is limited, the CFTC maintains general anti-fraud and manipulation enforcement authority over virtual currency cash markets as a commodity in interstate commerce."[144] However, the CFTC notes that many virtual currency exchanges "are not subject to the supervision which applies to regulated exchanges."[145]

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137. *Futures Glossary*, COMMODITY FUTURES TRADING COMMISSION, https://www.cftc.gov/ConsumerProtection/EducationCenter/CFTCGlossary/index.htm#futur escontract [https://perma.cc/JGZ6-MS6U].

138. *See* Commodity Futures Trading Comm'n v. Erskine, 512 F.3d 309, 323 (6th Cir. 2008).

139. *Id.*

140. *Id.* at 322.

141. *See* 7 U.S.C. § 2(a)(1)(A) (2012).

142. Commodity Futures Trading Comm'n v. My Big Coin Pay, Inc., 334 F. Supp. 3d 492 (D. Mass 2018).

143. *Erskine*, 512 F.3d at 324.

144. Press Release, CFTC, CFTC Launches Virtual Currency Resources Web Page (Dec. 15, 2017), https://www.cftc.gov/PressRoom/PressReleases/pr7665-17 [https://perma.cc/7WBP-A2HW].

145. COMMODITY FUTURES TRADING COMM'N, A CFTC PRIMER ON VIRTUAL CURRENCIES 17 (2017), https://www.cftc.gov/sites/default/files/idc/groups/public/%40customerprotection/documents /file/labcftc_primercurrencies100417.pdf [https://perma.cc/D6LJ-MAYP].

> For example, if the[] [exchange platform] engage[s] in only
> . . . spot [transactions] or cash market transactions and
> do[es] not utilize margin, leverage, or financing, [these
> platforms] may be subject to federal and state money
> transmission and anti-money laundering laws, but [are not
> subject to] all the rules that regulated exchanges operate
> under.[146]

This does not mean that the CFTC has no jurisdiction over such matters, but rather its regulatory authority over cash or spot transactions is limited to transactions that involve fraud or manipulation.[147] The CFTC prohibits

> [p]rice manipulation of a virtual currency traded in inter-
> state commerce; [p]re-arranged or wash trading in an ex-
> change-traded virtual currency swap or futures contract; . . .
> virtual currency futures or option contract or swap traded
> on a domestic platform or facility that has not registered
> with the CFTC as a [Swap Exchange Facility] [("]SEF["]]
> or [Designated Contract Market] [("]DCM["]]; [and]
> [c]ertain schemes involving virtual currency marketed to
> retail customers, such as off-exchange financed commodity
> transactions with persons who fail to register with the
> CFTC.[148]

Additionally, payment tokens may be created as a result from a previous ICO, now a fully developed blockchain. For example, Ethereum, a previously classified ICO, initially depended on sales of pre-mined tokens in exchange for legal tender or cryptocurrencies. Ethereum is also a good example of how the SEC classifies securities, and how they may not always be "securities" because ICOs, similar to IPOs, are not a permanent status.

7 U.S.C. § 1(a) sets out an exemption for commodities that are not an excluded commodity or an agricultural commodity but is likely not applicable to virtual currencies. Excluded commodities are "any financial instrument such as a security, currency, interest rate, debt instrument, or credit rating; any economic or commercial index other than a narrow-based commodity index; or any other value that is out of the control of participants

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146.   *Id.*
147.   7 U.S.C. § 2(c)(2)(C)(i)(II)(bb)(AA) (2012) (The CFTC does not have jurisdiction over "spot" transactions that "[result] in actual delivery within [two] days.").
148.   Commodity Futures Trading Comm'n v. McDonnell, 287 F. Supp. 3d 213, 243 (E.D.N.Y. 2018).

and is associated with an economic consequence."[149] Exempt commodity transactions may only take place between eligible contract participants or commercial entities, and cannot be executed on a trading facility.[150] A few examples of exempt commodities are energy and metal. Therefore, when determining whether a virtual currency is exempt from CFTC regulation, we must determine whether transactions of payment tokens occur in cash markets, meaning that the payment tokens may be exchanged for other tokens that are not securities—which is where most of the trading of cryptocurrencies takes place today.[151]

E.   CASE LAW

SEC Cases

> *SEC v. Blockvest, LLC., No. 18-CV-2287-GPB, 2019 WL 625163 (S.D. Cal. Feb. 14, 2019)*

In a reversal from his previous decision, Judge Curiel stated that Blockvest's promotion of digital tokens met the definition of a security established under *Howey* because "the contents of Defendants' website, the Whitepaper and social media posts concerning the ICO of the BLV tokens to the public at large constitute an 'offer' of 'securities' under the Securities Act."[152] Blockvest's website and white paper urged people to pay for BLV tokens with digital or other currency, an investment, and the website said any funds raised would be pooled together in what is likely considered a common enterprise which was promoted by entrepreneurial or managerial efforts of others. "Finally, as described on the website and Whitepaper, the investors in Blockvest would be 'passive' investors and the BLV tokens would generate 'passive income.'"[153] "The Court did not directly address this alternative theory in its original order and based upon the additional submitted briefing concludes that Defendants made an 'offer' of unregistered securities which violated [§] 17(a)."[154]

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149. *CFTC Glossary*, COMMODITY FUTURES TRADING COMMISSION, https://www.cftc.gov/ConsumerProtection/EducationCenter/CFTCGlossary/glossary_e.html [https://perma.cc/ZY49-FTZH].

150. *Id.*

151. Timothy G. Massad, *It's Time to Strengthen the Regulation of Crypto-Assets*, BROOKINGS (Mar. 18, 2019), https://www.brookings.edu/wp-content/uploads/2019/03/Economis-Studies-Timothy-Massad-Cryptocurrency-Paper.pdf [https://perma.cc/QJQ5-DDWJ].

152. Sec. & Exch. Comm'n v. Blockvest, LLC., No. 18-CV-2287-GPB, 2019 WL 625163, at *9 (S.D. Cal. Feb. 14, 2019).

153. *Id.* at *7.

154. *Id.*

Balestra v. ATBCoin LLC.[155]

Unlike the other cases, *Balestra v. ATBCoin* is an action brought by a private party, a previous investor of ATBCoin, and not the SEC. However, this case still clarifies when a token or coin issuance constitutes an offer or sale of unregistered securities as "[§] 12(a)(1) of the Securities Act . . . provides a private right of action against any person who 'offers or sells a security' in violation of § 5 of the Act, which in turn prohibits the offer or sale of unregistered securities."[156] The court determined that the sale of ATB Coins constituted a sale of securities (investment contracts) under the *Howey* test. A "common enterprise" existed because "potential profits stemming from the future valuation of the ATB Coins were entirely reliant on the success of [d]efendant's new blockchain,"[157] and the purchasers (investors) of ATB Coin expected a return on their investments because ATB Coins would lose its value and its "market" without the promised ATB Blockchain. These profits were also determined "to be derived from the entrepreneurial or managerial efforts of others"[158] because of ATBCoin's website advertisements which described the coins as "'an attractive investment opportunity' which 'grows in value.'"[159]

CFTC Cases

CFTC v. McDonnell[160]

The case *CFTC v. McDonnell* established the CFTC's authority to regulate virtual currency as a commodity, and that "the amendments to the CEA under the Dodd-Frank Act permit the CFTC to exercise its jurisdiction over fraud that does not directly involve the sale of futures or derivative contracts."[161] "A 'commodity' encompasses virtual currency both in economic function and in the language of the statute," and the "CFTC's broad authority extends to fraud or manipulation in derivatives markets and underlying spot markets."[162]

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155.   Balestra v. ATBCoin LLC, 380 F. Supp. 3d 340 (S.D.N.Y. 2019).
156.   *Id.* at 352. *See* 15 U.S.C. § 77(a)(1) (2012). *See also id.* § 77(e).
157.   *Balestra*, 380 F. Supp. 3d at 354.
158.   *Id.* at 352.
159.   *Id.* at 355.
160.   Commodity Futures Trading Comm'n v. McDonnell, 287 F. Supp. 3d 213 (E.D.N.Y. 2018).
161.   *Id.*
162*.   Id.* at 217. However, the

> CFTC does not have regulatory authority over simple quick cash or spot
> transactions that do not involve fraud or manipulation. . . . (The CFTC

In re Coinflip, Inc.[163]

The court decided in *In re Coinflip* that Coinflip, Inc., a corporation that advertised Derivabit, a "risk management platform . . . that connects buyers and sellers of standardized Bitcoin options and futures contracts,"[164] were unlawfully operating an unregistered trading facility. "Coinflip [previously] designated numerous put and call options contracts as eligible for trading on the Derivabit platform. For these contracts, Coinflip listed Bitcoin as the asset underlying the option and denominated the strike and delivery prices in U.S. dollars."[165] "Premiums and payments of settlement of the option contracts were to be paid using Bitcoin at a spot rate determined by a designated third-party Bitcoin currency exchange."[166] Users "post[ed] bids or offers for the designated options contracts. Coinflip confirmed the bid or offer by communicating it to all users through its website."[167]

In re BFXNA, Inc/d/b/a Bitfinex[168]

In a settlement agreement between the CFTC and Bitfinex, the defendant, Bitfinex, admitted to violating §§ 4(a) and 4d(a) of the CEA, agreed to discontinue its illegal operations, and paid $75,000, plus post-judgment interest. Although this does not provide a court opinion, it does provide insight as to what cryptocurrencies and/or cryptocurrency exchange platforms the CFTC will prosecute. In this case, Bitfinex operated an online cryptocurrency exchange platform that "permit[ted] users to exchange dollars for bitcoins and litecoins, and vice-versa, as well as to trade cryptocur-

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does not have jurisdiction over "spot" transactions that "[result] in actual delivery within 2 days."). This boundary has been recognized by the CFTC. It has not attempted to regulate spot trades, unless there is evidence of manipulation or fraud. . . . ("[T]he CFTC does not have authority to conduct regulatory oversight over spot virtual currency platforms or other cash commodities, including imposing registration requirements, surveillance and monitoring, transaction reporting, compliance with personnel conduct standards, customer education, capital adequacy, trading system safeguards, cyber security examinations or other requirements.')."

Id. at 227 (citations omitted) [brackets in original].

163. *In re* Coinflip Inc., CFTC No. 15-29, 2015 WL 5535736 (Sept. 17, 2015).
164. *Id.* at *1 [omission in original].
165. *Id.*
166. *Id.*
167. *Id.*
168. *In re* BFXNA, Inc., CFTC No.16-19, 2016 WL 3137612 (June 2, 2016).

rencies for other cryptocurrencies."[169] Bitfinex violated § 4(a) of the CEA because it

> offered to enter into, executed, and/or confirmed the execution of financed retail commodity transactions, [and because] [n]one of the financed retail commodity transactions were conducted on or subject to the rules of a board of trade that has been designated or registered by the CFTC as a contract market or derivatives transaction execution facility.[170]

Bitfinex additionally violated § 4(d)(a) of the CEA because it was an unregistered futures commission merchant ("FCM") by "accepting orders for retail commodity transactions" and "receiv[ing] funds from those customers in connection with retail commodity transactions."[171]

CFTC v. My Big Coin Pay, Inc. [172]

In *My Big Coin*, the District of Massachusetts ruled that the CFTC still maintained authority over regulation of the coins ("MBCs") for three reasons: (1) the MBCs deals with contracts for future delivery of virtual currencies, and virtual currencies are commodities; (2) because the goal of the CFTC in this case is to provide remedy to fraud, the term "commodity" within the CEA's antifraud enforcement provision of § 6(c)(1) should be "construed 'not technically and restrictively, but flexibly to effectuate [their] remedial purposes;'" [173] and (3) "the CEA only requires the existence of futures trading within a certain class (e.g., 'natural gas') in order for all items within that class (e.g., 'West Coast' natural gas) to be considered commodities."[174]

Although the defendants argued that because "'contracts for future delivery' are not 'dealt in' My Big Coin, it cannot be a commodity under the

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169.   *Id.* at *2.
170.   *Id.* at *6.
171.   *Id.* Section l(a)(28) of the Act defines a FCM, in relevant part, as an individual, partnership, corporation or trust, that is engaged in soliciting or accepting orders for retail commodity transactions, or that accepts money in connection with such transactions. *See* 7 U.S.C. §l(a)(28)(i)(I)(aa)(DD) (2012). *See also* Commodity Futures Trading Comm'n v. Hunter Wise Commodities, 1 F. Supp. 3d 1311 (S.D. Fla. 2014) (entering summary judgment against purported precious metals wholesaler for failing to register as an FCM).
172.   Commodity Futures Trading Comm'n v. My Big Coin Pay, Inc., 334 F. Supp. 3d 492 (D. Mass 2018).
173.   *Id.* [brackets in original] (quoting Sec. & Exch. Comm'n v. Zandford, 535 U.S. 813, 819 (2002) (analyzing § 10(b) of the Securities Exchange Act)).
174.   *Id.* at 498.

CEA."[175] Defendants argue "that in order to satisfy the CEA's 'commodity' definition, the specific item in question must itself underlie a futures contract," an agreement traded on an organized exchange to buy or sell assets, especially commodities or shares, at a fixed price but to be delivered and paid for later.[176] While the MBCs did not contain such agreements because the smart contracts allowed for instantaneous purchase and delivery of the coin, by "[p]ointing to the existence of Bitcoin futures contracts, [the CFTC] argue[d] that contracts for future delivery of virtual currencies are 'dealt in' and that My Big Coin, as a virtual currency, is therefore a commodity."[177] The court found that "Congress' approach to defining 'commodity' signals an intent that courts focus on categories—not specific items—when determining whether the 'dealt in' requirement is met."[178] "For example, the Act classifies 'livestock' as a commodity without enumerating which particular species are the subject of futures trading."[179] "The [CEA] defines 'commodity' generally and categorically, 'not by type, grade, quality, brand, producer, manufacturer, or form.'"[180] Thus, MBCs are commodities.

Additionally, "[t]his broad approach also accords with Congress's goal of 'strengthening the federal regulation of the . . . commodity futures trading industry,' since an expansive definition of 'commodity' reasonably assures that the CEA's regulatory scheme and enforcement provisions will comprehensively protect and police the markets."[181] Because "the court constru[ed] the term 'commodity' not in a vacuum, but rather as it functions within the CEA's antifraud enforcement provision of § 6(c)(1),"[182] the court is following Congress' goal of protecting the markets.

Finally, after referencing several natural gas cases, the court in *My Big Coin* held that "the CEA only requires the existence of futures trading within a certain class (e.g.[,] 'natural gas') in order for all items within a certain class (e.g.[,] 'West Coast' natural gas) to be considered commodities."[183]

> [C]ourts have repeatedly rejected arguments that a particular type of natural gas was not a commodity because that

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175. *Id.* at 496.

176. *Id.* at 496.

177. *My Big Coin Pay, Inc.,* 334 F. Supp. 3d at 496-97. Although the court does not seem to elaborate on this point, it seems like the court supported the CFTC's argument by claiming that because Bitcoin has the capability to be purchased as a futures contract, so does My Big Coin.

178. *Id.* at 497.

179. *Id.*

180. *Id.*

181. *Id.*

182. *My Big Coin, Inc.*, 334 F. Supp. 3d at 497.

183. *Id.* at 498.

specific type was not the subject of a futures contract.[184] Rather, the courts held that because futures contracts in natural gas underlaid by gas at Henry Hub, Louisiana, were dealt in, and because natural gas is "fungible" and may move freely throughout a national pipeline system, this was sufficient to show that natural gas, including the types at issue in these cases, was a commodity.[185]
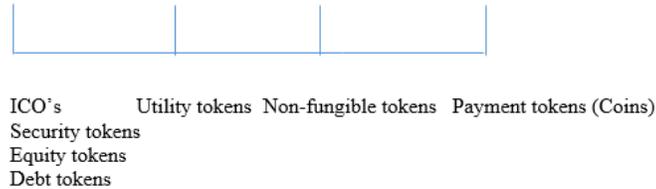
Therefore, "these decisions align with [the CFTC's] argument that the" CEA's broad scope of the definition of "commodities."[186]

Overall, it seems that the SEC and CFTC are more concerned about prosecuting fraud rather than enforcing regulations based strictly on corporate form.

PART III.   A SPECTRUM OF REGULATION AND ITS NUANCES

In regards to the classification of cryptocurrencies as either a security or commodity, there seems to be a theory that the world of cryptocurrency "exists on a continuum, a spectrum of sorts that is likely subject to different, sometimes overlapping, regulatory regimes and jurisdictions at various points in time, leaving open the twin possibilities of regulatory redundancy and regulatory void."[187]

Figure 1.1: Spectrum of Regulation

ICO's   Utility tokens Non-fungible tokens Payment tokens (Coins)
Security tokens
Equity tokens
Debt tokens

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184.   *See* United States v. Brooks, 681 F.3d 678 (5th Cir. 2012); United States v. Futch, 278 Fed. App'x 387, 395 (5th Cir. 2008); United States v. Valencia, No. CR.A. H-03-024, 2003 WL 23174749, at *8 (S.D. Tex. Aug. 25, 2003), order vacated in part on reconsideration, No. CRIM.A. H-03-024, 2003 WL 23675402 (S.D. Tex. Nov. 13, 2003), rev'd and remanded on other grounds, 394 F.3d 352 (5th Cir. 2004).

185.   *My Big Coin, Inc*., 334 F. Supp. 3d at 498 (citations omitted). *See Brooks*, 681 F.3d at 694-95 ("[I]t would be peculiar that natural gas at another hub is not a commodity, but suddenly becomes a commodity solely on the basis that it passes through Henry Hub, and ceases to be a commodity once it moves onto some other locale."); *Futch*, 278 Fed. App'x at 395 (noting that "Henry Hub is the nexus of several major natural gas pipelines" and focusing on "the type of commodity in question, natural gas"); *Valencia*, 2003 WL 23174749, at *8 (noting that "natural gas is fungible" and finding that "natural gas for delivery on the West Coast or otherwise, is a commodity.").

186.   *Id.* at 498.

187.   *See* David Rosenfeld, Cryptocurrencies, the CFTC, and Insider Trading Liability 1 (Jan. 2019) (unpublished manuscript) (on file with author).

In accordance with that theory, we can expect a continuum of regulation. At one end of the spectrum exist ICOs and security tokens, regulated by the SEC. On the other end of the spectrum, exists payment tokens, regulated by the CFTC, with certain types of tokens leaning towards one end of the spectrum or the other. The tokens in the middle, such as utility tokens and non-fungible tokens, should not be regulated but may lean towards regulation depending on the circumstances. Occasionally, the authorities of the SEC and the CFTC may overlap.

A.   FUNGIBLE TOKENS

1.   *ICOs & Tokens that Represent Ownership in a Company*

Tokens that represent (1) a stake in the wealth created by a third party, such as a company using a blockchain platform to release tokens, where the stake derives its value from the third party's success or failure; (2) ownership value in the underlying venture and is created with the expectation of profits through the efforts of a third party; or (3) a debt instrument where the token derives its value from the underlying instrument should be regulated by the SEC. These tokens represent securities, in general as tradeable financial assets, an equity security (such as stock) and debt security (such as bonds or mortgage). One may argue that security tokens should not be considered "securities" despite its name. The wealth is not created in a "common enterprise," since a security token's stake in wealth is created by a third party, and the stake derives its value from the third party's success or failure. However, this profit structure is identical to the definition of the strict vertical commonality which requires a direct relationship between the success of the company's promoters and investors. Therefore, security tokens are still considered "securities," but the company that releases security tokens on an already-existing blockchain platform without registration should be prosecuted, not the blockchain platform itself, unless the blockchain platform also promotes and benefits from promoting the security tokens. In this scenario, although the blockchain platform does not have a direct relationship between the success of the company's investors and the blockchain platform's promoters, this raises whether a blockchain platform may be vicariously liable as a "common enterprise" for illegally releasing a security under the broad vertical commonality test because a connection between the blockchain platform's promoters' efforts and the investors' collective successes or losses.

Even if the tokens are deemed "securities," they may not need to be registered as a qualifying exemption, most likely, a limited offering or private placement exemption. In *Blockvest*, the question should not have been whether the tokens were a security, but rather, whether the security tokens were exempt from registration. Despite the discrepancy between the SEC's

and *Blockvest*'s facts, the evidence proving the token sale was in fact a securities offering was clear in its whitepapers and in what Blockvest was advertising to potential buyers—which is what Judge Curiel ultimately decided after reversing his original rejection of injunction. The true question was whether Blockvest's security tokens were exempt from registration. If the company did not engage in fraudulent behavior by trying to pass off as a registered security, Blockvest may have been exempt from registering its security tokens with the SEC under the limited offering exemption. Although the court precluded the following issues of fact in the preliminary injunction, the BLV tokens could have met the private placement exemption requirement: the security tokens offered totaled less than $5 million (around $10,000 according to Blockvest), and Blockvest is not precluded from taking the limited offer exemption as the company is not solely an investment company, but rather a blockchain development company. If Blockvest did not advertise the offering, the offering may likely have qualified for a private placement exemption: the offering was less than $1 million, the offering was only available to thirty-two sophisticated (likely "accredited") investors, and seventeen non-accredited investors that had previously given money to the company (unrelated to the security tokens), and the offering was only made available to this group.

2.   *Utility Tokens*

Utility tokens issued to fundraise for the development of a blockchain project are not considered security tokens, and thus should not be regulated as a security offering, even if they are not offered on a secondary market, and are instead offered on a blockchain platform's mainnet open to the general public. "Utility tokens are . . . intended to provide [digital] access . . . to an application or service . . . ."[188] Similar to an electronics dealer such as Gamestop that accepts pre-orders for a video game that will be released months later at a discounted price, a company can create utility tokens on an already-existing blockchain platform and sell digital coupons for the services or products it is developing. Gamestop keeps a percentage of the pre-orders for a video game, and the pre-orders themselves fund the game developer to complete production of the game. In the case of a company licensing an already-existing blockchain platform to fund the development and production of its products, the already-existing blockchain platform acts as Gamestop where the general public may buy from Gamestop, but

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188.   Kriptan Identity Network, *The Beauty of Utility Tokens*, MEDIUM (June 7, 2018), https://medium.com/@kriptannetwork/the-beauty-of-utility-tokens-1b4d87e19211 [https://perma.cc/G2XW-BM7G].

the true purchase is early access to a future product. This may raise an issue if the tokens are exchangeable, and people not personally interested in the company's product purchase the utility token to manipulate the utility token's price. By manipulating the price of the utility tokens being sold, purchasers may be able to make a profit if the utility tokens' price increase, which would likely make those utility tokens securities. However, if the utility token purchase was limited to a small quantity (such as one or two), and not exchangeable for fiat currency or other tokens, the utility token is likely not a security because purchasers would not gain a profit from exchanging the tokens or attempting to manipulate its price.

> As the Ninth Circuit has noted in a different context, a transaction is not a security when "[t]he risk [the purchaser] assumed was that which any buyer takes when he pays in advance for goods to be delivered in the future." Some of these pre-sales have raised millions of dollars and have not produced a viable product. For example, $58 million was raised in 2014 to develop the Star Citizen game, which has yet to be released.[189]

However, simply labeling a digital asset a "utility token" does not suddenly qualify the token from being a security.[190] If the utility tokens truly represent access to a future good or service, then the purchasers do not have an expectation of profit. Although the purchasers may be seen as pooling their "investments" together, this is as much of a "pooling of investments" as the money of the purchasers of pre-ordered games at Gamestop.

Another way to restrict the manipulation of utility token value may be to restrict the purchase of utility tokens to a private network.[191] A private network is only accessible to nodes which are connected to it, and thus not accessible to other Ethereum users nor available on exchanges.[192] Thus, using a private network to issue utility tokens should be a proper way to fundraise without security registration under the private placement exemption as the nodes of the network would be considered accredited investors.

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189.   James J. Park, *When Are Tokens Securities? Some Questions from the Perplexed*, HARV. L. SCH.: F. CORP. GOVERNANCE (Dec. 20, 2018), https://corpgov.law.harvard.edu/2018/12/20/when-are-tokens-securities-some-questions-from-the-perplexed/ [https://perma.cc/Z6RT-FB7Y] [brackets in original].

190.   United Hous. Found., Inc. v. Forman, 421 U.S. 837, 850 (1975).

191.   ERC20 is an Ethereum-based utility token standard. *Should I Move my ERC20 Token to Main Network?*, ETHEREUM: STACK EXCHANGE (Apr. 12, 2018), https://ethereum.stackexchange.com/questions/45457/should-i-move-my-erc20-token-to-main-network [https://perma.cc/PVD5-H6LS].

192.   *Id.* (unless the private network is a network that is large successful, and profitable, but this is rare).

Even without the exemption, a utility token within a private network that requires some promotion should not make it a security. Unless the token issuer is very well-networked, the issuer's blockchain project would not be well-known, thus, the issuer would not be able to raise much capital unless if she advertised the project online. The token issuer could set a higher price in order to fund their blockchain, but the investors within the network are not guaranteed to purchase if the price is too high, and even if the investors do, the capital raised would likely not be enough. Kickstarter project creators are not limited to a small pool of investors, but rather anyone who is interested in supporting the project may donate money.[193] In order for an individual to support a blockchain project of a private network, they must be added to the network. In effect, "[a]ny economic benefit . . . derived from the appreciation in value of the [utility token after adding nodes to the network] is incidental to obtaining the right to use it for its intended functionality."[194] Additionally, if the blockchain is still in early stages of development and the developer would like to conduct some tests using a private network such as on a testnet or regnet, or perhaps gauge the value of the utility token, APs should be able to facilitate other forms of promotion such as online advertising to attract potential utility token buyers in order to fund or test the project. Utility tokens may also easily cross over into CFTC regulation when the utility tokens are offered for sale on a mainnet of another blockchain platform, as opposed to the mainnet of its own blockchain platform. To demonstrate this difference, if Sony were to create its own blockchain platform called Sony.io, which produced and offered utility tokens for sale on its own platform where token buyers can exchange utility tokens with each other on the Sony blockchain platform, Sony is placing utility tokens for sale on the mainnet of its own blockchain platform. An example of placing utility tokens on a mainnet of another blockchain platform would be if Sony were to license Ethereum's blockchain technology and create ERC-20 tokens on Ethereum, then Sony could offer the tokens for sale in its games or through its Sony Store, but the tokens would still be available on Ethereum. This means that those who have purchased the utility tokens could exchange them either through Sony or on the Ethereum blockchain. The availability of Sony's utility tokens on Ethereum represents tokens on an external exchange platform.

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193.   Kickstarter is a funding platform for creative projects where "backers" may pledge a certain amount of money to the project in order to help raise money so that the project creators may complete their production. Project creators often offer unique tier-based rewards depending on how much a backer pledges. *What is Kickstarter?*, KICKSTARTER, https://help.kickstarter.com/hc/en-us/articles/115004996453-What-is-Kickstarter- [https://perma.cc/RSV6-H8NY].

194.   *Framework for "Investment Contract" Analysis of Digital Assets, supra* note 68.

As seen in the example of KamaGames, individuals will only verify transactions if they believe that the tokens they receive for such verification will be worth something.[195] The perception is that most tokens only have value if there is a secondary market where they can be traded. Such markets are less likely to arise without broad distribution of tokens to investors, as the only way an investor can make money on utility tokens is when the company behind the utility token has a way of distributing their profit to the token holders. "The potentially distributed profit, divided by the amount of tokens, is the return on investment an investor is able to make."[196] In this case, Sony.io tokens may be worth more value on an Ethereum than on the Sony blockchain platform. While it is understandable why Sony.io utility tokens would be considered securities if listed on Ethereum's mainnet, they may also be considered commodities.

One may argue that utility tokens represent commodity futures contracts because the price and the amount of the utility tokens being bought are fixed at the time of the agreement, obligating both the purchaser and company to fulfill the contract at the specified price that is used to assume or shift price risk, and that may be satisfied by delivery or offset. If the utility token exists on external exchanges, then this argument stands. However, utility tokens are likely not futures contracts, but rather forward contracts, and are thus exempt from CFTC regulation because the tokens often exist within a closed exchange system. Essentially, people who have purchased the utility tokens have essentially purchased coupons that provide access to a future good or service and may trade these coupons with each other. The utility tokens are thus neither standardized nor traded on an exchange, and each trade is an individual agreement to buy or sell an agreed-upon quantity of the commodity (product or service) at an agreed-upon price at an agreed-upon time in the future. Similar to how the trading conducted on the foreign currency exchange market in *CFTC v. Erskine*

> is not a public market, but is instead a "negotiated market," in which . . . foreign currency prices (the prices used for the trades in this case) are "constructed" by the FCMs [futures commissions merchants] using "software to process and distill currency prices offered by numerous banks and come up with an indicative market price."[197]

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195.   ERC20 is an Ethereum-based utility token standard. *Should I Move my ERC20 Token to Main Network?, supra* note 191.

196.   Middelman, *supra* note 47.

197.   Commodity Futures Trading Comm'n v. Erskine, 512 F.3d 309, 311 (6th Cir. 2008).

Another argument that could be made is that even if a company's utility tokens listed on the main net of another blockchain platform are not considered futures contracts, because utility tokens may be exchanged with one another, they may be considered commodities anyway and are thus subject to CFTC regulation. Similar to the natural gas cases the court cites in *CFTC v. My Big Coin Inc.*, just because utility tokens may not be considered contracts for future delivery, nor do they qualify as a commodity because utility tokens are not a specific type of commodity subject to a futures contract (as seen in *My Big Coin*), one may argue that utility tokens are still likely considered commodities because utility tokens are fungible, and may easily be moved (traded) from anywhere due to its online accessibility. In *United States v. Brooks*, "because natural gas is 'fungible' and may move freely throughout a national pipeline system, this was sufficient to show that natural gas" is a commodity, despite that the particular type of natural gas did not fit the definition of a "commodity" as "that specific type was not the subject of a futures contract" covered by the CEA.[198]

However, in contrast to the exchange of gas contracts for future delivery, utility tokens represent prepaid coupons. The prepaid coupons that are bought fund the development of the blockchain. Therefore, exchanging a company's utility tokens is equivalent to exchanging prepaid coupons. If the utility token is listed on the mainnet of Ethereum, a token holder may sell the token for Ethers, and the utility tokens are likely fungible. However, if the utility tokens are only exchangeable within a closed, private network of other utility token holders within Ethereum, or even on the company's own closed blockchain platform, the profit made in this scenario would be incidental. The utility tokens in this scenario are not fungible because they cannot be exchanged with other tokens.

3. *Payment Tokens and Stablecoins*

The CFTC cannot set oversight standards for the cash market in crypto-assets as it does with derivatives on those crypto-assets. Because most payment token exchanges take place in the cash market, most payment token platforms such as Bitcoin, Monero, and ZCash are usually only regulated when there is evidence of fraud or market manipulation.[199] This framework makes sense as intense scrutiny over every transaction would be cumbersome, pointless, and impede the cryptocurrency market.

In regards to stablecoins, according to Benjamin Sauter and Jake Chervinsky, "litigators and government enforcement defense attorneys who

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198.   Commodity Futures Trading Comm'n v. My Big Coin Pay, Inc., 334 F. Supp. 3d 492, 497 (D. Mass. 2018).

199.   Massad, *supra* note 151, at 32.

specialize in disputes and investigations related to digital assets," the CFTC may hold that stablecoins are "swaps" under Commodity Exchange Act § 1(a)(47)(A).[200] The section defines swap to include an "option of any kind that is for the purchase or sale, or based on the value, of 1 or more interest or other rates, currencies, commodities . . . or other financial or economic interests or property of any kind."[201] "Under that definition, the CFTC [may] characterize stablecoins as options for the purchase of, or based on the value of, fiat currencies."[202] Sauter and Chervinsky argue that stablecoins may be excepted from CEA § 2(c)(2)(D) (and thus not subject to CEA §§ 4(a), 4(b), and 4b) as "retail foreign currency options, depending on" whether the exchange takes place between "retail investors" and if actual delivery of the commodity occurs within twenty-eight days of the transaction.[203] The retail commodity provisions apply only (a) to transactions with retail investors (i.e., not to institutional transactions) and (b) where there is some element of leverage, margin, or financing involved in the transaction.[204] Retail investors are

> (1) individuals with less than $10 million in total assets, or less than $5 million in total assets if entering into the transaction to manage risk, and who are not registered as futures or securities professionals; (2) companies, other than financial institutions and investment companies, with less than $10 million in total assets, or a net worth less than $1 million if entering into the transaction in connection with the conduct of their businesses; and (3) commodity pools that have less than $5 million in total assets.[205]

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200.   Jake Chervinsky & Benjamin Sauter, *Will Fiat-Backed Stablecoins Pass Legal Muster With the SEC and CFTC?* (Mar. 2, 2019, 11:00 AM), https://www.coindesk.com/will-fiat-backed-stablecoins-pass-legal-muster-with-the-sec-and-cftc [https://perma.cc/XQC8-TDPD].

201.   7 U.S.C. §1(a)(47)(A) (2012).

202.   Chervinsky & Sauter, *supra* note 200.

203.   *Id.*

204.   Nathan A. Howell et al., *CFTC Proposes Interpretation of "Actual Delivery" in Connection with Virtual Currency*, SIDLEY (Dec. 20, 2017), https://www.sidley.com/-/media/update-pdfs/2017/12/20171220-ifad-and-sder-update--cftc-proposes-interpretation-of-actual-delivery-in.pdf [https://perma.cc/A2HC-JUHE].

205.   *Advisory on Foreign Currency*, COMMODITY FUTURES TRADING COMMISSION (Feb. 5, 2001), https://www.cftc.gov/ConsumerProtection/FraudAwarenessPrevention/ForeignCurrencyTrading/forex_adv06-01 [https://perma.cc/9YQT-9Y7E] (citing "[§] 1(a)(12) of the newly-amended Act (CFMA [§] 101(3)) for the definition of 'Eligible Contract Participant.' Any Person not falling within this definition is a retail customer.").

However, in interpreting the term actual delivery, the Commission continues to follow the 2013 Guidance and "employ a functional approach and examine how the agreement, contract, or transaction is marketed, managed, and performed, instead of relying solely on language used by the parties in the agreement, contract, or transaction."[206] Actual delivery has occurred within the context of virtual currency when (1) A customer having the ability to: (i) take

> possession and control of the entire quantity of the commodity, whether it was purchased on margin, or using leverage, or any other financing arrangement, and (ii) . . . use [it] freely in commerce (away from any particular platform) no later than [twenty-eight] days from the date of the transaction . . . ; and (2) the offeror and counterparty seller [(including any of their respective affiliates or other persons acting in concert with the offeror or counterparty seller on a similar basis)] . . . not retain[ing] any interest in . . . or control over any of the commodity purchased on margin, leverage, or other financing arrangement at the expiration of [twenty-eight] days from the date of the transaction.[207]

Although the Commission has requested for comments on the definition of actual delivery in connection with virtual currency, and is questioning shortening the twenty-eight days limit, stablecoins currently meet this exception. Because stablecoins are a quick way for purchasers to convert cryptocurrency into fiat currency, purchasers are not likely to hold on to the coins for the full twenty-eight days. Thus, stablecoins may likely be exempt from CFTC oversight.

At the other end of the spectrum, "the SEC might characterize [stablecoins] as 'demand notes,' . . . defined as two-party negotiable instruments obligating a debtor to pay the noteholder at any time upon request."[208] However, stablecoins may likely not be considered securities through *Reves* because (1) stablecoins are not sold to raise money for a business, and buyers do not purchase stablecoins to earn a profit, but rather, as a quick way of

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206.   82 Fed. Reg. 60,338 (Dec. 20, 2017). *See* 17 C.F.R. § 145.9 (2018).

207.   Martino et al., *CFTC Issues Final "Actual Delivery" Interpretation for Virtual Currencies*, JD Supra (Mar. 30, 2020), https://www.jdsupra.com/legalnews/cftc-issues-final-actual-delivery-54331/ [https://perma.cc/YLA2-H4NJ]. Among other things, the Commission may look at whether the offeror or seller retain any ability to access or withdraw any quantity of the commodity purchased from the purchaser's account or wallet. The 2013 Guidance provides further examples of what does and does not constitute actual delivery.

208.   Chervinsky & Sauter, *supra* note 200.

quickly exchanging cryptocurrency for fiat currency; (2) there is no "common trading" of notes; (3) the investing public are unlikely to reasonably believe that stablecoins are investments; and (4) there is no alternative regulatory scheme that reduces the risk of the stablecoin as stablecoins themselves are not risky because they are not investments nor risky tokens meant to return a profit on due to the lack of price fluctuation. Therefore, stablecoins should not be regulated either way.

B.   NON-FUNGIBLE TOKENS

As a general rule, non-fungible tokens should not be regulated because they do not behave as securities nor commodities. Even if NFTs appear to be structured as securities, they are still not securities. Oddly, NFTs meet all the elements of *Howey*, but are arguably not securities. For example, a company could sell non-fungible tokens at different prices toward the potential buyers, the buyers are making an investment by buying the NFT, and expecting their token to increase in price (returning a profit), but it is debatable on whether or not the profits the buyers make off of the NFTs are supported by the efforts of the company's or blockchain developer's promoters (common enterprise). Under the broad vertical commonality test, one may argue that a common enterprise exists because the increase in the NFT's value could be attributed to the efforts of the company's promoters. Promoters bring in more buyers of NFTs or other tokens or products the company offers, an increase in the company's value may increase the value of the NFT. Additionally, if more NFTs are being bought and released, the rarity of one NFT may increase, thus increasing its price. However, NFTs are not exchangeable with each other. These tokens would likely only be exchangeable with the company itself if a person wanted to, and was able to, exchange the NFT back to the company for fiat currency, or if someone else wanted to buy the NFT off of the holder. Here, the profit increase is essentially based on its increase in value, unlike traditional securities which derive their value on price fluctuation and exchangeability. To further illustrate the difference, purchasing an NFT is similar to purchasing paintings from an artist. Each painting is different, and thus, each purchaser cannot exchange the paintings they have bought. If a purchaser seeks to make a profit from the painting, she may sell it at a later time after the painting has appreciated after the artist's notoriety and masterfulness (i.e., value) has increased. Paintings and other unique tangible assets such as baseball cards are not securities. Unique digital assets are not much different, and thus, should not be considered securities nor regulated by the SEC.

NFTs are also likely not commodities. Using Chairman Jay Clayton's definition of what the CFTC has regulation over, non-fungible tokens are not "pure mediums of exchange" because the value of one token does not equate to the value of another. Furthermore, even if NFTs are classified as a

commodity, they likely exist in the spot transactions market. Because NFTs often represent ownership in unique physical items, these tokens are analogous to collectibles, or even alternative investments such as baseball cards, land, artwork, etc., and should be classified as such. For example, let's say a ten-acre plot of land is divided into one-acre pieces. In the physical world, a person purchases one of the one-acre pieces, and the specific acre that that person bought would not be exchangeable for a different acre on the same ten-acre plot. Similarly, in the virtual world, each piece of land is tokenized in the form of a non-fungible token. In this case, each NFT represents ownership in a physical item, such as a piece of the entire plot of land. Here, the only benefit to tokenizing land is utilizing the blockchain to secure the transaction and record the now immutable deed. However, tokenizing an asset also has utility when it is applied to an asset that cannot be physically split into pieces, such as a painting. As the painting increases in value over time, so does the piece of the painting that the token holder owns. Yet, there are no regulations over individuals who purchase these "investments" for themselves. Thus, NFTs may only be regulated by financial regulating bodies that govern investment management and practices such as FINRA, but not by the SEC nor the CFTC when an investment firm or even a licensed investor purchases NFTs on behalf of an individual.

Although unique digital assets have additional features unlike baseball cards and paintings, these features do not affect whether an NFT is a security or commodity. For example, the digital collectibles game, *Cryptokitties* is a blockchain based video game that allows players to purchase, collect, breed and sell various types of virtual cats.[209] A kitty's uniqueness is determined by its genome within its code that defines its appearance and traits.[210] However, the kitties differ from baseball cards because players may breed their kitties to create new ones and unlock rare "cattributes." Unlike the cryptokitties, it is not possible to merge two baseball cards to create a new, preferably more valuable card. Although this is a distinct mechanic of digital collectibles as opposed to tangible collectibles, this does not make the digital collectible a security. Most individuals play the *Cryptokitties* game leisurely, but if one were to play in order to profit from the game by merging kitty breeds to create a more unique one, this would raise issues of gambling rather than securities or commodities regulation.

As demonstrated in this Article, utility tokens, stablecoins, and non-fungible tokens do not fit cleanly into either category of commodity nor security; however, utility tokens and fungible tokens may easily fall into one of the categories depending on the token's (i) application of the *Howey*

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209.   *About*,   Cryptokitties,   https://www.cryptokitties.co/about [https://perma.cc/UQW9-NHLF].

210.   *Id.*

test or determining whether the token is a widely exchangeable payment token (i.e., a commodity), (ii) purpose, and (iii) actual use. Tokens that cannot be categorized should not be regulated, but the tokens should be subject to federal tracing or seizure if issued for the purposes of fraud, deceit, or to commit other crimes.

For example, assume that a company, in order to avoid the restrictions of holding an ICO, releases NFTs that represent different percentages of stake in the company, but none of them are the same. Here, the NFTs pass the *Howey* test: the token represents an investment of money, in a common enterprise, with an expectation of profits, derived from the efforts of a promoter or third party. The purpose of these NFTs are not to provide ownership of a unique item (or a tokenized piece of a unique item), but rather to serve as a security. The NFTs are actually being used as securities rather than as NFTs. Therefore, the NFTs should be classified as securities.

Yet, *Cryptokitties* introduces an interesting idea: the idea of creating blockchain-based games. Games based solely on blockchain are still on the rise, but perhaps it may be easier to implement certain blockchain mechanics into video games, such as providing incentives for cooperation over energy or bandwidth consumption, or tokenizing in-game assets and using the decentralized networks of blockchain to move these tokenized items from one game to the next, and across different consoles. However, with new uses arise new legal issues.

PART IV.   TO REGULATE OR NOT TO REGULATE: TOKENIZING ASSETS IN VIDEO GAMES

In regard to tokenizing in-game assets, do SEC and CFTC regulations apply to virtual currency within a video game, especially if the tokens are only listed within the exchange platform within the video game? Utility tokens within video games, for example, should not be regulated by either the CFTC nor SEC, but may raise issues if listed on a mainnet. To demonstrate, let's say there is a game called *Game X*. The company of *Game X*, BestGamesEver, created utility tokens, called XAwesome tokens on the blockchain platform *Game X* developed itself called Miracle. The XAwesome tokens represent access to assets within *Game X* with special properties that may be unlocked once *Game X* releases, for a certain holiday or in-game event. The tokens may be exchanged within the *Game X*'s marketplace, but the tokens are not listed on any exchange outside of the game.

We must first determine the purpose of the tokens and what they fund. In this case, the game, the company, and the blockchain platform are likely already fully developed. The tokens thus would just provide revenue for the company, but the purchasers of the tokens are not expecting any economic benefit from it. The token purchasers want to use the in-game goods the utility token provides access to. Even if XAwesome tokens are available to

all Miracle platform users, and the token may be exchanged across Best-GamesEver's other games aside from *Game X*, the tokens exist only within the game, meaning that the tokens may only be issued and redeemed by the publisher (or developer). We know tokenized assets within video games are likely not securities because these tokens are listed within a secondary market, the game itself, and are only exchangeable among users of the Miracle platform—factors that the SEC counts against whether a token is classified as a security.

Even if the XAwesome tokens were created using Ethereum's blockchain technology, as long as the tokens are limited in a private network to players of BestGameEver, the token will likely not be seen as a security. An issue arises if the XAwesome tokens are listed on Ethereum's mainnet. In this situation, despite the secondary market, the SEC states that, as long as the digital asset's transferability is restricted to the users of the platform, this factor counts against whether a token is classified as a security. However, "users of the platform" is a little vague. Who are the "users of the platform"? In the scenario where *Game X* has created XAwesome tokens on its self-developed blockchain platform, Miracle, the "users of the platform" are the users of the Miracle blockchain. In contrast, assuming that XAwesome tokens were created using the Ethereum blockchain and listed on the Ethereum mainnet, Ethereum is the platform. Thus, are the "users of the platform" the XAwesome token holders on the Ethereum platform specifically, or all the users on the Ethereum platform since XAwesome tokens are available to all users on Ethereum when they are listed on the mainnet?

Regardless of this issue, even if the utility tokens are listed on a mainnet, the sale of the tokens should not be regulated because the blockchain project is already complete. The proceeds would then fund the development of *Game X*. However, if the utility tokens are used to fund the in-game economy during certain holidays, it may be best to limit the sale of the tokens to be exchanged in a private network of players or to be solely exchanged in the game for the video game's virtual currency.

Although dGoods are not quite similar to utility tokens, dGoods are a standard of token that functions as a tool. However, dGoods are even less eligible to be regulated because all the token does is create other subtokens, either fungible or non-fungible, and often applies directly to in-game items. This makes managing the sub-tokens the developer wants to produce easier for her. Given that dGoods are more akin to a management tool, likely not exchangeable, nor worth a separate value outside of the sub-tokens it produces, dGoods should not be regulated.

Finally, NFTs that exist within a game are different than utility tokens and other asset tokens that exist within a game because of the fundamental difference that an NFT is not exchangeable with other NFTs or even other tokens. Therefore, if the XAwesome tokens were non-fungible, then they should not be subject to regulation.

PART V.   HOW VIDEO GAME COMPANIES MAY BENEFIT FROM THE USE OF BLOCKCHAIN

Based on economic principle, in order for video game developers to maximize profits, they must maximize fun for their players.[211] Utilizing blockchain technology would improve the play experience for users and subsequently sustain profits for a longer period of time for developers. The current model for several games is free-to-play. The free-to-play model is an incentive-based game design that allows all players to create an account and play for free. As opposed to the traditional model where a consumer must first purchase the game in order to play it, the low barrier entry of a free game encourages a large number of players. While most players will play for free, the game company capitalizes on a small population of "whales" who generate most of the game developer or publisher's revenue through in-game spending.[212] However, these types of games are often unfavorable to players because of an excessive amount of required microtransactions in order to progress in the game, or when game developers, in an attempt to maintain their revenue stream late in the life cycle of the game after a significant amount of players have dropped away from the game, introduce more in-game items that are also more expensive. The remaining whales then must spend even more money in order to stay competitive.

Although the implementation of blockchain technology in games has been previously proven inefficient with processing mass transactions within video games, such as the case with Kama Games, Kevin Chou, CEO and fellow co-founder of Kabam with Brett Seyler, claims there may be a purpose to implementing the blockchain technology. The duo has been creating "free-to-play games for [ten] years."[213] Nevertheless, Chou and Seyler believe implementing blockchain technology in games to create peer-to-peer economies may be the solution to harmonize the incentives for both players and game developers. [214] "A peer-to-peer economy . . . is a decentralized model where[] two individuals interact to buy or sell goods and services

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211.   EDWARD CASTRANOVA, SYNTHETIC WORLDS: THE BUSINESS AND CULTURE OF ONLINE GAMES 175 (2005).

212.   Stephanie Carmichael, *What it Means to be a 'Whale' — and Why Social Gamers Are Just Gamers*, VENTUREBEAT (Mar. 14, 2018, 8:00 AM), https://venturebeat.com/2013/03/14/whales-and-why-social-gamers-are-just-gamers/ [https://perma.cc/B39U-LSQL].

213.   Dean Takahashi, *Kabam Founder Kevin Chou Believes Blockchain Will Revolutionize Game Economics*, VENTUREBEAT (Feb. 26, 2019, 9:30 AM), https://venturebeat.com/2019/02/26/kevin-chou-bets-big-that-blockchain-will-revolutionize-game-economics/ [https://perma.cc/LDY7-H7VD].

214*.   Id.*

directly with each other, . . . without an intermediary third-party . . . ."[215] Although peer-to-peer trading mechanisms have existed in games such as Blizzard's *World of Warcraft*, and many games before it, many games still struggle with creating a player-driven economy. Traditionally, the players often relied on the publisher or game developer to allow the auction house or item trading platform to continue allowing players to trade. This mechanism can sometimes be dislikeable to publishers and/or developers because this "foreign trade," the practice of selling in-game items for real money in out-of-game markets, may not only result in an erosion of equal opportunity gameplay by players that are already well-arrayed in expensive equipment that they bought for hundreds of dollars outside the game that ought to have a lower level of in-game wealth compared to their peers, but also often results in the publisher or game developer not making as much on that peer-to-peer traded item as it could be making and selling a brand new publisher/game developer-issued item.[216]

Chou provided an illustration of this phenomenon using *Counter Strike: Global Offensive* ("*CSGO*") as an example.[217] If an individual playing *CSGO* trades a gun skin with another player in the game, Valve does not make as much money on that particular skin trade as it could be if Valve was selling a new gun skin. Furthermore, the peer-to-peer trading exists as long as the game developer or publisher allows it, and the items are only tradeable across the same gaming platforms (e.g., PlayStation 4 to PlayStation 4, or PC to PC; no cross-platform trading such as PlayStation 4 to PC) or the items are only able to be used and traded in only one of the game developer's games. Utilizing blockchain technology to facilitate peer-to-peer trading would not only allow players to trade across platforms and games, it would also allow the game developer to make a steady stream of revenue even throughout a late term of the game's life cycle.

Blockchain further resolves another issue prevalent in free-to-play model games that eventually devolve into "pay-to-win" games. Game developers or publishers often struggle with balancing the in-game economy and creating positive experiences for both the old players and new players.

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215.   Jim   Chappelow,   *Peer-to-Peer   (P2P)   Economy*,   Investopedia, https://www.investopedia.com/terms/p/peertopeer-p2p-economy.asp (last updated Apr. 1, 2018) [https://perma.cc/URT6-ECYZ].

216.   Edward Castranova, *On Virtual Economies* 33 (CESifo, Working Paper No. 752,   2002),   https://papers.ssrn.com/sol3/papers.cfm?abstract_id=338500 [https://perma.cc/8F5E-4BWQ]. *See also* Takahashi, *supra* note 213.

217.   Although Kevin Chou references Counter Strike, he is most likely referring to *Counter Strike: Global Offensive* ("*CSGO*") when explaining his example because *CSGO* is the most recent game in the *Counter Strike* game series, and the game has previously and infamously experienced issues with gun skin trading. *CSGO* is a multiplayer first-person shooter game that has unique, cosmetic-only visual designs, also known as "skins" for its range of guns.

A player that spends $10,000 in a game versus a player that spends $5 but many hours in a game have different experiences. Naturally, in order to produce more "fun" in a game late in its life cycle, most developers produce more items for the player to buy. Because more and more items are being produced, weapons, for example, must have some kind of novelty, and each weapon introduced has increased strength. This results in players having to "pay-to-win" because the amount of hours a player would have to play the game for would be astronomical, and staying competitive with other players may be impossible without the aid of the better weapons. A peer-to-peer trading system, then, would allow for a better redistribution of higher value in-game assets, not only within the game, but with other games the developer produces as well.

Yet, how would peer-to-peer trading improve video games? Using our BestGameEver example mentioned in Part IV, let's say BestGameEver has three games: *Game X*, *Game Y*, and *Game Z*—all of which integrate BestGameEver's blockchain platform, Miracle. *Game X* was released three years ago, *Game Y* was just released, and *Game Z* is in production. All three games are part of a saga. BestGameEver tokenizes all of *Game X*'s in-game items such as weapons, armor, clothing, and a few other items. Because of the blockchain, the players can use the tokens across games. *Game X* items may be used in *Game Y* and vice versa. *Game Y* players will be excited that their *Game X* items can carry over into *Game Y*, but this is unlikely to discourage the players from purchasing new *Game Y* items. Players will still get excited about new *Game Y* items, but the utility of *Game X* items provide players with nostalgia, continuity, and replayability. In most games, players are excited to show that they are a "veteran" or a long time player/fan of a game or series of games, and enjoy showing that off whenever they can, while developers/publishers keep collecting on a continuous stream of revenue without making players feel as though they are being extorted to maintain competitive edge in the game through inflation or loot boxes. Another way BestGameEver can keep a steady flow of revenue, and to retain players for games in their late cycles such as *Game X*, is to release only a few non-fungible tokens that represent unique, high-level weapons or armor on *Game X*'s game "anniversary"[218] or other holidays. Because of the uniqueness and the high level of power of the weapons or armor, players will be competitive, and actively make trades with other players (either using in-game currency, or other asset tokens) to try and buy the tokens off of the initial NFT purchasers. Either way, the developer/publisher is able to profit from both the sale of the NFTs and any additional in-game currency or asset tokens that the players purchase to barter with the players that are NFT holders. Lastly, BestGameEver may raise money through its players or

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218.   The game anniversary is the same month and day the game was released.

others interested in the game by selling utility tokens that provide early access to new incoming weapons, armor, or clothing in *Game Z* at a discount. This will increase excitement and engagement in current *Game X* and *Game Y* players, as they would be able to use *Game Z* weapons, armor, or clothing in both *Game X* and *Game Y*, as well as raise capital to fund the development of *Game Z* without the developer having to seek aid from a larger game developer that would likely limit *Game Z*'s developer to a tight budget, and maintain a large control over how the game is produced.

CONCLUSION

This Article explains how blockchain technology could improve games for the players, but also how the technology could improve the current business model for game developers and publishers too. The connection between virtual world economies and real world economies comes full circle. As reflected by Edward Castranova,

> The demand for game time can be expressed in a simple economic model, and it seems to have increased as the immersive satisfaction available from gaming technology has increased. If this pattern continues, the advances of the information age could make gaming a significant aspect of the lives of millions of people. That scenario may have macroeconomic implications, as well as some effects on government policy.[219]

As technology continues to progress, the effects of the progression not only affect in-game worlds, but the real world as well.

Blockchain technology has dramatically changed the way people view financing and digital economics, with both the SEC and CFTC releasing explanations on how certain regulations will apply to virtual currency. While both regulatory authorities have provided a framework, there are still a few unresolved issues within the frameworks as applied to different tokens. The Article does not intend to draw clear lines on a securities and commodities framework, but rather to specify certain elements that allow the current framework to remain flexible in order to protect technological development companies from being persecuted on ambiguous terms and to protect investors from fraudulent financial schemes. This Article addresses these issues and proposes a theory of regulation, and how some regulations should not apply to tokens available within video games.

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219.   Castranova, *supra* note 216, at 37.