Bitcoin For Granddads

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Disclaimer: I am **not** a financial advisor and this is **not** financial advice. The views expressed in this presentation are my own and

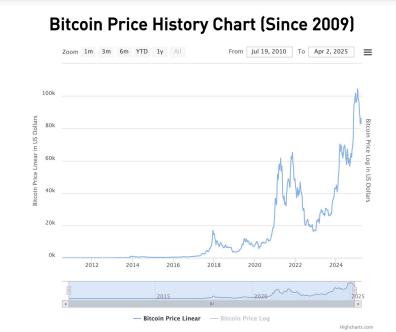
do not reflect those of any organization I am affiliated with.

What is Bitcoin?

Simply put, a software system

Basics

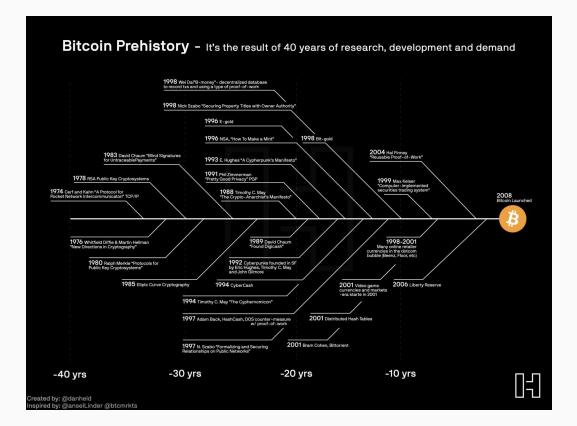
- Launched in January of 2009
- Created by a person or group under the pseudonym Satoshi Nakamoto
- Promises to be a self-policing monetary system operating outside of any central banking system or authority
- Only 21 Million tokens will ever be created
 - ~19.8M have been mined so far
- ~\$25 Billion transaction volume per day
- ~\$2 Trillion market cap



Current Price: \$84,720.64 Today: +2.82% +\$2319.60

Not the First Cryptocurrency!

Bitcoin was a breakthrough development in a history of "cryptocurrencies" or "e-cash" systems



And Certainly Not The Last

Others have tried to replicate Bitcoin's success with similar ideas.

Bitcoin



Bitcoin Cash



Ethereum

Ripple



Litecoin



Dash



NEC



NE



Qtum

BitConnect



Monero



Ethereum Classic



IOTA







OmiseGO

Cardano



Zcash



Lisk



EOS



Tether



Stellar Lumens



What is Bitcoin?

Simply put, a software system

Bitcoin - The Token

- The digital currency itself
 - What is bought, sold, traded
- The reward for mining

Bitcoin - The Protocol

These are the rules of the Bitcoin software system

• Defines how transactions are settled, the reward for helping this process (a.k.a. "mining"), and the broader parameters of the system

Bitcoin - The Network

- All of the servers around the world running the Bitcoin Core code
 - ~21,000 total nodes
- These are the "miners"

Bitcoin is a <u>hard digital currency</u> system that operates on a <u>decentralized peer-to-peer network</u> using <u>blockchain</u> technology to enable secure, pseudonymous transactions without the need for a central authority or financial intermediary.

Hard Money

Characteristics

- Scarcity Supply cannot be easily inflated
- Durability Maintains its physical properties over time
- **Divisibility** Can be divided into smaller units
- Portability Can be transported efficiently relative to its value
- Resistance to Centralized Control

Bitcoin is a *hard digital currency* system that operates on a *decentralized peer-to-peer network* using *blockchain technology* to enable secure, pseudonymous transactions without the need for a central authority or financial intermediary.

Blockchain Technology and a Peer to Peer Network

The Bitcoin Blockchain

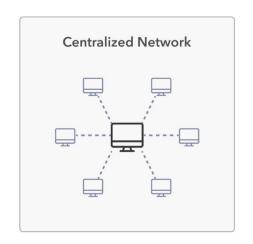
The Bitcoin Protocol defines the rules for settling transactions on the Bitcoin Blockchain. The rules are as follows:

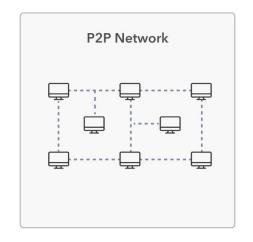
- 1. A user submits a transaction to the **Bitcoin Blockchain** (a distributed ledger) for the **Bitcoin Network** (all servers running the Bitcoin Core code) to verify
- 2. The protocol defines that this transaction will be one of many in a timestamped "block" in the blockchain
- 3. All of the Bitcoin network nodes, when the timestamped block is full, compete to solve a difficult math problem with brute force (computing power) which, when solved, will verify each of the valid transactions in the new block and reward the node that solves the math problem first with Bitcoin tokens (this is the process of mining)
- This repeats over time to create a transaction history which is mathematically impossible to forge or change

The Bitcoin Network - Peer 2 Peer

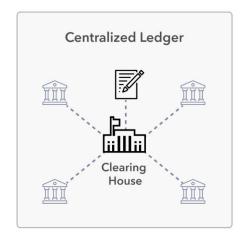
Peer to Peer is defined as communications between two or more individual entities rather than through an intermediary

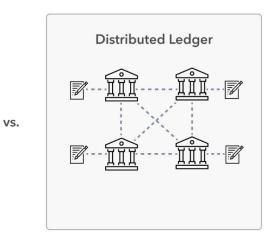
This is how the distributed ledger system works. Rather than having to trust a foreign third party, the protocol defining how Bitcoin transactions are settled provide a system that allows for peer to peer movement and transaction verification of a digital currency without having to trust a third party to verify.





VS.





How This Ties in to Mining

Because the problem each node is trying to solve is a brute force cryptographic puzzle, everyone has the exact same odds at the start.

By increasing how much compute power you have working to solve this problem, you increase your odds of being the first to find the solution which carries a reward.

This mechanism adds to the protection of the network via incentive.



Main Takeaways

- 1. Bitcoin is the *hardest* money system to ever exist
- 2. Bitcoin does not rely on centralized third party institutions to settle transactions, rather a peer to peer network which verifies transactions based on predefined rules which are mathematically impossible to break
- 3. Bitcoin is not just an abstract unit of currency—it is a system which can be defined by the network, the protocol, and the reward for contributing to the system's defense and success (which can be traded for things like dollars)

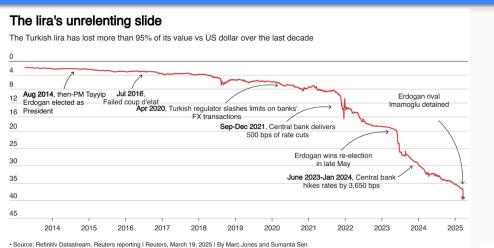
So Why Bitcoin? Who Cares?

Why Now?

In Short: Global Monetary Systems Are Eroding Public Trust

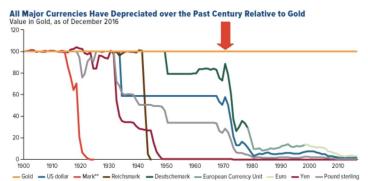
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Fiat Currencies





The USD is Not Exempt



Note: "As of December 2016. ""The 'Mark' was the currency of the late German Empire.

Originally known as the Goldmark and backed by gold until 1914, it was later called Papermark.

Source: Bloomberg, CFMS-Thimson Reuters, ICE Benchmark Administration, Metals Focus, World Gold Council, Global Investors



The Very Abridged History of the Dollar

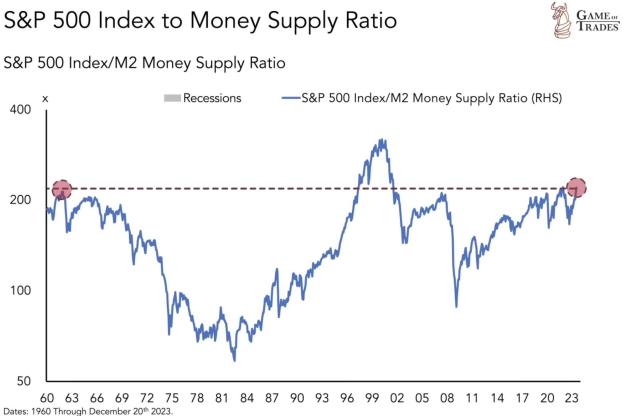
- 1792: US Coinage Act: USD is established with silver and gold coins at \$19.39/oz of Gold and a 15:1 Gold:Silver ratio
- 1834: The U.S. changed the gold-to-silver ratio to 16:1
- 1853: U.S. reduces silver content in coins due to rising silver prices
- 1863: U.S. **suspends gold convertibility** (resumed in 1879) and prints "Greenbacks" which immediately afterwards lose all value relative to gold-backed dollars
- 1907: Financial Crisis ushers in panic, leads to creation of the Federal Reserve
- 1934: Roosevelt's Gold Policy artificially pegs gold at \$30.67/oz, bans private gold ownership
- 1944: Post-WW2, Bretton Woods Conference—American leaders declare USD as world's reserve currency; becomes **only currency redeemable for Gold**
- 1973: Nixon ends dollar convertibility to Gold, ushers in inflationary period
- 1973-current: The dollar remains unpegged to valuable underlying asset and has no supply constraints, thus inflation has run rampant especially in the post-2008 era of QE

USD vs. GOLD Since Inception



The Result of Our Current Fiat System

The Gains Aren't Quite What They Seem...

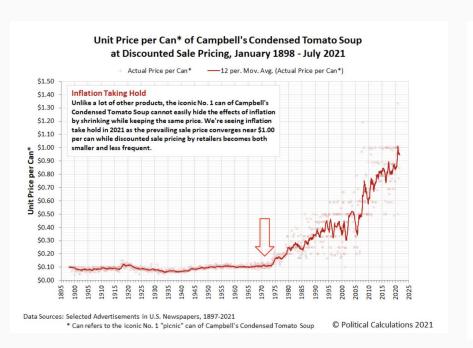


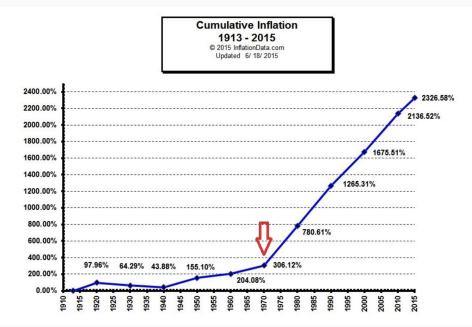
Source: Bloomberg Finance L.P., National Bureau of Economic Research, Game of Trades.

M2 data is through October 2023 and it's measured in trillion dollars. Ratio values for November and December use the October 2023 M2 number.

Takeaways

The way this system is set up, it fundamentally hurts the average global citizen and the gap widens between the haves (hard asset holders) and have nots.





Bitcoin is a Tool Through Which Individuals Can Protect Themselves Against this Monetary System

BTC Today

A maturing asset

- Recognized as a commodity by the SEC
- Held by major financial institutions everywhere
 - Being adopted by governments and financial institutions
 - Blackrock, Fidelity, J.P. Morgan, etc.
 - El Salvador, Czech Republic, U.S.A., etc.
- New financial tools (ETFs, stock offerings backed by bitcoin, etc.) are being introduced as new vehicles to connect traditional financial systems with Bitcoin and allow them to buy it indirectly and within their constraints
- The network is stronger and healthier than ever

Common Questions

- 1. "I read about Bitcoin hacks all the time, what do you mean it's secure?"
- 2. "Doesn't it use a ton of electricity? How is that sustainable? Can't be good for the environment..."
- 3. "What's Trump doing creating a Strategic Bitcoin Reserve? Didn't he launch his own cryptocurrency too before he took office?"
- 4. "What makes Bitcoin different than other cryptocurrencies? I heard Ethereum is better and faster."
- 5. "Isn't Bitcoin just for terrorists and criminals? Why would I want to use that?"

Where'd all my Bitcoin Go?

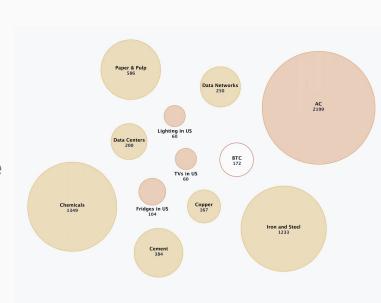
Bitcoin has never been "hacked". Institutions claiming to be responsible custodians of clientele's Bitcoin (FTX, Binance, Bitfinex, etc.) have been hacked and that Bitcoin has been stolen by bad actors and governments.

There are certainly ways you can protect yourself from this.

- SELF-CUSTODY!!!!
- Trusting the right institution

Bitcoin's Electricity Usage

- Place it into Perspective:
 - Currently, Bitcoin consumes ~35% less energy than traditional financial systems (Bank Branches, ATMs, Data Centers, Payment Networks, etc.)
 - Not including the physical waste that comes from a non-paperless system nor the military resources expended to defend this system
- The Value Proposition Justifies the Energy Cost:
 - Bitcoin provides a censorship-resistant, permissionless monetary network available to anyone globally without central control
- Bitcoin Incentivizes Developments in Low Cost Energy Production
 - Bitcoin mining seeks the lowest-cost energy sources, which increasingly means renewable energy
 - Examples of new energy sources BTC has incentivized:
 - El Salvador uses the heat from a Volcano
 - Exxon uses flared gas



Trump, the SBR and his memecoins...

The Trumps have done two notable things related to cryptocurrency, and one less notable but interesting to me:

- World Liberty Financial (a company with heavy ties to the Trumps) launched two
 memecoins, \$TRUMP and \$MELANIA, which gained notable popularity and has
 enriched the company and the holders of the memecoin
 - a. They have also launched a stablecoin, which is a type of cryptocurrency that is pegged to the USD which allows for seamless transaction settlement between traditional currencies and cryptocurrencies
- 2. Donald Trump signed an executive order establishing the creation of a Strategic Bitcoin Reserve.
 - a. Dictates that the U.S. Government will not sell any Bitcoin it currently holds and will explore ways to increase the number of BTC in the reserve in a budget neutral way

Why Should the U.S.A. Have a SBR?

- As a hedge against the possibility of the dollar losing its global reserve currency status
 - We're in the midst of a trade war that started well before Trump took office
 - Deals establishing settlement of Middle Eastern and South American oil trading in USD expiring
 - BRICS system expansion
- To maintain global fiscal dominance in a system with new variable: an asset that fits the characteristics of money with truly inelastic supply
 - Thought experiment: if everyone in the world decided tomorrow that the most important asset in the world is Bitcoin, there'd be 21M/8B people
 - The U.S.A. should be prepared in the event that this happens on any scale as matter of national security

Why BTC over other Cryptocurrencies?

Bitcoin is the only cryptocurrency that truly achieves decentralization, security, and scarcity without compromise. While others may claim similar benefits, only Bitcoin has proven itself through over a decade of uninterrupted operation with no central authority, no successful attacks on its core protocol, and an immutable monetary policy.

"BTC is for Bad Actors"

- Despite what this statement implies, not everyone has access to a banking or digital payment system
 - Ex. a rural farmer in India now has recourse to make digital payments without having to have access to a bank
- Who is a Bad Actor?
 - For millions of women in Africa and the Middle East, under the laws of their country, they are unable to open bank accounts without a man in their family's permission
 - BTC allows another way out and has been adopted by women in these countries
- Bitcoin isn't actually anonymous, it's pseudonymous. Every transaction is technically public and traceable in the distributed ledger.
- An abundance of other utility hopefully described by this presentation

Further Reading/Watching/etc.

Books:

- The Bitcoin Standard
- Softwar: A Novel Theory on Power Projection and the National Strategic Significance of Bitcoin
- Mastering Bitcoin 3rd Edition Programming the Open Blockchain

Media:

Money Electric (HBO Max)

Online Resources:

- https://wtfhappenedin1971.com/
- The Bitcoin Whitepaper
- Bitcoin.org