The Blockchain Association
1701 Rhode Island Avenue N.W.
Washington, D.C. 20036

August 5, 2022

Department of Financial Protection and Innovation, Legal Division
Attn: Sandra Navarro
Regulations Coordinator
2101 Arena Boulevard
Sacramento, CA 95834

Re: Invitation for Comments on Crypto-Asset-Related Financial Products and Services

Dear Commissioner Hewlett,

The Blockchain Association (the "**Association**") submits this letter in response to the Department of Financial Protection and Innovation's ("**DFPI**") request for comment titled "Invitation for Comments on Crypto Asset-Related Financial Products and Services Under the California Consumer Financial Protection Law".[1]

The Association is a non-profit organization dedicated to improving the public policy environment for public blockchain networks to allow them to develop and prosper in the United States. The Association endeavors to educate policymakers, courts, law enforcement, and the public about blockchain technology and the need for regulatory clarity to allow for a more secure, competitive, and innovative digital marketplace. The Association consists of over 90 industry leaders who are committed to responsibly developing and supporting public blockchain networks field by cryptocurrencies ("**crypto**"). Our diverse membership reflects the wide range of this dynamic market and includes crypto exchanges, crypto miners, custodians, software developers, early-stage investors, trading firms, and others supporting the crypto ecosystem. Given our diverse membership, the Association is well positioned to provide Commerce with insight into how the United States can be the global leader in this transformational space.

We thank the DFPI for the opportunity to provide industry input on crypto-related financial products and services as the department develops guidance and provides regulatory clarity for the industry. We fully support the DFPI's and California's overall effort to foster responsible

[1] State of California Department of Financial Protection and Innovation, Invitation for Comments on Crypto Asset-Related Financial Products and Services Under the California Consumer Financial Protection Law (May 31, 2022), https://dfpi.ca.gov/wp-content/uploads/sites/337/2022/06/DFPI-crypto-invitation-for-comment-5-31-22.pdf.

innovation and create a transparent regulatory and business environment, while incorporating California values for the crypto industry.

This letter addresses why California is well positioned to construct a regulatory environment for crypto that attracts (and keeps) industry players in the state while ensuring consumer protection and continued innovation. We first discuss the state of crypto in California, including a discussion of diversity, equity, and inclusion in the industry. Next, we discuss consumer protection as it relates to crypto and "web3," a term that refers to the open and disintermediated internet built using blockchain technology where users have ownership over their content, data, and assets. Finally, we recommend a few important policy objectives that California should undertake to achieve the goals outlined in the DFPI's request for comment. We welcome the opportunity to further engage and collaborate with the DFPI to develop a well-tailored framework for the digital asset ecosystem in California.

1) Crypto and California

The Current State of Crypto in California

Currently, the high demand for, and adoption of, crypto within the United States stems from Americans' broad access to the internet, their sophistication with new and emerging technology, and unbanked and underbanked Americans' desire to find an alternative to the exclusionary traditional financial system. This also applies to California. California has already seen increased spending on crypto and blockchain solutions by companies domiciled in the state, and has resulted in an explosive surge in California-based crypto jobs.

California, as the world's 8th largest economy and a global hub for technological innovation and entrepreneurship, is undoubtedly one of the premier locations for any evolving technology. California has been the home and innovation hub for both modern tech giants like Apple, Google, and Microsoft as well as thousands of technology startups of all sizes. This is due to the state's tech-friendly policies, elite educational system, and network of aspiring innovators along with investors supporting their work. California has already become a top destination for crypto and web3 firms. California can and should position itself as the home of builders and innovators in the greater blockchain ecosystem by implementing crypto-friendly policies to ensure safe innovation continues to flow out of the state.

Diversity, Equity, and Inclusion

Silicon Valley is regarded not only as California's financial center with its concentration of traditional technology companies and venture capitalists, but the technology and innovation hub of the world. Yet its record on workforce diversity and gender inclusion falls short.

According to Bloomberg, “female founders secured only 2% of venture capital in the U.S. in 2021, the smallest share since 2016 and a sign that efforts to diversify the famously male-dominated industry are struggling. It was the second year in a row that women’s percentage of VC funding shrank[.]”[2]

Crypto and web3 offer a unique solution aimed at deconstructing the long-standing barriers to enter our traditional financial system as well as our entrepreneurial market. Decentralization in particular offers a pathway to ownership and has the potential to level the playing field for women and innovators of color given the diminished barriers to entry. For instance, women of color are a fast growing demographic in crypto and have built a strong community supporting other underrepresented entrepreneurs, creatives, and engineers.

Blockchain-based solutions, like decentralized autonomous organizations (“**DAOs**”), allow creatives, entrepreneurs, and developers to build communities, expand access to user-driven growth, and create opportunities for an unlimited range of user voices in decision making through an alternative organizational structure. Additionally, startups, e-commerce businesses, and any entities struggling with high fees associated with centralized payment platforms can benefit from faster, more cost-effective digital currencies.

2) Consumer Protection

California already leads the nation with its robust consumer protection laws covering a wide range of activities, including false and misleading advertising, unfair competition, and unlawful business practices. The breadth of pre-existing consumer protection laws allow California’s enforcement departments to use the resources already at their disposal to protect consumers against unlawful schemes in the crypto industry. The technology of crypto itself, by virtue of its transparency, may arm those responsible for enforcing California’s consumer protection laws with even more investigative power than traditionally found in other industries.

Moreover, because the state already sets the highest bar for consumer protection in the nation, California lawmakers have a unique opportunity to develop more tailored consumer protection laws that address the unique risks involved in the crypto ecosystem, while recognizing the fundamental accountability and transparency that blockchain networks bring to the markets. California may also partner with private companies in the crypto sphere who are working on specific technology to mitigate these unique risks.

[2] Lizette Chapman, *Female Founders Raised Just 2% of Venture Capital Money in 2021*, Bloomberg (Jan. 11, 2022), https://www.bloomberg.com/news/articles/2022-01-11/women-founders-raised-just-2-of-venture-capital-money-last-year#xj4y7vzkg.

How Crypto Addresses Consumer Protection via the Blockchain

Prior to implementing consumer protection laws, we believe it is essential to acknowledge and identify the ways in which blockchain technology provides inherent levels of accountability and transparency for the crypto ecosystem.

Public blockchains are a type of distributed ledger technology that records information and transactions on a publicly visible, digital ledger. At its genesis, each blockchain is hard-coded with a set of rules that determines how the blockchain will operate, such as the types of information that transactions must contain to be valid, and how those transactions will be verified and added to the blockchain. These rules govern all interactions on a blockchain and establish a predictable, reliable execution environment giving users certainty about how the system will work at all times. Many blockchains have rules that guarantee transparency which grant an unprecedented level of accountability and capacity for real time monitoring and auditing compared to our traditional financial system. Other blockchains have rules that guarantee privacy and the removal of data privacy risks otherwise addressed by the California Consumer Protection Agency, and other agencies focused on privacy.

Additionally, the transparency of public blockchains can be used as a deterrent for illicit actors who may otherwise utilize these protocols. According to Chainalysis, a leading blockchain analytics and data platform, in 2021, transactions involving illicit crypto wallet addresses represented just 0.15% of the crypto volume and 0.62% of all transaction volume is associated with illicit activity.[3] According to the United Nations, it was estimated that between 2% and 5% of global GDP annually is connected with money laundering and illicit activity[4]. Despite a narrative that the crypto industry is rife with crime and illicit financial activities, by the most relevant metrics, evidence demonstrates that the ecosystem is seldom used for illicit financial transactions when compared to the traditional financial sector.

Finally, the decentralized nature of blockchain technology inherently provides a significant level of individual privacy. For instance, users' exposure to risks associated with entities storing sensitive consumer data, including identity theft, are significantly mitigated due to the limited amount of personally identifiable information necessary to conduct a transaction on the blockchain. Lastly, many decentralized financial protocols also are "non-custodial," meaning users do not have to trust third-party intermediaries to secure and safeguard their assets. The crypto ecosystem's blockchain technology eliminates the centralization that would otherwise serve as the point of failure in data breaches of sensitive consumers' financial and personal information.

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[3] Chainalysis Team, *Crypto Crime Trends for 2022: Illicit Transaction Activity Reaches All-Time High in Value, All-Time Low in Share of All Cryptocurrency Activity*, Chainalysis (May 20, 2022), https://blog.chainalysis.com/reports/2022-crypto-crime-report-introduction/.

[4] Hailey Lennon, *The False Narrative of Bitcoin's Role in Illicit Activity*, Forbes Magazine (Dec. 13, 2021), https://www.forbes.com/sites/haileylennon/2021/01/19/the-false-narrative-of-bitcoins-role-in-illicit-activity/?sh=1d409f453432.

Rather, data is distributed across a network of computers and servers such that if one fails, the data remains safe and secure.

Mitigating Evolving Risks in the Crypto Ecosystem

As with any emerging technology, blockchains may create new risks to consumers and can be abused by bad actors. But this also presents a novel opportunity for California to develop risk mitigation mechanisms that set the standard for the nation, much like it has with its consumer protection laws. As a starting point, the industry is already developing best practices that include industry standards and protections beyond those required by law. Examples of such risk mitigation efforts include on-chain monitoring of transactions amongst participants and disclosures to ensure participants fully understand the risks associated with engaging with the crypto ecosystem.

Further, the industry is developing applications to monitor and detect errors, vulnerabilities, and illicit activity, and to provide additional layers of security. Additionally, the growing array of blockchain analysis tools allow law enforcement to trace crypto addresses to identify the origination and/or cash-out points at cryptocurrency exchanges. Law enforcement can leverage the transparency and traceability of transactions on the blockchain alongside collaboration with the industry to monitor interactions of illicit actors at an unprecedented level. These efforts will continue in conjunction with appropriate regulation as the crypto and web3 industry matures.

3) Policy Recommendations

Decentralized Autonomous Organizations

The emergence of decentralized autonomous organizations ("**DAOs**") presents an enormous opportunity for business in California. DAOs are internet-native, leaderless organizations collectively owned and managed by their members. While traditional organizations require a central person or group of persons to authorize decisions and delegate actions, DAOs utilize "smart contracts" to facilitate all aspects of operations. Smart contracts are self-executing lines of code that contain predetermined rules, generally agreed upon by the collective, to dictate how operations will proceed without the need for trust. For example, while a traditional investment firm requires a hierarchical structure to make decisions on certain investments, a DAO would utilize a smart contract to execute a decentralized voting procedure to execute an investment once voted upon by the organization. Rather than electing a leader to oversee operations, members of a DAO need only to trust the code to execute decisions. DAOs introduce tremendous opportunities for the coordination of global entities to engage in a common venture without the need for mutual trust.

DAOs in California currently do not fit into any existing corporate structures that would allow for these organizations to maintain certain levels of protection for their members against liability.

States like Wyoming[5] and Tennessee[6] have adopted laws that grant DAOs legal status as limited liability companies and legislation in other states is in development. California already is at the forefront of technological innovation and entrepreneurship, and, as entrepreneurs' utilization of DAOs continues to grow, California can remain at the forefront by supporting DAO's through legislation.

Climate

Cryptocurrencies, like any industry, require energy investments to keep them running safely and effectively. While the implications and energy consumption of crypto mining has recently come under scrutiny due to its perceivably high energy costs, the tangible environmental impact of mining is misunderstood.

Blockchains are distributed databases designed to record, communicate, and transact value without the need for a central authority. Most blockchains are built on a network of distributed nodes that work together to validate the transactions that take place on the network that they collectively run. Because of the decentralized nature of these networks, it is necessary for every blockchain network to have a mechanism to ensure all of its nodes are synchronized with one another, agree on which transactions are legitimate, and maintain the security of the network against mistaken or malicious actors. This decentralized system for determining which transactions are recorded on a blockchain network is called a "consensus mechanism." In addition to ensuring the core operations of a blockchain, consensus mechanisms directly impact the rules, economic conditions, and security of the networks they underpin. The two most widely utilized consensus mechanisms: Proof-of-Work and Proof-of-Stake.[7]

Proof-of-Work ("**PoW**") networks require computers to compete for the opportunity to add new "blocks" of transactions to the blockchain in exchange for transaction fees and a reward in the form of the blockchain's native asset, such as Bitcoin, by solving hash functions (i.e., a complicated math problem that can only be solved by trial and error but, once solved, can be easily checked and verified). Solving hash functions requires computational power and electricity. This competitive process protects the network's ledger of transactions from manipulation by imposing a high cost—in this case in the form of computing power dedicated to solving hash functions—on participants attempting to change or add data to the blockchain. Participation in this consensus process is colloquially referred to as "mining."

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[5] Wyoming Decentralized Autonomous Organization Supplement, S. 73, 66th Leg. (Wyo. 2021), https://www.wyoleg.gov/Legislation/2021/SF0038.

[6] Tennessee Decentralized Autonomous Organization Amendment, H.R. 2645 (Tenn. 2021), https://www.capitol.tn.gov/Bills/112/Amend/HA0748.pdf

[7] Although there are many alternative consensus mechanisms being utilized in the crypto ecosystem, many of these alternatives incorporate similar processes and components. *See* Cryptopedia Staff, *Blockchain Consensus Mechanisms Beyond PoW and PoS*, Cryptopedia (Dec. 3, 2021), https://www.gemini.com/cryptopedia/blockchain-consensus-mechanism-types-of-algorithm#section-proof-of-contribution-po-c-po-co-consensus-mechanism

Proof-of-Stake ("**PoS**") networks rely on validators rather than miners to add blocks to the blockchain. Instead of using computational power to solve hash functions as PoW miners do, PoS validators "stake" some of the blockchain's native tokens—locking those tokens up so that the validator cannot transfer or sell them—to become eligible for random selection as the node with the right to add the next block to the blockchain. When a validator adds a new block, that validator is typically rewarded with network transaction fees and new units of the blockchain's native asset.

As these technologies are still in their infancy and continue to be developed by the top cryptographers and engineers in the world, it would be inappropriate for policymakers to decide that one mechanism is manifestly superior to another, either from an environmental perspective or otherwise. Instead, policymakers should let the innovative process continue so that the best technology can prevail in the market, and should avoid calls to favor or discriminate against one consensus mechanism or another.

In addition to adopting technology-neutral policies, California is in a unique position as a leader in climate initiatives to enact policies to facilitate crypto mining's transition to renewable energies by incentivizing the use of renewables and making renewable sources of energy more accessible. For instance, the majority of Bitcoin mining energy (74.1%) is generated from renewable sources, which is more than four times the global average.[8] While Bitcoin has come under scrutiny lately due to the perceived high energy consumption, which was estimated to be 62 TWh in 2020, resulting in 33 million tonnes of carbon dioxide emissions, these statistics represent just 0.04 percent of global primary energy consumption and 0.1 percent of global carbon emissions, demonstrating its misunderstood environmental impact.[9] Interestingly, the majority of the regions in which mining is geographically concentrated are likewise rich in renewable energy resources: Iceland (100% renewable energy), Quebec (99.8%), British Columbia (98.4%), Norway (98%), and Georgia (81%). In the United States, mining operations are similarly located in areas with rich sources of renewable energy like the Pacific Northwest, upstate New York, and Western Texas. "Voting with their feet," it is evident that miners' demand for cheap energy already incentivizes them to seek and use renewable sources of energy.

The rate at which the technology has developed in reducing energy consumption and the intrinsic desire for miners to seek renewable sources of energy present an opportunity for California to pass legislation welcoming miners to the state. California can lead the United States by encouraging miners to use renewable sources of energy within the state to create a more efficient and sustainable system. Banning mining or crafting policy that limits the viability of a certain consensus mechanism does not confront the underlying policy goal of limiting crypto's impact on the environment. Rather, it encourages miners to go overseas to countries with

[8] *Mining Whitepaper June 2019 Update*, CoinShares (June 2019), https://coinshares.com/assets/resources/Research/bitcoin-mining-network-june-2019-fidelity-foreword.pdf.
[9] Nic Carter, *Report: Bitcoin Net Zero: Nydig - Bitcoin for All*, NYDIG (Sept. 20, 2021), https://nydig.com/research/report-bitcoin-net-zero.

cheaper energy costs–or to other states–that may not implement the same incentives to use renewable energy.

Licensing Arrangements

A predominant regulatory compliance challenge for early-stage crypto companies are overburdensome regulatory regimes with steep costs. Most crypto companies are still operating as startups and their survival suffers from greater risk when regulators impose operating requirements like strict state specific licenses. Such burdensome licensing regimes that specifically target crypto companies severely stifles innovation and promotes unintentional gate-keeping against emerging companies . To avoid this gate-keeping, the DFPI can craft policies that work alongside existing federal regulations to ensure innovation can persist for companies of all sizes.

Alongside instituting policies that coordinate with federal regulation, any policy specific to companies in the crypto space should be tailored to the risks presented by the unique attributes existing within the ecosystem. In many cases, expanding the scope of existing laws and regulations tailored to intermediaries in the traditional financial space are unworkable for crypto native companies. For instance, New York implemented a licensing framework known as the "BitLicense," which imposes a burdensome one-size-fits-all licensing requirement on nearly every company that offers a product or service related to crypto, regardless of the risks involved in their business or the propriety of licensing as a means to address those risks. By failing to create a tailored regulatory regime in which the costs of compliance are well-matched to the risks at issue, the BitLicense has failed to achieve its intended goal of establishing a model for crypto regulation across the United States, instead becoming "what legislatures in other states now consider a case study in how not to regulate an industry whose complex technical details can quickly confound over-broad and ill-defined rules."[10]

Legislation often does not carry the necessary nuance to properly differentiate between the activities and subsequent responsibilities of different actors in the space. On a state level, like what happened in New York with its bitlicense, companies will flee from the state, taking their talent with them, to states with friendlier regulatory regimes. To prevent such an exodus from California, the DFPI can implement policy that recognizes the unique attributes and functions of different service providers in the crypto space, rather than applying broad level regulation that may present unworkable requirements for different entities.

[10] Danny Nelson, *Bitlicense at 5: Despite Architect Lawsky's Hopes, Few States Copied NY Rules*, CoinDesk (June 24, 2020), https://www.coindesk.com/policy/2020/06/24/bitlicense-at-5-despite-architect-lawskys-hopes-few-states-copied-ny-rules/.

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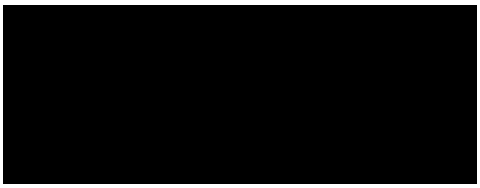
We thank the DFPI for the opportunity to comment on Invitation for Comments on Crypto Asset-Related Financial Products and Services Under the California Consumer Financial Protection Law. The Blockchain Association fully supports the effort of both the department and California's efforts to lead the nation in creating a home for innovation within the cryptocurrency and greater blockchain space. We are dedicated to working with the DFPI to craft good policy that both supports builders and businesses on the blockchain, and ensures the crypto industry can safely thrive in California. We welcome further discussion and offer ourselves as a resource regarding our submission to the DFPI and further work in creating a framework for the crypto industry in California.

Sincerely,



Kristin Smith
Executive Director

Jake Chervinsky
Head of Policy