



WORLD BANK GROUP

Equitable Growth, Finance & Institutions

Michael Casey – The Truth Machine: Blockchain and the Future of Everything

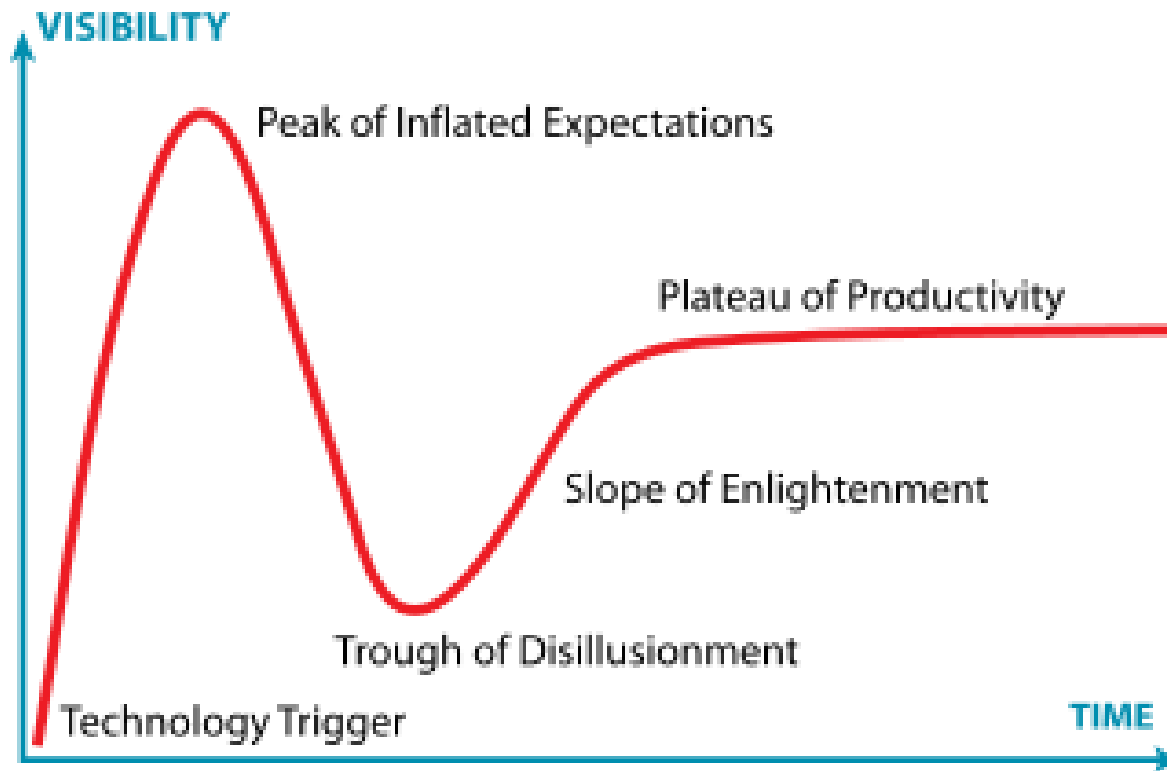
Discussion

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Blockchain: towards an eventual “plateau of productivity growth”?



“We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run”

- Roy Amara

The core value proposition of (decentralized) blockchains

- Consensus formation in network of “strangers” with limited mutual trust and without a central authority (single point of failure)
- Decentralized computing and record keeping: World computers and smart contracts – beyond *crypto currencies*
- Social Scalability (Szabo, 2017): can reduce coordination costs which facilitates economic activity, but no panacea; innovation incentives

Some technical and developmental challenges: an industry in its infancy?

- **Blockchains do not scale (yet?).** “Layer 2” solutions and new protocols to address issues such as Buterin’s “Trilemma”, mining concentration, and finality.

- **Blockchains are not private (yet?).** Legitimate need for privacy (e.g. zero-knowledge proofs, ring signatures)

- **Blockchains have not attracted many institutional money (yet?).** Limited custodial solutions, regulatory uncertainty

Some regulatory concerns and challenges

- **Investor protection and ICOs.** When a security (Howey test)?

- **Criminal use (AML/CFT).** The “weakest link” of crypto exchanges. DEX – who to regulate?

- **Evasion.** Sanctions, capital controls, taxes.

- **Consumer protection.** Exchange hacks and failures; price volatility.

International response

G20: “...technological innovation, including that underlying crypto-assets, has the potential to improve the efficiency and inclusiveness of the financial system and the economy more broadly.”

G20: “Crypto-assets do, however, raise issues with respect to consumer and investor protection, market integrity, tax evasion, money laundering and terrorist financing.”

FSB: No financial stability risks (yet), but monitoring warranted

IOSCO: Warnings on ICOs

CPMI: Implications for FMIs, monetary policy, seignorage, Central Bank-issued Digital Currencies