Crypto Assets | Evolution Or Revolution?

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Crypto assets and tokenization will increasingly disrupt financial markets. Central bank digital currencies may act as a trusted bridge between traditional and virtual worlds.

How this will shape 2022

Adoption of cryptocurrencies will continue to gather pace. As of Nov. 11, 2021, their total market capitalization was around $2.8 trillion--about 6% of the U.S. equity market. Around 45 corporates have taken positions on cryptocurrencies (bitcoin and ethereum), totaling around $24 billion. Three companies--Block.one, MicroStrategy, and Tesla--hold almost 84% of corporate investments in bitcoin. Yet, growing interest from institutional investors augurs accelerated expansion for cryptocurrencies as investment vehicles. Beyond the corporate world, senior elected officials in New York and Miami have expressed a desire to receive their salaries in cryptocurrencies. Miami has launched MiamiCoin, and New York City has announced a similar intention. Still, we don't think cryptocurrencies will constitute a viable global means of payment until technological enhancements, such as changes in consensus mechanisms, allow for greater efficiency.

Cryptocurrencies are likely to continue experiencing major price swings in 2022. This is because of their extreme volatility, regulatory uncertainty, and high energy consumption. While cryptocurrencies have laid the foundations, greater disruption of financial markets may come from tokenization, in our view. Tokens are the digital representations of a physical or nonphysical asset managed on distributed ledgers and representing the right to the asset (such as right to use or proof of ownership).

Central bank digital currencies (CBDC) are likely to act as a trusted bridge. We expect a number of central banks to progress toward launching digital versions of their currencies. These could encourage broader adoption of crypto assets and tokenization by offering a smooth and reconcilable link between the traditional and the virtual worlds. Up to now, stablecoins have tried to fulfil this role. But investors cannot be totally immune to the valuation volatility of their reserve assets or their lack of capacity to be self-sustaining.

The race is on between central bank digital currencies and private cryptocurrencies

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[Digitalization Of Markets: Framing The Emerging Ecosystem], Sept. 16, 2021

[Net Debt: Why Digital Currencies Like Bitcoin Are Not Akin to Cash In Our Ratio Analysis], May 3, 2021

Stage Of Development In Key Banking Systems For CBDC

Information are estimates based on public information including central bank announcements and CBDCTracker.org. CBDC--Central bank digital currency. Source: S&P Global Ratings.

What we think and why

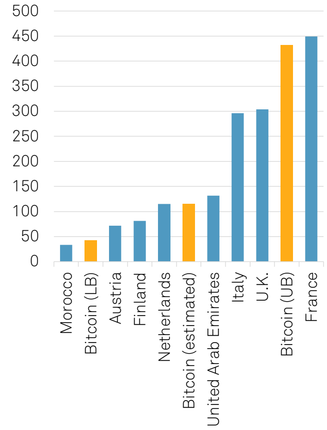
Fast adoption, expanding use cases, and evolving technology augur further digitalization of markets. The COVID-19 pandemic highlighted the importance of digitalizing the financial services industry. While cryptocurrencies created the framework, tokenization is expanding the use cases and opportunities for further digitalization.

Tokenization is creating new opportunities. The fractionalization of assets could enhance liquidity and open the door for investors or borrowers excluded from existing instruments. Tokenization allows also for an efficient exchange of assets by reducing the need for intermediaries and streamlining back-office operations. This could potentially allow for markets to open 24/7, shorten clearing and settlement times, and ultimately reduce counterparty risk and free up collateral.

Regulators and policymakers are slowly catching up. The industry faces several hurdles, including the need for a regulatory framework that recognizes the rights of token holders and smart contract protocols. The technology will also have to reliably meet the requirements of network stability, scalability, settlement finality, interoperability, and immunity to cyber risk. Yet, the key challenge in our view is the current lack of a bridge of trust between the traditional and the virtual worlds for key stakeholders and policymakers. CBDCs will facilitate this because a CBDC represents a liability of the issuing central bank and, like cash, its legitimacy would mirror that of its central bank. A CBDC would be widely and easily accessible and, more importantly, its value would remain stable. CBDCs could foster broader adoption of tokenization by providing a smooth and reconcilable link between the traditional and digital worlds.

Chart 55

Electricity Consumption: Bitcoin Network Vs. Selected Countries (TWh/yr)



Sources: S&P Global Ratings, International Energy Agency, CBECI.

Note: The Cambridge Bitcoin Electricity Consumption Index (CBECI) provides a real-time estimate of the total electricity load and consumption of the Bitcoin network. Given that the exact electricity consumption cannot be determined, the CBECI provides a range of possibilities consisting of a lower bound (floor) and an upper bound (ceiling) estimate. Within the boundaries of this range, a best-guess estimate is calculated to provide a more realistic figure that we believe comes closest to Bitcoin's real annual electricity consumption.

What could go wrong

Energy consumption and validation models will be key to the future sustainability of cryptocurrencies. Bitcoin consumes a large amount of electricity, according to the Cambridge Bitcoin Electricity Consumption Index. Cryptocurrency supporters counter that the highest amount of energy is spent on the issuance of new coins rather than network maintenance. A change in the model of validation could also make them more energy-efficient. We think currently high electricity consumption could deter investors with environmental, social, and governance (ESG) considerations. Still, while the 'E' seems to be the most relevant factor for now, once it is fixed, the 'S' could open up access to financial services for excluded parties, while the 'G' could ensure that cryptos are not misused or manipulated..

Striking the balance between innovation and prudential regulation will be a critical challenge. The pace of crypto adoption already outpaces the adoption rate of the internet in the 1990s and portends more change to come. In the absence of solid technological and regulatory foundations, crypto assets could have a significantly negative impact on the financial markets through, for instance, volatility in liquidity flows between digital and traditional markets, vulnerability in sometimes largely untested technologies--including cyber risk--or increasing opacity in financial transactions. In addition, should the development of CBDCs fail or be to slow to stem the rise in private money, the monetary system could become more fragmented, which could reduce the ability of central banks to respond to emerging crises through monetary policy. It could also increase risks for retail and institutional investors given price volatility and the lack of regulatory oversight.

Top 10 Corporate Investors In Bitcoin.

Data as of Nov. 11, 2021	Total holding	Bil. US$
Block.one	140000	9.1
MicroStrategy Incorporated	114042	7.4
Tesla, Inc	38300	2.5
Galaxy Digital Holdings	14932	1.0
StoneRidge Holdings Group	10000	0.7
Square, Inc.	8027	0.5
Marathon Digital Holdings	4813	0.3
Coinbase Global, Inc	4502	0.3
Hut-8 Mining Corp.	2271	0.1
Nexon Co. Ltd.	1717	0.1

Source: Cryptotreasuries.org

This report is an extract from "Global Credit Outlook 2022: Aftershocks, Future Shocks, And Transitions", Dec. 1, 2021.

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