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Daniel J. Harty  
Director of the Office of Capital Markets  
United States Department of the Treasury  
1500 Pennsylvania Avenue NW  
Washington, DC 20220

**Re: Request for Comment on “Ensuring Responsible Development of Digital Assets; Request for Comment,” Document Number 2022-14588**

Dear Director Harty:

The Blockchain Association (the “Association”) submits this letter in response to the Department of the Treasury’s (“Treasury”) request for comment titled “Ensuring Responsible Development of Digital Assets; Request for Comment.”<sup>1</sup>

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 is comprised of over 90 industry leaders who are committed to responsibly developing and supporting public blockchain networks fueled 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 Treasury with insight into how the United States can create an environment amenable to the continued development of digital asset innovation.

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<sup>1</sup> 87 FR 40881. Pages 40881-40883 (July 8, 2022), available at <https://www.federalregister.gov/documents/2022/07/08/2022-14588/ensuring-responsible-development-of-digital-assets-request-for-comment>.

## **(A) Adoption to Date and Mass Adoption**

**(1) What explains the level of current adoption of digital assets? Please identify key trends and reasons why digital assets have gained popularity and increased adoption in recent years. In your responses, please address the following:**

*a. Who are the users, consumers, and investors that are adopting digital assets? What is the geographic composition and demographic profile of consumers and investors in digital assets?*

Data surrounding U.S. crypto usage consistently suggests crypto has gone mainstream among American consumers. Indeed, a 2022 NBC News poll estimated that “one in five Americans has invested in, traded or otherwise used cryptocurrency,”<sup>2</sup> and a Pew Research Center survey calculated that sixteen percent of U.S. adults have owned, traded, or used some form of cryptocurrency.<sup>3</sup> Notably, the underbanked and minorities have been especially interested in crypto. One survey found that 37 percent of the underbanked indicated that they own cryptocurrency, compared to 10 percent of the fully banked.<sup>4</sup> A Harris poll reported that 23 percent of African-Americans and 17 percent of Hispanics reportedly own crypto.<sup>5</sup>

Global adoption of crypto has been equally high. According to “The 2021 Global Crypto Adoption Index” of Chainalysis, one of the world’s preeminent blockchain analytics firms, worldwide adoption jumped over 880% in 2021.<sup>6</sup> Many countries suffering from authoritarian governments or war have significant rates of adoption, which suggests that crypto has become a tool used by individuals living under economic uncertainty or distress to create financial security.

*b. What businesses are adopting digital assets and for what purposes?*

Some of the largest banks operating in the United States are now involved in a variety of crypto related services. For instance, Bank of America, Citigroup, Goldman Sachs, BNY Mellon, and

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<sup>2</sup> Franck, Thomas. “One in Five Adults Has Invested in, Traded or Used Cryptocurrency, NBC News Poll Shows.” *CNBC* (March 31, 2022), available at <https://www.cnbc.com/2022/03/31/cryptocurrency-news-21percent-of-adults-have-traded-or-used-crypto-nbc-poll-shows.html>.

<sup>3</sup> Perrin, Andrew. “16% of Americans say they have ever invested in, traded or used cryptocurrency.” *Pew Research Center*. (November 11, 2021), available at <https://www.pewresearch.org/fact-tank/2021/11/11/16-of-americans-say-they-have-ever-invested-in-traded-or-used-cryptocurrency/>.

<sup>4</sup> Principato, Charlotte. “Banking the Unbanked Requires Raising Trust and Awareness. For the Underbanked, Better Service Means Payments Innovation.” *Morning Consult* (August 17, 2021), available at <https://morningconsult.com/2021/08/17/trust-awareness-payments-unbanked-underbanked/>.

<sup>5</sup> Finurah Contributor. “African-Americans Outpace Whites and Hispanics In Cryptocurrency Investments, Is a New Avenue to Black Wealth-Building Opening?” *Yahoo* (October 26, 2021), Available at: <https://www.yahoo.com/video/african-americans-outpace-whites-hispanics-202900463.html>.

<sup>6</sup> Chainalysis Team. “The 2021 Global Crypto Adoption Index.” Chainalysis (October 14, 2021), available at <https://blog.chainalysis.com/reports/2021-global-crypto-adoption-index/>.

many other large, institutionalized banks offer crypto-related custody services, wealth management, trading, R&D, and much more.

In addition to major U.S. banks, several prominent U.S. businesses, including Microsoft, PayPal, Starbucks, and Etsy, all accept crypto, often bitcoin, as payment for their products and services. Other businesses, like Santander, use crypto as a faster and cheaper settlement layer for cross-border payments.

### *c. What are the main use cases for digital assets for consumers, investors, and businesses?*

The most prolific use-case of digital assets are their use as an alternative to fiat currency. With crypto, money is transferred almost instantly without the need for a financial intermediary. Cutting out the middleman enables formerly high cost payments or transfers, such as remittances, to be completed cheaply and efficiently. Bitcoin is the most prominent example of this novel virtual payment mechanism. Another example is USDC, a fully-reserved U.S. payment stablecoin that has price parity with the U.S. dollar and is backed with cash and short-duration U.S. Treasuries.

Cryptos have applications beyond simple value transfer, however. With a total locked value at nearly \$43 billion, decentralized finance (“DeFi”) is an area of the digital asset ecosystem where thousands of users engage in a range of financial activities including lending markets and prediction markets.

Though crypto represents innovations in currency and financial activities, entrepreneurs and developers are now using crypto networks to build the next iteration of the internet: sometimes called “Web3.” Web1 refers to the early internet of the 1990s, when users could only perform basic tasks like read websites or send emails. Web2—the internet of today—revolutionized how we interact with the web and allowed us to post or comment on an article, modify a web page such as Wikipedia, or use applications such as Google docs. But Web2 is dominated by a few large companies – the tech giants – who wield outsized power and influence for their own benefit at the expense of the American public.

Web3, born from and built on crypto networks, is the solution to this imbalance of power. Web3 brings property rights to the web and its users. It not only allows individuals to own their own data and content, but it also allows them to possess digital goods and property. Just like when the mainframe computer was replaced with personal computers, and proprietary operating systems were replaced with web-based software, the opening of internet platforms – and the ability to have digital ownership that comes along with it – will unleash immense innovation and change how people go about their daily lives. Some current examples of the innovation and change occurring in the Web3 space are described below.

Crypto and Web3 can be used to create unique digital items known as NFTs (non-fungible tokens) whose ownership, origination, and authenticity can be proven digitally without the need

for a third-party validator. Smart contracts can then be used to automatically provide creators/artists with a cut of the proceeds each time their art is subsequently sold. For instance, NBA fans can buy and trade digital trading cards from the NBA's Top Shot collectables package. Individual digital artists now have the power to sell their work directly to art collectors as NFTs. The digital artist Beeple, for example, recently sold one of his works packaged as an NFT for \$69 million.

Cryptocurrency and Web3 can also be used to access a peer-to-peer network that stores files on the internet. The technology has been leveraged to create a decentralized “cloud storage” network that has the potential to rival the centralized data storage services of big technology companies like Amazon Web Services. Filecoin, a project launched in 2020, enables users to store their files in a disintermediated and secure manner.

*d. What are the implications for equitable economic growth?*

Digital assets allow for individual economic empowerment, which creates a unique opportunity for equitable economic growth. Indeed, because crypto is accessible to anyone with a phone and internet connection, populations that have been previously shut-off from financial services can now access them with a click of their phone. Further exploration of the implications of digital assets for equitable economic growth can be found in the response to question 6.

**(2) Factors that would further facilitate mass adoption**

*a. Describe a set of conditions or pre-conditions that would facilitate mass adoption of digital assets in the future. To the extent possible, please cite any public data related to the responses above.*

As a threshold matter, if digital assets are allowed to flourish to their full potential, they will extend far beyond a single use case, like payments or digital-art collectibles. Indeed, digital assets are a nascent technology whose applications are limited only by human imagination. In his book, *The Metaverse: And How It Will Revolutionize Everything*, Matthew Ball explains, “the untapped potential of this technology is extraordinary and will be realized as the utility of, and access to, blockchain-based games and products expands.”<sup>7</sup> As development continues to expand, it is critical that the regulatory and legal uncertainty around digital assets is resolved.

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<sup>7</sup> Ball, Matthew. *The Metaverse: And How it will Revolutionize Everything*. Liveright Publishing Corporation (July 19, 2022).

President Biden, in his executive order of March 9, 2022 (“President Biden’s EO”),<sup>8</sup> set forth a national strategy that calls for studying digital assets and determining how to support responsible innovation and reinforce US leadership in global finance. While President Biden’s EO process continues and new proposals for appropriate regulation are developed, the U.S. government could forestall the harmful impact of regulatory uncertainty and thus bolster the mass adoption potential of digital assets by taking a light-touch enforcement approach to U.S. companies that act in good faith and demonstrate a strong commitment to compliance.

Unfortunately, some federal agencies – the SEC in particular – pursue enforcement actions against too many upstanding U.S. companies, all while they ignore offshore competitors engaged in regulatory arbitrage and bad actors who exploit blockchain technology for malicious purposes. The current regulatory by enforcement scheme results in unclear guidance and untailed rulemaking. U.S. companies crave healthy dialogue with regulators in service of producing well-considered guidance and rulemaking. For example, a dialogue between industry and regulators around the tailored regulation of both stablecoins and crypto spot markets will be particularly helpful in ensuring digital assets’ potential for mass adoption.

Supporting the development of stablecoins with technology-neutral regulation or legislation that focuses on underlying activities and the specific risks of a given stablecoin would help facilitate mass adoption of digital assets in the future while ensuring the global supremacy of the U.S. dollar. To absorb credit and mitigate risks related to liquidity, the market, legal compliance, and cybersecurity, stablecoin projects must adopt strict rules on reserve assets management and have adequate capital and liquidity buffers. These rules and risk management strategies must also be communicated and meaningfully disclosed to the public. Information pertaining to the amount of a particular stablecoin in circulation and the value and the composition of the assets backing the stablecoin should be subject to attestations, and disclosed on a regular basis in a comprehensive and transparent manner. Both Representative Josh Gottheimer (D-NJ) and Senator Patrick Toomey (R-PA) have drafted stablecoin legislation with all of these qualities.

Crypto spot market regulation that places the industry under a clear and holistic regulatory structure and is enforced by the Commodity Futures Trading Commission (“the CFTC”) will also help facilitate mass adoption of digital assets by ensuring that American consumers have access to efficient, manipulation-free markets. According to Sam Bankman-Fried, the chief executive officer and co-founder of the world’s second largest cryptocurrency exchange FTX, 95% of crypto trading volume occurs offshore, in part, due to regulatory uncertainty. Bringing even a portion of crypto trading volume into U.S. borders will not only ensure a safer experience for American users but will also bolster adoption of digital assets in the United States.

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<sup>8</sup> The Biden Administration. "Executive Order on Ensuring Responsible Development of Digital Assets." The White House (March 9, 2022), available at <https://www.whitehouse.gov/briefing-room/presidential-actions/2022/03/09/executive-order-on-ensuring-responsible-development-of-digital-assets/>.

This type of spot market regulation will also protect long-term investors, prevent fraudulent activity within the crypto ecosystem, and provide clear guidance to foster innovation in the crypto economy. Although this would not solve all jurisdictional issues that regulators face when overseeing the crypto spot markets, bills such as the Digital Commodity Exchange Act of 2022 (DCEA), the Responsible Financial Innovation Act of 2022, and the Digital Commodities Consumer Protection Act of 2022 would make great strides in bringing more trading volume and activity into the United States.

*b. What developments in technology, products, services, or markets account for the current adoption of digital assets? Are there specific statutory, technology, or infrastructural developments that would facilitate further adoption?*

Currently, the high demand for and adoption of crypto from the U.S. market 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 traditional financial system. Coupled with the increased spending by U.S. corporations on crypto and blockchain solutions, it is clear that a booming economy for crypto exists in the United States.

Additionally, U.S. crypto companies benefit from the United States' status as the world's premier location for technology and software firms. Over the past fifty years, the United States has been home to the most important companies of the digital era, from early computer pioneers like IBM and Hewlett-Packard to modern tech giants like Apple and Google. The same factors that led to that success – the quality of our academic institutions, our entrepreneurial spirit and openness to risk-taking, the depth of our capital markets, and the government's "do no harm" approach to the rise of the internet – have led to a boom in the U.S. crypto industry and supplied the talent necessary to build world-class products and services here.

## **(B) Opportunities for Consumers, Investors, and Businesses**

**(3) What are the main opportunities for consumers, investors, and businesses from digital assets? For all opportunities described, please provide data and specific use cases to date (if any). In your responses, please consider:**

*a. Potential benefits of decentralized and disintermediated systems*

While the potential societal benefits of decentralized and disintermediated systems abound, these systems actively empower crypto networks, which bring autonomy, accountability, and increased security to Americans' digital lives.

Bitcoin is the world's first cryptocurrency – and the decentralized Bitcoin network is the world's first crypto network. Invented in 2009, Bitcoin allows anyone, anywhere in the world to send and receive value using nothing more than a computer or mobile phone with an internet connection.

Before Bitcoin, if someone wanted to make a payment over the internet, they had to rely on an intermediary, like a bank, to add an entry to its private ledger debiting them and crediting the person they wanted to pay. In other words, before Bitcoin, all online payments depended on gatekeepers and middlemen, who are notoriously slow and expensive and have a history of exposing Americans' sensitive information to cyber attacks, discriminating against underserved communities, and exploiting their own customers in the pursuit of profit.

Bitcoin and the cryptos that have followed solve these problems by replacing centralized intermediaries with a decentralized ledger that allows anyone, anywhere, to send payments across the world, almost instantly at a low cost. Unlike the legacy banking system, which is dominated by large, private financial institutions, the Bitcoin network is a public payments infrastructure: digital cash for the digital era. As described above, crypto networks are disintermediating far more than digital payments. By decentralizing the world wide web, crypto actively helps individuals ensure that their personal data is under their control and sufficiently protected from cyberattack.

#### *b. Creation of new types of financial products and contracts*

Interoperability is a core feature of public blockchains; one of the main benefits of building on an open, public blockchain rather than a closed, proprietary database is the ability to develop new assets and protocols that leverage the ones that already exist. Blockchain developers often use the term “composability” to refer to the ability to use existing, shared resources as building blocks to compose new, more advanced applications. For that reason, many blockchain projects have adopted standards — like the ERC-20 token standard on the Ethereum blockchain — that programmatically ensure interoperability between different assets and protocols.

#### *c. Potential for improved access to and greater ease of use of financial products*

Crypto networks operate twenty-four hours a day, seven day a week and are available to anyone with a phone or computer and an internet connection. This continuous and widely accessible availability is beneficial not only for the individuals accessing these networks, but also for the health of the crypto markets themselves.

The ability for market participants to continuously contribute their view to the market adds a level of “fidelity” to the crypto market. Broad 24/7 accessibility also removes several prerequisites that have historically impeded upon individuals' ability to use financial products. In this manner, 24/7 markets level the playing field for market participants who do not have the time or the sophisticated tools at their disposal to hedge positions during off-market hours. While a large investment firm may be able to do off-book trades with another large counterparty, a mom-and-pop retail trader in the U.S. must wait until 9:30 a.m. EST to act on her market decision. In other words, this feature of these networks gives individuals more opportunities to manage

their portfolio at a convenient time for them, whether that is in the early morning or in the evening.

#### *d. Potential opportunities for building wealth*

Crypto can be used by underserved communities to amass generational wealth and provide relief for their lingering distrust in the financial system. Below are two examples of how crypto helps to achieve these ends. Additional insight into how crypto can facilitate increased financial inclusion can be found in our response to question 6.

In his article, “A Liberal Case for Cryptocurrency,” Congressman Ritchie Torres (D-NY) effectively outlines one of the primary wealth-building opportunities that crypto offers:

“a decentralized digital economy where creators from places like the South Bronx can not only collect income from the initial sale of their content but can automatically collect royalties from every future sale — all without the rent-seeking of a corporation.”<sup>9</sup>

Additionally, crypto plays a crucial role in helping underserved communities build financial independence. According to a Washington Post article, “[i]t wasn’t their dog-walking business, or the food stand, or their decision to drop out of college that ended up saving the Lopez twins’ parents from financial ruin...It was Penelope and America Lopez’s investments in cryptocurrency that eventually allowed them to pay off one of those mortgages.”<sup>10</sup>

#### *e. Potential benefits of interacting with counterparties, suppliers, vendors, and customers directly*

Interacting with counterparties, supplies, vendors, and customers directly provides cheaper, faster, and more secure transactions for individuals.

Many of the fees associated with opening and managing an account with a third party institution will become obsolete with the advent of decentralized networks that eliminate the need for these costly intermediaries. While there are transaction fees on blockchain networks, many up-and-coming projects are working on greatly reducing or completely eliminating these fees. Additionally, the transaction fee is inversely correlated with the network’s volume – in other words, as these networks gain popularity and thus users, fees will be reduced.

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<sup>9</sup> Torres, Ritchie. “A Liberal Case for Cryptocurrency.” *New York Daily News* (March 17, 2022), available at <https://www.nydailynews.com/opinion/ny-oped-a-liberal-case-for-cryptocurrency-20220317-n6iaevmh5jeszkpiaqwcog742g-story.html>.

<sup>10</sup> Foster, Frau, Silvia. “Locked out of traditional financial industry, more people of color are turning to cryptocurrency.” *The Washington Post* (December 1, 2021), available at [https://www.washingtonpost.com/national/locked-out-of-traditional-financial-industry-more-people-of-color-are-turning-to-cryptocurrency/2021/12/01/a21df3fa-37fe-11ec-9bc4-86107e7b0ab1\\_story.html](https://www.washingtonpost.com/national/locked-out-of-traditional-financial-industry-more-people-of-color-are-turning-to-cryptocurrency/2021/12/01/a21df3fa-37fe-11ec-9bc4-86107e7b0ab1_story.html).

In addition to cost reduction, omitting the intermediary from the transaction leads to increased speed in crypto transactions compared to transactions through traditional financial institutions. For example, it takes anywhere from 10 minutes to an hour for a bitcoin transaction to be verified while the process of clearing and settling a transfer of funds in the traditional financial system can take several days.

Finally, crypto networks increase the control users have over their personal information. In traditional financial systems, intermediaries must gather a large amount of personal information about their customers, and data breaches that expose individuals' financial information or history can be severely disruptive. In cryptocurrency networks, however, there is no central authority gathering this type of data, so users have greater discretion to control the amount of personal information that is shared with others and potentially compromised.

#### *f. Potential for improved cross-border payments and trade finance*

Stablecoins—blockchain-based digital assets that seek to maintain a stable value compared to a reference asset, typically a sovereign currency—actively improve cross-border transactions and empower economically disadvantaged individuals around the world.

For example, Leaf Global Fintech developed a simple Stellar wallet that enables central African refugees without bank accounts to securely store, send and receive payments and cash into and out of the network without bank fees from low-tech feature phones.<sup>11</sup> Additionally, two licensed money transmitters, U.S.-based FinClusive<sup>12</sup> and Mexico-based Pago Biccós,<sup>13</sup> have teamed up to help migrant day laborers safely and inexpensively send their U.S. earnings home to Mexico while increasing compliance. By converting their earnings into U.S. dollar stablecoins that are stored and transmitted on the Stellar network, these laborers avoid the risk of theft and assault that comes with carrying hard currency across the U.S. border.

Finally, Circle has helped the legitimate, elected government of Venezuela distribute millions of dollars of desperately needed aid to the nation's front-line medical workers as they battled Covid-19 under horrendous conditions. Circle partnered with the Bolivarian Republic of Venezuela, led by President-elect Juan Guaidó, U.S.-based fintech Airtm, and the U.S. government to send the relief funds. The joint initiative established a disbursement pipeline that leveraged USDC to bypass the controls that Nicolás Maduro's authoritarian government placed on Venezuela's financial system.<sup>14</sup> Stablecoins have also led to similar gains in payment system

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<sup>11</sup> Leaf Global Fintech. Available at: <https://leafglobalfintech.com/>.

<sup>12</sup> Finclusive. Available at: <https://finclusive.com/>.

<sup>13</sup> Pago Biccós. Available at: <https://pagobiccos.com/>.

<sup>14</sup> Team Circle. "Circle Partners with Bolivarian Republic of Venezuela and Airtm to Deliver Aid to Venezuelans Using USDC." Circle (November 20, 2020), available at <https://www.circle.com/blog/circle-partners-with-bolivarian-republic-of-venezuela-and-airtm-to-deliver-aid-to-venezuelans-using-usdc>.

competition, optionality and lowering fundamental costs, including in the US context, which has millions of households on the margins of the banking system.<sup>15</sup>

### **(C) General Risks in Digital Assets Financial Markets**

**(4) Please identify and describe any risks arising from current market conditions in digital assets and any potential mitigating factors. Identify any such responses that directly relate to:**

*a. Market transparency, including pre- and post-trade transparency*

Since all code is available for public review and analysis, “security by transparency” is an innate feature of public blockchain technology and the crypto markets it creates. To maximize the benefit of security by transparency, many blockchain projects have adopted the well-established best practice of “bug bounty” programs, offering financial rewards to any security researcher who identifies a vulnerability in public code. The security by transparency approach of open-source, public code is far more effective than the “security by obscurity” approach of trying to prevent would-be attackers from analyzing code by keeping it closed-source and private. Indeed, crypto’s open-source nature has led to an unprecedented degree of resilience in blockchain technology and the crypto markets it empowers through battle-testing and -hardening.

The native transparency of some blockchain networks can also be used to prevent illicit actors from accessing these protocols. Indeed, many of the top blockchain analytics companies in the ecosystem, including Chainalysis and TRM Labs, are based in the U.S. These companies actively partner with the U.S. government to identify and prevent the use of crypto for illicit finance by cultivating. Additionally, companies like Chainalysis and TRM Labs are enabling compliance by providing transaction monitoring services to crypto businesses so that they can identify suspicious transactions, conduct enhanced due diligence, and meet their AML obligations under the Bank Secrecy Act. As a result of these partnerships, the U.S. has established itself as one of the preeminent experts on weeding out criminal activity in these networks, including taking down the largest child abuse site on the internet.<sup>16</sup>

*b. Accuracy and reliability of market data*

Due to the immutable nature of the blockchain, there is little risk for inaccurate or unreliable crypto market data. Immutability is one of the key features of the technology that empowers digital transactions. Immutable transactions make it impossible for any individual or entity, including illicit actors or malicious corporations, to manipulate, replace, or falsify data stored on a

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<sup>15</sup> Disparte, Dante. “Could Digital Currencies Make Being Poor Less Costly?” *Harvard Business Review* (August 5, 2020), available at <https://hbr.org/2020/08/could-digital-currencies-make-being-poor-less-costly>.

<sup>16</sup> Greenberg, Andy. “Inside the Bitcoin Bust That Took Down the Web’s Biggest Child Abuse Site.” *Wired* (April 7, 2022), available at <https://www.wired.com/story/tracers-in-the-dark-welcome-to-video-crypto-anonymity-myth/>.

given blockchain network. Additionally, because all transactions that have ever occurred on a blockchain network can be audited at any point in time, these networks are characterized by a high degree of data integrity.

The immutability of public blockchains also enhances the trust and auditability of these systems. By reducing the time and cost of audits, verifying information becomes much simpler. Indeed, many crypto companies have created programs whereby members of the public perform audits on a project's underlying code in order to find bugs that developer teams might have missed.<sup>17</sup> Other members of the public will screen the activity of different blockchain networks for suspicious activity and post their findings to public forums like Twitter. One such post has even been featured as evidence for the recent insider trader lawsuit filed by the SEC.<sup>18</sup>

### *c. Technological risks, including attacks, bugs, and network congestion*

The increased use of crypto has brought a commensurate increase in crypto-related cyber attacks, including ransomware. While it is true that cryptocurrency is generally the preferred payment of choice in ransomware attacks, it is not true that crypto is the cause of these attacks. Indeed, ransomware dates back to 1989, two decades before the release of the Bitcoin white paper. The increase in ransomware attacks can instead be attributed to the growth of “ransomware-as-a-service” and cyber insurance in jurisdictions with insufficient or non-existent AML/CFT regimes, like Russia or North Korea.

When it comes to curbing the risk of ransomware attacks, rather than focus on the medium by which these attacks are carried out, policymakers should focus on increasing international cooperation and information sharing between law enforcement agencies, while also developing adequate cybersecurity infrastructure to prevent these attacks from happening. Critically, the U.S. government must work with crypto companies to bolster their cybersecurity infrastructure, develop industry best practices for ransomware attacks, and devote additional resources towards increased international coordination between law enforcement around the world.

### *d. Smart contract design and security*

Smart contracts may be susceptible to security breaches as a result of issues or “bugs” in the technology underlying these digital contracts. As a result of these bugs, several crypto projects employing smart contracts to execute transactions have suffered from hacks resulting in disrupted operations or loss of customers' assets. While these attacks are a horrible tragedy for those involved, this technology is becoming more battle-tested and bug-resistant with each hack

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<sup>17</sup> [Uniswap](#) is one example of a company that has created a “bug bounty” program for users of the protocol.

<sup>18</sup> U.S. Securities and Exchange Commission (SEC). “SEC v. Ishan Wah, Nikhil Wah, and Sameer Ramani.” United States District Court Western District of Washington Seattle Division (July 21, 2022), available at <https://www.sec.gov/litigation/complaints/2022/comp-pr2022-127.pdf>, pg 21.

or breach. Indeed, in its earliest days, the Bitcoin network suffered hacks. As a result of these attacks, however, developers were able to address and resolve underlying technological issues and ultimately create the widely trusted Bitcoin network of today. Smart contracts must be given the same latitude.

Moreover, many of the attacks on smart contracts are occurring not due to issues with the code powering them, but due to malicious actors exploiting individuals operating or using this technology. Some hackers will employ elaborate “phishing” scams to trick users of smart contract platforms to send money, which, when sent via smart contract, cannot be returned. Additionally, bad actors can steal and compromise administration keys, the mechanism by which developers can update or change the code powering smart contracts, through scams. The industry has responded to these scams and mitigated risk of stolen funds by creating governance tokens, which enable decentralized governance of a crypto project by transferring decision-making power from the individuals holding the administration keys to the broad community of stakeholders who will use their tokens to vote on the operations and development of a protocol.

#### *e. Settlement and custody*

The primary risk when it comes to the settlement and custody of digital assets is whether customers will have exposure should the company custodialing their assets or settling their transactions crumble. While there are not currently regulatory standards in place around the settlement and custody of digital assets, except for banks that are prudently regulated by the federal government, the crypto industry, itself, has developed its own standards and best practices. Many digital asset custodians hold their customers’ assets in separate accounts from their own and they do not commingle retail customers’ funds with corporate funds.

Another concern related to market conditions and custody that the Treasury Department should discern is the negative impact that Securities and Exchange Commission’s Staff Accounting Bulletin No. 121 (SAB 121) is having on the institutional digital-asset market. While SAB 121 is a well-intended response to market failures, its scope is too broad and inadvertently creates a de facto ban on publicly traded banks from providing custody or sub-custody services. This is despite the fact that prudentially regulated banks are subject to custody regulation and examination from federal regulators. Moreover, SAB 121 violates the long and well-established legal precedent that assets held in custody for a customer by a custodian are not the assets of the custodian, but are the assets of the customer. And therefore requirements in SAB to hold an artificial “indemnification asset” to essentially count these custodial assets as company liabilities, even though they are neither assets or liabilities of the custodian, is highly problematic and irrational.

Although the industry has made great efforts to mitigate bankruptcy or insolvency risk exposure, there is still a great need for codified standards and prudential oversight. Regulation of crypto spot markets, the details of which are elaborated upon in our response to question 2(a), will make great strides in building the regulatory guardrails necessary to mitigate the risks associated with the custodying and settlement of digital assets.

*f. Jurisdictional and legal conditions*

The globally accessible nature of crypto markets means that some project failures and illicit conduct are inevitable. The lack of legal and regulatory certainty for digital assets within the United States only exacerbates the effects of this reality.

In some cases, however, more robust enforcement of existing laws may be the most effective and appropriate way to address potential deficiencies in the crypto market. For example, to the extent that the well-known collapse of the TerraUSD project was exacerbated by false or misleading marketing that described the asset as a “stablecoin,” consumer protection laws regarding deceptive and unfair trade practices may apply. Further, to the extent that TerraUSD holders relied on the skill or expertise of a figurehead like Do Kwon to maintain stability, the securities laws may apply. Yet, regulators failed to utilize these preexisting laws and provide guidance on how they may apply to digital assets to prevent the harm to consumers resulting from the TerraUSD collapse. Additionally, regulators, and the SEC in particular, have failed to address actual scams targeting US citizens and other victims, such as the notorious Wonderland or Squid Game scams. Instead, the SEC, for instance, has targeted legitimate companies and left bad actors operating large scams to continue to harm investors and consumers.

Lastly, regulatory arbitrage thwarts regulatory intent and creates disadvantages for good-faith actors who play by the rules. As the legal and regulatory environment currently stands, non-US companies domiciled in lax jurisdictions can offer products and services to US citizens without any sort of oversight.

**(D) Risks to Consumers, Investors, and Businesses**

**(5) Please identify and describe potential risks to consumers, investors, and businesses that may arise through engagement with digital assets. Identify any such responses that directly relate to:**

*a. Frauds and scams*

Although crime is not new to the world wide web, never before have criminals had access to digital assets that cannot be recovered if stolen. Indeed, the total addressable market for digital

fraud has massively enlarged with the advent of crypto.<sup>19</sup> Prior to crypto, any internet scam or fraud had to be carried out through an intermediary with anti-money laundering and know your customer standards. With crypto, fraudsters can interact directly with their victims, tricking them to send money from one public address to another without going through any regulatory choke point.

While the increased surface area for fraud is a risk within the crypto ecosystem, the benefits of the technology far outweigh the negatives that scams incur. In this manner, efforts to curb fraud and scams in the crypto ecosystem should center around better operational security and increased consumer education. It is a far better outcome for American consumers and the American economy more broadly if crypto is made safer than if Americans' access to crypto was limited due to scams. Moreover, because of the transparency built into some public blockchains, law enforcement may have an easier time holding bad actors accountable for their crimes.

#### *b. Losses due to theft*

Early instances of thefts and data breaches among non-U.S. crypto firms have led to significant innovation in custody, identity, and privacy standards across the industry. U.S. crypto companies that take custody of their customers' assets have developed robust standards for private key management to reduce or eliminate the risk of loss, and those that store sensitive personally identifiable information have adopted best practices from traditional financial institutions – informed by compliance requirements under applicable data privacy laws – to protect against the risk of breaches and to remediate them in the rare case of their occurrence.

Additionally, thanks to the vibrant ecosystem of crypto firms and developers around the world, the process of consensus-building and adoption around specific standards to prevent losses due to theft is organic and ongoing.

#### *c. Losses of private keys*

In any cryptocurrency transaction, an individual must have a “public address” and “private key” compatible with the relevant cryptocurrency network. These addresses and private keys are simply strings of random numbers and characters. The public address can be thought of as a phone number; an individual user shares his or her public address with other users from whom the original user would like to receive an asset (or a call). The private key is cryptographically tied to the buyer's public address and must match an individuals' public address for a transaction to occur.

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<sup>19</sup> Although the market for digital fraud has grown with the advent of crypto, there is not a significant amount of illicit activity in the space. According to [Chainalysis](#), “transactions involving illicit addresses represented just 0.15% of cryptocurrency transaction volume in 2021.”

In this manner, ownership of cryptocurrency is determined by who holds the private keys to these assets. Storing one's private key on the cloud can be calamitous in the event of a hack, and holding a private key on one's phone can be devastating if the device is lost, stolen or damaged. Additionally, storing one's private key offline is susceptible to being lost or thrown away.

Encouragingly, new technology designed to help people recover their private keys is starting to emerge. This new technology is only in the initial stages of development but is a large priority for those within industry. Indeed, it is likely that risks arising from losses of private keys will be obsolete in just a few short years.

#### *d. Losses from the failure/insolvency of wallets, custodians, or other intermediaries*

Where there are companies that custody the assets of others, there is risk. In the traditional financial system, robust regulatory requirements exist for intermediaries to prevent losses from failure or insolvency. The same cannot be said for the digital asset ecosystem, which is why we are so adamant that regulators and members of Congress prioritize regulation around crypto spot markets. While there have only been a small number of exchange failures throughout the course of crypto's history,<sup>20</sup> many, if not all of these failures, could have been prevented or greatly mitigated with implementation of appropriate consumer protection requirements.

#### *e. Potential losses associated with interacting with counterparties directly*

The ability to self-custody one's digital assets and interact directly with counterparties in a peer-to-peer network is one of the transformational features of crypto. From increased privacy and autonomy over finances to censorship and authoritarianism resistance, the benefits of self-custody abound. At the same time, however, there are risks. As previously mentioned in our response to 5(c), there is a risk, although diminished given the development around private key retrieval, of individuals losing access to their funds by virtue of losing their private keys.

Additionally, many people rely on intermediaries for fraud detection. Although that safety net is not inherently present with self-custody, it can be built into these systems. Indeed, the individuals and communities of individuals developing and managing the code underlying peer-to-peer networks can ultimately decide to build the benefits of intermediation, namely fraud and theft detection, into said networks.

#### *f. Disclosures and amount of fees & g. Disclosures of other relevant terms*

Blockchains may create new risks to consumers that warrant additional disclosures or risk mitigation systems. Policymakers could incorporate into spot market regulatory standards disclosures such as how the software works, potential risks, network governance, token

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<sup>20</sup> [Quadriga](#) and [Mt.Gox](#) are the largest and most widely recognized exchange failures.

economics, and development team involvement. Additionally, the industry, in coordination with government, needs to find ways to make disclosures digestible and easily accessible to everyday consumers and end users. Chris Brummer, in his white paper, “Disclosure, Dapps and DeFi,” reinforces this point, emphasizing “the need for shorter, crisper disclosures typically associated with consumer protection law.”<sup>21</sup>

Although an update to the consumer protection laws as they apply to digital assets might be needed, crypto businesses are already complying with current consumer protection requirements at both the state and federal level. For example, Unfair and Deceptive Acts and Practices (UDAP) statutes in each of the fifty states and the District of Columbia currently apply to crypto companies, and there are laws in every state that prohibit fraudulent communications with consumers.

#### *h. Authenticity of digital assets, including NFTs*

Immutability of the blockchain means that authenticity is a given when it comes to digital assets. Indeed, as our response to 4(b) suggests, immutability is native to the infrastructure of public blockchain networks.

#### *i. Ability of consumers, investors, and businesses to understand contracts, coding, protocols*

Crypto is a novel technology that is transforming the way society goes about daily life. Like everything that is new, crypto must be studied and learned before it can be effectively used. It is incumbent upon both the crypto industry as well as the U.S. government to ensure that consumers, investors, and businesses understand this emerging technology. As such, investments in financial and digital literacy programs that include crypto are needed. To tackle inequalities and increase financial inclusion, a new framework for distributing financial literacy funding to ensure non-traditional educational groups with a footprint in emerging industries receive the resources to maximize impact and scale.

Several innovative strategies are already underway: The Blockchain Foundation, a new 501c3 nonprofit organization, is leading an industry-wide education campaign and will focus on financial literacy and risk education among its priorities. The District of Columbia’s Department of Insurance, Securities and Banking has established a Financial Services Regulatory Sandbox and Innovation Council, which is exploring legislation that includes digital assets and has also begun a program offering free one-on-one financial advice either virtually or in-person to local residents. Additionally, Advantage Evans Academy’s educational tools seek to empower individuals traditionally locked out of tech and finance to take control of their financial futures and participate in the new digital cash economy.

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<sup>21</sup> Brummer, Chris. “Disclosure, Dapps, and DeFi.” *Forthcoming, Stanford Journal of Blockchain Law and Policy* (March 27, 2022), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4065143](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4065143).

## **(E) Impact on the Most Vulnerable**

**(6) According to the FDIC's 2019 “How America Banks” survey, approximately 94.6 percent (124 million) of U.S. households had at least one bank or credit union account in 2019, while 5.4 percent (7.1 million) of households did not. And roughly 25 percent of U.S. households have a checking or savings account while also using alternative financial services. Can digital assets play a role in increasing these and other underserved Americans' access to safe, affordable, and reliable financial services, and if so, how?**

There is a real need for digital cash infrastructure, like payment stablecoins, that can make payments cheaper, faster, and facilitate automated transactions. The inability of the federal government to deliver stimulus payments to the most vulnerable in urban and rural communities who were the last to receive physical checks had consequences. Another pandemic or other natural disasters are inevitable and a digital version of cash will be critical to a strong national response. With growing adoption of payment stablecoins and continued development of blockchain-based payment technologies, the cost of payments may continue to decrease for unbanked and under-banked individuals.

Since its inception over a decade ago, cryptocurrency has emerged as an alternative financial system for Black and Latino Americans. Today, data shows that 25 percent of Black Americans own cryptocurrencies compared to 15 percent of white Americans.<sup>22</sup>

Entrepreneurship has been a pathway out of poverty, fueling the gig and sharing economies. With high unemployment and the threat of recession, there is a large number of Americans who cannot access the traditional workforce. For those who have launched e-commerce businesses, the cost of existing credit card payment services is costly. Cryptocurrency payment options are less expensive and would provide relief to this pain point for entrepreneurs and SMEs.

Digital assets have the potential to empower the underserved and the most vulnerable, as well as, other diverse groups. Federal resources to empower consumers is just as important as consumer protection policies. To tackle inequities and increase financial inclusion, a new framework is needed with greater investments in financial courses that include cryptocurrencies for K-12 public school students and clients of financial literacy centers across the nation. These financial courses will train consumers to better understand how to mitigate risk in the digital asset ecosystem.

More education about cryptocurrencies is needed to help the public understand how to make informed choices about digital assets. The Blockchain Foundation is leading an industry-wide

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<sup>22</sup> Ariel Investments and Charles Schwab. “2022 Black Investor Survey.” (April, 2022), available at [https://www.arielinvestments.com/images/stories/PDF/2022-ariel-schwab-black-investor-survey-findings\\_4.5.22.pdf](https://www.arielinvestments.com/images/stories/PDF/2022-ariel-schwab-black-investor-survey-findings_4.5.22.pdf).

education campaign, which prioritizes risk education, to ensure the crypto industry is tackling this issue.<sup>23</sup>

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It is critical that the transformative potential of crypto and blockchain technology is not lost on policymakers in the United States. Indeed, this burgeoning ecosystem has the potential to deliver applications that will not only bring efficiency and inclusion to the global financial system, but will also revolutionize the way that ordinary people engage in daily life. The Association applauds Treasury's efforts to understand how the U.S. can foster the responsible development of digital assets within its borders, and we continue to offer ourselves as a resource that Treasury can leverage in this pursuit.

Sincerely,



Kristin Smith  
Executive Director



Jake Chervinsky  
Head of Policy

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<sup>23</sup> The Blockchain Foundation, available at <https://theblockfound.com/>.