

Implications of Biden Executive Order for Blockchain Games

U.S. TECH LAW UPDATE¹

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I. Introduction

On March 9, 2022, President Joe Biden issued the "Executive Order on Ensuring Responsible Development of Digital Assets" (the "Biden Order"), ² and shortly after, on May 4, 2022, California Governor Gavin Newsom issued "Executive Order N-9-22" (the "Newsom Order", and together with the Biden Order, the "Orders"), addressing California's approach to blockchain technology and crypto assets. ³ Both Orders, while recognizing the need for consumer and investor protection, emphasize the goal of ensuring America and California are welcoming to blockchain technology and the potential economic gains that it may foster.

Video games that incorporate blockchain technology, like many other blockchain based applications, currently face challenging regulatory hurdles in the United States. Among the highest hurdles is the Securities and Exchange Commission's (the "SEC") application of investment contract analysis to determine whether a digital asset is a security, and thus subject to SEC regulation. Core elements of blockchain games, including the use of fungible tokens and non-fungible tokens in-game and the ability to trade such tokens on exchanges off-game, significantly increase the risk that these digital assets will be regarded as securities subject to SEC regulation, very high compliance costs, and potentially crippling liability for non-compliance.

This legal update examines the core SEC regulatory challenge that creates legal uncertainty for blockchain games, along with many other blockchain applications. We then summarize select elements of the Orders, with emphasis on the goal of enhancing competitiveness in America and California by creating an environment that is welcoming to blockchain technology. We also note recent blockchain regulatory and legislative proposals that attempt to reconcile investor and consumer protection with responsible blockchain innovation.

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² Executive Order on Ensuring Responsible Development of Digital Assets (March 9, 2022).

³ Executive Order N-9-22 (May 4, 2022).



a. Blockchain Games

The first mobile game to implement blockchain technology, *Spells of Genesis*, launched on the Ethereum network on April 20, 2017. In the three months prior to *Spells of Genesis*'s fifth anniversary, investors poured \$2.5 billion into blockchain games and their underlying infrastructure, reflecting a surge of enthusiasm for games incorporating blockchain technology. Blockchains are decentralized, distributed digital ledgers of verified transactions, which blockchain games usually incorporate by using (i) player-minted non-fungible tokens ("NFTs") as in-game virtual assets, and (ii) fungible tokens as in-game virtual currencies. NFTs and fungible tokens belong to a class of non-tangible virtual assets that are created, traded, and stored on blockchain technology, collectively called "digital assets." Digital assets in blockchain games reward player engagement by offering players (a) verifiable ownership of unique, scarce in-game NFTs that can be transferred, bought, and sold outside the game, and (b) opportunities to earn in-game fungible tokens that can be used as in-game virtual currency or traded on exchanges outside the game.

Prior to blockchain games, in-game virtual assets purchased, earned, or traded by players only "belong" to the players within the confines of the game in which they were created and only so long as the game servers remain operable. While blockchain games may offer typical virtual assets too, unique to blockchain games are NFT assets, a subclass of in-game virtual assets that are unique, interoperable, and scarce. Additionally, NFT assets are immutable since they are hosted on an independent blockchain rather than a game server, so players may save, sell, trade, or transfer them within or separate from the game in which they were created. Unlike typical virtual assets, an NFT asset's ownership and authenticity can be validated through the permanent, unalterable records stored within all blockchain assets. Blockchain games sometimes allow players to increase their NFTs' value by either progressing in the game or purchasing upgrades using in-game virtual currencies. NFT in-game assets are usually either collectibles with values based on rarity, or playable assets with values based on in-game utility.

Fungible tokens used as in-game currencies have value both inside and outside the game.¹⁴ In addition to functioning as in-game currencies, fungible tokens may be traded on exchanges separate from the game for fiat currencies or other blockchain assets.¹⁵ Some game developers also hope to offer players decision-making power in games through the distribution of fungible tokens called "governance tokens," which allow token holders to vote on how games are operated.¹⁶ Governance tokens may also be traded on exchanges for fiat currencies or other

8 Id

⁴ Ian Kane, *Pioneering Blockchain Game Spells of Genesis Turns Five*, DAPPRADAR (April 20, 2022).

⁵ Pedro Herrera, *DappRadar x BGA, Blockchain Games Report Q1 2022*, DAPPRADAR (April 20, 2022).

⁶ Cryptopedia, *Digital Assets: Cryptocurrencies vs. Tokens*, GEMINI (May 17, 2021).

 $^{^{7}}$ Id.

⁹ Cryptopedia, Gaming and Non-Fungible Tokens, GEMINI (June 28, 2022).

¹⁰ Id.

¹¹ Id.

¹² Stephen Graves and Andrew Hayward, What Is Axie Infinity? The Play-to-Earn NFT Game Taking Crypto by Storm, DECRYPT (May 30, 2022).

¹³ Cryptopedia, *Gaming and Non-Fungible Tokens*, GEMINI (June 28, 2022).

¹⁴ Murtuza Merchant, Utility tokens vs. equity tokens: Key differences explained, COINTELEGRAPH (May 16, 2022).

¹⁵ *Id*.

¹⁶ *Id*.



blockchain assets. ¹⁷ This "play-to-earn" model fulfills a core goal of blockchain games by providing a financial reward to players for their participation in the game. ¹⁸

b. Digital Asset Growth; Current Downturn

The digital assets market has grown dramatically in recent years. In November 2021, global digital assets reached a combined market capitalization of \$3 trillion, compared to approximately \$14 billion only five years ago. ¹⁹ However, the digital assets market is also volatile: geopolitical tension, inflation, interest rate hikes, and a slumping stock market sent most cryptocurrencies into free fall by January 2022, prompting a massive sell-off and plummeting the combined digital asset market capitalization from \$3 trillion to \$1.6 trillion. ²⁰ The careening market then experienced another jarring blow when the TerraUSD and LUNA cryptocurrencies collapsed in May, triggering over \$500 billion in losses to the broader market. ²¹ In June, cryptocurrency exchanges Gemini and Coinbase announced layoffs, job offer rescissions, and hiring freezes, heralding an industry contraction. ²²

According to SEC Commissioner Hester Peirce, a longtime supporter of blockchain technology, the United States' lack of regulatory guidance for digital assets is not allowing innovation to develop or experimentation to happen in a healthy way. The SEC currently determines whether a digital asset is a security and thus subject to its jurisdiction by applying the US Supreme Court's investment contract framework from *SEC v. W.J. Howey Co*, also known as the Howey test. However, applying the Howey test to NFTs and fungible tokens used in blockchain games creates significant risk that those digital assets would be deemed securities, resulting in burdensome compliance costs and potentially crippling liability for non-compliance. With their focus on maintaining America and California's positions as global technology leaders while also recognizing the need for consumer and investment protection in the digital asset space, the Biden Order and Newsom Order may lead to new regulatory approaches for the industry.

II. Core Regulatory Challenge for Blockchain Games

The SEC and federal courts analyze whether unique instruments like digital assets are securities by applying the Howey test.²⁵ When applied to blockchain games, the Howey test could subject game developers and publishers to securities regulations. Registering NFTs and fungible tokens used in blockchain games as securities would, however, be prohibitively expensive and ultimately unworkable. Exemptions from the registration requirement are also not practical for most blockchain game assets. But the costs of violating US securities laws can be extremely high. Thus, the current application of the Howey test arguably conflicts with the core

¹⁷ Id

¹⁸ PubDAO, What Are Play-to-Earn Games? How Players Are Making a Living with NFTs, DECRYPT (January 18, 2022).

¹⁹ Executive Order on Ensuring Responsible Development of Digital Assets (March 9, 2022).

²⁰ Tracy Wang, <u>Crypto Sell-Off Wipes \$700B From Industry Market Cap So Far in 2022</u>, COINDESK (January 24, 2022).

²¹ https://rekt.news/luna-rekt/; Elizabeth Lopatto, How the Anchor protocol helped sink Terra, THE VERGE (May 20, 2022).

²² Farran Powell, Benjamin Curry, Crypto Winter Is Coming: What You Need To Know, FORBES (June 14, 2022).

²³ MacKenzie Sigalos, SEC's Hester Peirce says the U.S. has dropped the ball on crypto regulation, CNBC (May 25, 2022).

²⁴ SEC v. W.J. Howey Co., 328 U.S. 293, 298 (1946).

²⁵ SEC, Framework for "Investment Contract" Analysis of Digital Assets (Last modified April 3, 2019).



elements of blockchain games: play-to-earn mechanics and true player ownership of in-game items.

a. The Howey Test

The Supreme Court of the United States held in SEC v. W. J. Howey Co. that securities called investment contracts exist where parties agree to invest money in a common enterprise with the reasonable expectation of profits derived from the efforts of others, also known as the Howey test. ²⁶ In applying the Howey test to digital assets, the SEC breaks the test into three prongs, all of which much be present for a digital asset to be deemed a security: (i) an investment of money, (ii) in a common enterprise, (iii) with the reasonable expectation of profits derived from the efforts of others. ²⁷ The SEC has determined that the offer and sale of digital assets typically satisfy the first and second prongs of the Howey test. ²⁸ Thus, whether digital assets are regulated as securities typically hinges on the third prong's two elements: (a) reliance on the efforts of others and (b) reasonable expectations of profits.

Satisfaction of the first element is influenced by whether a purchaser expects to rely on the efforts of a promoter, sponsor, or another party that provides significant managerial efforts affecting the failure or success of the enterprise. A blockchain game, which is a complex creative work, generally relies on centralized game development teams and publishing teams to create the game and manage the ongoing game operations. In addition, the value of in-game digital assets is generally directly linked to the success of the underlying game. If the game is never completed or unsuccessful, then the digital assets associated with the game are unlikely to flourish. Even blockchain games aspiring to decentralize, like Axie Infinity, intend to maintain a central team of developers while extending some governance decisions to players. As a result, blockchain game digital assets would generally satisfy the "reliance on the efforts of others" element of the Howey test.

Satisfaction of the second element, reasonable expectations of profits, is influenced by whether the digital asset is designed for functionality or investment.³¹ The degree to which a blockchain game digital asset is functional depends on a variety of factors, including the digital asset's in-game utility, the target market audience for the digital asset (players or investors), the digital asset's transferability and tradability on a secondary market, use of functional or investment language in marketing the digital asset, quantities of the digital asset sold relative to expected usage quantities, the timing of the digital asset's sale with respect to availability of the game, and the sale price of the digital asset relative to the value of purchasable in-game assets.³²

Although game developers could design digital assets in a manner that limited the likelihood of profits, blockchain game digital assets will nonetheless generally be available for purchase, sale, and trading on exchanges outside of the game – thus fulfilling the play-to-earn and true player ownership elements of blockchain games. Once digital assets are freely tradable on

²⁶ SEC v. W.J. Howey Co., 328 U.S. 293, 298 (1946).

²⁷ SEC, Framework for "Investment Contract" Analysis of Digital Assets.

²⁸ *Id*.

²⁹ I

³⁰ Axie Infinity Whitepaper.

³¹ SEC, <u>Framework for "Investment Contract" Analysis of Digital Assets.</u>

³² *Id*.



exchanges, there would generally be an ability to profit from the appreciation in the value of those digital assets, which dramatically increases the likelihood that the digital assets satisfy the "reasonable expectation of profits" element of the Howey test.

As a result, there exists a conflict between the fundamental goals of blockchain games and the SEC's current application of the Howey test. Blockchain games aspire to provide players with meaningful ownership over in-game items by minting those items into NFTs that have value outside the game. However, once in-game NFTs are tradable on secondary markets, where their value may fluctuate based on the efforts of game developers and publishers, there is a much higher risk that those NFTs would be deemed securities under the Howey test. It thus becomes difficult for blockchain game creators to implement true player ownership over in-game NFT assets without potentially incurring material liability for selling unregistered securities.

Another core goal of blockchain games is to provide players the opportunity to earn money through playing the game. This play-to-earn goal is often implemented through awarding ingame fungible tokens to players upon achieving certain milestones. For these fungible tokens to have value, they are generally tradable on exchanges. But like in-game NFTs, as soon as the ingame fungible tokens are tradable on a secondary market, there is a much higher risk that the fungible token would be deemed a security under the Howey test. Thus, it becomes challenging for blockchain game creators to implement the play-to-earn model in which players receive value for their engagement without potentially incurring material liability for selling unregistered securities.

b. The Compliance Challenge

Although the SEC may regard many digital assets in blockchain games as securities, compliance is impracticable for most blockchain game developers. As SEC Commissioner Peirce outlined in her address to the 2020 International Blockchain Congress, there are few options for companies that want to participate in the digital assets market without inviting SEC intervention: they must decentralize, register digital assets as securities, conduct offerings under exemptions to registration, or sever ties to the United States to avoid US securities law entirely.³³ For blockchain game developers, decentralization may not be practical, particularly during the early stages of development, leaving only registration, reliance on exemptions, or exodus from the United States.

Registering digital assets as securities is equivalent to conducting an initial public offering ("<u>IPO</u>"), which is only possible for the most successful companies and is never undertaken by startup companies, which are vital to the emerging blockchain games space.³⁴ Registration would also require digital assets to be traded through registered broker-dealers or on a registered securities exchange, rather than the existing centralized and decentralized exchanges that have risen around digital assets.³⁵

³⁵ *Id*.

³³ Commissioner Hester M. Peirce, <u>Running on Empty: A Proposal to Fill the Gap Between Regulation and Decentralization</u>, address before the International Blockchain Congress in Chicago, IL (February 6, 2020).

³⁴ The SEC's Office of Investor Education and Advocacy, Registration Under the Securities Act of 1933.



The various exemptions from registration do not provide a practical solution for blockchain game developers. The private placement exemption under Regulation D would restrict the sale of digital assets to only accredited investors, which would severely limit the addressable market of players for a game.³⁶ The Regulation A exemption is equivalent to a mini-IPO and, like actual registration, is prohibitively expensive and requires digital assets to be traded through registered broker-dealers or on a registered securities exchange.³⁷

To avoid SEC regulation, American blockchain game developers can always move overseas and prohibit US residents from playing their games. This solution, however, would invariably result in America losing blockchain innovation to more accommodating regulatory environments abroad, which is precisely the outcome that the Biden Order and Newsom Order seek to avoid.

c. Liability

All securities, including digital assets deemed securities under the Howey test, must either be registered with the SEC under Section 5 of the Securities Act of 1933 (the "Securities Act") or qualify for an exemption from registration.³⁸ For securities sold without registration or meeting the requirements for an exemption from registration, Section 12 of the Securities Act provides purchasers with a rescission remedy, which is a "put right" allowing a purchaser to return the security to the issuer for a refund of the purchase.³⁹ If the purchaser doesn't own the security at the time of initiating litigation, then the purchaser would be entitled to money damages equal to the purchase price, less any proceeds received upon the sale of the security. 40 When digital asset values decline, like in the current market environment, recission rights could result in crippling liability for digital asset creators and ultimately bankruptcy.

d. SEC Enforcement

The SEC brought 20 enforcement actions against digital market participants in 2021, including 14 litigation actions in US federal courts and six administrative proceedings. 41 These actions include first-of-their-kind actions against a crypto lending platform, an unregistered digital asset exchange, and a decentralized finance lender. 42 Since 2013, monetary penalties for digital asset market participants have totaled about \$2.35 billion. 43 On May 3, 2022, the SEC announced the allocation of 20 additional positions to its newly named Crypto Assets and Cyber Unit in the Division of Enforcement, nearly doubling the total dedicated positions.⁴⁴ Enforcement actions are expected to increase with the expanded SEC capacity and heightened focus on the digital assets market.

³⁶ Commissioner Hester M. Peirce, Running on Empty: A Proposal to Fill the Gap Between Regulation and Decentralization, address before the International Blockchain Congress in Chicago, IL (February 6, 2020).

^{38 15} U.S.C. § 77e; 15 U.S. Code § 781(a).

³⁹ *Id*.

⁴¹ Cornerstone Research, <u>SEC Cryptocurrency Enforcement</u> (January 19, 2022).

⁴² Id. at 2.

⁴³ *Id*. at 12.

⁴⁴ SEC, Press Release: SEC Nearly Doubles Size of Enforcement's Crypto Assets and Cyber Unit (May 3, 2022).



e. Class Action Lawsuits

Although SEC enforcement actions are limited by finite SEC resources, securities laws are also enforced by the much less constrained plaintiff's bar through class action lawsuits and a private right of action. Cornerstone Research reports elevated cryptocurrency-related class action filings in 2021, with 11 total filings. ⁴⁵ With the recent severe downturn in digital asset values, we expect a material increase in class action securities litigation against blockchain companies, with potentially many thousands of purchasers seeking to "put" their devalued digital assets back to the issuers in exchange for the original purchase price.

III. President Biden's Executive Order

a. Overview

The Biden Order outlines the White House's priorities concerning digital assets without proffering a specific game plan. Those key priorities include consumer and investor protection and reinforcing US leadership in the global financial system alongside technological and economic competitiveness. The Biden Order requires various government departments to submit reports and recommendations regarding digital asset regulation and, in doing so, is a call to action that may lead to solutions that reconcile the current conflicts between existing federal securities law and digital asset market innovation.

b. Consumer and Investor Protection

The Biden Order highlights consumer and investor protection as a principal policy objective, acknowledging that absent sufficient protections, the "unique and varied features of digital assets can pose significant financial risks to consumers, investors, and businesses." Although the appeal of digital assets is due, in part, to the additional security provided by distributed ledgers, the Biden Order cites the "billions of dollars in losses" stemming from "cybersecurity and market failures at major digital asset exchanges and trading platforms," to assert the critical necessity of federal consumer and investor protections.⁴⁷

The emphasis on cybersecurity failures is not unfounded. According to Immunefi, a bug bounty and security service platform for decentralized technology, hacking and fraud resulted in losses totaling \$1.23 billion across blockchain platforms in the first quarter of 2022 alone. ⁴⁸ The amount attributable to fraud totaled \$11 million, while the rest stemmed from malicious hackers. ⁴⁹ These numbers represent an almost eight-fold growth in losses attributable to hacking and fraud compared to the first quarter of 2021, during which losses totaled \$155 million. ⁵⁰

The White House's eventual policy on digital assets will thus likely prioritize consumer and investor protection. In furtherance of the policy objective, the Biden Order requires a report to be

⁴⁵ Cornerstone Research, <u>Securities Class Action Filings: 2021 Year in Review</u> (February 2, 2022).

⁴⁶ Executive Order on Ensuring Responsible Development of Digital Assets (March 9, 2022).

⁴⁷ *Id*.

⁴⁸ Immunefi, *Crypto Losses in O1 2022* (April 18, 2022).

⁴⁹ *Id*.

⁵⁰ Id.



submitted by September 5, 2022, on the implications of developments and adoption of digital assets and changes in financial market and payment system infrastructures for United States consumers, investors, businesses. ⁵¹ The report will address the conditions that would drive mass adoption of digital assets and the risks and opportunities such growth might present to US consumers, investors, and businesses. This report will be produced by the Secretary of the Treasury, in consultation with, among others, the head of the SEC.

c. US Leadership and Competitiveness

The Biden Order also reflects a commitment to maintaining the United States' role as a leader in global finance and in an emerging technology that may underpin future innovation. One example of this competitive focus is the Biden Order's prominent call to explore creating a United States central bank digital currency ("CBDC"). The order recognizes that a US CBDC could support the continued centrality of the US within the international financial system and help to protect the unique role that the dollar plays in global finance. Although not stated in the Biden Order, China's test launch of its own CBDC, the e-CNY, at the Beijing Winter Olympics in February 2022 likely increased the sense of urgency to explore a US CBDC. That focus on competitiveness, whether with China or generally, is a key theme of the Biden Order and may increase momentum toward a regulatory framework for digital assets more conducive to blockchain innovation.

IV. Governor Newsom's Executive Order

Similar to the Biden Order, the Newsom Order outlines California's roadmap towards a more concrete policy for digital assets, with an emphasis on bolstering California's status as a global innovation hub. ⁵⁴ The Newsom Order acknowledges that federal law has principal authority over interstate financial transactions but seeks to create a comprehensive, harmonized regulatory and business environment for digital assets. Like the Biden Order, the Newsom Order commissions reporting from various agencies to make recommendations with respect to, among other things, regulation of blockchain technology. A key goal of the Newsom Order is the creation of a transparent and consistent business environment for companies operating in blockchain, including crypto assets and related financial technologies, that harmonizes federal and California laws and balances the benefits and risks to consumers. Although the regulations with the most significant impact on blockchain games are at the federal level, the Newsom Order signals that California intends to remain a welcoming home for the emerging blockchain technology.

V. Efforts to Address the Core Regulatory Challenge

Although the Biden Order indicates a desire to address consumer and investor protection in digital assets while facilitating technological innovation, the core regulatory challenge for blockchain games remains the conflict between current US securities regulations and the industry key goals of play-to-earn and player ownership. Two recent efforts have attempted to address this conflict by proposing alternative regulation frameworks for digital assets: (i) the token safe

⁵¹ Executive Order on Ensuring Responsible Development of Digital Assets (March 9, 2022).

⁵² *Id*.

⁵³ Ananya Kumar, A Report Card on China's Central Bank Digital Currency: the e-CNY, ATLANTIC COUNCIL (March 1, 2022).

⁵⁴ Executive Order N-9-22 (May 4, 2022).



harbor proposed by SEC Commissioner Peirce and (ii) the Responsible Financial Innovation Act, which was recently introduced as a bill in the US Senate.

a. Token Safe Harbor

The token safe harbor proposal ("<u>Safe Harbor</u>") is SEC Commissioner Peirce's suggestion for reconciling current US securities laws with innovative projects like blockchain games. In her proposal, initial development teams ("<u>Teams</u>"), meaning any persons or entity that provides the essential managerial efforts for the development of a blockchain network or application, would have three years to establish their network as functional or decentralized such that the digital assets used on the network would no longer be deemed securities under the Howey test. The Safe Harbor would require the Team to file a notice of reliance with the SEC prior to the date of the first token sale. Additionally, Teams would be required to provide certain disclosures on a freely accessible public website prior to filing a notice of reliance and semi-annually thereafter, and an exit report at the expiration of the three years. If adopted by the SEC, the Safe Harbor would offer a significant lifeline for startup blockchain projects. For now, however, the Safe Harbor is just one SEC commissioner's suggestion, which has not been adopted or proposed by the SEC.

b. Responsible Financial Innovation Act

On June 7, 2022, US Senators Kirsten Gillibrand (D-NY) and Cynthia Lummis (R-WY) introduced the Responsible Financial Innovation Act (the "<u>RFIA</u>"), a bipartisan framework for regulating digital assets. ⁵⁸ The landmark bill distinguishes between digital assets that are commodities and digital assets that are securities by examining the rights conveyed to the consumer, giving creators of digital assets the ability to determine their regulatory obligations, and providing regulators the clarity necessary to enforce existing commodities and securities laws.

Under RFIA, "ancillary assets" are digital assets which are not fully decentralized, and which benefit from the entrepreneurial and managerial efforts of others that determine the value of the assets, but do not represent securities because they do not create rights to profits, liquidation preferences, or other financial interests in a business entity. ⁵⁹ If signed into law, the RFIA would require ancillary asset creators to file certain disclosures with the SEC twice a year, and ancillary assets in compliance with these disclosure requirements would be presumed to be commodities, not securities. ⁶⁰

⁵⁵ Commissioner Hester Peirce, <u>Token Safe Harbor Proposal 2.0</u> (April 13, 2021).

⁵⁶ *Id*

⁵⁷ Id

⁵⁸ Lummis-Gillibrand Responsible Financial Innovation Act (June 6, 2022).

 $^{^{59}}$ *Id.* at 13.

⁶⁰ Id.