

MANIFEST DESTINY: *Risk, Opportunity & Reward Around Digital Currencies*

Paradigm Shift: Accessibility, Transparency, and the Social Impact of Money

Moderator



Jeremy Estabrooks
Senior Legal Editor,
Finance Service,
Thomson Reuters



Christina Ayiotis, Esq.
CRM,
Cyber Consultant



Dr. Jan Kregel
Director of Research,
Levy Economics
Institute of Bard College



Jennifer J. Schulp
Director of Financial
Regulation Studies,
Center for Monetary and
Financial Alternatives,
Cato Institute

Paradigm Shift: Accessibility, Transparency and the Social Impact of Money:

Does Digital Currency level the playing field for the indigent or unbanked to transact with ease?

Jan Kregel



Some Hypothetical Benefits of Cryptocurrency

Easy Transactions

Security

Private Transactions

Outsized Speculative Gains

Hedge against Inflation

High Liquidity

24/7 market

Freedom of Transactions

- can be done autonomously without any third party, making the transaction free and free from any central control.

Cross-Border Payments

Portfolio diversification

Inclusive Financial System

More Industry Growth

The Cryptomyth

- Even if some people don't have access to traditional financial systems or fiat currencies, they can, with no limitation, get access to cryptocurrency, and all its benefits by participating and trading in cryptocurrency.
- To use cryptocurrency doesn't need any bank account or other financial account service to store it.
- A cryptocurrency functions similarly to cash, except that it lacks a physical form and instead relies on encryption to function.

The Crypto Inclusive Financial System

- Cryptocurrency also benefits people who don't have any access to the traditional financial system. One of the advantages of cryptocurrency is that it's mainly based on a decentralized system and doesn't require any authorization from a third party.
- Individuals don't require authorization from any financial institution or government to utilize the crypto environment.
- Moreover, people dealing in cryptos don't even require a bank account. Currently, you can find thousands of people without bank accounts, but that doesn't imply that they don't have access to cryptocurrency.
- Indeed, individuals can freely trade, buy, sell, and exchange cryptocurrencies with just about any crypto exchange or wallet system on their mobile phones.
- You can convert your smartphone into a digital wallet with these crypto exchange wallets.

How to Get Crypto without a financial relation

Trade Cash (physical Dollar Notes or Coin) for Crypto

- How do you get Cash?
 - From your Bank Deposit Account
 - If you don't have a Deposit Account?
 - Exchange labour, physical assets with someone who has a Deposit Account to trade for cash notes
 - From the Federal Reserve?
 - No, the Fed only gives Federal Reserve notes to Member Banks
 - Steal it from somebody who has a traditional deposit account!!
 - Make it yourself!!

Bottom line – you need a traditional Bank Account to get cash to get crypto

If you are financially excluded from the traditional system you are also excluded from the Crypto system

“if some people don't have access to traditional financial systems or fiat currencies, they cannot get access to cryptocurrency, or any of its benefits by participating and trading in cryptocurrency.

Where does Crypto Come From?

Is crypto substitute for cash? No

The paradigm story is that it is a substitute for Gold

- You get gold by owning a mine
- and hiring financially excluded labour to mine the gold
- (spoiler – historically even under the gold standard it was little used as payment)

Crypto can be “earned” by “proof of work” by a “miner” who receives a “block award” (initially 50 BTC)

You don’t need to own a gold mine

- But you do need a sophisticated computer system
- You also need an internet connection
- And a source of energy to run the computer system

Bottom line – Only miners can create their own Crypto for their own “work”

- Miners take the place of the traditional financial system

Why do we really need miners?

Because blockchain – to do DAO management/record keeping

To eliminate central authority

To insure anonymity/privacy

But all this is not really relevant to indigenous uses of the system who are excluded and unbanked

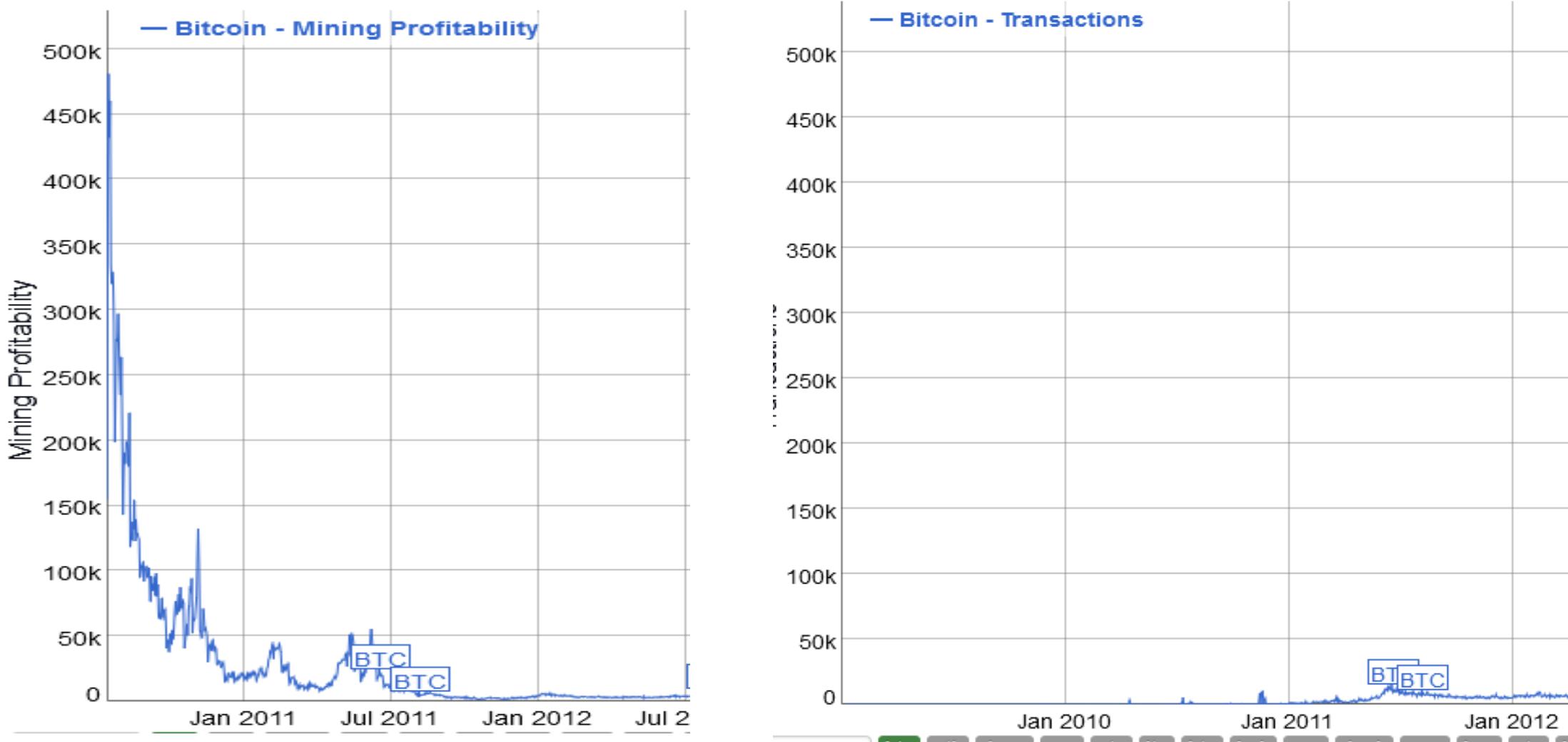
- They are not likely to have their accounts frozen or expropriated by some central authority

Where do bitcoin come from?

The first miner – (Nakamoto?) using (Patoshi?) created the first 50 BTC coinbase (miner block reward)

- The “work” was to validate a zero-BTC transaction (there weren’t any in existence yet) which was paying himself 50 BTC, recording it in Block 0 mined on January 03, 2009 at 1:15 PM EST
 - The miner(s) of this block earned a total reward of 50.00 BTC The reward consisted of a base reward of 50.00 BTC with an additional 0.00 BTC (\$0.00) reward paid as fees of the 0.00000000 BTC were sent in the block to the address of the miner.
- This was followed by the first block which actually confirmed a transfer of BTC: number 170 sending 10 BTC of the 50 BTC fee to Hal Finney on January 11, 2009 at 10:30 PM EST. The miner(s) of this block earned a total reward of 50 BTC .
- The next non-zero value transaction occurs in block 181 on January 12, 2009, followed sporadically by transactions in blocks 182, 183, 248, 545 and 546

Mining profits, trx per day, top 100/total



Where does BTC Go?

In addition to creating BTC with coinbase rewards

- Which are designed to eventually trend to zero as BTC reaches the maximum limit

Since latency depends on miners' speed in confirming transactions and validating blocks of transactions

Users may include a “Fee” for the miner of the successful proof of work to give miners an incentive to deal with their transaction first

- This is a sort of “pay to play” incentive
- The higher the fee the more rapid the transaction.

All BTC were initially created by miners and will eventually return to miners as transaction fees!

Bottom line: Crypto is a game for the “haves”-- not the “have nots”

If you are excluded from the traditional financial system you will be excluded from the Crypto system

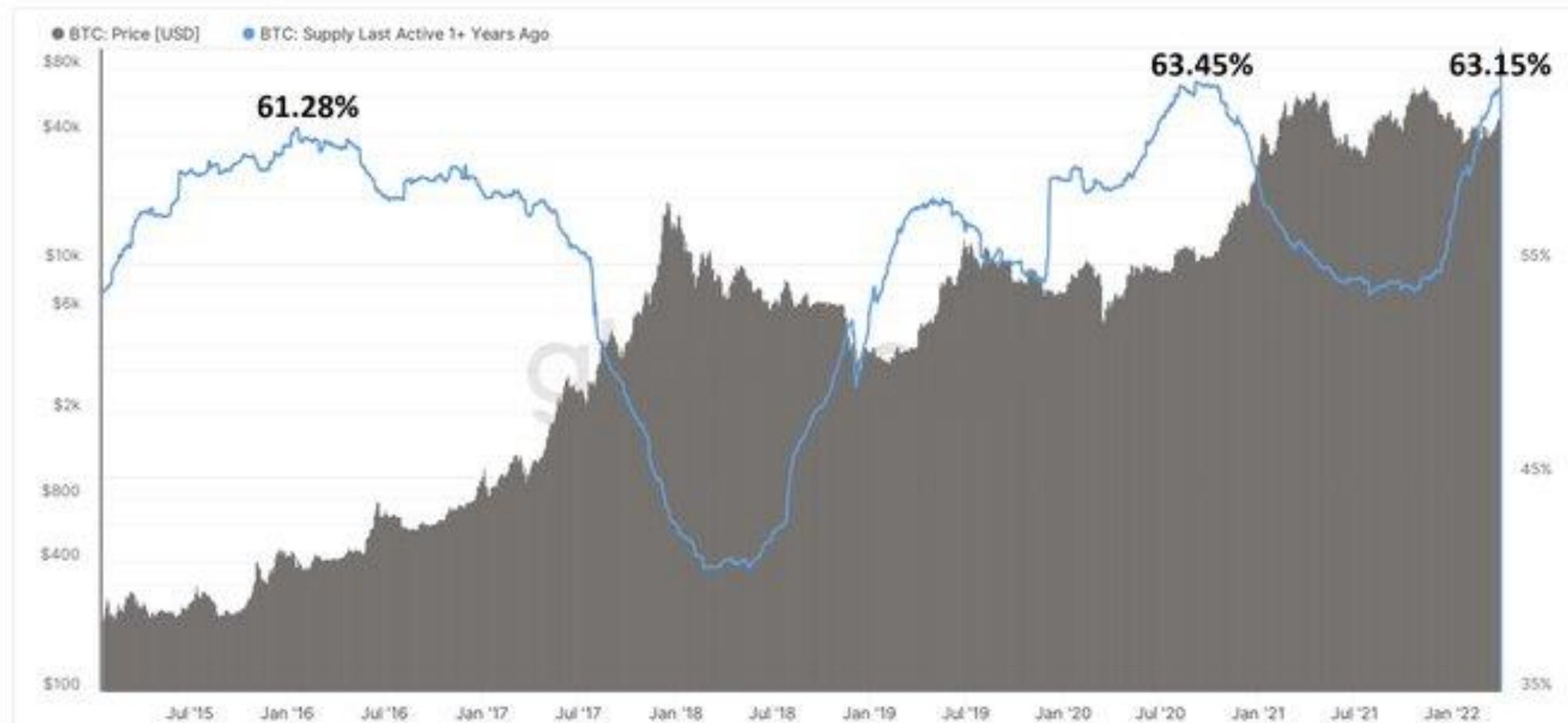
Can BTC be a transaction currency?

If not, can it survive?

- Supply must grow with transactions
 - But supply is fixed at 21 million by coinbase block reward protocol
 - there is no velocity of circulation
 - 3-4 million are estimated as frozen (keys lost)
 - 19 million have already been mined
 - Around 2/3rds of outstanding does not transact
- Strong deflationary bias in prices denominated in BTC
 - But this means a transfer of real income from BTC borrowers to creditors
 - And from latecomer buyers to existing holders
 - And from lower to higher wealth holders
 - Not exactly friendly to the unbanked
- Miners will require higher fees
 - Miners have a currency mismatch – they earn declining BTC fees but have costs in fiat
 - Would lead to even more miner concentration
 - Half of blocks are currently mined by top 4 mining pools
 - 51% concentration of work power (CPU)
 - If energy and other costs do not fall miners will cease to confirm transactions
 - Or change the source code to secure dominance of miners

The Hodl Throdl

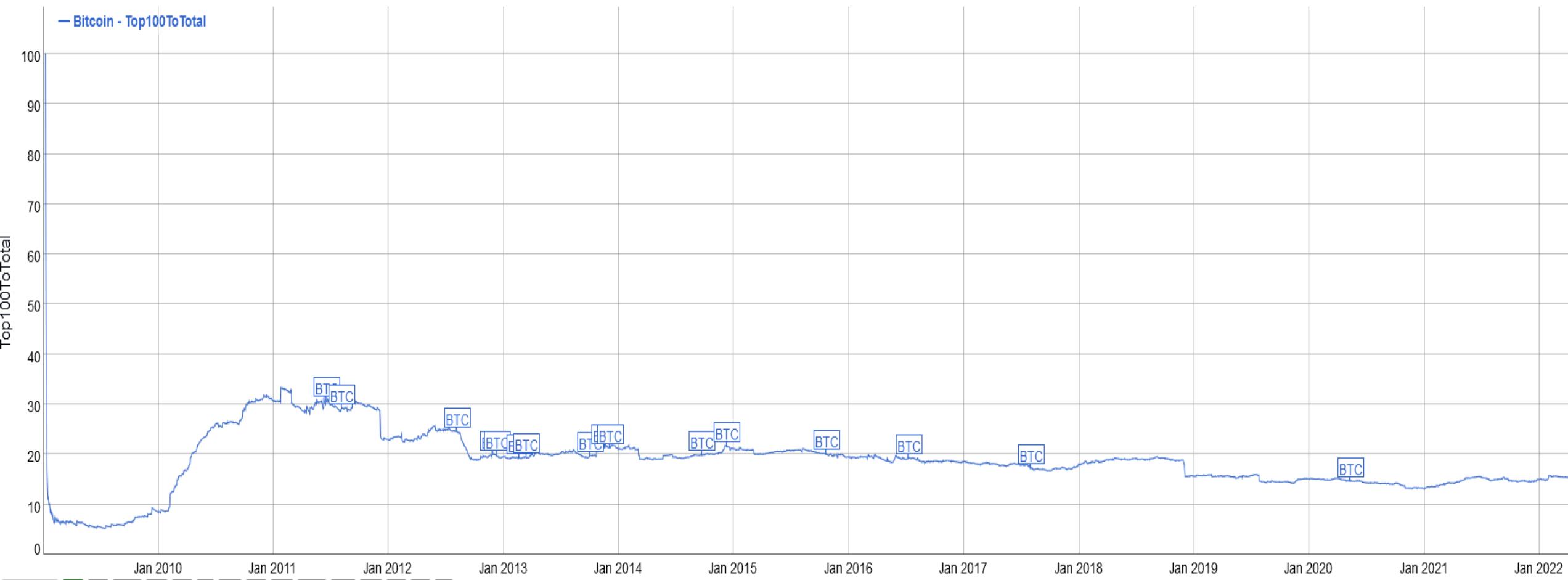
Supply not moved in at least 1 year



Bitcoin Top100ToTotal historical chart

Top 100 Richest Addresses to Total coins %

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Creating Money out of Nothing

This is not what Schumpeter had in mind

Stablecoins MMMFs

- Transaction Details Blockchain Tron Type Mint
- Amount 1,000,000,000 USDT (\$1,000,000,000 USD)
- Timestamp (Wed, 30 Mar 2022 14:43:15 UTC)
- Hash 193df027d669c1b9f4e1272966a029a35bc1dc42aa8f4953194c3ce512194def
- Address Tether Treasury (Exchange)
- TBPxhVAsuzoFnKyXtc1o2UySEydPHgATto

Cryptoverse Wildcat Banking

- Wildcat Banking in US Banknotes issued with no collateral
- Silvergate Bank, announced a \$205 million interest only term loan under its Silvergate Exchange Network Leverage program to MacroStrategy LLC, a subsidiary of MicroStrategy Incorporated secured by bitcoin held in MacroStrategy's collateral account with a custodian mutually authorized by Silvergate and MacroStrategy.
- MacroStrategy will use the loan proceeds to purchase bitcoins
- A BTC loan hedged with bitcoin

What about CBDC? Or a USTDC

Since Fed not geared up for individual account management

- current proposals (FRB Boston/MIT) to test logistics favors substitute Federal Reserve Notes and Reserve Deposits with digital accounts that supplement traditional banks Reserve accounts at the Fed.
- to get the CBDC you go through the same circus as getting cash
- Like national bank notes in the National Banking System

There used to be a systems to do this: The Post Office

There are also working systems based on mobile telephony – e.g. webtel.mobi

Since cash is furnished by the Treasury to the Federal Reserve Banks – why not have the Treasury/OCC do this directly?

- There is no “run” risk or solvency risk with a Government issue DC
- Who needs the Fed?
- Who needs the FDIC?

Paradigm Shift: Accessibility, Transparency and the Social Impact of Money:

Shifting While Protecting the Interests of the Unbanked

Christina Ayiotis

Executive Order on Ensuring Responsible Development of Digital Assets

MARCH 09, 2022

” . . Advances in digital and distributed ledger technology for financial services have led to dramatic growth in markets for digital assets, with ***profound implications for the protection of consumers***, investors, and businesses, including ***data privacy and security***; financial stability and systemic risk; crime; national security; the ability to exercise human rights; ***financial inclusion and equity***; and energy demand and climate change.

..

We must promote access to safe and affordable financial services. Many Americans are underbanked and the costs of cross-border money transfers and payments are high. ***The United States has a strong interest in promoting responsible innovation that expands equitable access to financial services, particularly for those Americans underserved by the traditional banking system, including by making investments and domestic and cross-border funds transfers and payments cheaper, faster, and safer, and by promoting greater and more cost-efficient access to financial products and services.*** The United States also has an interest in ensuring that the benefits of financial innovation are enjoyed equitably by all Americans and that any disparate impacts of financial innovation are mitigated.” (EMPHASIS ADDED)

<https://www.whitehouse.gov/briefing-room/presidential-actions/2022/03/09/executive-order-on-ensuring-responsible-development-of-digital-assets/>

Cryptocurrency & Entrepreneurship of the Unbanked—Protecting Investors

“The chair delineated four issues he would like to see his staff address.

- **Protecting retail traders in crypto** in much the same way they are protected in equities. As an example, the New York Stock Exchange is regulated in ways that a Coinbase or a Kraken are not, which provides retail traders there more protections.
- **Teaming up with the Commodities Futures Trading Commission.** Until crypto, commodities and securities didn't trade on the same venue, the agency's Scott Schneider explained to Axios. Because they trade side-by-side on crypto platforms in the form of tokens, though, the two regulators need to explore ways to work together.
- **Firewall custody of assets.** Crypto's platforms take custody of assets (actual cryptocurrency), while regulated equity exchanges do not. ***Crypto often gets stolen from such exchanges, putting investors at risk*** (with Canada's QuadrigaCX serving as one cinematic example). Gensler wants to explore rules around separating exchange and custody functions.
- **Separate market making out.** Regulated exchanges serve as a meeting place for buyers and sellers, but some crypto exchanges also do buying and selling in order to keep liquidity flowing. Gensler asked staff to look at whether separating these functions would be appropriate in crypto as well.

What they're saying: ‘New technologies come along all the time; the question is how we adjust to that new technology,’ Gensler said. ‘Crypto may offer new ways for entrepreneurs to raise capital and for investors to trade, but we still need investor and market protection.’”

Brady Dale, SEC head has four new questions about crypto AXIOS (April 4, 2022) <https://wwwaxios.com/sec-head-has-four-new-questions-about-crypto-cfbd989f-1ab2-46d8-9cab-1662d03dac46.html>

Cryptocurrency & Legal Services for the Unbanked –Access to Justice

Virginia State Bar Legal Ethics Opinion 1898

Accepting Cryptocurrency As An Advance Fee for Legal Services (DRAFT 020222)

“A lawyer may accept cryptocurrency as an advance fee for services yet to be performed. However, the lawyer must ensure that the fee arrangement is reasonable, ***objectively fair to the client, and has been agreed to by the client only after being informed of its implications*** and given the opportunity to seek the advice of independent counsel, all of which is confirmed in writing. In addition, if the lawyer accepts cryptocurrency as an advance fee, the lawyer must also take competent and reasonable security precautions to safekeep the client’s property.”
(EMPHASIS ADDED)

https://www.vsb.org/docs/1898_pub_cmnt_3.25.22.pdf

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