WEB3 IS COMING FAST, AND REGULATION NEEDS TO KEEP PACE

BY

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Web3 is a buzzword and concept that quickly rose to prominence during 2021 and 2022, alongside the continued investment in underlying blockchain technologies by institutions and nation-states across the board. Despite the increased level of attention and investment, however, there remains significant ambiguity with regards to how web3 use cases and applications should be treated from a regulatory perspective. Not equivalent to blockchain or cryptoassets, it is important to recognize how closely these technologies influence and impact each other. This piece is written with both investors and policymakers in mind, and should be viewed as the beginning of this comprehensive conversation, versus a definitive or authoritative guide.

01
INTRODUCTION

As the enterprise adoption of blockchain-based applications and tokenized assets continue to accelerate across different economic areas, one specific use case has continued to attract significant attention and investment, known increasingly as "Web3." While not directly connected to blockchain or cryptoassets, there are several fundamental characteristics and components of Web3 applications that need to be understood prior to a robust conversation around Web3 regulation can be conducted. Specifically, the two components in question are blockchain and tokenized governance protocols, both of which are necessary to have Web3 applications operate as advertised. These tools will be broken down in more depth throughout this piece as they currently operate, as well as how they link to the broader concept of Web3. This piece is not written to be an all-inclusive, nor exhaustive analysis of the wide range of issues. Rather, this should be viewed as a primer for investors and policymakers seeking to both obtain more information around Web3 use cases, and leverage this increased expertise to conduct more comprehensive policy analysis.

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WEB3 DEFINED AND CONNECTION TO BLOCKCHAIN

Definitions as to what Web3 is can be quite varied and can include a relatively wide range of options, but for the purposes of this piece the following definition will work. Web3 represents an umbrella term for decentralized and distributed web-based applications, which can operate across a wide range of economic areas. A simple definition, but one that highlights several of the differentiating factors that set Web3 apart from existing web-based applications. The current state of the internet economy, dominated by a handful of digital services giants such as Meta, Google, Amazon, Apple, and Twitter, is beset by a number of privacy, governance, and economic issues.

Time and again, the privacy of customer data has been violated, breached, or otherwise not protected by the aforementioned organizations, with the Congressional hearings that have been held previously not addressing the underlying issues.[2] This also has led to renewed calls for monopoly-busting legislation to be crafted specifically to address the issues that arise from an overt concentration of economic power in the hands of just a small number of organizations. Lastly, this combination of factors has led to a generalized dissatisfaction – playing out in real time via the purchase of Twitter by Elon Musk – that has continued to lead to research, investment, and development of decentralized alternatives.

This is where the connection to blockchain technology becomes more readily apparent. At the core of the idea blockchain represents a decentralized and distributed platform that allows users to store and share information between network members. Various consensus methodologies are available to help ensure the successful operation of this promise, with Proof of Work and Proof of Stake leading the pack by being used by the Bitcoin and Ethereum blockchains, respectively.[3] No matter what consensus methodology is used the goal of said methodology is develop a platform and ecosystem that does not rely on a trusted third party or any centralized organization, but instead creates a "trustless" community that is both transparent and secure for users.

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BLOCKCHAIN AND TOKEN ISSUES WITH WEB3

Despite the promise and potential of Web3 applications, there are significant challenges that policymakers need to understand and assess in order to construct reasonable, constructive, and flexible policy frameworks for this fast-growing space. For the purposes of this discussion, two primary categories of issues will be presented – blockchain and tokenization issues and operational concerns.

After the volatile, and potentially disastrous year for blockchain and cryptoassets that was 2022, policymakers and regulators across the board are – somewhat justifiably so – increasingly skeptical with regards to virtually everything

2 See https://www.bloomberg.com/news/newsletters/2022-09-15/senate-hearings-for-tiktok-meta-twitter-youtube-lack-clear-path-forward.

3 See https://www.investopedia.com/terms/p/proof-work.asp and https://www.investopedia.com/terms/p/proof-stake-pos.asp#:~:text=Investopedia%20%2F%20Crea%20Taylor-,What%20Is%20Proof%2Dof%2DStake%20(PoS)%3F,and%20keeping%20the%20database%20secure.

blockchain or crypto related. Whether it takes the form of dramatic decreases in prices and trading volumes of a wide array of cryptoassets, the numerous hacks and breaches that have cost investors billions in (mainly) uninsured losses, or the spectacular collapse of FTX, the attitude to tokenized assets has seemingly shifted from a neutral wait-and-see approach to a more hostile one. Building on this shift, it should come as no surprise that new use cases and applications that rely on a decentralized and distributed platform to store and share information will draw higher levels of scrutiny. When combined with the volatility, and investor losses, that have resulted from crypto volatility, it is a relatively safe supposition that regulation is coming for the crypto sector.

As it connects to the Web3 ecosystem, there are a few considerations that should be integrated as they are linked to blockchain and cryptoasset issues. As permissioned blockchains continue to proliferate throughout the enterprise landscape, regulators must be mindful of the fact that the rise of walled gardens enabled via permissioned blockchains could have a similarly stifling effect on the development of Web3 as different versions of the internet had on the development of web browsers in the early days of the internet. Put another way, regulators need to focus on both the permissionless blockchain sector – with all of the volatility that entails – as well as the permissioned blockchains that have been developed by multiple corporate actors. Privacy, access to the data stored on these blockchain platforms, and process by which administrators are added and/or removed to blockchain-based applications, especially those that will form the basis of Web3 protocols, should be at the center of Web3 regulation. This is also an area that needs to be examined from a policy perspective, as many of the major players in the blockchain and digital asset spaces are web 2.0 players, which might lead to a duplicative hierarchy of major players. In other words, care must be taken to balance the approach and oversight actions taken with regards to both permissioned and permissionless actors to help ensure that Web3 develops as promised.

Cryptoassets are an asset class that has had a dramatic effect on financial markets, and the long-term implications of increasing tokenization on trading, control, and ownership around financial and other information are difficult to forecast at this point. As it connects directly to Web3 applications, tokens and other tokenized assets play a crucial role; how to pay, support, access, and more broadly enable these applications to function as advertised. Regulators, both financial and non-financial, are primed to become more overt in the regulation and potentially punitive punishments that can be levied against issuers, exchanges, developers, and traders of cryptoassets.

This is seemingly true even for tokens that are not designed to be traded, be volatile in nature, or encourage investors to engage in speculative activities. Utility tokens and governance tokens have existed for years, and serve as the governance structure for other decentralized applications such as decentralized autonomous organizations ("DAOs"). One aspect that policymakers and users need to keep in mind, however, is that while different tokens have different use cases, these tokens are treated the exact same way under current U.S. tax policy; taxable whenever created or involved in a transaction.

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OTHER ISSUES WITH WEB3

Setting aside the regulatory concerns that are connected to Web3 applications and use cases, there are also several items that should form the basis for robust and comprehensive policy conversations. Let's take a look at a few of them.

Decentralization issues. One of the strongest attributes of Web3 applications is the decentralized aspect of how these applications are going to operate. In theory, a decentralized operating protocol allows a faster and more flexible structure that also improves the privacy for consumers and users on these platforms. That said, the issues with scaling and processing capacity that exist with other blockchain applications – which in turn has led to the rise of permissioned and enterprise blockchains – will be even more amplified for use cases seeking to supplant entrenched internet giants. Decentralization also makes regulating and rooting out scammers more difficult for policymakers, adding to the somewhat dubious reputation of blockchain and crypto applications have already garnered as a result of 2022.

Not truly decentralized. On the other side of the decentralization conversation, there is an underlying reality that needs to be part of how regulation is treated; decentralized protocols are not as decentralized as they might appear. An example of this is, following the Ethereum merge during September 2022, over two-thirds of staked ether (which will drive Ethereum development moving forward), was controlled by just five (5) organizations.[4] Given that many of the Web3 applications, and many other blockchain or token affiliated use cases, are counting on the staked Ethereum blockchain to power future decentralized applications ("dApp") development, policymakers would be well advised to recognize the specifics of how projects differ from one another.

4 See https://www.forbes.com/sites/seansteinsmith/2022/09/15/what-is-next-for-ether-post-merge-implications-for-ethereum-and-crypto/?sh=28600e36dd9c.

Interoperability issues. One of the most important issues with any technology design, platform, or applications is whether or not different organizations, options, and implementations will be able to communicate with each other. A parallel to this somewhat technical concept would be if a user was trying to get an Apple and PC device to run together; while possible in some cases (but not all), it would involve the utilization of patches, adapters, and other external tools. This same issue exists in the Web3 world, and further complicates attempts to regulate the space since not only the individual platforms need to be regulated, but the connectivity points must also be taken into account when drafting rules, frameworks, or other policy initiatives. To hopefully avoid dislocations in market access and user functionality, interoperability needs to be a focus for both industry actors and policymakers.

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CONSTRUCTING REGULATION FOR WEB3 APPLICATIONS

While there certainly be volatility and bad actors in the Web3 space, as there are in any sector, it should be reasonably certain at this point that some form of regulation is going to be necessary to help ensure a sustainable pace of investment and development of certain projects. Let's take a look at a few of these considerations that should be a part of how policy and regulation will be constructed for Web3 going forward. Specifically, let's examine several of the core factors that need to form the basis for policymaking and policy conversations.

Differentiated rule making. Web3 is often discussed and presented as a monolithic field, but that is far from the truth, and ignores the reality that applications in this space span multiple economic and societal areas from art, to healthcare, educational records, property data, and a multitude of financial transactions and information. Such a wide range of industry applications means that – by extension – the rules and frameworks for how Web3 applications are governed need to reflect this differentiation. Much like how different industries are treated and regulated different in the web 2.0 landscape, it makes sense that different Web3 platforms and use cases should be regulated based on use case and industry effects, versus a blanket approach.

Update disclosures and reporting. Corporate financial reporting and other forms of disclosure are simultaneously well-defined for web 2.0 firms, and also well understood to be lacking. There have been multiple instances, both in the blockchain space and other economic areas, where the reporting, disclosure, and other data that has been provided to the marketplace is not sufficient for informed decision making. Web3 entities, due to their decentralized operating structure and governance model, will by default require a differentiated set of disclosure and reporting rules, especially for those that are governed by a community or group, versus a more centralized structure.

Embrace the power of decentralized autonomous organizations ("DAOs"). DAOs might be the example of a Web3 applications most familiar to those in the space, but it is an idea that remains very much a work in progress versus an established economic engine or source of growth. Even after the success of DAOS in 2021 and 2022 – in the form of the ConstitutionDAO project and CityDAO in Wyoming – DAOs remain an idea and concept that is only vaguely understood by most policymakers. Improving the knowledge and understanding of users and policymakers alike on 1) the technical operations of DAOs, and 2) the numerous areas in which DAOs can be successfully leveraged is a necessary step toward more effective policymaking. Time and again, an issue around the combination of blockchain, tokenized assets and control, and Web3 more generally is investor and regulator education; DAOs are a real-world example of how these tools are already present and active in the marketplace.

Connect Web3 to ESG. Few ideas have generated more investment, discussion, and controversy over the last several years than ESG, green investing, and the more generalized concepts linked to sustainability. One of the most obvious obstacles toward 1) more investment in this space, and 2) better outcomes is the lack of transparency and timely data connected to these types of projects Since Web3 applications are decentralized in nature, and have an immutable and traceable blockchain as the basis for operations, this adds additional amounts of transparency and auditability in their records. While certainly not a cure-all for problems that routinely beset ESG projects or green initiatives, the increased transparency and real-time auditability of this information is an area that policymakers need to be aware of.

Internet of Things. One innovation or concept that has been long in coming is the Internet of Things ("IoT"), but this development is not possible without the more comprehensive development of Web3 platforms and applications. To achieve the promise of IoT applications and tools, including the long-awaited autonomous vehicles, a decentralized data storage and management system is necessary in order to achieve the data processing, feedback, and responses required for such use cases. As this develops, however, there will need to be flexible (yet strong) rules in place for the management of this data, frameworks for which organizations will have access to this data, and what other internal controls need to be in place at corresponding entities. With the rise of more personalized, customizable, and real-time tools and applications, Web3 will have an important role to play; this also highlights the need for specified oversight and rulemaking in this space.

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WEB3 MOVING FORWARD

There is little doubt that the future of the internet and internet-based applications will be characterized by more decentralization, more transparency, better auditability, and an increased focus on user privacy; that much should be clear in the aftermath of the numerous hacks and breaches that occurred in this space during the last several years. What remains more of an open item, however, is how exactly a trustless and decentralized web ecosystem can be developed in a way that minimizes the tradeoffs commonly associated with blockchain-based applications. Not a perfect tool or set of tools, blockchain and cryptoassets possess many of the attributes that developers and users are seeking in attempts to make Web3 less of a concept and more of a reality. Regulation is not normally a word or concept that is regarded with anticipation by any sector, and Web3 is no exception to this rule, but the reality is that Web3 applications are already in the marketplace. In order for Web3 applications to both achieve their promise, and to do so in a manner that preserves user privacy, flexible, innovative, and commonsense rules are necessary. The industry, developers, and users will all benefit as a result. ■

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