Introduction:

Gold, most cryptocurrencies and other assets like arts are quite frequently being criticized for being a bad investment, as they are only a collectible and their value is only derived from scarcity. Compared to stocks, they do not “work for the investor” and they do not generate dividends. While stocks appreciate and depreciate with the growth or decline of the underlining economy, gold and other assets appreciated and depreciate in value only by social adaption consensus and/or social network effects.

We, the ethereum community, have built something awesome: a decentralized world computer. We used a cryptocurrency, crypto fuel for it. I would like to discuss whether we could build the same decentralized world computer without any cryptocurrency, but using a decentralized index-fund token as collateral.

World computer with POS and without a cryptocurrency:

Imagine we would create a decentralized index fond (DIF100)

on ethereum, which would hold the top 100 most valuable ICO’s (like the Nasdaque100). This DIF100 could be a smart contract that holds these top 100 ICO coins and issues DIF100-tokens representing an ownership in all the top 100 tokens.

Now, these DIF100-tokens could be used for staking and for paying transaction fees on the decentralized world computer instead of Ether. Everything would be quite the same, with the only difference that the token supply cannot be inflated, proof of stake validators could only be paid with transactions fees.

Advantages:

- Collateral tokens (DIF100-tokens) for staking have an inherent value

(Ether has also an inherent value, as it is used to pay for computation fees. But the dividends from the DIF100 might a high multiple of the transaction fees collected)

- “higher security”, as the valuation of the DIF100 might become higher than the market cap of Ether
- If the DIF100 would contain reliable companies, volatility might be lower as it is for Ether.
- (Decentralized computers run on a crypto-currency have a coupling between the security provided and the fees charged, as a fee model maximizing the total fees collected will boost the value of the token and therefore the POS-stakes. This might not be the optimal fee structure for a decentralized computer.)

Disadvantages:

- Forks are getting much harder to manage
- If the companies require KYC, validators would be known
- No issuance of new tokens is possible
- Governing the DIF100 might be challenging

Comment

By no means, this post is meant as a criticism of the current ethereum model. I think that ethereum has a sound economic model, as it is the currency required to run any computation on this great trust-machine. I am just wondering, whether another model might be even better.