

Decentralized Systems

Are Blockchains Good?

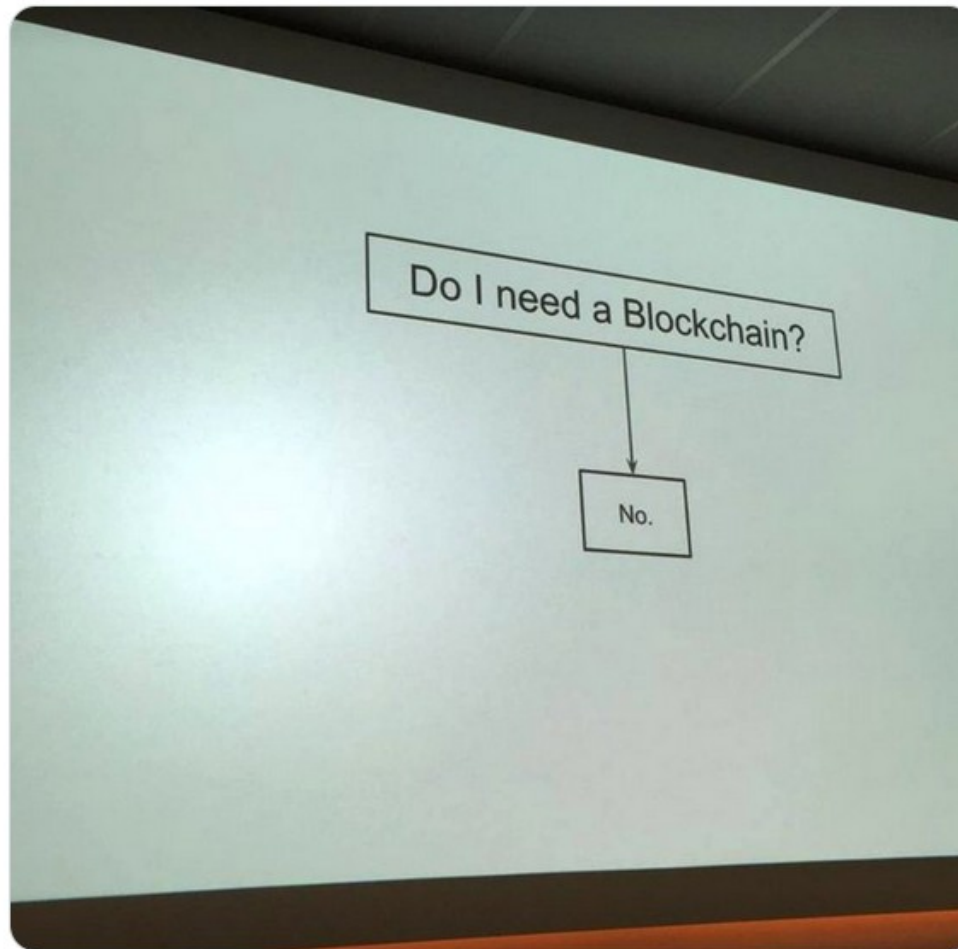
The Skeptics' Point of View



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Simple flowchart:



Politics and Ideology

- Some cryptocurrency proponents share **political views**
- **Crypto-anarchism**
 - Distrust institutions
 - **Anonymity**
 - **Freedom of speech**
 - **Freedom of trade**

DON'T BUY



MONERO

Cryptocurrencies are harmful to the banking system and may weaken the state apparatus

(Monero community,
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Some Objections From a Big Debate

- Institutions are useful
 - **Public services** (e.g., health, instruction, security)
- There are reasons to **limit freedoms**, for example:
 - Trading weapons and illegal goods
 - Hate speech
 - Child abuse

Centralization: Economies of Scale

David Rosenthal makes this economic point:

- **Income** should be **linearly proportional** to contribution
 - If not, one can mount a **Sybil attack** to appear as several smaller entities
- **Cost** is **less than linear** due to **economies of scale**
 - Producing X objects costs less than X times the cost of producing one
- Hence, **P2P systems** inevitably **tend towards centralization**

User Tendency to Centralization

Moxie Marlinspike (creator of Signal):

- People **don't want to run their own server**
- **Protocols move** much more **slowly** than a (centralized) platform: less features, less convenient
- This is why we don't use our own mail and web server
- This is why **centralized services** like Infura, OpenSea, Coinbase, Etherscan show up
 - Even Metamask uses them to show e.g. the NFT in your wallet

Sybil Attack Vs. Democracy

- “One head, one vote” only works if we can **count heads**
 - Permissionless systems: subverted by creating **fake identities** at will with a Sybil attack
- Solutions:
 - Proof of work: “**one hash, one vote**”
 - Costs **infrastructure and energy**, hence **money**
 - Proof of stake: “**one coin, one vote**”
- They point towards **plutocracy** (government of the rich) rather than democracy

Inflation and Deflation

- An effective currency should have a **stable value**
 - Handling this is the job of central banks
 - Low but positive **inflation**—incentive to spend/invest
- Deflation: **value goes up** in time
 - Encourages people to invest: buy coin because it will be worth more in the future (the more people buy it, the higher the value)
 - If it is deflationary, one **doesn't want to spend it**
 - Paradox: a coin's success makes it a **bad currency**

Scams and Greater Fool

- The space is filled with **scams of all kind**
- **Rug pull**: somebody raises funds and runs away
- **Wash trade**: somebody buying from themselves
- **Greater fool** (e.g., Ponzi or pyramid schemes):
investments on a scheme that yields no returns
 - As long as new investors arrive, old investors are paid with the new investors' money
 - At some point the scheme inevitably collapses

Red Flags

- **Ignoring criticisms**
 - Marking them as FUD, “Fear Uncertainty and Doubt”
- **Proselitism** to recruit fresh money and advice to **never sell**
 - HODL (“Hold on for dear life”), HFSP (“Have fun staying poor”), “Diamond hands”, “To the moon!”
- **Unclear business plan**

Are All Cryptocurrencies Scams?

- The **debate is up**
- According to some economists, they are pretty much all **greater fool** schemes
- It boils down to which **real-world applications**, beside speculations, they will have in the long run

yahoo!finance

'Only good for drug dealers': More Nobel prize winners snub bitcoin



Ethan Wolff-Mann · Senior Editor

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James Heckman, Oliver Hart, Thomas Sargent, and Angus Deaton talk before a UBS event. (Ethan Wolff-Mann/Yahoo Finance)

Source: Yahoo! Finance