



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

July 5, 2022

Diane Farrell
Deputy Under Secretary for International Trade
United States Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

Re: Request for Comment on “Developing a Framework on Competitiveness of Digital Asset Technologies,” Document Number 2022-10731

Dear Deputy Under Secretary Farrell:

The Blockchain Association (the “Association”) submits this letter in response to the Department of Commerce’s (“Commerce”) request for comment titled “Developing a Framework on Competitiveness of Digital Asset Technologies.”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 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 Commerce with insight into how the United States can be the global leader in this transformational space.

Bitcoin allows anyone, anywhere in the world to send and receive value using nothing more than a device with an internet connection. Before Bitcoin, if someone wanted to make a payment over

¹ 87 Fed. Reg. 30450. Pages 30450-30452 (April 19, 2022), available at: <https://www.federalregister.gov/documents/2022/05/19/2022-10731/developing-a-framework-on-competitiveness-of-digital-asset-technologies>.

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 and the digital assets that have followed, all online payments depended on gatekeepers and middlemen, who are sometimes slow and expensive. Crypto solves these problems by replacing centralized intermediaries with a decentralized ledger that allows anyone, anywhere, to send payments across the world, almost instantly, and at almost no cost. Unlike the legacy banking system, which is dominated by large, private financial institutions, crypto networks create public payments infrastructure: digital cash for the digital era.

Crypto is far more than currency, however. Innovators, 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 do basic tasks like read websites or send emails. Web2 refers to the internet of today, with all its interactive applications and services. But just like the banking system, 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. For the United States to realize the full benefits of Web 3 and ensure we remain the global leader in this space, American entrepreneurs must continue to have the freedom to innovate in the crypto ecosystem.

In many ways, the United States has already become the global leader in the crypto industry. The industry’s largest and most widely utilized stablecoins are pegged to the U.S. dollar, between 2020 and 2021, there was a 395% surge in U.S. crypto-related job postings,² and the United States holds the largest share of Bitcoin mining pools in the world.³ Many of the largest crypto companies are domiciled in the United States, and according to a 2022 NBC News poll, “one in five Americans has invested in, traded or otherwise used cryptocurrency.”⁴ While the United States has played and continues to play a leading role in the crypto industry, regulatory and legal

² Pandey, Erica. “Crypto Jobs Surge as Money Pours into the Industry.” *Axios* (January 14, 2022), available at: <https://www.axios.com/2022/01/14/crypto-job-postings-surge>

³ Sigalos, MacKenzie. “U.S. Officially the Top Destination for Bitcoin Miners, Beating out China for the First Time.” *CNBC* (October 13, 2021), available at: <https://www.cnbc.com/2021/10/13/us-beats-china-as-the-number-one-destination-for-bitcoin-miners.html>

⁴ 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>

uncertainty has prevented the United States from realizing the full potential that this transformative industry has to offer.

The United States' leadership role in the crypto industry is at risk due to uncertain legal standards and the overzealous "regulation by enforcement" approach of certain regulatory agencies. Indeed, these factors have already pushed several of the most innovative crypto companies overseas where they can operate within a clearer legal structure and offer the full range of products and services that they have created. Moreover, studies have shown that the United States' market share in Web3 development is in a state of decline. In short, the current approach toward crypto by some U.S. regulators and legislators is robbing the U.S. economy of the benefits of this fast-growing and ever-innovating industry, while stifling competition between the next generation of U.S.-based, digital pioneers and other crypto developers around the globe.

The potentially enormous economic and societal benefits of the technology should motivate every lawmaker to help create the home of web3 and the crypto industry within the United States. In the 1990s, the early years of the developing internet, the Clinton Administration fostered a competitive and innovative marketplace by adhering to one simple maxim: "first, do no harm."⁵ In hindsight, this mindset allowed the internet to thrive and ensured U.S. dominance in the information technology sector. The same standards must once again pave the way for U.S. leadership in the crypto industry.

To achieve the goals set forth by President Biden in his executive order of March 9, 2022 ("President Biden's EO"),⁶ we must ensure that federal policy encourages the development and deployment of crypto projects within the United States. Doing so requires policymakers to be deliberate in developing the right regulatory regime—one that is technology-neutral, incorporates clear standards for companies and guardrails for consumers, and is guided by the principle that regulatory requirements must not stifle innovation that will benefit consumers, investors, businesses, employees, communities, and other stakeholders.

Competitiveness

(1) What are the features of U.S.-based digital asset businesses (e.g. administrators, operators, validators, and other key stakeholder roles in the function of digital assets as well as the exchanges, brokers, and custodians used to trade and store them) that currently underpin their competitiveness in a global market? Will these features support future competitiveness?

⁵ Sobieraj, Sandra. "Clinton Issues 'Hands Off' Policy on Internet Commerce." *New York Times* (July 2, 1997), available at: <https://archive.nytimes.com/www.nytimes.com/library/cyber/week/070297commerce.html>

⁶ 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/>

Currently, the high demand for crypto from the U.S. market is one of the largest competitive advantages of U.S.-based digital asset businesses in global crypto markets. This demand 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. Coupled with the increased spending by U.S. corporations on crypto and blockchain solutions, and the surge in U.S. crypto jobs, it is clear that there is a considerable market for crypto 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.

Finally, the United States' controlling share of crypto mining pools means that the United States sets the standard for which low-cost energy sources are used to power these operations. Because the lowest cost energy sources for crypto mining operations, or proof of work data centers, are increasingly from excess energy produced at renewable energy plants, especially wind and solar, entities operating PoW data centers are flocking to the United States, bolstering the U.S. power grids' transition to renewable energy and underscoring the U.S. as the preeminent mining location.

(2) What obstacles do U.S. digital asset businesses face when competing globally? How have these obstacles changed over the past five years and are any anticipated to disappear? Are there clearly foreseeable new obstacles that they will face in the future? What steps could the U.S. government take to remove, minimize, or forestall any obstacles?

The largest obstacle that U.S. crypto businesses face when competing globally is legal and regulatory uncertainty. During a Congressional hearing before the House Financial Services Committee in December 2021, five CEOs from industry-leading crypto companies testified to this fact, explaining that regulatory uncertainty is a major impediment to their operations in the United States.⁷ In particular, the CEO of FTX, the second largest crypto exchange in the world, explained how U.S. residents are not allowed access to the company's global platform due to the broad and complex regulatory environment within the United States. His experience is unfortunately all too common.

⁷ U.S. House Committee on Financial Services. "Digital Assets and the Future of Finance: Understanding the Challenges and Benefits of Financial Innovation in the United States" (December 8, 2021), available at: <https://financialservices.house.gov/events/eventsingle.aspx?EventID=408705>.

We provide more details below explaining the main legal and regulatory issues that currently pose obstacles to U.S. crypto industry competitiveness. To remove or minimize these obstacles, the U.S. government can and should enact new laws and regulations providing certainty to crypto companies that seek to do business in the United States. Given the complexity of the issues at hand, it will likely take significant time and effort to craft new frameworks that properly balance the benefits and risks offered by this nascent industry. The process outlined in President Biden's EO is an excellent first step toward that goal, establishing for the first time a constructive national strategy for digital assets.

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 by taking a light-touch enforcement approach to U.S. companies that act in good faith and demonstrate a strong commitment to compliance. Unfortunately, the enforcement record of some federal agencies – the SEC in particular – is characterized by the pursuit of too many upstanding U.S. companies while ignoring offshore competitors engaged in regulatory arbitrage and bad actors who exploit blockchain technology for malicious purposes. We urge a realignment of priorities away from enforcement and toward a healthy dialogue with U.S. companies in service of producing well-considered guidance and rulemaking.

[\(3\) How does the current U.S. regulatory landscape affect U.S. digital asset businesses' global competitiveness? Are there future regulatory shifts that could support greater global competitiveness of U.S. digital asset businesses? How does the U.S. regulatory landscape for digital assets compare to that in finance or other comparable sectors?](#)

Many of the obstacles that U.S. crypto companies face when competing globally are dependent upon the U.S. regulatory environment for crypto. One of the most prohibitive regulatory issues facing the crypto industry in the United States is whether crypto offerings fall under the SEC's jurisdiction and trigger compliance obligations under the federal securities laws. Due to the decentralized, digital nature of many crypto products and services, it is unclear whether they are subject to the securities laws at all, and if so, how U.S. companies can comply with decades-old rules and requirements designed for a centralized, analog context.

Despite U.S. companies' good faith attempts to engage the SEC in discussion about these nuanced issues, and despite routine requests for further guidance and clarification, the SEC has largely failed to clarify the scope of its jurisdiction, leaving companies guessing as to whether they are in compliance with federal law or not. Instead, the SEC has resorted to a strategy of "regulation by enforcement," in which the U.S. crypto industry only learns of the SEC's views on material legal issues when those views are expressed in publicly-filed complaints or published settlement agreements, often without any useful analysis that can be consistently applied. The SEC's strategy has chilled innovation among U.S. entrepreneurs and damaged the ability of U.S. companies to compete globally.

Reconciling the unique nature of digital assets with the important goals of the federal securities laws is of paramount importance. If the SEC is allowed to merely continue with its “regulation by enforcement” strategy, it will be exceedingly difficult for crypto to achieve the kind of widespread distribution that is the key to success for many crypto companies currently operating in this country. The House Financial Services and General Government Appropriations Bill of 2023 echoes this sentiment explaining that “[t]he Committee is concerned that enforcement action in the absence of regulatory clarity invokes confusion in the growing sector. The Committee encourages the SEC to issue public guidance that promotes U.S.-based innovation.”⁸

U.S. crypto companies’ global competitiveness is also impacted by the complex regulatory process that crypto companies must go through in order to set up operations in the U.S. In many cases, crypto companies operating outside of the United States have a clearer, less resource intensive path toward making their product available to consumers. In the United States, however, companies are forced to navigate a patchwork system of regulations at both the state and federal level, which requires a significant expenditure of resources, and still without clarity.

For instance, in the earliest stages of industry’s development, those U.S. crypto projects that wanted to offer a service involving the exchange of crypto had one option: register as a money transmitter and obtain a money transmitter license (MTL) in the state where they intended to conduct business. Due to the nature of the technology, however, many of these projects intended to conduct operations on a national scale, which meant that they had to obtain 50 different MTLs. This process continued for several years until both state and federal regulators attempted to simplify this onerous system.

The Office of the Comptroller of the Currency (OCC) proposed a national framework that would preempt the state-by-state process in July 2018, and several states, most notably Wyoming and New York, developed their own state banking charters for crypto companies. Three entities applied for the national banking charter and were granted conditional approval; however, the entire process is currently paused and under review. Additionally, the Board of Governors of the Federal Reserve System (the Fed) has delayed making a decision on whether or not state charter banks can access the Fed’s payment rails, stagnating the development of this process as well. In the United Kingdom, this hurdle is not present: crypto exchanges, stablecoin issuers and others can receive e-money licenses to access the payments system, which, in part, has resulted in the GDP cost of the payments system in the U.K. to be roughly four times less costly than that of the U.S.

Moreover, even when U.S.-based crypto companies successfully navigate the complex regulatory requirements involved in setting up operations, they face obstacles in ensuring that their full range of products and services to U.S. customers complies with the spectrum of unclear U.S.

⁸ House of Representatives, 117th Congress. “Financial Services and General Government Appropriations Bill, 2023.” 2nd Session, Report 117, page 104 (June 17, 2022), available at: <https://docs.house.gov/meetings/AP/AP00/20220624/114951/HMKP-117-AP00-20220624-SD002.pdf>

regulations, thus harming U.S.-based crypto companies' ability to compete in the global market. Indeed, many companies, out of regulatory and legal uncertainty, are either prohibited from allowing U.S. customers to interact with them or unable to offer a product or service that they have created for U.S. consumers. For example, significant work has been done to bring a spot exchange-traded fund to the United States' crypto market. The SEC has often outright rejected these attempts, and sometimes enacted endless delays that operate as a de facto rejection. As a result, several companies have gone outside of the U.S. to bring this product to market.

Canada, for example, has allowed its crypto firms to offer bitcoin ETFs; physically settled crypto ETFs are safe and legal in Germany, Brazil, and Singapore as well. A similar experience has also occurred with certain crypto lending projects, and a Staff Accounting Bulletin put forth by the SEC currently threatens crypto banks' ability to issue stablecoins by unsustainably adding billions of dollars to crypto firms' balance sheets.

A regulatory shift in crypto spot market regulation and stablecoin regulation could support greater global competitiveness. Any regulation or legislation surrounding stablecoins should focus on underlying activities and specific risks of a given stablecoin, while maintaining technological neutrality. To absorb credit and mitigate risks related to liquidity, the market, legal, 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 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 independent audit, 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 Future Trading Commission ("the CFTC") will help U.S. crypto companies more effectively compete in global crypto markets. This type of spot market regulation will 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, the Digital Commodity Exchange Act of 2022 (DCEA), introduced by Representatives Glenn Thompson (R-Pa.), Ro Khanna (D-Calif.) Tom Emmer (R-Minn.) and Darren Soto (D-Fla.) in April, 2022, would make great strides in enhancing the global competitiveness of U.S. crypto spot markets.

U.S. firms also must contend with lack of clarity regarding the taxation of crypto. For example, the Infrastructure Investment and Jobs Act⁹ introduced into the Tax Code a definition for "broker" that

⁹ The Infrastructure Investment and Jobs Act, H.R. 3684, 117th Cong. Public Law No: 117-58 (November 15, 2021), available at: <https://www.congress.gov/bill/117th-congress/house-bill/3684/text>.

is so broad that it could theoretically be applied to many different participants in the digital asset ecosystem, including DeFi protocols, software developers, wallet providers, miners/stakers, and others who do not play the traditional role of a broker. These actors do not have “customers” and are not able to collect the information that a broker would need to produce to the IRS, both because the users of public blockchains are pseudonymous, and because these actors do not have a direct relationship with those users by which they could request the necessary information. In the case of miners, these actors only have a relationship with software, which has no social security number, address, or name as the IRS would require. As a result, these actors are fundamentally unable to comply with reporting requirements.

If the IRS forces reporting by groups who are unable to comply, these groups will either be forced to prohibit transactions with U.S. persons or close down their operations. That result is a lose-lose-lose: the IRS will not get the information it needs, the industry will not be able to thrive in the United States, and American citizens will not have access to the digital asset ecosystem.

(4) What are the primary challenges to U.S. technological leadership in the digital assets sector?

Regulatory and legal uncertainty is the primary challenge to U.S. technological leadership in the crypto ecosystem. If one jurisdiction is unnecessarily restrictive in their regulations, a digital asset company and their talent and innovation can simply move to a more welcoming environment in another country. This regulatory arbitrage ultimately thwarts regulatory intent and creates disadvantages for good-faith actors who play by the rules.

The lack of consensus, coordination, and communication among nations and international law enforcement agencies only exacerbates this phenomenon. Indeed, pursuant to President Biden’s EO, the Attorney General’s report titled, “How To Strengthen International Law Enforcement Cooperation For Detecting, Investigating, And Prosecuting Criminal Activity Related To Digital Assets,”¹⁰ recommends the “strengthen[ing] and expand[ing] of U.S. law enforcement operational and capacity-building efforts with foreign law enforcement partners.”¹¹

A comparison between U.S. and other nations’ crypto regulation plainly demonstrates how susceptible U.S. firms are to regulatory arbitrage. For example, the United States is decidedly more restrictive than other international jurisdictions, like Dubai and Portugal, when it comes to the applicability of securities and derivatives laws to the technology. At the same time, however, the U.S. regulatory environment when compared to the European Union’s (“EU”) comprehensive crypto regulation, Markets in Crypto-Assets (MiCA), is far more flexible. With increased consumer protection via enhanced privacy measures and fewer licensing requirements that necessitate

¹⁰ Attorney General Merrick B. Garland. “How To Strengthen International Law Enforcement Cooperation For Detecting, Investigating, And Prosecuting Criminal Activity Related To Digital Assets.” U.S. Department of Justice (June 6, 2022), available at: <https://www.justice.gov/ag/page/file/1510931/download>

¹¹ Ibid, 14.

advanced permission, the United States' regulatory environment is more desirable for crypto companies seeking to innovate than that of the EU.

(5) What impact, if any, does the global nature of the digital assets sector have on U.S. digital asset businesses' ability to attract and retain talent and maintain leadership in development and operation of digital asset technologies within the United States?

The borderless nature of crypto means that innovation in the sector can and will happen anywhere. In this manner, crypto companies have great autonomy when it comes choosing where their home-base of operations. Unfortunately, many of the best and brightest minds in the industry have chosen to take their projects elsewhere due to the regulatory uncertainty that impedes the efforts of crypto operations in the United States. In the words of Brian Brooks, CEO of Bitfury and former Acting Comptroller of the Currency, "There is a reason why crypto talent is no longer concentrated in Silicon Valley, the birthplace of the original commercial Internet. Sure, some talent has merely moved from Silicon Valley to Miami – but a surprising number of talented founders have left for Portugal, Dubai, Abu Dhabi, Singapore, and other jurisdictions that are not at all unregulated but that have a more positive posture toward innovation and growth."¹² This flight of talent is especially prevalent in Web3.

The U.S. is currently locked in a global race to be the home of Web3. Unfortunately, data suggests that the United States is falling behind, and this deficit can, in part, be attributed to overly complicated and restrictive regulations. According to a report published by Electric Capital, the share of Web3 developers in the United States steadily decreased from 47% in 2015, to 39% in 2017, to 29% in 2021. Even more concerning than the steady decrease of Web3 development is that the U.S. is losing market share to some of its greatest opponents, including Russia and China.¹³ Without regulatory clarity, there is a real possibility that the United States loses the "space-race" of the 21st century.

Just as crypto innovation has no geographic boundaries, crypto products and services can be offered from anywhere as well. Because there is no geographic constraint on this technology, the phenomenon of "regulatory arbitrage" has impacted U.S. companies. Indeed, because many crypto companies, especially crypto exchanges, operating outside of the United States do not have the same regulatory constraints as those crypto companies operating within U.S. borders, they have considerably more flexibility and thus success when it comes to consumer engagement and product offerings.

¹² Brooks, Brian. "Statement before the U.S. House of Representatives Committee on Financial Services." (December 8, 2021), available at:

<https://financialservices.house.gov/uploadedfiles/hhrg-117-ba00-wstate-brooksb-20211208.pdf>

¹³ Electric Capital. "2021 Developer Report." (December 2021), available at:

<https://twitter.com/eherrerosj/status/1524049777008291840>

(6) What, if any, is the future role of digital assets mining in the U.S. digital assets sector? Can digital assets be compatible with a low-carbon economy that emphasizes renewable energy? If so, how? In what ways can the U.S. government and U.S. companies drive competitive, sustainable (for the environment and energy consumption) development of digital assets?

One of the most popular consensus mechanisms in the crypto ecosystem is called Proof-of-Work (“PoW”), often referred to as crypto mining. PoW involves data center operators running facilities in which computers solve complex mathematical puzzles and secure and validate transactions on the network. PoW provides consensus for transactions in a way that is transparent, distributed, and secure while also preventing hacks and double-spending. PoW is the consensus mechanism used by some of the most prominent crypto currencies such as Bitcoin and Ethereum.

From a policy perspective, it is critical that PoW operations, which have proven to be catalysts for the increased use of renewable energy sources, are incentivized to set-up shop within the United States. Indeed, as fossil fuel dependent nations like China and Kazakhstan increasingly enact rules that curb or outright ban PoW data centers, it is in the best interest of the United States to redirect those operations into its borders where a regulatory framework that upholds robust environmental standards can be crafted, enacted, and enforced. Creating a U.S. regulatory environment for these data centers that is both welcoming and incentivizes the use of renewable energy sources, is the best way to ensure that the industry continues to be dominated by renewable energy sources. In addition, by bolstering the United States’ transition to renewable energy sources, the industry can also help stimulate local economies within the United States through high paying, high tech jobs that are created in many rural communities.

Crypto PoW data centers are not only compatible with a low-carbon economy that emphasizes renewable energy, but also can help usher the United States towards a more resilient and renewable energy-focused electrical grid. Crypto data center operators are naturally incentivized to use the lowest cost electricity available to them because reducing energy costs increases profits. In practice, this means finding and using the cheapest available electricity, which increasingly leads them to use electricity from renewable sources.

Crypto data centers are also actively enhancing existing power generation, both non-renewable and renewable. In this manner, these data center operators can incentivize and accelerate the United States’ transition to renewable energy generation sources by acting as a prime offtaker for excess energy production. For example, when wind turbines and solar arrays generate more electricity than the grid demands, crypto data operators can turn on and absorb this excess almost instantaneously, helping stabilize the grid frequency while facilitating the purchase of otherwise stranded renewable energy. Grid operators that are incentivized to move towards renewables but lack consistent users may be more likely to adapt systems like wind, solar, and others knowing that crypto data center operators will be a steady customer.

PoW data centers can also help fossil fuel companies reduce emissions and become greener

through a process known as *flare mitigation*, which generates electricity from associated gas that would otherwise be vented (let out into the atmosphere) or flared (combusted) on-site. Instead of flaring or venting gas, companies like Upstream Data and Crusoe Energy Systems are building infrastructure to capture this methane at the wellhead and use the otherwise-wasted gas to mine bitcoin. Consuming a highly insulating pollutant, methane-rich flare gas, with no additional extraction mitigates one of the largest sources of methane in the atmosphere while providing bitcoin data centers with an inexpensive source of energy. Flare mitigation strategy employing bitcoin data centers could also lead to fewer pipelines, as waste energy can be consumed onsite with containerized solutions. Further, energy transportation is notoriously difficult and bitcoin acts as a demand source that eliminates any need for energy transport.

Although PoW is a critical component of the industry, they have declined as a percent of the total crypto market cap over time. Indeed, in August 2021, 25% of the top 20 cryptos by market cap were non-PoW currencies. This percentage will only increase if and when the Ethereum network successfully completes its transition to using the Proof-of Stake (PoS) consensus mechanism, a less battle-tested but more energy efficient way to secure blockchain networks. As the industry continues to make itself more energy efficient and increase its focus on using renewable energy sources, policymakers should avoid calls to favor or discriminate against one consensus mechanism or another and let the best technology prevail in the market.

(7) What impact, if any, will global deployment of central bank digital currencies (CBDC) have on the U.S. digital assets sector? To what extent would the design of a U.S. CBDC (e.g. disintermediated or intermediated, interoperable with other countries' CBDCs and other domestic and international financial services, etc.) impact the sector?

Should our adversaries develop a CBDC that takes off in popularity and usage around the world, the status of the U.S. dollar as the world's reserve currency could be threatened if the U.S. does not have a viable, ready-made response. China is already implementing a CBDC pilot program, which enhances the country's robust social surveillance programs, and several other countries, including Russia, South Korea, the Bahamas, and Canada have either launched or are exploring their own CBDC.¹⁴ In short, the United States is behind the pack when it comes to the development of a CBDC.

Thankfully, the United States already does have a powerful response: U.S. dollar stablecoins developed by the private sector. The benefits of these stablecoins include lower-cost, safe, real-time, and more competitive payments compared to what consumers and businesses experience today. Stablecoins are also rapidly making it cheaper for businesses to accept payments and actively connecting unbanked or underbanked segments of the population to the

¹⁴Atlantic Council. "CBDC Tracker." Available at: <https://www.atlanticcouncil.org/cbdctracker/>

financial system. Additionally, because U.S. dollar stablecoins dominate the global stablecoin market, they will help to ensure U.S. dollar dominance in the digital era.

The priority of U.S. policymakers should be to spread dollars to every corner of the planet, and the best way to succeed in this endeavor is to support the proliferation of stablecoins developed by the next generation of innovative American companies.

Although far from ideal, should the U.S. develop and integrate a CBDC into our financial system, it is essential that private stablecoins can coexist and integrate with the financial ecosystems that these CBDCs create. The creation of a U.S. CBDC should not hinder the private sector's growth and innovation when it comes to creating competitive financial products. If the U.S. government develops a CBDC that prevents stablecoins from competing with this national digital currency, the innovative potential that comes from a competitive marketplace will surely be lost.

[\(8\) Should digital assets be given specific consideration in trade agreements? If so, to what extent? What types of provisions would be beneficial to the U.S. digital assets sector in the United States? Are there provisions that would be beneficial to U.S. businesses and consumers?](#)

We are not aware of specific considerations in trade agreements that would be appropriate for digital assets at this time. However, we recognize that both blockchain technology and global trade are prone to rapid development and change, so we recommend openness to specific considerations in the future.

[\(9\) What other factors related to economic competitiveness should Commerce consider in the development of the framework?](#)

President Biden's EO states "We must reinforce the United States leadership in the global financial system and in technological and economic competitiveness, including through the responsible development of payment innovations and digital assets." However, the U.S. Government is moving in the wrong direction on one critical area that is necessary to be a world leader in financial technology competitiveness. This issue is custody. The U.S. Securities and Exchange Commission's Staff Accounting Bulletin No. 121 ("SAB 121") threatens the ability of certain U.S. banks and U.S. bank holding companies to offer crypto services. SAB 121 does this by requiring banks that custody digital assets for their customers to consider these assets as bank liabilities that will then need to be offset with additional capital, possibly at a ratio one U.S. dollar for each U.S. dollar worth of crypto assets.

SAB 121 not only conflicts with U.S. legal precedent - indeed, custodian banks of traditional financial assets do not count their customers' assets held in custody as liabilities - but it also, counters the will of bipartisan Congressional legislation that explicitly states that digital

assets held in custody are not to be considered a liability or asset of the custodian.¹⁵ It also creates a number of unintended consequences, which are detailed below.

SAB 121 creates bankruptcy confusion as to the title of assets. It is unclear if banks own the assets held in custody for customers or if the customers own the assets. SAB 121 also may cause three abnormal collateralization problems: (1) both the custodian and the customer may have to collateralize against the digital assets, (2) sharded key holders or entities that hold copies of keys may all have to collateralize against the same digital assets, and (3) bank stablecoin issuers may have to double collateralize, first under some kind of full-reserve requirement and for a second time under SAB 121 requirements.

Overall, the consequences are disastrous. As a result of SAB 121, U.S. banks will not hold digital assets, which will drive consumers and financial innovators to locate their businesses outside of America. This exodus means fewer high-paying American financial technology jobs, less capital investment in America, less U.S. economic growth, and less U.S. innovation. Unfortunately, this may also hurt U.S. national security, if more financial transactions are conducted outside the confines of U.S. laws and outside the reach of the U.S. intelligence community.

Not only is the growth of the crypto industry creating more jobs in the United States but it is also revolutionizing the nature of these jobs in a way that empowers individual Americans. For example, the U.S. creator economy is currently being transformed by non-fungible tokens, which can programmatically monetize the digital things that Americans are creating for the market with the benefit accruing to the creator rather than middlemen. Additionally because Web3 has created a future of digital identity that is characterized by Americans owning their own data, the commercialization of the internet will be drastically altered both within the United States and around the world.

Although there are already revolutionary applications in development, blockchain and crypto are still relatively nascent technologies that need to be given plenty of flexibility to continue to develop. Just as was the case in the early days of the internet, a great deal of the early innovation and experimentation was associated with market volatility, but it was during and after that time when enduring use-cases were discovered that eventually transformed the global economy.

One such avenue that needs to be given flexibility for further exploration and development is the role that privacy should and must play in the industry. In crypto, privacy often means the incorporation of zero-knowledge-proof (ZKP) technology, which provides greater security and suitability for payments and other use-cases that are not compatible with on-chain transparency. Just as there was a shift from 'http' to 'https' in internet protocols as it became apparent that

¹⁵ Lummis-Gillibrand Responsible Financial Innovation Act, S.4356, 117th Cong. (June 7, 2022), available at: <https://www.lummis.senate.gov/wp-content/uploads/Lummis-Gillibrand-Responsible-Financial-Innovation-Act-S.4356.pdf>

greater security and privacy was needed for internet commerce, ZKP technology has already been incorporated in to some cryptos and is actively being integrated into many other blockchains based on the same rationale. Commerce, when developing this framework, should consider how this development in the U.S. can be furthered to ensure digital assets have the necessary characteristics to meet the needs of global commerce and to ensure U.S. competitiveness in blockchain globally.

(10) Beyond enhanced economic competitiveness, how can the U.S. digital assets sector advance the other objectives outlined in the Executive Order? These other objectives include protection of consumers, investors, and business in the United States; protection of United States and global financial stability and the mitigation of systemic risk; and mitigation of illicit finance and national security risks posed by misuse of digital assets.

The U.S. crypto sector can be a role model for and leader in consumer protection, systemic risk mitigation, the protection of the United States and global financial stability, and the curbing of illicit finance. The fundamental transparency and accountability that blockchain networks bring to markets is the root of ensuring consumer protection, risk mitigation, market stability, and curbing illicit finance activity. The reason for this transparency: public blockchains are decentralized, immutable, and accessible to anyone with an internet connection and a computer.

Crypto has native consumer and investor protections because the technology itself mitigates or removes risks that are traditionally handled by regulation. Because the entire operations of decentralized blockchain protocols, including the liquidity available to users and the amount of collateral backing the project, are readily available and accessible to any individual with a computer and an internet connection. This transparency allows regulators, law enforcement, and the general public alike to hold the industry accountable for consumer and economic protection.

Additionally, the native transparency of blockchain networks can 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 are actively partnering with the U.S. government to be at the forefront of identifying and preventing the use of crypto for illicit finance by cultivating. 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.¹⁶

The U.S. Department of Treasury recently released its encouraging “National Strategy for Combating Terrorist and Other Illicit Financing” which not only affirms the United States’ leadership role in this space, but also explains that “it is imperative that the United States

¹⁶ 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/>

continue to lead on enhancing the global model for supervision, examination, and private sector compliance with existing regulatory obligations.”¹⁷

Crypto also protects financial stability by significantly improving the infrastructure underlying the financial system, making global markets less costly and more efficient and resilient. An intrinsic resilience in this technology exists as many of the operating protocols of digital assets are open source and do not depend on any single point of failure. For example, decentralized finance protocols are naturally resilient because they reliably and securely self-execute on the Ethereum blockchain without the need for ongoing input or maintenance.

(11) By what metrics should we measure the competitiveness of the U.S. digital assets sector in the global market? Are there existing measurements or data against these metrics?

One metric to measure the competitiveness of the U.S. crypto sector in the global market is the availability of crypto protocols and services to U.S. consumers. Given that the two largest crypto exchanges in the world and several decentralized finance protocols explicitly prevent access to their platforms by U.S. customers, this metric ultimately suggests that the U.S. has fallen behind in the global crypto competition.

The various industry reports published by private sector groups can also help measure U.S. competitiveness in crypto. For example, the Bitcoin Mining Council aggregates data on the number and energy mix of U.S. Bitcoin miners,¹⁸ and as previously mentioned, Electric Capital publishes a developer report highlighting the geographic distribution of Web3 developers around the world.

Comparisons to ‘Traditional’ Financial Services and Financial Inclusion Considerations

(12) What factors and conditions, if any, that have driven and sustained the global leadership of U.S.-based legacy financial institutions will foster the same leadership for U.S. digital asset businesses? If there are no common factors, what factors and conditions will differentiate global competitiveness for U.S. digital asset businesses?

Clear regulatory perimeters and architecture for existing regulated banks have been some of the primary contributors to the continued success and global leadership of U.S.-based legacy financial institutions. Although the regulations for legacy financial institutions can, at times, be confusing and overlapping in terms of the number of regulators, the rules are explicit and understood by all in the ecosystem. These regulations are calibrated and tailored for the specific

¹⁷ U.S. Department of Treasury. “National Strategy for Combating Terrorist and Other Illicit Financing.” page 11 (May 2022), available at: <https://home.treasury.gov/system/files/136/2022-National-Strategy-for-Combating-Terrorist-and-Other-Illicit-Financing.pdf>

¹⁸ Bitcoin Mining Council. Available at: <https://bitcoinminingcouncil.com/>

risk presented by the different legacy financial institutions in the marketplace. It is ultimately because of this regulatory clarity that legacy financial institutions are able to compete with international financial institutions.

Indeed, the U.S. owes much of its geopolitical strength – and the robustness of its financial system – to the economic principles of free and open markets, in which American entrepreneurs and companies compete to develop the best possible products and services. Instead of the U.S. government crafting regulation that chooses winners and losers, U.S.-based legacy financial institutions have been given the space and flexibility to decide them. The crypto industry must be treated in kind.

Additionally, the U.S. has a lot more competition in financial services than its international counterparts, particularly in Europe. In the United States for example, there are thousands of different types of banks whereas Europe's financial markets are dominated by a few mega-banks. Should the crypto industry hope to have the same international success that traditional financial institutions have had, it is imperative that regulatory moats are not created that prevent up-and-coming crypto projects to freely enter different sectors of the industry.

[\(13\) Can digital assets improve international payments \(including trade and remittances\), and improve on access to trade finance? If so, how? How do digital assets compare to other initiatives in payments such as the Federal Reserve's FedNow?](#)

The inherent qualities of cryptocurrencies are desirable for any payment system. They allow for peer-to-peer transfer of value online; they are available 24 hours a day, 7 days a week; and they facilitate an almost instantaneous transfer of value. The only problem with this novel asset class is most cryptocurrencies fluctuate in price. Fortunately, there is a solution that helps crypto achieve the same utility as traditional payments systems: stablecoins. As their name suggests, stablecoins peg their value to a reference asset or use an programmatic system to ensure their value remains stable.

Stablecoins are ideal for quick, always-available payments, and they are programmable, meaning that they can be incorporated into countless applications and protocols that are being developed on top of blockchain and DeFi networks.

Stablecoins give people options. For example, if someone is paid in an unstable fiat currency (the Venezuelan bolivar or Argentine peso, for example), they can protect themselves by exchanging the inflationary currency for a stablecoin backed by a healthier one, such as the U.S. dollar. These stablecoins will not depreciate overnight and are resistant to confiscation and manipulation by authoritarian governments. As individuals around the world are increasingly subjected to domestic, hyper-inflationary currencies like the bolivar, it is clear that stablecoins and their ability to improve the reach and accessibility of dollars on the internet as a medium of exchange not only preserve free market activities, but also help solve significant public policy issues.

Indeed, stablecoins actively improve cross-border transactions and empower economically disadvantaged individuals around the world. 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.¹⁹ Additionally, two licensed money transmitters, U.S.-based FinClusive²⁰ and Mexico-based Pago Biccós,²¹ 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. And, Circle and AirTM leveraged U.S. dollar stablecoins on Ethereum to bypass the repressive Maduro Regime and distribute aid disbursements directly to front line medical workers battling the coronavirus in Venezuela.²² Similar gains in payment system competition, optionality and lowering fundamental costs, including in the US context, which has millions of households on the margins of the banking system, have also occurred as a result of stablecoins.²³

(14) 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. 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? What role can the Federal government and the digital assets sector play to ensure that underserved Americans can benefit from the increased commercial availability of digital assets?

Those who have been locked out of centralized banking have not expressed enthusiasm about banks and traditional financial systems. They show a greater willingness to explore alternative options, which led to the growth of some fintech products. But there is a real desire for options that make payments cheaper, faster, and facilitate automated transactions.

Decentralization and the diminished barriers to entry that it brings are not just appealing to the unbanked and underbanked, but also to entrepreneurs, small businesses, and those who send money via remittances. With stablecoins, the cost of payments is nominal to working class and middle class Americans who are some of the earliest adopters of cryptocurrencies. For e-commerce businesses, the cost of existing services to accept payments is costly. Crypto

¹⁹ Leaf Global Fintech. Available at: <https://leafglobalfintech.com/>

²⁰ Finclusive. Available at: <https://finclusive.com/>

²¹ Pago Biccós <https://pagobiccós.com/>

²² 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>

²³ 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>

payment options are less expensive and would provide relief to entrepreneurs and small and medium sized enterprises.

Government must understand that empowering consumers is just as important as the long standing consumer protection policies that make it challenging for historically disadvantaged groups to innovate and thrive in the emerging innovation economy. There are concrete steps the government can take to address key pain points.

Blockchain and crypto need to become part of the future of work deliberations in Washington. Female-led founders and startups recover less than 2% of venture capital funding, so access to capital sources is vital.²⁴ Investments in financial and digital literacy programs that include crypto is also 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.

Here are a few examples of innovative strategies: 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.²⁵ 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.²⁶ 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.²⁷

Technological Development

(15) To what extent do new standards for digital assets and their underlying technologies need to be maintained or developed, for instance those related to custody, identity, security, privacy, and interoperability? What existing standards are already relevant? How might existing standardization efforts be harmonized to support the responsible development of digital assets?

Because digital assets and their underlying technologies are so unique, they do require new best practices and industry standards to address issues that are rare or non-existent outside the

²⁴ Chapman, Lizette. "Female Founders Raised Just 2% of Venture Capital Money in 2021." Bloomberg (January 11, 2022), available at: <https://www.bloomberg.com/news/articles/2022-01-11>

²⁵ The Blockchain Foundation. Available at: <https://theblockfound.com/>

²⁶ District of Columbia Financial Services Innovation and Regulatory Sandbox Creation Act of 2021, B24-0227. Committee on Business and Economic Development (April 26, 2021), available at: <https://lms.dccouncil.us/Legislation/B24-0227>

²⁷ Advantage Evans Academy. Available at: <https://advantageevans.com>

blockchain context. U.S. crypto firms have already developed many such standards related to custody, identity, security, privacy, and interoperability.

In some cases, industry standards are inherent to the technology. For example, 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 refer to this feature as “composability,” meaning 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.

Similarly, “security by transparency” is an innate feature of public blockchain technology, since all code is available for public review and analysis. 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 widely viewed as 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 through battle-testing and -hardening.

In other cases, standards develop through market pressure as firms compete to satisfy customer demand. For example, 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.

Thanks to the vibrant ecosystem of crypto firms and developers around the world, the process of consensus-building and adoption around specific standards is organic and ongoing. At this time, we do not believe any particular action is required to harmonize these standardization efforts.

[\(16\) What new security concerns does increased adoption of digital assets raise? How can the U.S. government collaborate with U.S. digital asset businesses to protect consumers' access to their assets, personal information, and other sensitive data?](#)

Because anyone, anywhere with an internet connection can use crypto, there is a risk that criminals can access these networks as well. However, the permissionless, open source, and transparent nature of the most popular and widely used blockchain networks greatly benefits law enforcement. The U.S. government currently works with crypto companies to protect their assets, but increased coordination and funding for these efforts would go a long way to ensure that these partnerships are as fruitful as possible.

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, policymakers should focus on increasing international cooperation and information sharing between different law enforcement agencies and developing adequate cybersecurity infrastructure to prevent these attacks from happening, not on the medium by which these attacks are carried out. In this manner, it is critical that the U.S. government 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.

(17) To what extent will interoperability between different digital asset networks be important in the future? What risks does a lack of interoperability pose? And what steps, if any, should be taken to encourage interoperability?

Interoperability among digital assets will be a critical piece of the success of the crypto sector in the U.S. Indeed, the future of the crypto ecosystem is one with many different blockchain networks, and people will want to be able to move between them. Although interoperability is something relevant to all participants in the crypto ecosystem, certain regulators have been especially critical of stablecoins due to a lack of interoperability between the same stablecoin on different blockchain networks and the lack of interoperability between different stablecoins.²⁸

Lack of interoperability between different stablecoins is by design. Stablecoins like USDC, Tether, and DAI are fundamentally different assets that are not fungible. Additionally, this perceived problem is not actually a problem at all because different stablecoins can be traded for one another on secondary markets. Indeed, one of the best ways to foster interoperability among

²⁸ Acting Comptroller of the Currency Michael J. Hsu. “Thoughts on the Architecture of Stablecoins.” Remarks Before the Institute of International Economic Law at Georgetown University Law Center (April 8, 2022) available at: <https://occ.gov/news-issuances/speeches/2022/pub-speech-2022-37.pdf>

different stablecoins is to create hyper-efficient markets, which comes from exchanging these different assets across protocols.

The criticism that the same stablecoins are not interoperable on different blockchains is a legitimate concern that many within the industry have spent countless hours and dollars attempting to ameliorate. Indeed, one of the primary issues that many consumers face in the Web2 marketplace has been the significant costs that they incur when attempting to switch between different platforms. The current solutions that are most popular for interoperability between blockchains are bridges and wrappers, but these products are often controlled by a centralized intermediary and thus vulnerable to cyber attack. As previously mentioned, however, millions of dollars are being spent to find a more decentralized, less vulnerable solution.

It is also necessary to point out that the significant switching costs for customers in the Web2 world are simply not a factor in the world of Web3. One of the foundational elements of Web3 is consumer optionality and the ability to fluidly move between the different blockchain protocols. In this manner, crypto is interoperable by default because the entire technology stack is open source and anyone can access it. Additionally, because of the efficiency of these markets, any project that attempts to lock customers into its platform will be out competed by other players in the ecosystem.

* * *

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 Commerce's efforts to understand how the U.S. can bolster its competitiveness in global markets using this technology, and we continue to offer ourselves as a resource that Commerce can leverage in this pursuit.

Sincerely,



Kristin Smith
Executive Director



Jake Chervinsky
Head of Policy