



United States Senate

July 1, 2022

The Honorable Gavin Newsom
Governor, State of California
State Capitol
Sacramento, CA 95814

Dear Governor Newsom:

I commend your recent executive order to protect consumers and create regulations around the sale and use of crypto assets, blockchain, and related technologies. As you know, digital currencies have fallen in value significantly over the past several months and are the fastest growing cause of fraudulent financial losses in the United States.

In light of the risks these technologies pose to Californians and the financial system, your cautious approach to this issue is appropriate, and I write to offer several considerations for your Administration as you gather information and prepare regulations for crypto assets.

I am attaching comments covering risks and concerns with respect to crypto assets, including in the areas of:

1. Protecting consumers and investors.
2. Ensuring the safety of the financial system.
3. Addressing tax reporting implications.
4. Limiting energy usage and supply chain issues.
5. Preventing the facilitation of illegal activities.
6. The purported benefits of crypto assets and blockchain technology

If I can ever be helpful, do not hesitate to call me, or have your staff contact [REDACTED] on my staff at [REDACTED]. I appreciate your consideration of these concerns and share in your goals of protecting Californian consumers and investors.

Sincerely,



Dianne Feinstein
United States Senator

DF/js

cc: The Honorable Clothilde Hewlett, Commissioner, California Department of Financial Protection & Innovation

Ms. Dee Dee Myers, Director, California Governor's Office of Business and Economic Development

Attachment

1. Consumer protection: Your executive order rightly places a high priority on protecting consumers and developing a financial regulatory framework to effectively do so.

The risks posed by cryptocurrencies have been extensively reported.

Fraud and theft have been among the major problems. Chainalysis, a blockchain analytics company, estimated that scammers stole \$14 billion in crypto assets in 2021, an increase of 79 percent from 2020. In April, a group of North Korean hackers stole \$625 million in crypto assets from a blockchain network. And on June 3, the Federal Trade Commission reported that since the beginning of 2021, more than 46,000 people had reported losing over \$1 billion to crypto scams, and that nearly 40 percent of reported losses from fraud and about a quarter of all reported losses were lost on crypto assets. And these are only the losses that were reported.

Moreover, the crypto market has been highly volatile. The total value of Bitcoin, for example, increased from zero in 2009 to \$2.1 trillion in early April 2022, before dropping below \$1 trillion in mid-June. The total value of cryptocurrencies declined from about \$3 trillion in November to under \$1 trillion in June. This makes it concerning that some pension funds are already investing in Bitcoin, while other funds holding the money of main street investors are exploring crypto investments.

The lack of central control and oversight over crypto markets makes fraud and theft easier. For instance, nefarious computer programmers can exploit “smart contracts,” the computer programs used to execute crypto transactions, by hiding instructions that the average investor is not equipped to understand. In one case, programmers hid a 99 percent transaction fee in its computer code.

Some of the most popular crypto asset trading platforms have also been found to be charging transaction fees much higher than traditional trading platforms. In other cases, individuals have deposited their crypto assets in trading platforms without realizing that the platform then technically owns their underlying assets and if it goes bankrupt, those individuals may have no recourse to recover their funds.

Some crypto offerings are simply Ponzi schemes where fraudsters take advantage of consumers eager to own a piece of the “crypto boom.” In such cases, people who invest early make money and the last investors are left “holding the bag” when new funding dries up. In May, international tax officials said they had so far identified more than 50 potential crypto tax crimes, including a \$1 billion Ponzi scheme.

The privacy and security built into cryptocurrencies presents additional risks to consumers. For example, an investor must have a digital “key” to access the crypto assets in their digital wallet. Unlike if a consumer loses the key to a safe deposit box, if someone loses their digital key, they have no recourse to gain access to their assets.

One U.K. man mistakenly threw away a hard drive that contained his digital key to 7,500 Bitcoin he owned that were at one point worth more than \$200 million. He is petitioning his local council to allow a team of people to search the local landfill to find it. Another Canadian man kept the pass codes for investors that held \$250 million in crypto assets secured in his possession. But when he died suddenly in 2018, those investor, who had no way of discovering the pass codes, lost access to those funds forever.

2. Financial stability: The most recent crypto boom carried many telltale signs of a financial bubble: a rapid increase in the price of a class of assets, a compelling story that excited investors, claims that innovators had rewritten the rules of finance, promises of yields that seem too good to be true, and lots of opportunities for confusion and fraud. The existence of these factors doesn’t guarantee that the crypto boom will bust over the long run but it does present obvious reasons for caution and concern.

Regulators have taken notice. The International Monetary Fund noted that crypto’s “interlinkages with the regulated financial system are rising. Policymakers struggle to monitor risks from this evolving sector, in which many activities are unregulated. In fact, we think these financial stability risks could soon become systemic in some countries.”

In a February 2022 report, the Financial Stability Board found that crypto markets “could reach a point where they represent a threat to global financial stability” as they become more interconnected with the traditional financial system. Further, it is difficult for regulators to assess the risk they pose “given the rapid evolution of these markets and the significant data gaps that impede authorities’ risk assessments,” as well as that crypto market participants’ activities are often unregulated.

Volatility in crypto markets has shown the potential to disrupt markets. The steep decline in crypto value was driven in part by the collapse of Terra USD, the market value of which dropped from \$18.8 billion to \$82 million in just a weeks in May. On June 12, Celsius Network, a crypto lending business that had promised high returns on customer investments, abruptly suspended withdrawals as well as some of its key crypto trading services. The *Wall Street Journal* reported that Celsius had been requiring only about 50 percent collateral on \$2.7 billion in loans it had made, a far lower rate than a bank would require to ensure safety and soundness.

The President’s Working Group on Financial Markets, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency pointed out in a November 2021 report that stablecoins, a digital asset meant to provide a stable value relative to a dollar or other currency or asset, are vulnerable to runs (like the one Celsius experienced) in ways similar to money market mutual funds. Such runs have caused major instability in financial markets throughout history and could have a similar effect with digital assets.

Moreover, crypto assets have no intrinsic value; they only have value because others believe they do. There is ample precedent for bubbles with these types of assets, including the famous 17th century Dutch “tulip mania,” when the best tulip bulbs shot up in price to nearly \$1 million before collapsing in 1637. In more traditional bubbles, such as the tech stock bubble of the late 1990s or the housing bubble of the 2000s, the assets involved retained a lot of value, even though speculation led prices to unsustainable levels.

It’s possible that cryptocurrencies will eventually evolve into more stable assets. Gold doesn’t have any intrinsic value either but does have a track record over millennia of being highly sought after. However, unlike crypto assets, gold is a physical commodity. Other financial assets are also often backed by physical collateral like homes and equipment. Crypto assets like Bitcoin are supported by scarcity—such as a limit on the number of Bitcoin that can be mined at 21 million—that is created from nothing. Stablecoins are intended to be backed by real liquid assets like global currencies and Treasury bonds, but many stablecoin companies refuse to release proof of such backing.

We should also be concerned that some crypto firms are not complying with the relatively few regulations that do apply to them. In February, for example, one of Celsius’s competitors, BlockFi, received a \$100 million penalty from the Securities and Exchange Commission for violating securities laws.

3. Taxation: The anonymity and privacy designed into crypto assets is making it difficult for governments to collect tax revenue. In 2021, IRS Commissioner Charles Rettig estimated that the IRS may be losing \$1 trillion per year to tax evasion, in part due to the lack of reporting requirements for crypto transactions and non-fungible tokens (NFTs). Legislation passed by Congress last year to introduce new reporting requirements will help but it is not yet clear how effective they will be.
4. Energy consumption and supply chain issues: The massive amount of energy required to maintain Bitcoin—at 150 terawatt-hours, about the same energy consumption as the country of Argentina— has been widely reported. Digiconomist indicated that a single transaction for Ethereum (another popular cryptocurrency) takes the same amount of electricity it takes to power an average US home for 9 days. Given the increasing frequency we see of blackouts in California, this allocation of limited electrical supply is troubling.

Newer forms of crypto are working to address this problem by moving to more energy-efficient models. However, Bitcoin remains the most popular cryptocurrency and we must take this issue into account in assessing the value of these technologies. It is also notable that the recent crypto asset collapse reduced Ethereum's emissions by 30,000 metric tons of carbon per day.

Further, demand for the massive computing capacity required to handle these transactions has contributed to the global semiconductor shortage, which has driven inflation in a variety of products.

5. Facilitating illegal activities: Being generally unregulated and designed for privacy, digital assets can more easily be used for illicit activities such as money laundering and terrorism financing than many other traditional financial instruments. Sound regulation and enforcement with global standards will be needed to reduce these risks, and we have barely begun to design such a scheme.
6. Benefits: The risks of cryptocurrencies and related technologies are substantial, but the potential benefits of crypto deserve mention as well. Supporters of crypto tout benefits such as making payments faster and easier, making money more accessible to underserved groups, offering a hedge against inflation, and providing a secure monetary system with strong privacy and freedom from government control.

Faster payments are a worthy goal. The Brookings Institution’s Aaron Klein estimates that delays in the U.S. payment and settlement cost Americans—especially poorer ones—billions of dollars annually in fees from overdrafts, payday lenders, and check cashing services. However, it is not clear that crypto can solve this problem. The Clearing House already offers a real-time payment system for its private bank members and the Federal Reserve is working toward one. Further, most crypto owners have so far not used them as currency replacements, but rather as speculative investments.

Providing increased access to financial services for Americans is also important. Here again, though, there are alternatives being created by traditional banks and fintech companies to address access issues without the risks of cryptocurrencies. As mentioned above, crypto assets have also largely been used as speculative assets rather than as another form of money. And as has been the case in numerous past asset bubbles, the people who often escape the collapse of a bubble most unscathed are the wealthy individuals who buy in early and have access to better market information. As the *New York Times* reported on June 29, 2022, “many amateur traders flooded into the crypto market during the pandemic, when prices had already started soaring. ... Now many of them have seen their savings vanish or have lost their jobs.”

The argument that crypto is a hedge against inflation is belied by the high volatility in crypto markets, and also the fact that the extreme drop in crypto asset prices has happened while inflation rates are at 40-year highs.

Finally, while the idea of a private monetary system outside of government control is a positive to some, it should be viewed as dangerous. As Federal Reserve Vice Chair Lael Brainard noted in recent testimony to Congress, the proliferation of private money in the 1800s was a central factor in the frequent financial crises the U.S. experienced through that century. Banks today are highly regulated in large part because they create money and can threaten the real economy through financial instability, and financial products have featured time and again in scams. Private money could also undermine the ability of the U.S. to conduct effective monetary policy. In short, we should worry about any privatization of the monetary system.

7. Innovation: Innovation is something that that policy makers should encourage while keeping in mind that many specific innovations turn out to be harmful. Following the 2007-2009 financial crisis, former Federal Reserve Chairman Paul Volcker famously said that “the ATM has been the only thing useful innovation in banking for the past 20 years.” This is in part because much of the innovation in finance is designed to circumvent regulations. Credit default swaps, which were at the core of the last financial crisis, are one such example.

Blockchain technology could turn out to be useful in a variety of ways. However, a letter sent to Congress on June 1 by 1,500 computer scientists, software engineers, and technologists is notable. The authors of the letter argue that blockchain is “a solution in search of a problem” that has few, if any uses for the real economy today, lacks security and the ability to mitigate fraud, and has numerous “inherent flaws and extraordinary defects.” They urge a wise approach to regulating crypto assets and its underlying technologies.