

# The Concept and Criticisms of Steemit

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Usman W. Chohan, MBA

School of Business and Economics

University of New South Wales, Canberra

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**Abstract:** This paper examines the concept and the criticisms of Steemit, with a view to situating its difficulties in imposing a self-regulating cryptoanarchist information network, as well its interesting meshing of blogging and social networking with a blockchain (Steem) database. This raises questions about the structures of accountability in the cryptocurrency realm, and of the abuse of cryptoanarchist principles in practice.


## The Concept and Criticisms of Steemit

This purpose of this paper is to extend the discussion of cryptocurrencies towards their enmeshing with other aspects of technology, including the “leisures of the blockchain” (see discussions in Chohan 2017h and 2017n) by examining the case of a blockchain combined with social networks and blogging in **Steemit**, with the attendant challenges of legality, economics, legitimacy, technology, and its cryptoanarchist shortcomings.

A growing public interest in cryptocurrencies and in the accountability architecture surrounding cryptocurrencies (see also discussions in Decourt et al., 2017; Chohan 2016a, 2016b, 2016c, 2017a, 2017b, 2017c, 2017d, 2017e, 2017f, 2017g, 2017h, 2017i, 2017j, 2017k, 2017l, 2017m, 2017n, 2017o, 2017p, 2017q, 2017r, 2017s, 2017t, 2017u, 2017v, 2017w) has led to a burst of research into the possibilities for deploying blockchain solutions including cryptocurrencies in a variety of contexts.

This includes the combination of social networking and blogging with blockchain technology and a monetary system, in the form of **Steemit**. The Steemit platform deploys a blogging and social networking website superimposed on the *Steem* blockchain database. The Steem blockchain applies Steem Dollars, representative of colloquially termed “magic bean tokens,” which users obtain for posting, discovering, and commenting on interesting content.

The Steemit project was officially launched in July, 2016. The initial concept for Steem was described in March, 2016, as similar to other blogging websites or social news websites, but wherein the text content would be saved in a blockchain, which would allow for the ability to reward comments and posts with secure tokens of ascribed value. Images would also be uploaded and hosted on Steemit, although multimedia content



would be embedded from other web hosts. A what-you-see-is-what-you-get (WYSIWYG) editor would serve as the interface, but users could also opt to use Markdown formatting with HTML elements. On July 1, 2016 Steemit announced on their website that they had been hacked, and that the attack had compromised more than 250 accounts, which amounted to nearly \$85,000 (USD) worth of Steem Dollars.

According to its original structure, user accounts would be able to upvote posts and comments, and the authors who would get upvoted would receive a monetary reward in a cryptocurrency token named STEEM, and US dollar-pegged tokens called Steem Dollars. People would also be rewarded for curating (“discovering”) popular content.

Curating would involve voting comments and post submissions. Vote strength and curation rewards would be influenced by the amount of STEEM Power held by the voter. This STEEM power would create accountability asymmetries and the monopolization of power by “wealthy” users, which would to a notable extent defeat the original cryptoanarchist vision of the blockchain concept deployed under Steemit.

The structure of Steemit is premised on a reputation system, whereby new accounts are commenced with endowment of a reputation of 25. An account's received votes can influence its reputation up and down, incentivizing better online etiquette, comportment, and interaction between community members. Steemit includes

third-party applications, such as *d.tube*, a decentralized video platform based on the InterPlanetary File System (IPFS) protocol. Whereas *D.tube* resembles YouTube, it differs in the absence of advertisements, and instead uses the built-in Steem currency which gets awarded by users upvoting videos. The Steem blockchain functions on two tokens: STEEM and Steem Dollars. There is also a vested or stored interest known as

Steem Power. Steem Power is strictly for internal use in the Steem community, while the tokens are used as an economic “store of value” as well as for trading.

The Steem currency is based on the Smart Media Tokens (SMT) protocol, developed by Steemit. In December 2017, CoinMarketCap.com had listed Steem as wielding a substantive \$475 million market capitalization, although this was considerably smaller than the major cryptocurrencies, ranking in at 32 out of 1,358 cryptocurrencies. In the Steemit structure, it is user actions such as upvoting, that facilitate Steem’s *Proof-of-Brain* algorithm, which also incorporates the Steem Power that a user can hold. This is done so as to provide incentives for content-creators and for the community through the transfer of minor amounts of the Steem token currency.

The initial economic model underlying Steem was highly inflationary in supply, doubling roughly every year. However, due to community demand, on December 6, 2016, the inflation rate of Steem was changed to 9.5% per year, reducing by 0.5% per year. This speaks to the community driven adjustments and inputs in reorganizing the economic structure of cryptocurrencies along cryptoanarchist principles.

In November, 2017, there were more than 450,000 Steem accounts. After an initial public beta for which no payments were made, the hard fork on July 4, 2016, saw \$1,300,000 of STEEM and Steem Dollars paid out to Steemit users. According to company reports, since October 2017, \$30 million were paid out to over 50,000 users.

An important accountability aspect of Steemit is the foundation of transparency, as every vote and transfer is viewable to the public from upvotes on posts to wallet-transfers. In stark contrast to other digital currencies, which are difficult for the general public to access due to systemic barriers to entry, whether legal or material,

Steem erodes these barriers to entry by structuring a system of earnings through posting without forcing an initial outflow of capital from users.

In contrast to many other cryptocurrencies, the Steem's value will be closely affiliated to its utilitarian value as a social networking and sharing platform, and less dependent on the speculative aspect of crypto-"investment" which has characterised most other such instruments. In other words, there is a stronger correlation between the underlying function of the platform and the value of cryptocurrency than is found in other altcoins.

These benefits notwithstanding, the practical deployment of Steemit has not come without due criticism. One risk in Steemit is in the deliberate relaunching of the currency to assure centralization. Another risk emerges from the manipulation of the system in ways that dismantle the cryptoanarchist principles of self-governance and community policing. Examples of this include vote-selling, bullying by wealthier members of the site, the monopolization of influence to set policy, overt control by wealthy users, and forced censorship. Worse still, Steemit has already faced instances of malignant content postings, including repugnant and despicable content such as child pornography. These problems emerge from the abuse of cryptoanarchist thought, which rests upon mutual trust and respect in fair dealing and good conscience. Without this, the lack of unified governance, moderators, and structured accountability creates incidences of significant abuse.

In sum, whereas the novel concept of meshing social networks and cryptocurrencies can lead to significant innovations, there are fundamental accountability problems that arise from the abuse of cryptoanarchist thought. Future iterations of Steemit and other such

media must remain vigilant, and mindful of the structural problems that can arise in the effective deployment of cryptocurrencies more broadly.

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