

13th February, sektor5

TOKEN ECONOMY: THE PRICE OF

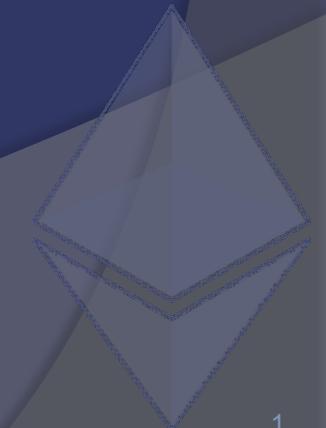
(AND OTHER CRYPTO TOKENS)

7TH MEETUP



Outline

- ◎ 1) Tokens as a means of exchange and why Bitcoin 1.0 's value is limited
- ◎ 2) Token Value Drivers (theory and empirical data)
- ◎ 3) Prediction: Investment Advice

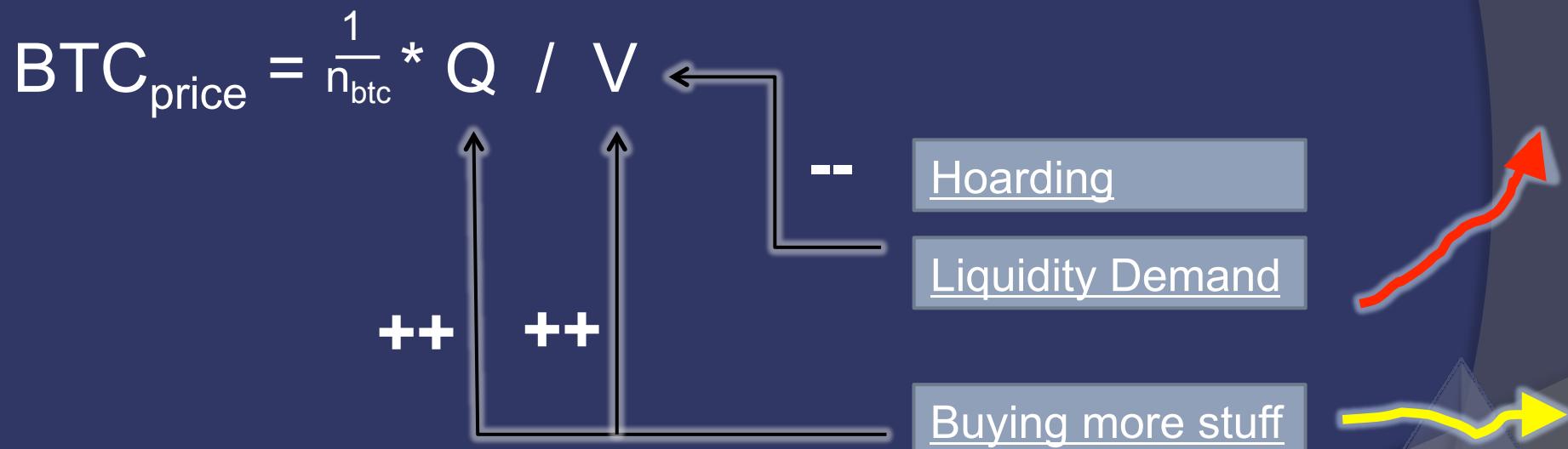


Token Prices

- Common Wisdom: price ↑ if mass acceptance
 - large retail players accepting them
 - ease of use (i.e. easy / low risk)
 - assumption = token monopoly or no circulation after first buy
- → *wrong* as long as there co-exist with “you-can-buy-everything” currencies (e.g. roughly fiat)
- $M * V = P * Q \rightarrow \text{Tokens} * \text{Speed of Exchange} = \text{nominal Price} * \text{Value of Goods}$

Token Prices continued

- $M * V = P * Q$ | / \$...Measure in \$ market cap
- $n_{btc} * \text{BTC}_{\text{price}} * V/\$ = P/\$ * Q/\$$



Intuition #1: If I buy a coffee with BTC, why shouldn't the shop spend it subsequently?
ex.: Overstock (90%), Microsoft, Dell, Expedia, virtually all mom & pop shops (100%)

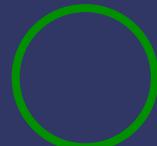
Intuition #2: Why should employee receiving BTC-wages compound savings in BTC
when value depends on everyone else doing the same (hoarding, volatility)?

source(s): [2]

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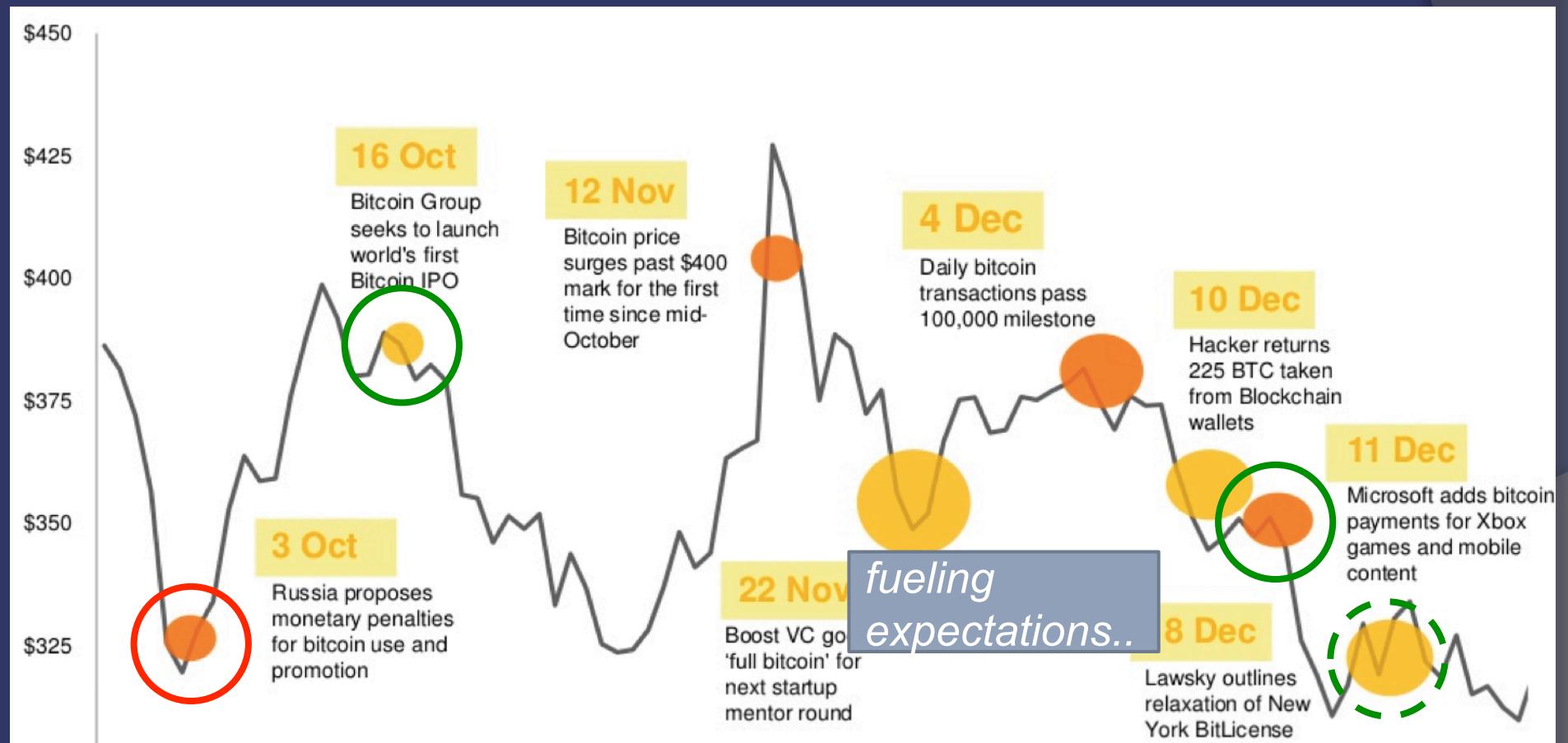
Adoption != higher Price



More
acceptance



Less
acceptance



source(s): [3 - 7]

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Adoption = lowers Price (pops hoarding bubbles)

CoinDesk merchant revenue

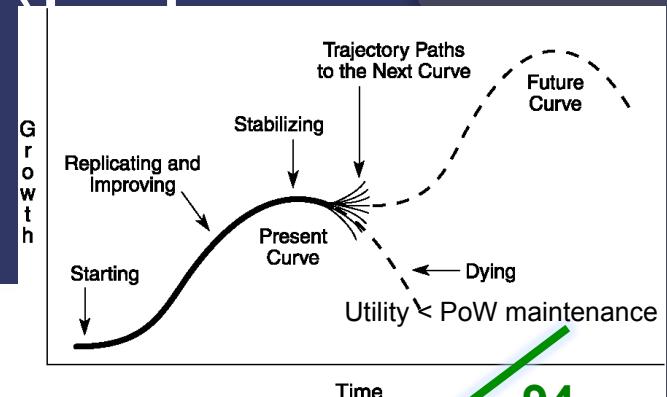


China hoarding bubble + mtGox shock

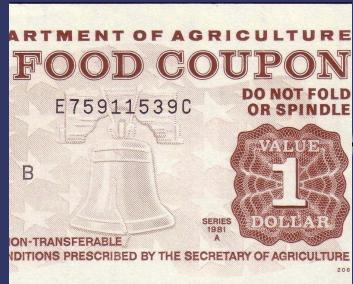


source(s): [3 - 7]

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What causes tokens to appreciate ‘sustainably’?



Food Stamps

In war/communism/crisis currency drops against foodstamps (get them through social capital or bribery)



Concert Tickets

Appreciate on black market if band coveted



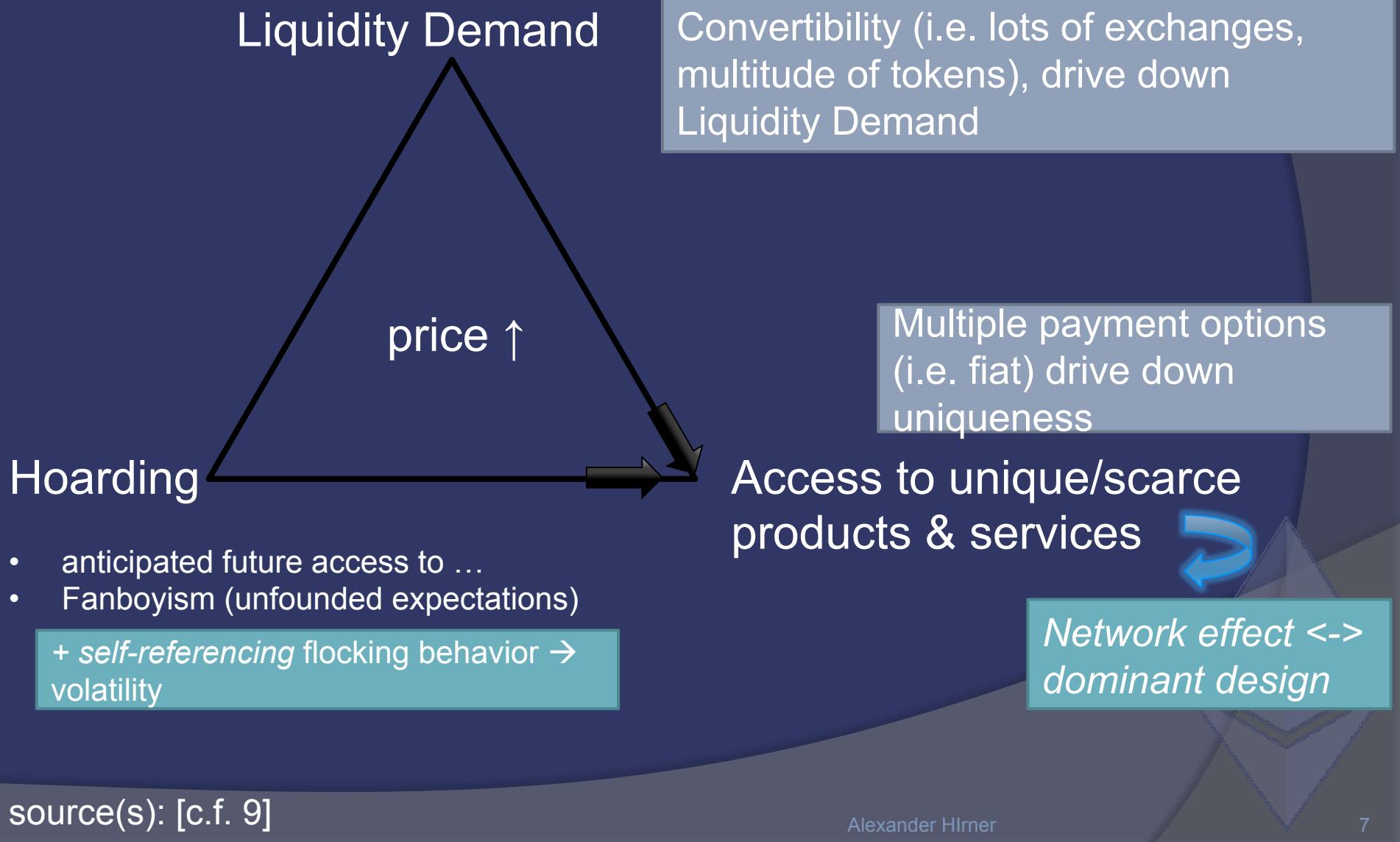
Tax on Land & Building

Don't go to jail: personal freedom is extremely valuable (bailment only for the affluent)

● Common features of tokens with fundamental value

- Exclusive access to unique goods and services
- Represent scarcity tied to something else than the token itself

Model: disentangling supply and demand

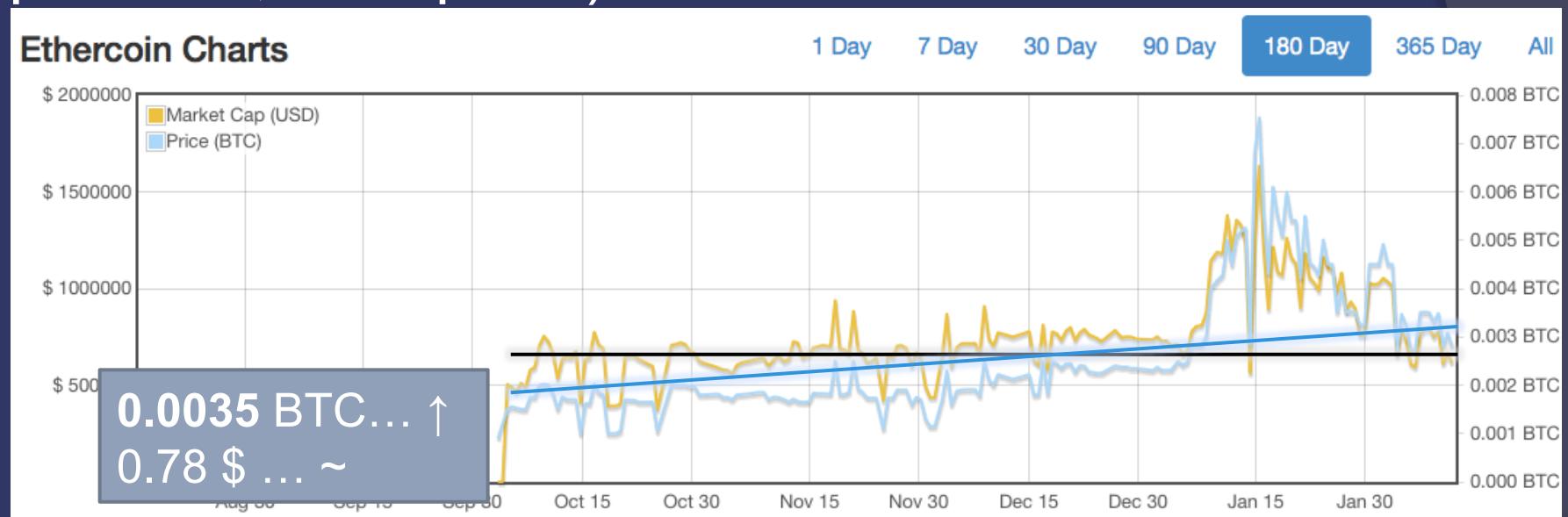


How much can you access exclusively via Bitcoin 1.0? ... not much

- Procurement of illicit goods, aka S*lkroad et al.
- Cross border remittance
- Anarchy means-of-payment
- Illegal → unsustainable
 - Anonymous hackers offer the contents of Russian prime minister Medvedev's smartphones and tablet. Bids start at 500 Bitcoins for the whole file (1 Gigabyte) or 100 BTC for smaller files. <https://libertas.bz/>
 - appropriate cases (Africa, Philippines) but capital control rules
 - competition Transferwise (~80% less fees)
 - Blockchain depends on civilization & physical public goods (electricity, bandwidth, governance)
 - .. and has maintenance costs (buried gold has not)

ETH Speculation

Crowdsale: ~Mio. 60 ETH for 31,529 BTC (0.005 per BTC, 0.21 per \$)



~ 6 times ↑ vs. BTC.
~ 4 times ↑ vs \$

- floating ~10% of ETH
- (still) low liquidity
- discounted by counter-party risk

The components of ETH Price

Component

Measurement

Suggestion

◎ Fanboyism

hard to measure

rather mine than
buy if not sure why

◎ Volatility

certainly high (+
risk of security
flaws)

short-term hedging
or even better: sell
own derivatives

◎ Access to unique products

Announcement and
Deployment of
major DApps

mid-term: have
them earlier on the
radar than others
and buy
accordingly

Dapps on the Radar

Non ETH

- Gaming! PangeaPoker
(big traction in NXT community)

- Sharing + Reputation =
LaZooZ (how good?)

- Crowdfunding with Arbitration
and Transparency =
LightHouse

- P2P paid Storage ...

- Lodging services
(Airlock)
- Securities
(DigixGlobal)
- Even better crowd-
funding
- Dec. Exchange
EtherX
- All these DApps
demand ETH/GAS



Takeaways & Implications

Morale:

If you hoard BTC and simultaneously demand it to be the only form of money, you cause unemployment (and bubbles)

Socioeconomic:

Tokens don't operate in a vacuum and have no value unless granting access to something you can't (easily) get by other means

Pure payment solutions are proxies for local currencies given they feed back into the economy and thus have low upper limit of price (which bitcoin 1.0 might already have touched)

Crypto tokens that are accepted only by convention of a minority, i.e. without enforceable social contracts are not a good store of value (but have high maintenance costs, depend on civilization, e.g. electricity, storage, bandwidth, human governance, long-term investments)

Investment:

long-term appreciation tied to exclusive access to unique products and services (e.g. crowd equity with programmable governance rules, legal internet services, early bird access to prototypes, data intelligence; and is susceptible to a race for dominant design and network effects)

Sources

- 1) <http://www.quora.com/Is-the-cryptocurrency-Bitcoin-a-good-idea>
- 2) Joseph Wang - A Simple Macroeconomic Model of Bitcoin http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2394024
- 3) <http://www.slideshare.net/CoinDesk/state-of-bitcoin-2015>
- 4) overstock reported big sales 10th January 2014 <https://twitter.com/OverstockCEO/status/421682424976654336>
- 5) Tigerdirect announced on 23rd of January
<http://www.businesswire.com/news/home/20140123005942/en/TigerDirect-Major-Internet-Retailer-Accept-Bitcoin-BitPay#.VNviOkIVNPM>
- 6) <http://time.com/money/3658361/dell-microsoft-expedia-bitcoin/>
- 7) Merchant's accrued revenue according to CoinDek's "State of Bitcoin" slides, probably not bn but Mio. [sic!]:
2014 Q1: estimation 30% total in Q2 = 8.7 \$bn
2014 Q2: 29 \$bn (until June) delta = 20.3
2014 Q3: 86 \$bn. delta = 57
2014 Q4: 180 \$bn delta = 94
- 8) <https://blog.ethereum.org/2014/11/20/bitcoin-maximalism-currency-platform-network-effects/>
<http://suitpossum.blogspot.co.uk/2014/12/academic-bitcoin-research.html>
- 9) <https://transferwise.com>
- 10)
<https://bitcointalk.org/index.php?topic=798031.160> "Are there really any substantive guarantees that 1 ethercoin will get you 1 ethereum?? --> "Are you blind? Of course no"
- 11) <http://coinmarketcap.com/currencies/ethercoin/#charts>
- 12) <https://www.cryptocoinsnews.com/ethercoin-price-falling-are-investors-rightfully-disillusioned/>
- 13) [@PangeaPoker on NXT ... as an example for Gaming as a source of exclusively accessible goods:](#)
on great demand by the community
- 14) What about Chess players on Ethereum (they want certainty and transparency, cf. Vinay Gupta
https://www.youtube.com/watch?v=T6_30eKQeN8)
- 15) Lodging services running via <http://airlock.me>
- 16) EtherStarter, modular governance choices in future versions <https://github.com/dafcok/ethereum/tree/master/dapps/etherstarter>

source(s): []

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