

ANDREESSEN HOROWITZ – WRITTEN EVIDENCE (CDC0026)

CENTRAL BANK DIGITAL CURRENCIES INQUIRY

Our firm, Andreessen Horowitz, has over \$19 billion in assets under management and over \$3 billion dedicated to investments in decentralized technologies. These innovations represent the third generation of the internet, or web3, and they have the potential to bring greater opportunity, accountability, and security to our digital lives.

CBDCs and stablecoins (privately issued digital assets pegged to a specific value such as that of the U.S. dollar, Euro, or pound sterling) will be critical instruments for unlocking economic and societal progress. A stable digital representation of value is a core building block for the coming wave of financial and technological innovation embodied in web3.

Below, we provide some background on the current state of activity surrounding CBDCs and stablecoins. We then go on to explain the importance of ensuring that open societies encourage and facilitate the private sector development of stablecoins, which should happen in conjunction with the ongoing conversation around CBDCs. We conclude by briefly discussing the importance of privacy-first architecture for CBDCs.

Background on the Growth and Types of Stablecoins and CBDCs

1. To set the stage: since the beginning of 2020, stablecoins have grown in total supply from approximately \$5 billion to over \$125 billion.¹
2. Not all stablecoins are created equal. An asset-backed stablecoin is one in which the issuer maintains asset reserves (either fiat assets or digital asset reserves) underpinning the value of each token. These are most often overcollateralized in the event that the assets fluctuate in value. The term stablecoin also encompasses algorithmic stablecoins, which maintain their value through the automatic execution of code. Different types of stablecoins will have different interactions with the traditional banking sector and with monetary policy, and will require different regulatory strategies.

¹ The Block, <https://www.theblockcrypto.com/data/decentralized-finance/stablecoins>, accessed 14 October 2021.

3. Fintech has been incredibly successful over the past decade at improving the experience of consumer finance for many. However, little has been done to truly upgrade and improve core financial infrastructure, particularly when it comes to international payments, clearing, and settlement.
4. Decentralized financial technologies already handle hundreds of billions in transaction volume every day² and provide compelling evidence that there is a viable pathway for instantaneous, global, 24/7 financial rails. Stablecoins are a basic building block on which financial innovation is occurring. The reason for this is simple: to unlock digital financial innovation, one important prerequisite is a stable, programmable, digitally native representation of value.
5. In tandem with the growth of stablecoins, countries from Chile³ to Nigeria⁴ have announced CBDC projects. According to the Atlantic Council, 81 separate countries and currency unions are now exploring a CBDC, and five CBDC projects have officially launched.⁵
6. China has become an early breakout leader in the development and rollout of CBDC technology. The People's Bank of China (PBoC) launched the e-CNY (digital renminbi) for wide scale public testing earlier this year, and anticipates using the technology at the 2022 Winter Olympics in Beijing.⁶ Given the success and rapid growth of its cross-border payments system launched in 2015, the PBoC is likely to pursue the adoption of e-CNY for cross-border transactions.⁷

It is Imperative That Western Governments Facilitate and Encourage a Variety of Private-Sector Stablecoins Even as They Investigate CBDCs

7. In order to avoid falling far behind international competitors and to provide greater opportunities for financial inclusion, open societies should embrace well-regulated stablecoins by providing projects with clear, reasonable regulatory pathways.

² Chainalysis, "The 2021 Geography of Cryptocurrency Report," October 2021.

³ Reuters, "Chile cenbank to decide on roll-out of digital currency in 2022," 27 September 2021.

⁴ Press Release, "CBN Selects Technical Partner For Digital Currency Project," 30 August 2021.

⁵ Atlantic Council, <https://www.atlanticcouncil.org/cbdctracker/>, accessed 14 October 2021.

⁶ CNBC, "China may test its digital currency with foreign visitors at the 2022 Beijing Winter Olympics" 18 April 2021.

⁷ The Carnegie Endowment for International Peace, "China's Digital Yuan: An Alternative to the Dollar-Denominated Financial System," August 2021.

8. From a security perspective, financial systems should seek to avoid a single point of failure in critical infrastructure. Since stablecoins are such a fundamental building block, having the optionality and resilience that comes with multiple, interoperable solutions is far superior to ending up with a single winner. HM Treasury and the Bank of England should therefore encourage the development of competing, responsibly regulated private-sector stablecoins.
9. Ceding the development of next generation cross-border financial rails to other nations would undermine the efficacy of economic sanctions regimes as a tool for geopolitical influence and soft power.
10. In the relentless race to develop more efficient financial infrastructure, too many policymakers seem unaware that there is a competition underway. Governments should embrace what their private sectors have developed so far, and ensure that such innovation can continue apace of solutions being developed out by the PBoC and others.

In the Exploration of CBDCs, Privacy-First Architecture is a Key Consideration

11. CBDCs may — but need not — be used for retail banking and everyday payments. The greater the degree to which a CBDC touches on the economic activity of consumers and citizens, the greater the privacy and security implications.
12. Privacy-first architecture will therefore be a key design consideration with respect to CBDCs. Techniques like zero-knowledge cryptography, differential privacy, and homomorphic encryption should be explored given their potential to strike a balance between regulatory needs, on the one hand, and individual privacy and data sovereignty, on the other.⁸

We are encouraged by your attention to decentralized technologies, and offer ourselves as a resource as you explore them further.

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⁸ Bank of Canada, "Privacy in CBDC technology," June 2020.