PYMNTS

October/November 2022

Is Regulation Friend Or Foe For Blockchain?

Blockchain Payments Tracker® Series

What's Inside

Need To Know

Regulation Is Easier Said Than Done

The blockchain market is expected to grow by $4.02 billion by 2026, according to a recent study, but the industry's rapid growth has also brought some risks that put regulators on alert. Price volatility associated with cryptocurrencies was a concern, for example, as regulators believe some investors may not be fully aware of the risks they take. Bitcoin topped out at more than $19,000 per coin in 2017, skyrocketed to more than $65,000 last year, then plummeted right back down to its current value of approximately $20,000. Regulators are also concerned about fraud, with the Federal Trade Commission seeing $575 million in cryptocurrency losses reported last year.

Experts and policymakers have also raised concerns about the environmental impact of cryptocurrency. Until recently, a single Ethereum transaction used more energy than the average household consumed in a week, thanks to its proof-of-work (PoW) verification. The company claims to have reduced this power consumption to that of boiling a household kettle with its recent switch to proof-of-stake (PoS).

Energy usage of most popular cryptocurrencies, as of August 2022

120B-240B
kilowatt-hours per year
Total electricity usage of global crypto-assets

60%-77%
Bitcoin's share of crypto-asset energy usage

20%-39%
Ethereum's share of crypto-asset energy usage, pre-PoS

Need To Know

Well-crafted regulation could unlock the blockchain's full potential.

The blockchain has enormous capability to improve cybersecurity, financial inclusion, cross-border payments and a host of other functionalities, but its current free-for-all status is holding it back. The biggest drawback to the status quo is not necessarily regulation or lack thereof but rather the uncertainty of regulatory status, with 55% of leading cryptocurrency companies saying that regulatory ambiguity hinders blockchain adoption.

Government regulation could potentially curb these drawbacks and improve the blockchain for both corporates and individual investors. Another 60% of leading blockchain companies say that regulatory clarity could have the most significant positive impact on institutional cryptocurrency adoption. This relatively new industry will require a gentle hand, however, as overbearing or misguided regulations could irreparably damage the industry and snuff it out before it reaches its full potential.

Reported cryptocurrency losses, by year

$130M
2020

$680M
2021

$329M
Q1 2022

Need To Know

Countries around the world are attempting to solve the regulatory puzzle.

The White House, for example, is calling for legislation that would develop comprehensive standards for the cryptocurrency industry's environmental issues. Other pieces of legislation require cryptocurrency exchanges to comply with the same anti-money laundering (AML) protocols that currently apply to banks, placing verification requirements on an industry that was once largely self-regulating.

The European Union recently enacted legislation allowing cryptocurrency wallet providers to market themselves across the continent so long as they meet certain AML and stability requirements. The European cryptocurrency industry has so far been welcoming of these regulations, despite questions about their applicability to non-fungible tokens (NFTs). This law should go into effect one year to 18 months after next spring.

A sampling of blockchain regulatory legislation and its status, by country

European Union

Markets in Crypto-Assets regulation

Passed, October 2022

United Kingdom

Economic Crime and Corporate Transparency Bill

Introduced in House of Commons, September 2022

United States

Lummis-Gillibrand Responsible Financial Innovation Act

Introduced in Senate committee, June 2022

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News And Trends

New Blockchain Regulations Around The World

Employees of the U.S. government are typically subject to strict ethics rules to ensure they are not unfairly profiting from their positions, and the U.S. Office of Government Ethics (OGE) just updated these regulations to account for NFTs. The new guidance says that government employees must file financial disclosures if they own an NFT worth more than $1,000 or if the asset produces more than $200 in income during the reporting period.

This guidance applies only to NFTs purchased for investment purposes rather than for personal or household use. The OGE issued a seven-part test to determine if a given employee's NFT falls into these categories, including questions as to whether the employee purchased the NFT for its potential value or aesthetic reasons.

News And Trends

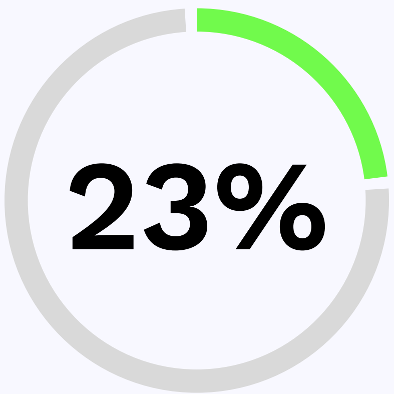
UAE cracks down on cryptocurrency money laundering

Bad actors sometimes use cryptocurrency in scams and illicit purchases, with the real estate field emerging as a new favorite for cryptocurrency scammers. The United Arab Emirates recently announced new regulations to curb cryptocurrency real estate fraud and money laundering, requiring real estate agents to alert authorities of any property purchased using cryptocurrency.

The new rules will also attempt to curb other forms of real estate fraud by requiring government notification of any real estate cash purchase of more than AED 55,000 ($15,000 USD). These new regulations leave “little or no room for manipulation or illegal practices that could negatively impact the work environment and the economy and investment,” said UAE Minister for Economics Abdulla bin Touq Al Marri.

Experts skeptical of U.K. government’s cryptocurrency plans

The U.K.’s recent Chancellor of the Exchequer, Nadhim Zahawi, introduced a new bill that regulates the cryptocurrency sector and will allow firms to test new blockchain technologies in a sandbox environment. Cryptocurrency experts are skeptical of the U.K.’s move to enter the blockchain field, considering the currently plummeting values of cryptocurrencies, NFTs and other blockchain-related products. Experts raised several concerns, including environmental issues and the safety of crypto wallets and exchanges.



Portion of IT experts whose top concerns were energy consumption and environmental impact

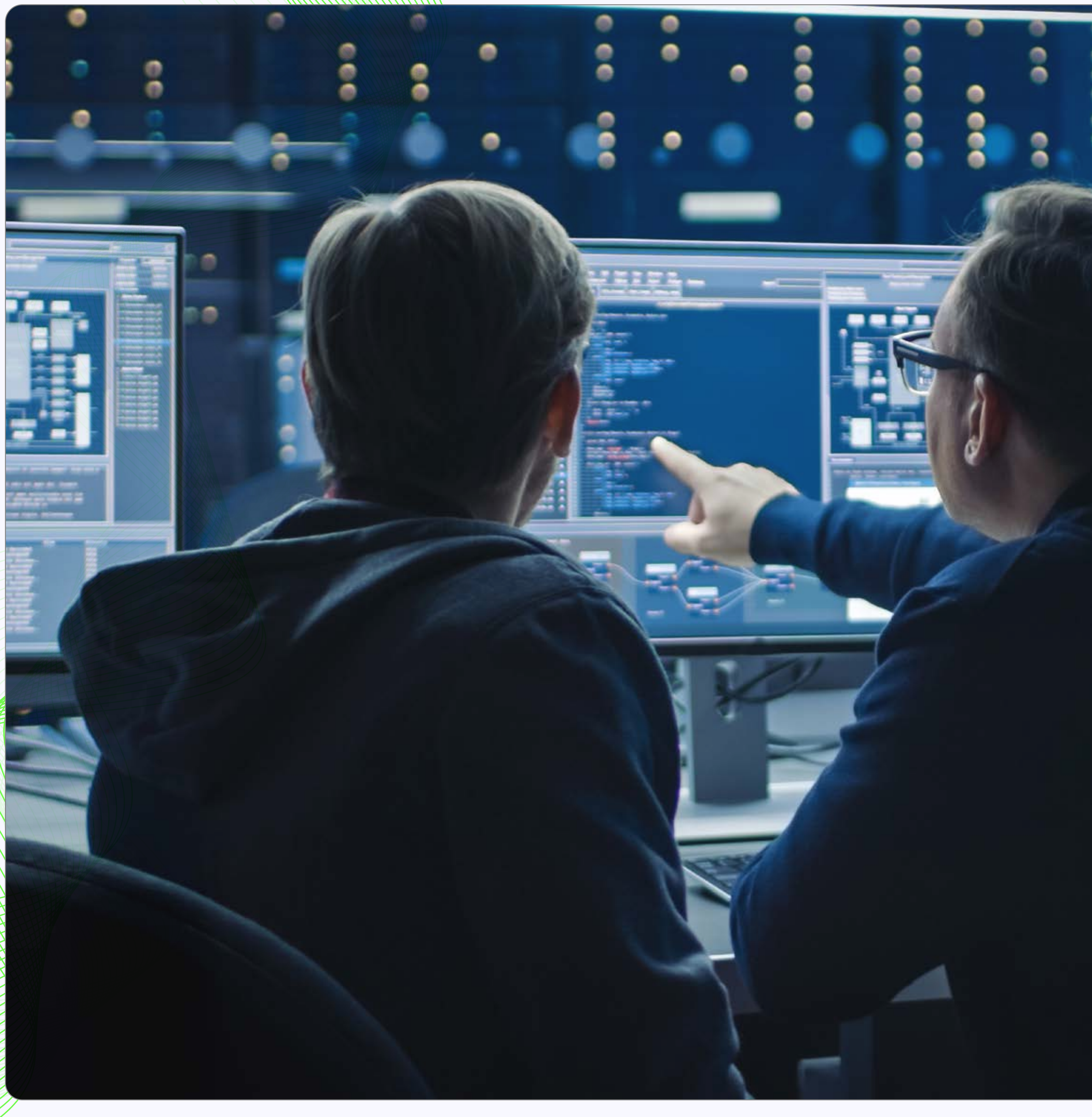
Portion of IT experts whose top concerns were money laundering and wallet security

PYMNTS Intelligence

The EU Takes The Regulatory Lead, With The U.S. Following Closely

Blockchain is drawing government scrutiny worldwide as regulators seek to constrain fraudsters, limit its environmental impact and protect investors and enthusiasts from the technology's potential drawbacks. The EU and the U.S. are currently taking the lead in blockchain regulation, although other countries, such as China, have taken the simpler step of banning it entirely.

This relatively new technology will require a careful hand when it comes to regulation, however. Overly onerous restrictions could constrain its potential economic benefits, while a laissez-faire approach could enable fraud, money laundering and worse. This month, PYMNTS examines how the U.S. and the EU are threading this needle in their current and developing blockchain regulations.



PYMNTS Intelligence

U.S. executive action is kicking blockchain regulation into high gear.

Until now, cryptocurrency supervision was primarily based on the Securities and Exchange Commission's (SEC's) interpretation and enforcement of the Securities Act of 1933, the Securities Exchange Act of 1934 and the Investment Company Act and Investment Advisers Act of 1940. In most cases, cryptocurrencies have been considered securities, and cryptocurrency exchanges and issuers are required to register and disclose market activities to federal regulators in the same manner as other investments under the SEC's oversight.

A rapidly growing number of Americans have invested in cryptocurrency, but many more are suspicious of its potential, resulting in calls for government regulation.

21%

Share of Americans who have used or invested in cryptocurrency

19%

Share of Americans who view cryptocurrency in a positive light

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PYMNTS Intelligence

The Biden administration is looking into further cryptocurrency regulation, but the most pressing question is the clarification of whether cryptocurrencies should be defined as securities or commodities. Classifying them as securities would continue their current jurisdiction under the SEC, but a new congressional bill would change their classification to commodities, placing crypto under the control of the Commodity Futures Trading Commission (CFTC) instead. Both the SEC and the CFTC heads acknowledged, however, that not all cryptocurrencies are equal, and a case-by-case analysis may be needed.

Placing cryptocurrency oversight under CFTC control would be a game-changer, as industry players see the agency as a more crypto-friendly regulator than the SEC and more willing to issue new regulations. Still, if the CFTC were to obtain new powers to regulate crypto, it would likely assess new fees on crypto industry players to pay for the enforcement of new regulations, as the agency is much smaller than the SEC.

PYMNTS Intelligence

The EU is focusing on the blockchain's environmental concerns.

The European Parliament Committee on Economic and Monetary Affairs recently endorsed the Markets in Crypto-Assets regulation, which requires crypto-asset service providers to disclose their total energy consumption. While it does not specifically mandate that cryptocurrency companies reduce their carbon footprints, the hope is that these providers will voluntarily become more energy-efficient under public pressure.

This energy-focused regulation follows initiatives in other parts of the world to limit cryptocurrency mining due to environmental concerns. China, for example, banned cryptocurrency transactions entirely, and the state of New York passed a cryptocurrency mining moratorium and began a study on the damage of PoW mining. Some cryptocurrencies, such as Ethereum, are already shifting to a PoS technique to reduce these damages.

Europe lags behind much of the world in crypto adoption.

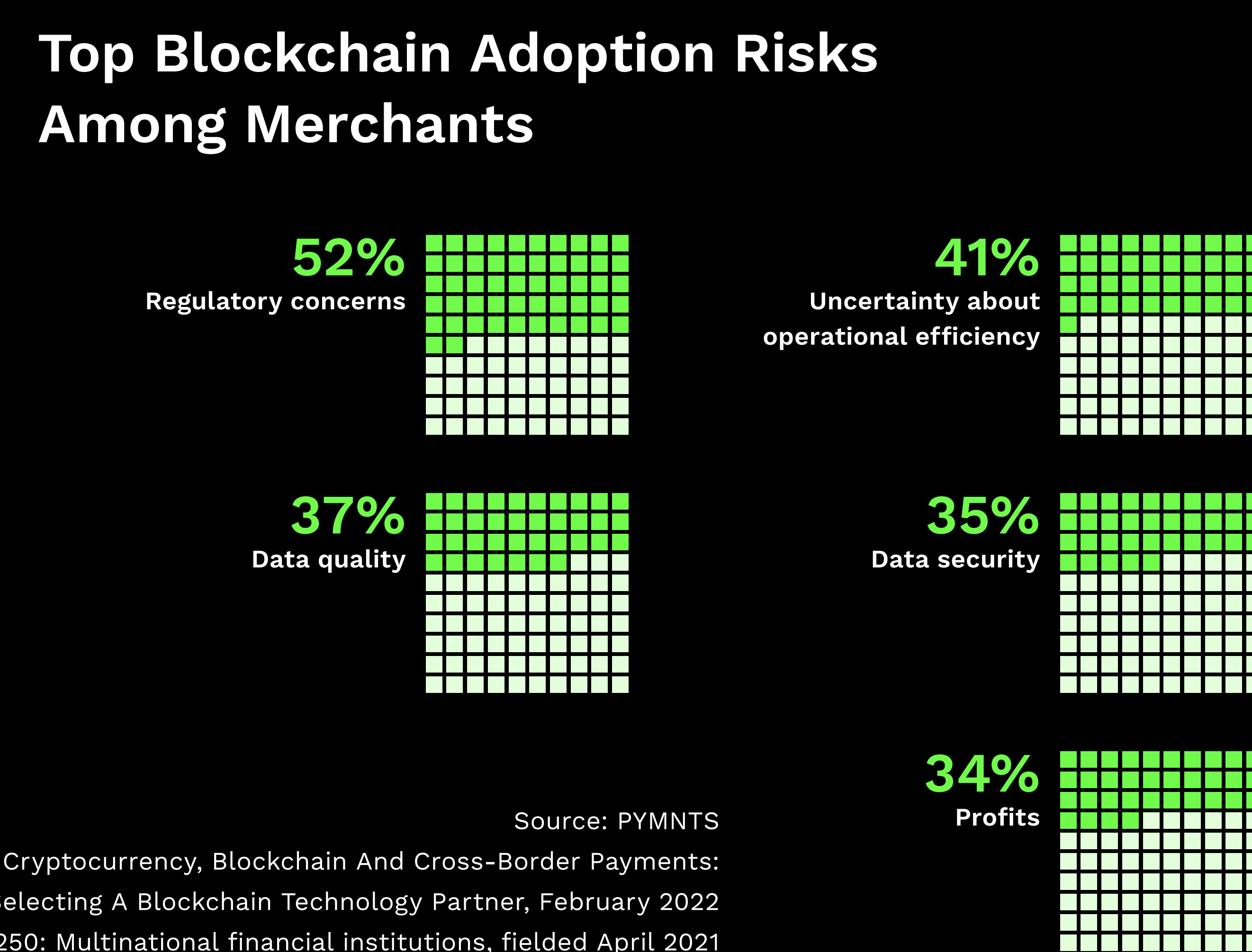
17%
Percentage of Europeans who own cryptocurrency

40%
Share of European cryptocurrency owners who first invested last year

Chart Of The Month

Regulatory Uncertainty Is Top Concern For Blockchain Adoption

Businesses have enormous risks to contend with when entering the blockchain realm, and regulation tops the list. Fifty-two percent of firms cited regulatory concerns as their top risk, followed by uncertainty about operational efficiency at 41%, data quality at 37% and data security at 35%. Despite these concerns, businesses are still exploring ways to leverage the blockchain to make their processes more efficient.



Source: PYMNTS
Cryptocurrency, Blockchain And Cross-Border Payments: Selecting A Blockchain Technology Partner, February 2022
N = 250: Multinational financial institutions, fielded April 2021

Insider POV

Navigating Blockchain's Complex Regulatory Landscape

ANDREAS VENERIS
Professor of electrical and computer engineering

UNIVERSITY OF TORONTO

"[Blockchain regulation until now] has been like closing your eyes and throwing a dart at the wall. It is a field that has been very puzzling to a lot of people because there are so many different new entities — and so many unknown entities."

Andreas Veneris, professor of electrical and computer engineering at the University of Toronto, tells PYMNTS why cross-border payments would be a good start for blockchain regulation.

Legislators have been toying with the idea of regulating the blockchain field for several years, but they only recently started passing legislation in earnest. This interest is long overdue, said Veneris, spurred by the collapse of the stablecoin TerraUSD this past May. This fall cost investors tens of billions of dollars despite its pegging to the U.S. dollar, casting intense doubt on the viability of stable cryptocurrencies.

"The collapse of TerraUSD brought up the need for stronger, more thorough and more detailed regulation to protect the public from scams and fishy cryptocurrencies."

Insider POV

These regulatory efforts remain quite slapdash, however, as lawmakers are still trying to understand this complex technology and craft appropriate legislation. Governments commonly perceive cryptocurrency as a payment for dubious purposes and not as its own complex economy on par with traditional financial systems.

"The regulatory environment is still a mess, but in fairness, it's still a very new medium. But the genie's out of the bottle right now, and they cannot stop the ride. It's like BitTorrent 20 years ago: The music industry tried to scare people into not downloading songs, but that didn't work out at all."

The best way forward for blockchain regulations is to focus on cross-border payments, said Veneris. These already rely on international cooperation and avoid the central problem of per-country regulation: Different countries will likely never totally agree on the best way to regulate the blockchain, and cryptocurrency exchanges can easily flock to the country with the loosest laws and continue to sell all around the world.

"For the purposes of advancing interoperability, it might be necessary for regulators to have some provisions that are similar. If they are not similar, there will be a lot of opportunities for regulatory arbitrage, where one country's regulations are not in line with another country's regulations. People might want to take advantage of other jurisdictions with relaxed regulatory provisions."

Until now, blockchain and cryptocurrency have been largely unregulated, despite their increasing market size.

There are 18,142 cryptocurrencies in circulation.

There are 460 cryptocurrency exchanges around the world.

The market cap for cryptocurrency is $1.7 trillion.

Companies To Watch

Ethereum's Proof-Of-Stake Gambit

ethereum

Ethereum's much-hyped shift from PoW to PoS is finally here after seven years of planning. Ethereum's developers made this move in an attempt to alleviate environmental and energy usage concerns, with some experts estimating that the blockchain's power consumption could drop by more than 99.9%. This is because the new PoS underlies a consensus mechanism that requires far less energy than what the PoW computations need. Gas fees will remain unaffected, however, as the total network capacity will remain largely the same. Ethereum is not the only blockchain working to reduce energy consumption. Algorand's blockchain, for example, was designed as a greener alternative and carbon-neutral, as its protocol requires the energy consumption of 10 average U.S. households.

What's Next

White House Releases First-Ever Cryptocurrency Framework

Cryptocurrency regulation in the U.S. has largely been left to financial regulators, but it is quickly gaining interest from higher up in the chain of command. The White House recently issued its first-ever framework on future cryptocurrency regulation, with a special emphasis on borderless transactions and cracking down on digital asset fraud. The U.S.'s next steps are a risk guidance assessment from the Treasury Department and an exploration of a new digital currency that the Federal Reserve would issue.

> **Innovation is one of the hallmarks of a vibrant financial system and economy. But as we've painfully learned from history, innovation without adequate regulation can result in significant disruptions and harm to the financial systems and individuals.**

JANET YELLEN
United States secretary of the treasury

Source: The White House. Background Press Call by Senior Administration Officials on the First-Ever Comprehensive Framework for Responsible Development of Digital Assets. 2022. https://www.whitehouse.gov/briefing-room/press-briefings/2022/09/16/background-press-call-by-senior-administration-officials-on-the-first-ever-comprehensive-framework-for-responsible-development-of-digital-assets/. Accessed October 2022.

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