The Platformization of Currencies

Web 3.0 native platforms face significant challenges when providing services that compete with Web 2.0 platforms, including infrastructure scalability, decentralized protocol organization and non-predatory monetization models. Tokens are a crucial tool to overcome some of these challenges. Nonetheless, understanding how to design them to face these challenges is a complex task. This research defines a framework for what is here called ‘platformized currency’ with the goal of providing a theoretical model to assist the design of such tokens.

The "multi-sided platform" model has emerged as the winning paradigm of the Web 2.0 era. In this model, platforms serve as intermediaries that facilitate transactions between two or more sides of a market: those who provide a service and those who are willing to pay for the service. In this sense, platforms are empty frameworks that enhance interaction by leveraging frictionless interfaces and efficient matchmaking algorithms.

The Ethereum network itself can be considered a multi-sided platform operating in the market for block-space as it connects those who generate blocks ("space" sellers) with those who seek to have their transactions validated on-chain ("space" buyers). Moreover, thanks to smart contracts, platforms can be built on top of Ethereum - effectively making the Ethereum Network a platform for platforms or, in other words, a platformized infrastructure.

Block-space is valuable for two reasons: first, all of the information stored on-chain inherits the security of the underlying infrastructure, which is secured by the crypto-economic model of the Ethereum blockchain. Second, in order to interact with other entities, be that addresses or smart contracts, the interaction needs to be registered on-chain. Since block space is priced in ‘gwei’ (which is a unit of value representing a small fraction of $ETH), $ETH is the required medium to interact on the platform.

In this sense I recognize ETH as a “platformized currency” as it derives its value from the usage of the Ethereum platform itself while also being the fundamental coordination mechanism for platform participants. The ERC-20 smart contract standard allows for tokens to run on the Ethereum Network. These tokens inherit all the security and transparency guarantees of the network while being fully programmable currencies. Thus, their scope is not limited by the necessity of being the security mechanism of the network and the medium for the block-space market.

I argue that these tokens can also be ‘platformized currencies’ in the same way $ETH is, while having a much wider design space available. They enable crypto economics to be applied to any platform built on top of Ethereum and are useful at making explicit the incentive system at play. Thus, making them the main advantage Web 3.0 has when competing with Web 2.0 platforms. By developing this framework, the research hopes to provide valuable insights into how Web 3.0 native platforms can more effectively use tokens as a tool for sustainable and market-aligned growth. Thus, making these platforms a more attractive and fair place for all platform participants.