Hello,

I wonder about the priorities of Ethereum development.

Approximately half of the new cryptocurrencies listed on Coinmarketcap are masternodes (token excepted).

The reason is that masternodes are very efficient for fast transactions, reliability, scalability and rewarding of holders. They can be eco-friendly with little power usage and allow little or no fees, especially with POS. The funds are safe thanks to cold storage masternodes.

They are currently 3 cryptocurrencies based on Go Ethereum which have succeeded to implement masternodes : Etherzero (POS masternodes), Akroma (POW masternodes) and Pirl (POW masternodes). Others are on the way like Exereum.

These cryptocurrencies have been able to implement masternodes on Go Ethereum within a few months with very limited resources.

Yet, Ethereum, with huge resources, is still running on POW without masternodes.

It seems Ethereum developers prefer to focus on difficult and untested concepts like plasma and sharding, whereas there are hundreds of masternode cryptocurrencies running swiftly, more than 130 being listed on Coinmarketcap.

Plasma and sharding may be interesting ideas, but making them a priority is debatable :

- the size of the blockchain (one of the big argument for plasma and sharding) is not a real problem : just implement an option allowing nodes to choose the size of the blockchain they want to store. The nodes which have little storage will store only the most recent transactions, and the nodes with a lot of storage could store the whole blockchain if they want. And why not include in the blockchain, once a month, a snapshot of account balances and smart-contracts. With this simple solution, there would be no need for ordinary nodes to store more than a month of blocks.

- 51 % attacks are not a big problem with POS, because taking control of the blockchain would require to invest billions to buy the required ethers. If some organizations decide to invest so much to take control of the blockchain, it will be a huge benefit for ethereum holders, and it would be possible to make a fork at any moment in case of misbehavior.

- there's no need of plasma and sharding to handle a lot of transactions. With a good network of masternodes, instantsend options enable a lot of transactions.

Major problems are solved with a network of POS masternodes enabling instantsend.

Regarding the safety of the funds deposited for masternodes, cold storage, which is used in most masternodes currencies, is a much better option than locking the funds in a contract.

Regarding penalties to solve the "nothing-at-stake" problem, I'm not sure it's a real problem, because many masternode currencies have been running for years without penalties. If some penalties were needed, it would be easy to implement a small stake, a small amount paid to other masternodes when a new masternode joins the network.