

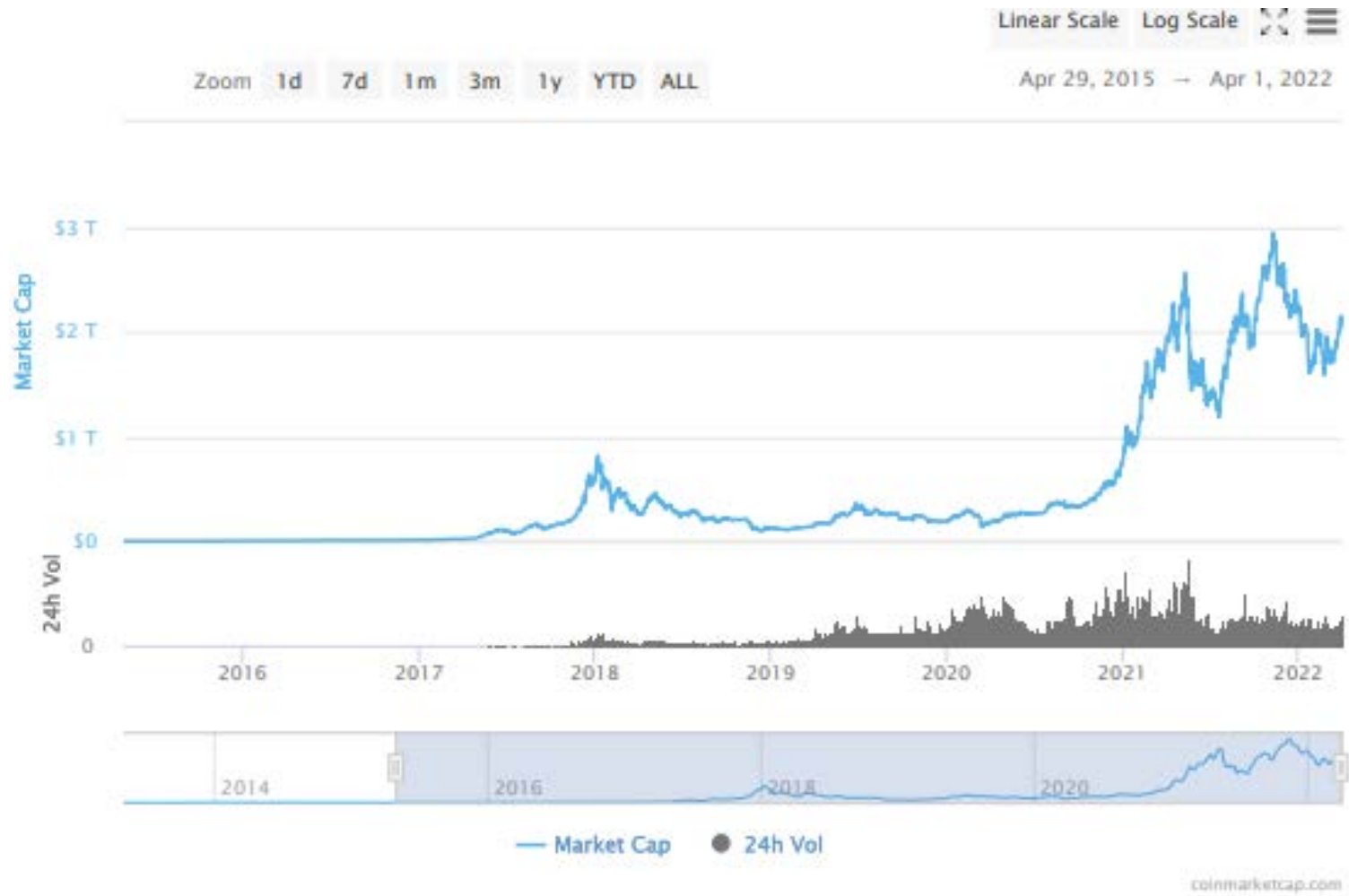
October 31
2008

Bitcoin: A Peer-to-Peer Electronic Cash System

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Abstract. A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending. We propose a solution to the double-spending problem using a peer-to-peer network. The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.

Global Crypto Market Cap



At Hearing, Warren Delivers Remarks on Digital Currency

Transcript: *Building A Stronger Financial System: Opportunities of a Central Bank Digital Currency*

U.S. Senate Banking, Housing, and Urban Affairs Committee's Subcommittee on Economic Policy

Wednesday, June 9, 2021

Cryptocurrencies have turned out to be a fourth-rate alternative to real currency. **First, cryptocurrencies are a lousy way to buy and sell things.** Unlike the dollar, their value fluctuates wildly depending on the whims of speculative day traders. You know, in just the last two months, the value of Dogecoin increased by more than ten-fold and then declined by nearly 60%. Now that may work for speculators and fly-by-night investors, but not for regular people who are looking for a stable source of value to get paid in and to use for day-to-day spending.

Second, crypto is a lousy investment. Unlike, say, the stock market, the crypto world currently has no consumer protection - none. As a result, honest investors and people trying to put aside some savings are at the mercy of fraudsters. Pump and dump schemes are outlawed in the case of ordinary stock, but they have become routine in crypto trading. One study found that the level of price manipulation in cryptocurrency is - and I quote - "unprecedented in modern markets."

And third, crypto has become a haven for illegal activity. Online theft, drug trafficking, ransom attacks, and other illegal activity have all been made easier with crypto. Experts estimate that last year more than \$412 million was paid to criminals in ransom through cryptocurrencies. And unlike other payment systems that make it tougher to move money illegally, a key feature of crypto is its secrecy. So just in the past few weeks, cryptocurrencies made it possible for hackers to collect a ransom to release the Colonial pipeline hack and to free JBS, the world's largest meat producer, from a paralyzing cyberattacks. And every hack that is successfully paid off with a cryptocurrency becomes an advertisement for more hackers to try more cyberattacks.

Finally, there are the environmental costs of crypto. Many cryptocurrencies are created through "proof-of-work" mining. It involves using computers to solve useless mathematical puzzles in exchange for newly minted cryptocurrency tokens. Such mining has devastating consequences for the climate. Some crypto mining is set up near coal plants, spewing out filth in return for a chance to harvest a few cryptocurrencies. Total energy consumption is staggering, driving up demand for energy. If, for example, Bitcoin - just one of the cryptocurrencies - were a country, it would already be the 33rd largest energy user in the world - using more energy yearly than all of the Netherlands.

Very
Negative
Views

Very
Positive
Views

Winklevoss Twins Say Bitcoin Will Explode to \$500K

And Ethereum Will Eventually Be Worth 75K Per Coin





CHRISTOPHER T. SUNUNU
Governor

STATE OF NEW HAMPSHIRE
OFFICE OF THE GOVERNOR

STATE OF NEW HAMPSHIRE
BY HIS EXCELLENCY
CHRISTOPHER T. SUNUNU, GOVERNOR

Executive Order 2022-1

An order establishing the Governor's Commission on Cryptocurrencies and Digital Assets.

WHEREAS, the State of New Hampshire served an historic role as the host location for the Bretton Woods Conference in July of 1944 held at the Mount Washington Hotel, where delegates from 44 Allied nations negotiated and signed the Bretton Woods Agreements which established critical institutions that formed the foundation of our international economic system for over 77 years; and

WHEREAS, as we approach the 78th anniversary of the Bretton Woods Conference, cryptocurrencies (such as Bitcoin, Ethereum, BNB, Tether and USD Coin) and other digital assets using the rapidly developing distributed ledger/blockchain technologies are gaining momentum, with estimates of total global market capitalization exceeding \$3 trillion; and

Governor
Sununu's
Executive
Order
February 9,
2022

President
Biden's
Executive
Order

BRIEFING ROOM

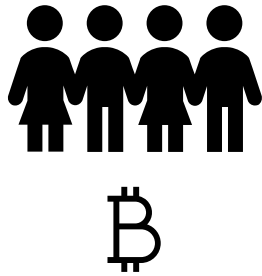
Executive Order on Ensuring Responsible Development of Digital Assets

MARCH 09, 2022 • PRESIDENTIAL ACTIONS

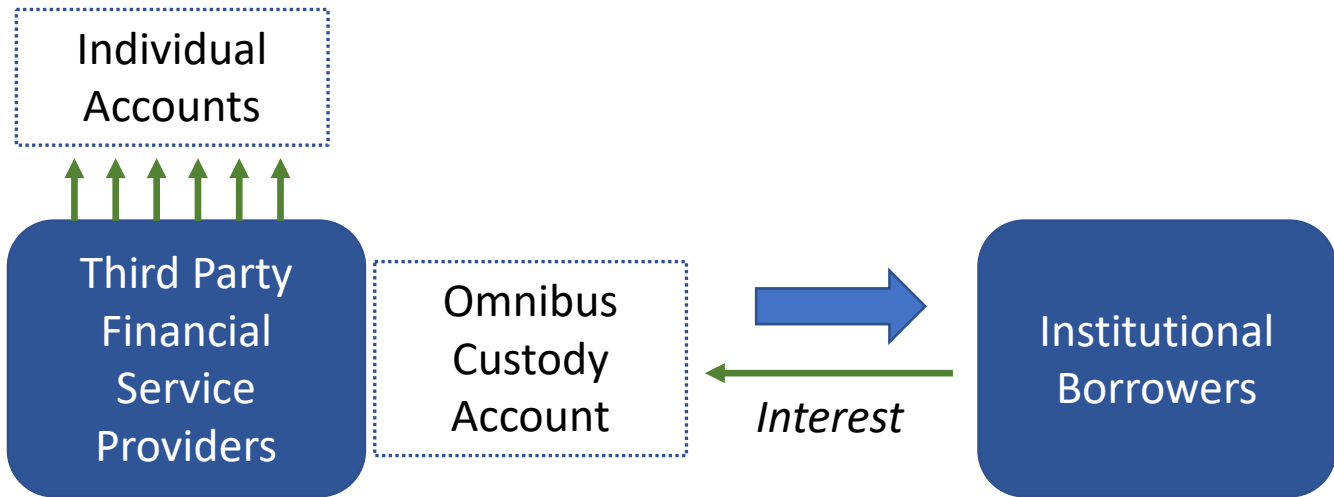
By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Policy. Advances in digital and distributed ledger technology for financial services have led to dramatic growth in markets for digital assets, with profound implications for the protection of consumers, investors, and businesses, including data privacy and security; financial stability and systemic risk; crime; national security; the ability to exercise human rights;

What Regulation Applies?



- Banking (Federal and State)?
- Securities (Federal and State)?
- Commodities (Federal and State)?
- Tax (Federal and State)?
- On and On ...



National Importance

CURRENCIES

China leaps into a central digital bank currency, but similar progress eludes the U.S.

PUBLISHED TUE, APR 6 2021 3:57 PM EDT | UPDATED TUE, APR 6 2021 9:02 PM EDT



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