

BITCOIN

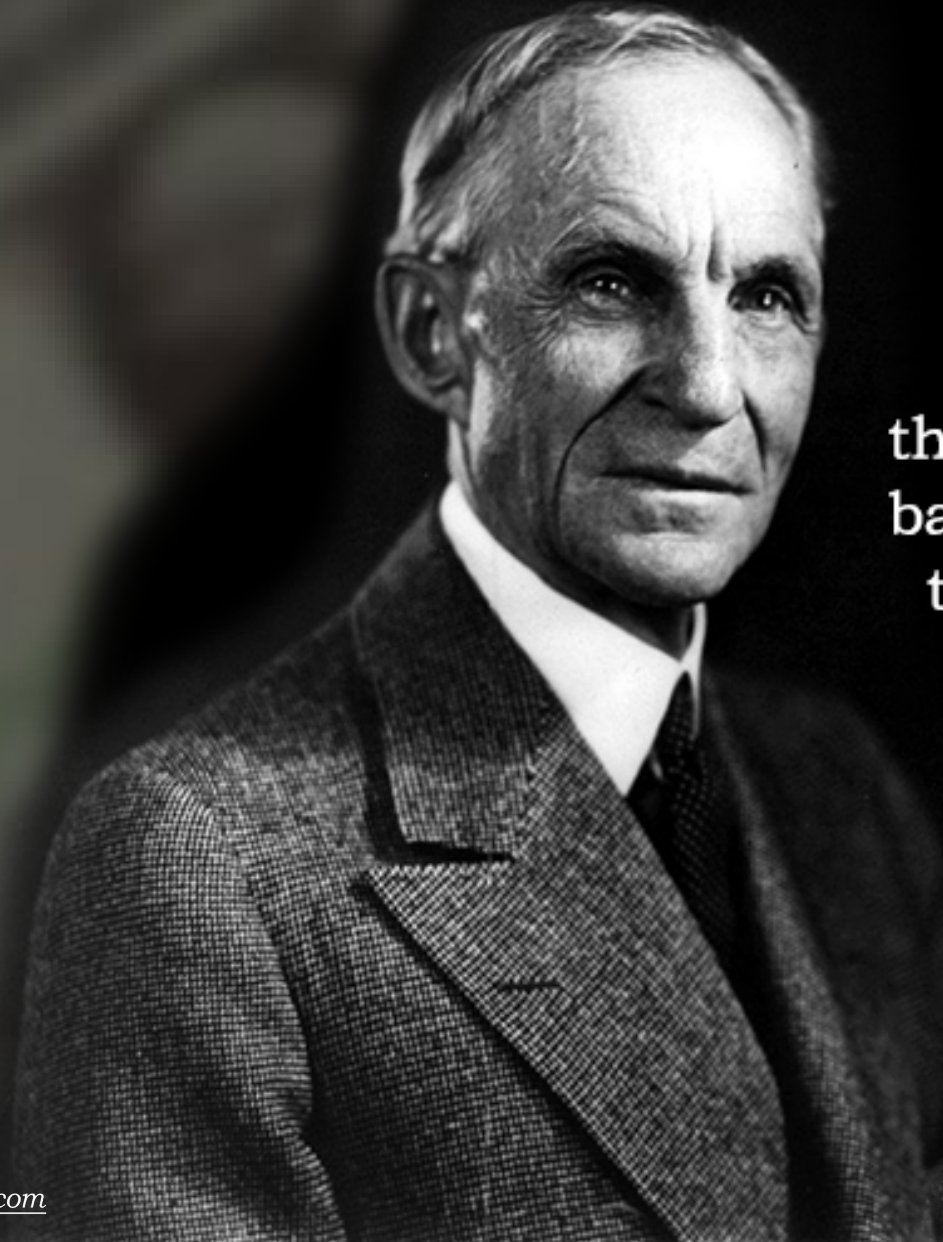
Fix the money, fix the world



Part 1: Why We Need Bitcoin



Our Money is Broken



“It is well enough that people of the nation do not understand our banking and money system, for if they did, I believe there would be a revolution before tomorrow morning.”

Henry Ford

What is Money?



Money = anything people obtain *not* for its own sake, but with the aim of exchanging it for something else (i.e., medium of exchange)



Good vs Bad Money



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What makes good (or bad) money?



Good vs Bad Money



What makes good (or bad) money?

Good money is...

1. Scarce
2. Recognizable
3. Fungible (individual units interchangeable)
4. 'Salable' across scale, space, and time



Good vs Bad Money



What makes good (or bad) money?

Good money is...

1. divisible/groupable ('salable' across scales)
2. easy to transport ('salable' across space)
3. a good store of value ('salable' across time)



Range = 10^4



Good vs Bad Money



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=

1850: 1 oz gold = \$18.93

2021: 1 oz gold = \$1823.04

Store of Value



To be a good store of value, money must be

1. Physically stable
2. (Relatively) Fixed supply



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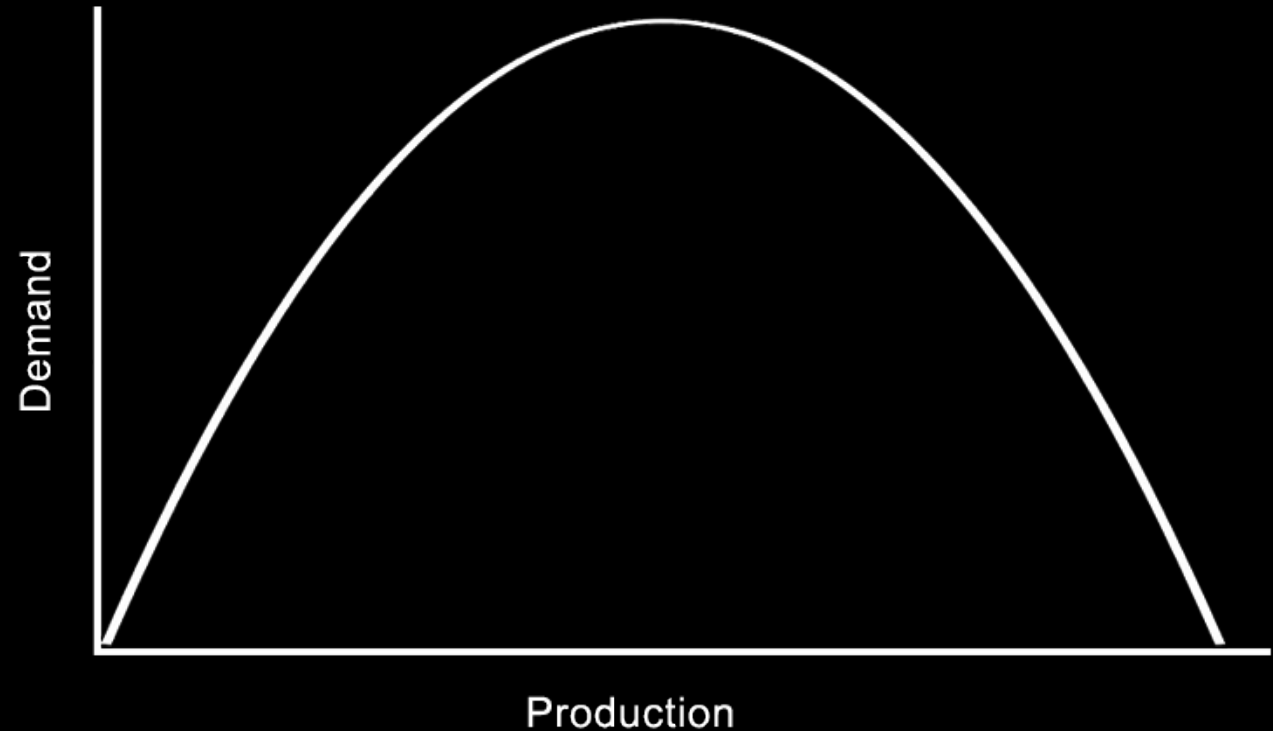


Store of Value



To be a good store of value, money must be

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The supply of copper is *not fixed* and will *increase* to meet demand until demand falls

Store of Value



To be a good store of value, money must be

1. Physically stable
2. Fixed supply



Even worse... copper has a multitude of industrial uses and is thus *consumed*

Store of Value



- For 5 thousand years, gold has served as an excellent store of value
- It is durable
- It cannot be created, only mined
- Mining gold is arduous, supply cannot quickly accelerate to meet demand; rate of production is about 2% growth annually

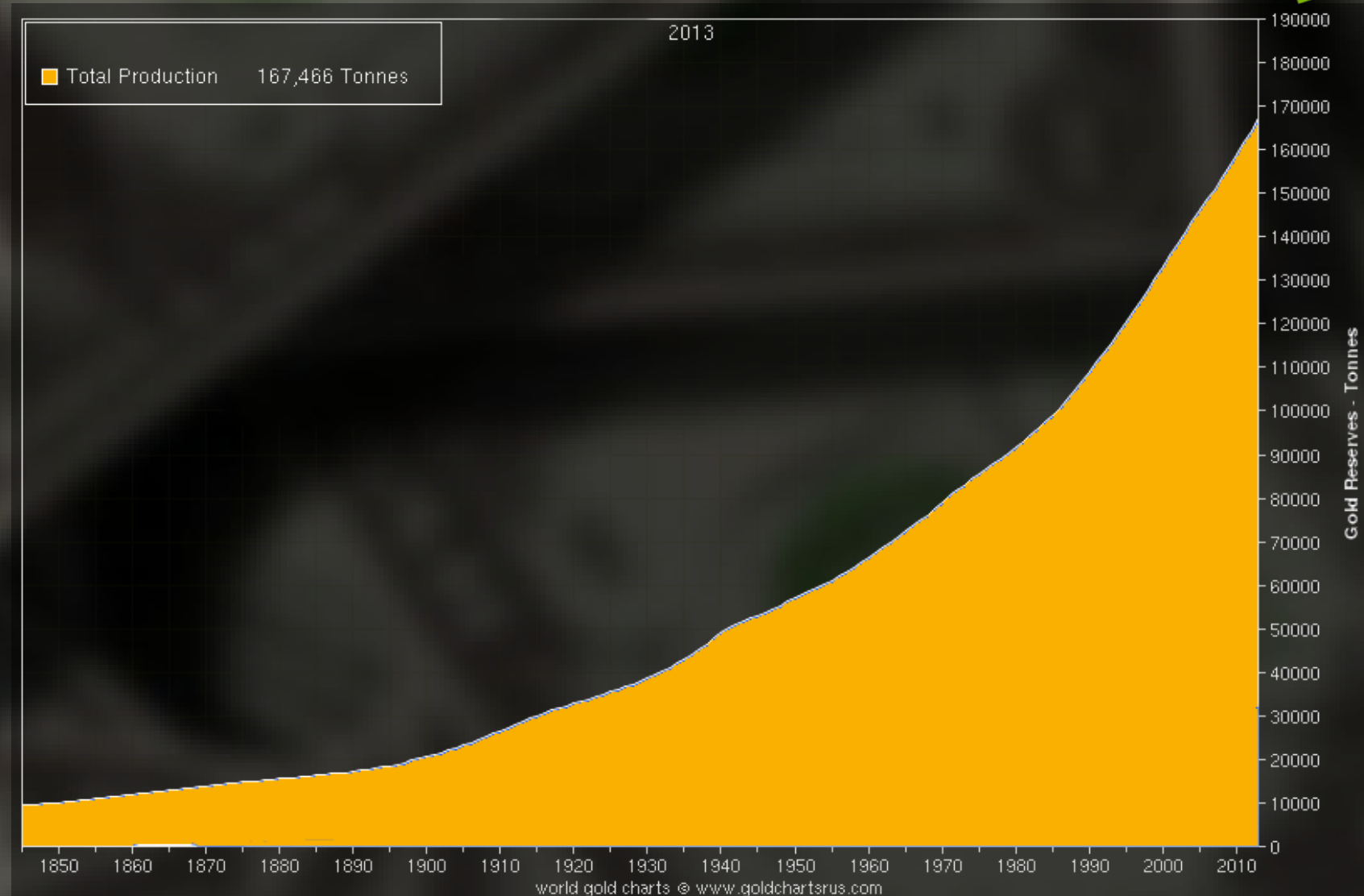


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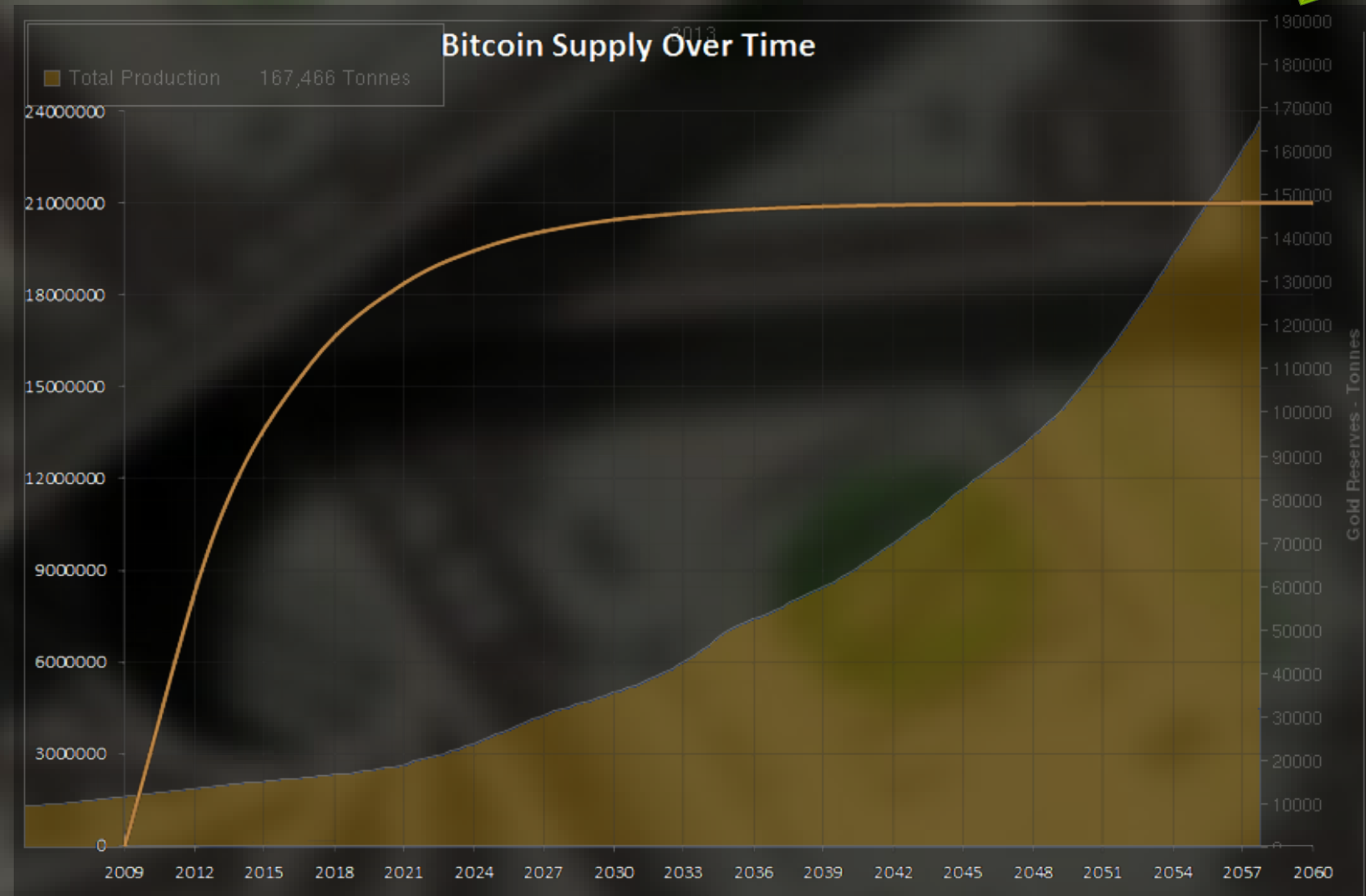


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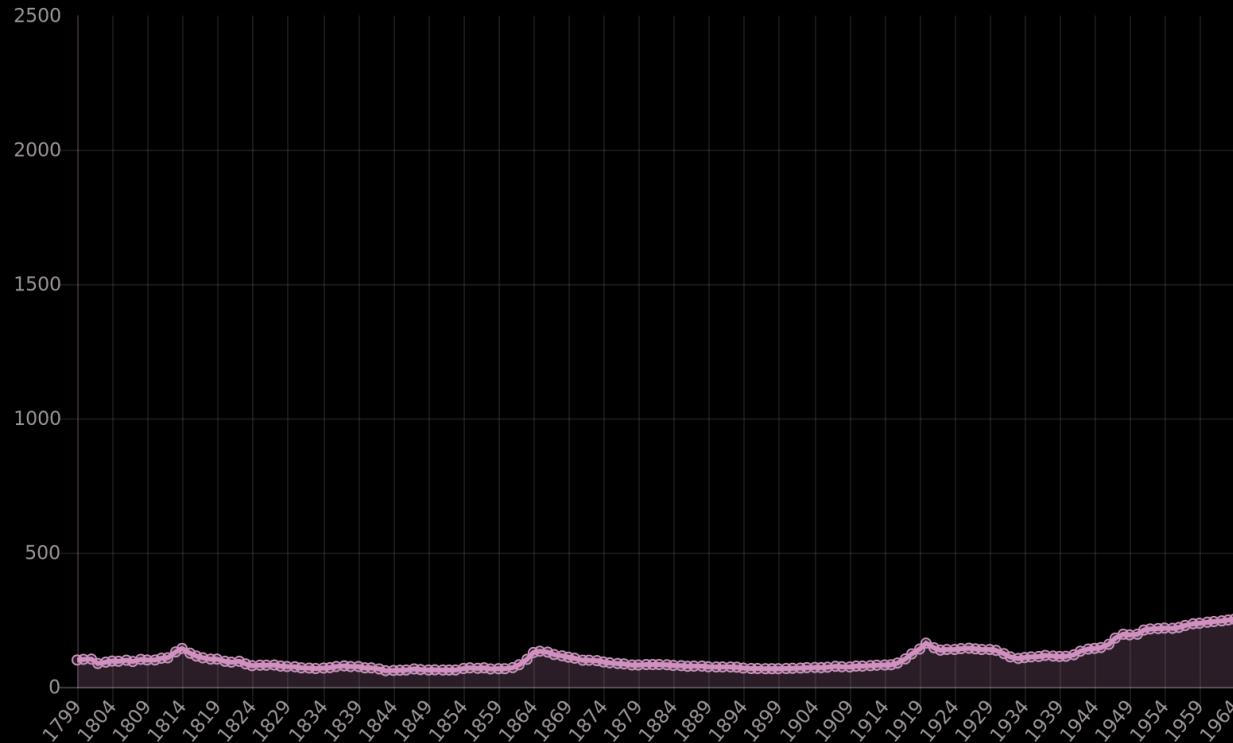
The Gold Standard



- The US dollar *used to be* backed by gold
- This kept the value of the \$\$ stable (salable over time) and made the \$\$ a good store of value



Buying power equivalent for \$100 in 1799



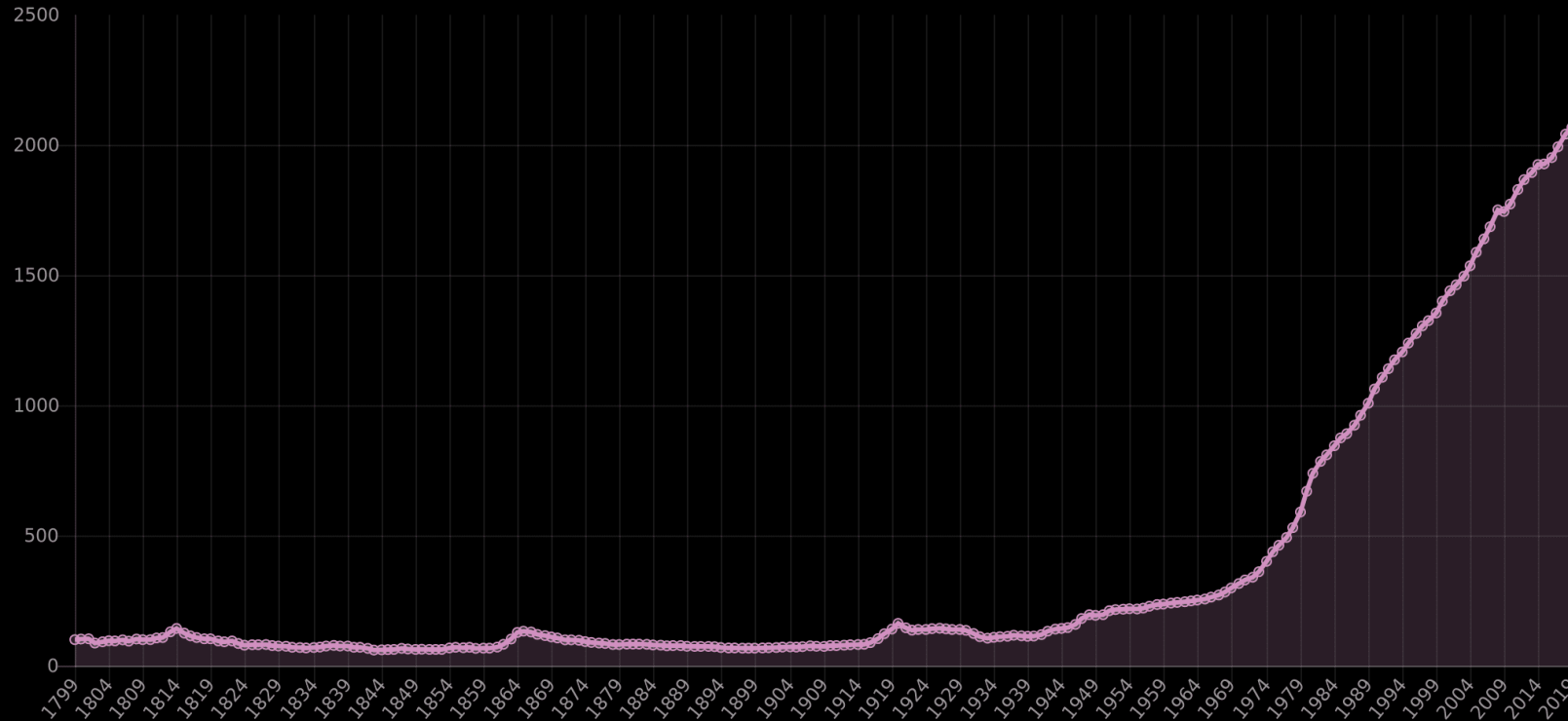
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On August 15, 1971 the US abandoned the gold standard by order of Richard Nixon

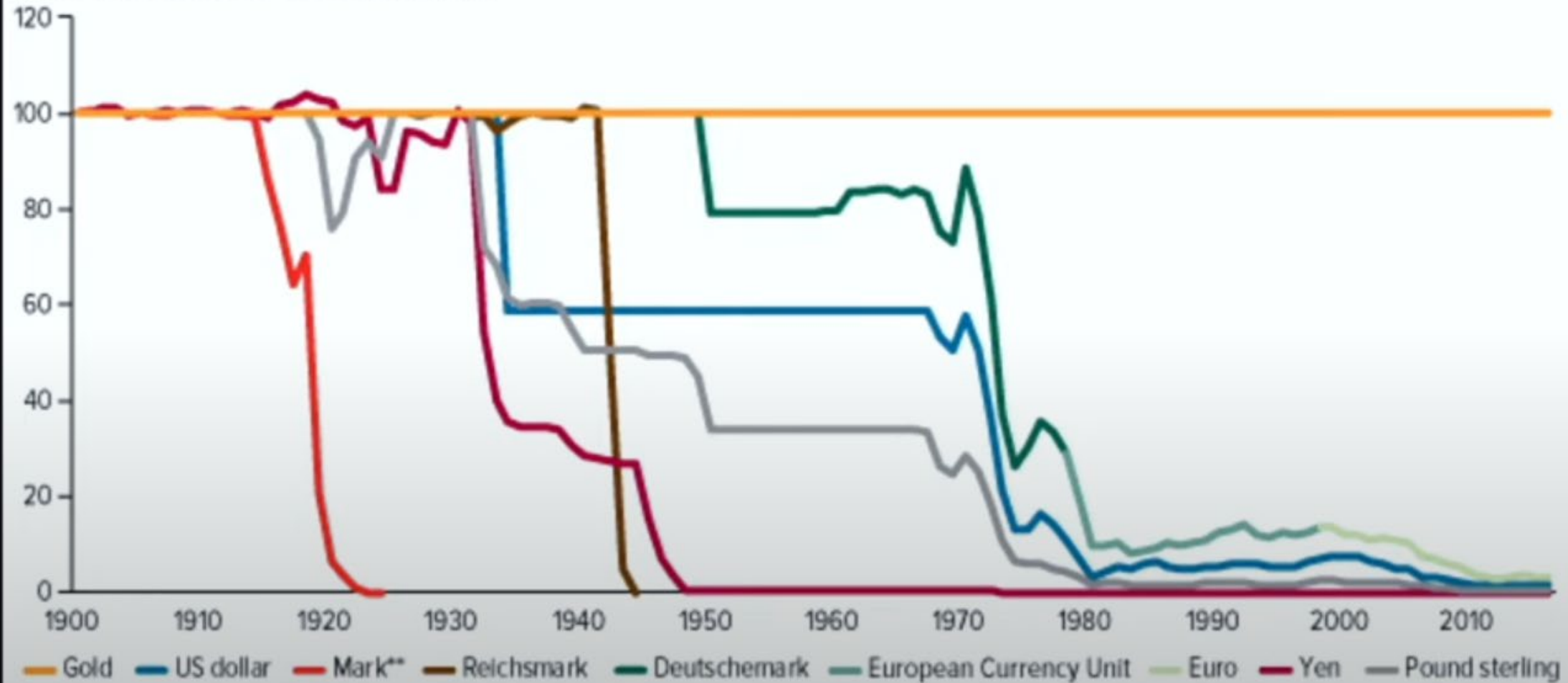
The US Dollar officially became **fiat money**

Gold vs Fiat



All Major Currencies Have Depreciated over the Past Century Relative to Gold

Value in Gold, as of December 2016



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.

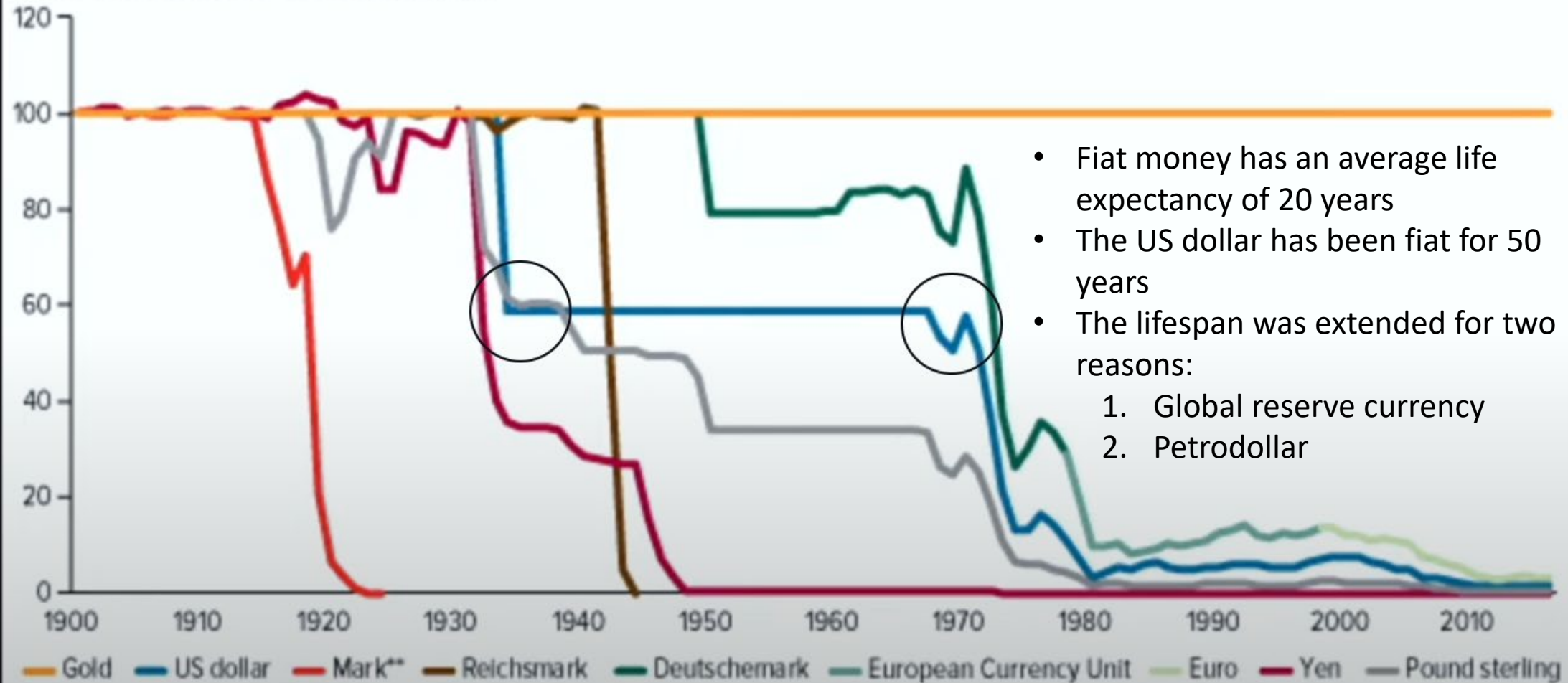
Source: Bloomberg, CFMS-Thimson Reuters, ICE Benchmark Administration, Metals Focus, World Gold Council, U.S. Global Investors

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Inflation



- 1/3 of all dollars in existence were printed during COVID
- The Feds have printed over \$10 trillion since 2008 (75%)
- Interest rates are at or near 0% (negative in Europe)
- Hyperinflation is imminent



Inflation



College tuition = \$1,500 in 1971

College tuition = \$35,000 in 2021

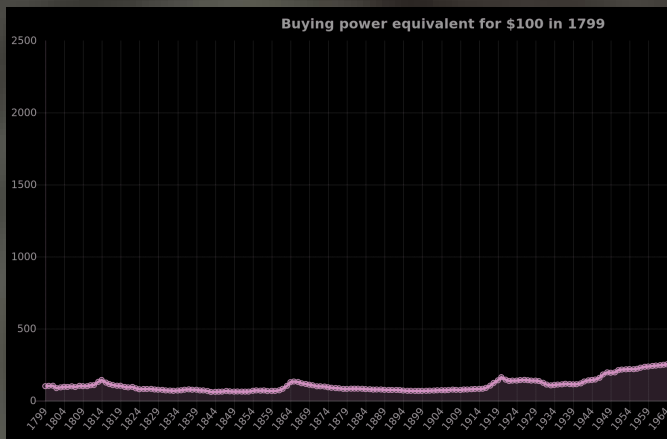


Inflation



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INFLATION SILENTLY ROBBING YOU

M CryptoManiaKs

20 \$ 20

1980 2000 2022

1BTC 1BTC 1BTC

2011 2018 2030

Inflation



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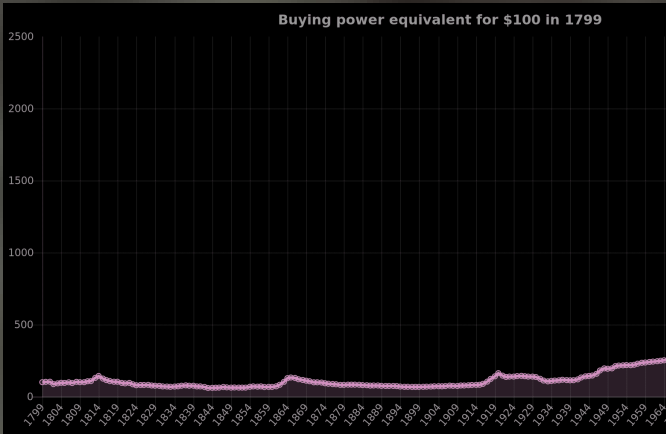
INFLATION
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1980 **2000** **2022**

1BTC **1BTC** **1BTC**

2011 **2018** **2030**



Inflation



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College tuition = \$35,000 in 2021

Money represents your time.

Inflation = theft of your life.

You work hard for your money.
When bankers can simply print
money with no effort, it steals
your time & work from you.



Inflation

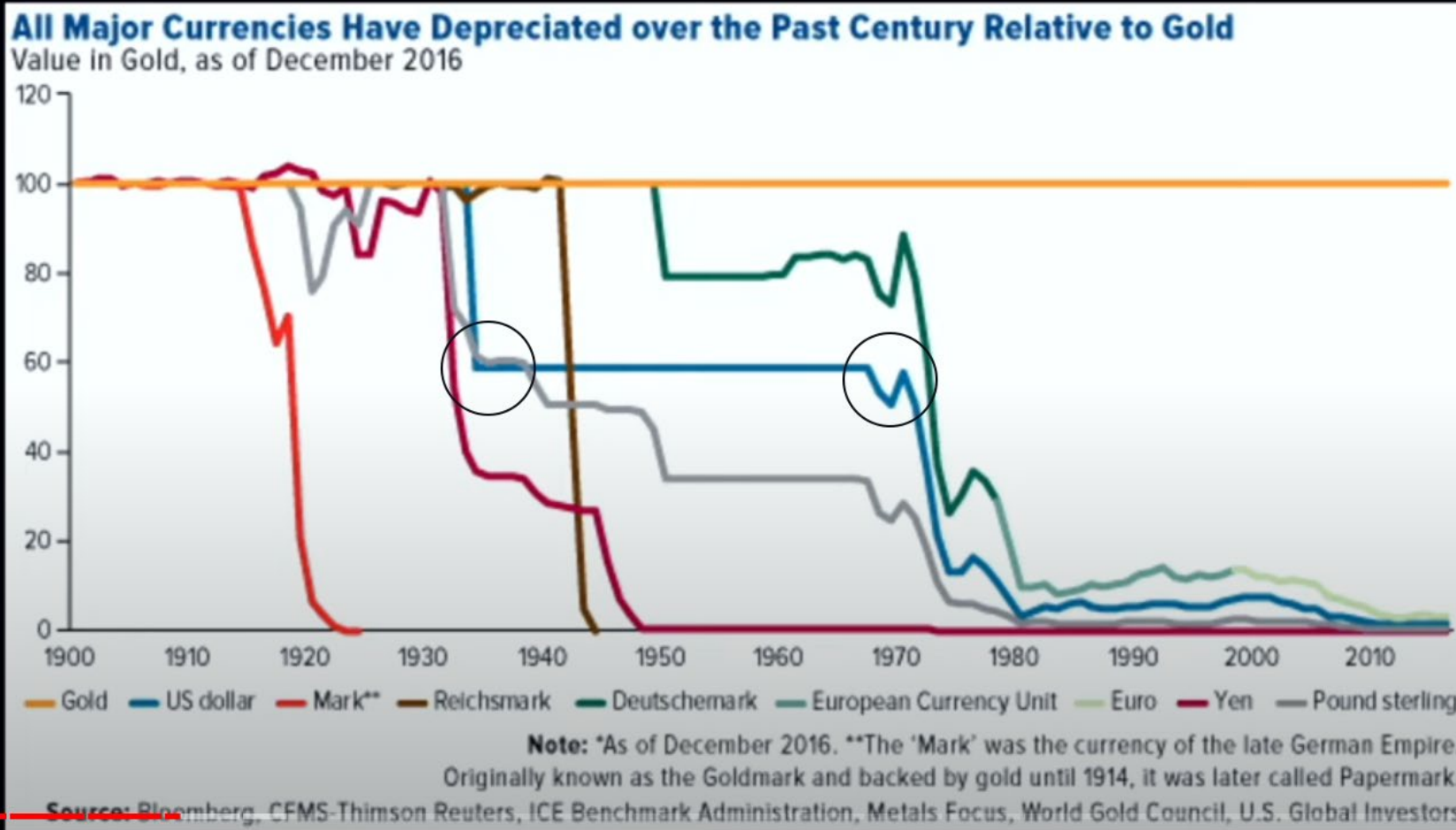


- Fiat money is immoral
- For example: should you save and buy a house with cash, or assume a debt to buy the house?
- Given inflation (monetary expansion), it is logical to assume the debt
- Our entire economy is now built on debt

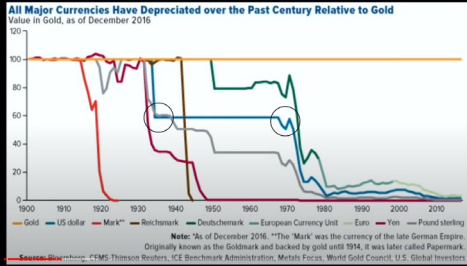
Inflation



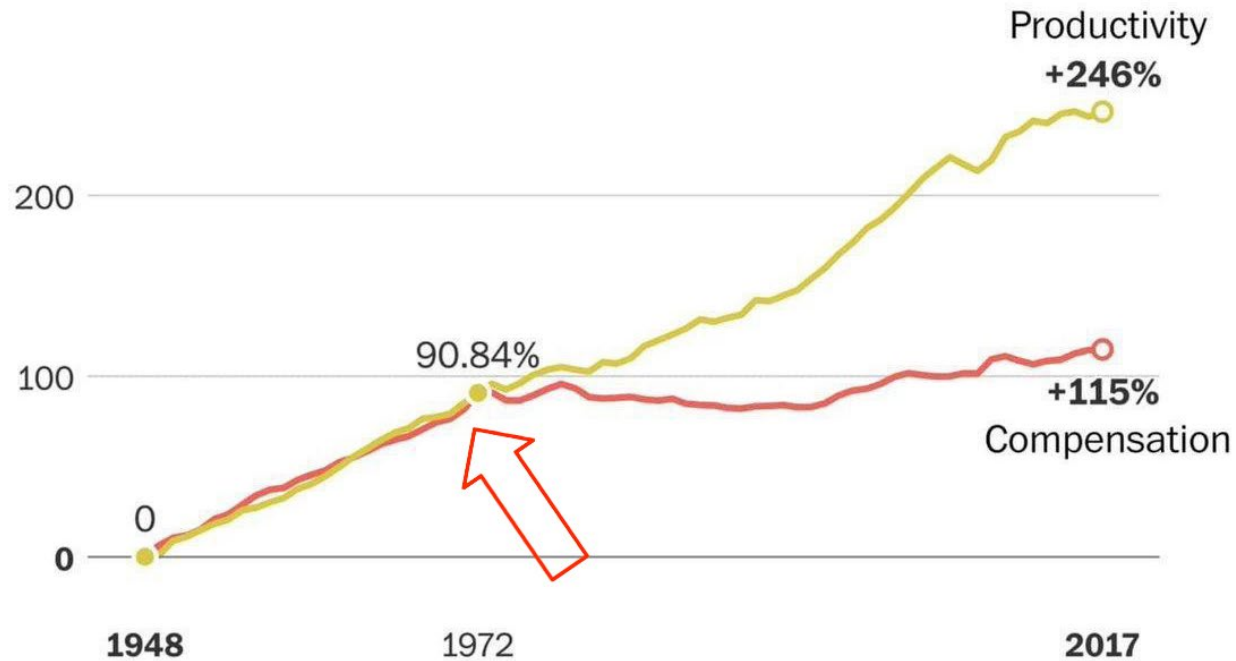
- Proverbs 22:7 The rich rule over the poor, and the borrower is slave to the lender
- Romans 13:8 Owe no one anything, except love...
- Proverbs 22:26 Be not one of those who give pledges, who puts up security for debts
- Proverbs 23:22 A good man leaves an inheritance for his children's children, but the sinner's wealth is laid up for the righteous
- Exodus 22:25 If you lend money... you shall not be like a moneylender (banker) to him, and you shall not exact interest from him.
- Matt 6:22 *And forgive us our debts, as we forgive our debtors*



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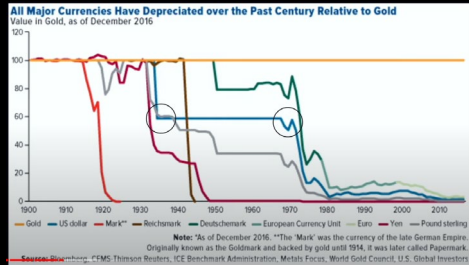
Growth in productivity and hourly compensation since 1948



Note: Compensation includes wages and benefits for production and non-supervisory workers

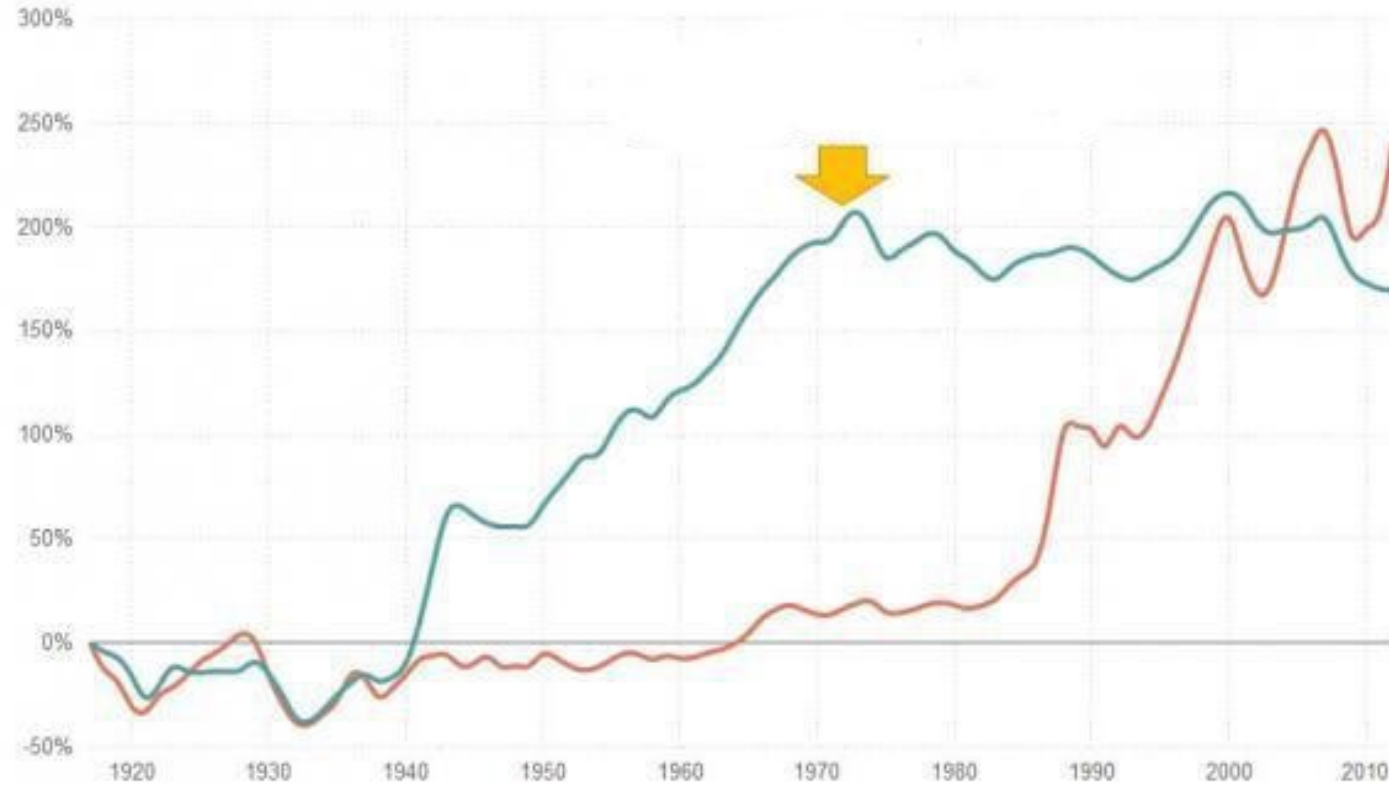
Source: Economic Policy Institute

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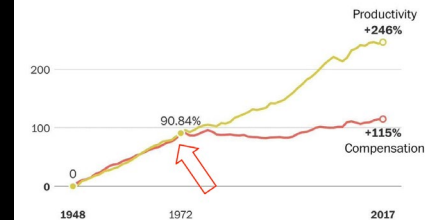


Income Growth, From 1917-2012

Top 1% Of Earners Bottom 90% Of Earners



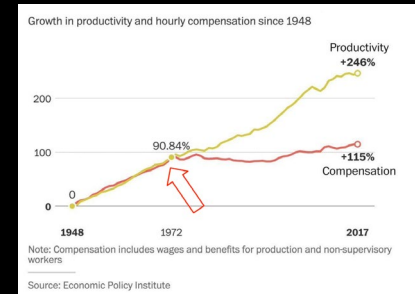
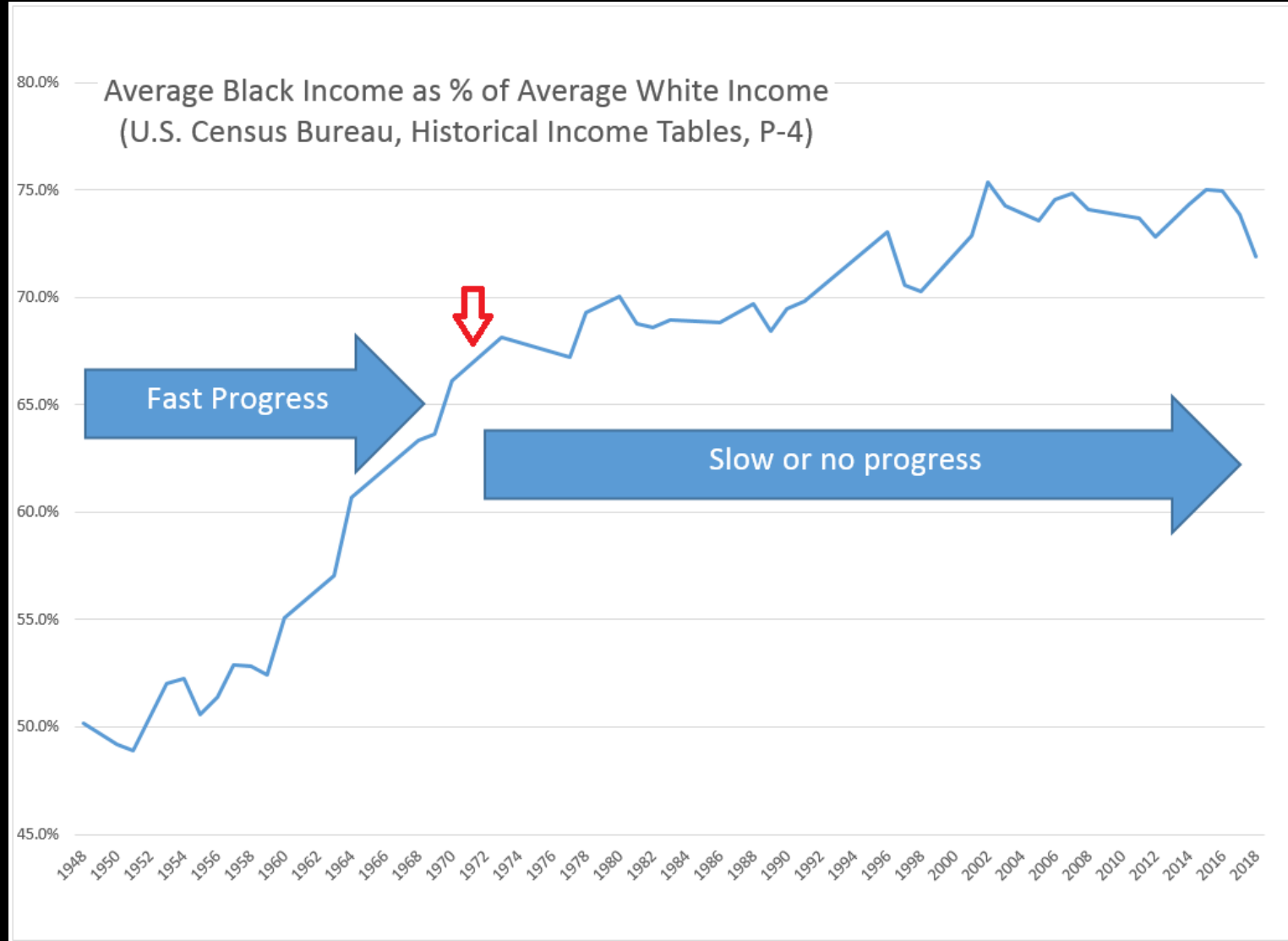
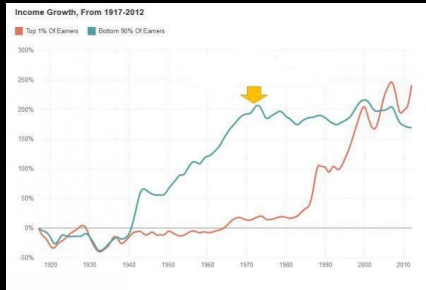
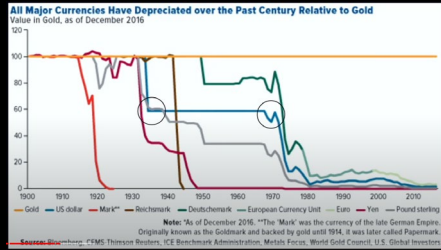
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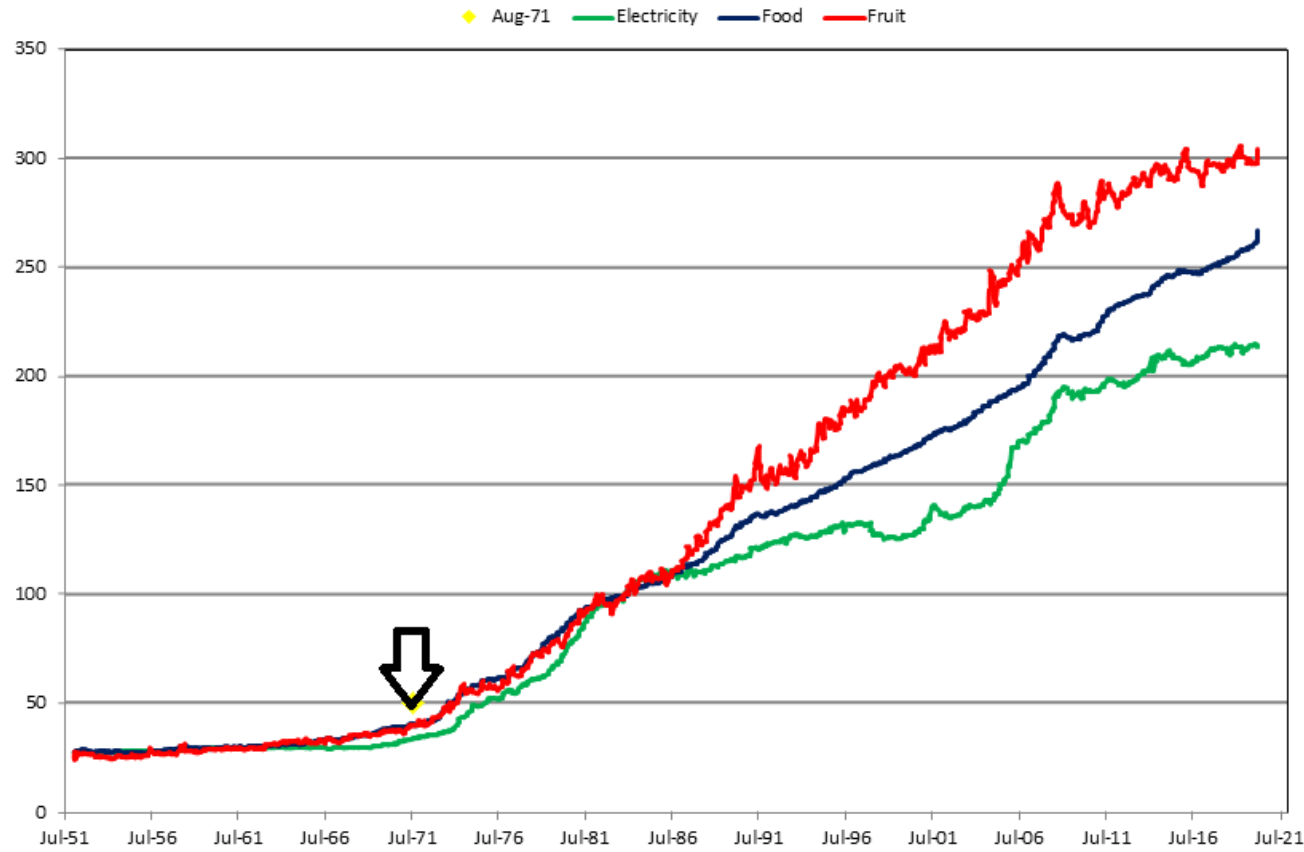
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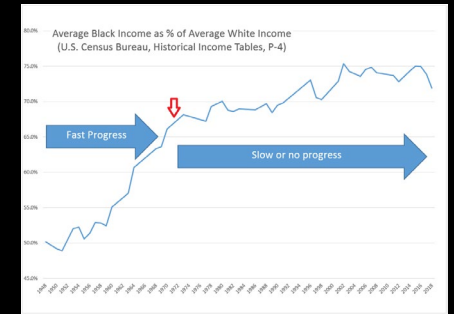
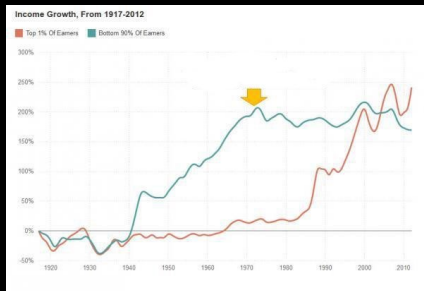
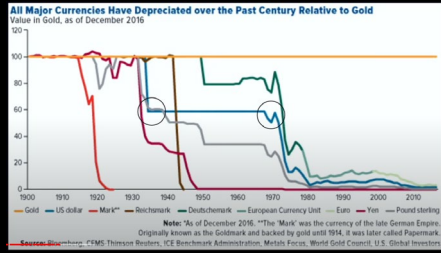
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Electricity, Food and Fruit CPI (St. Louis Fed Data)

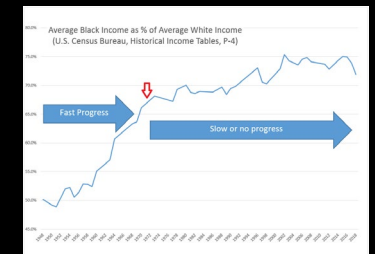
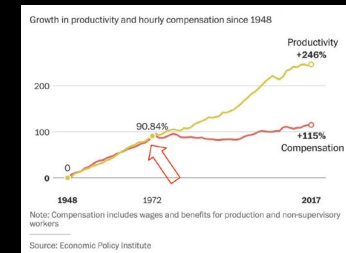
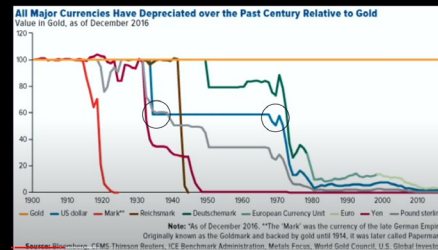
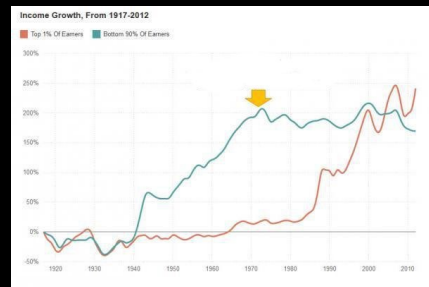
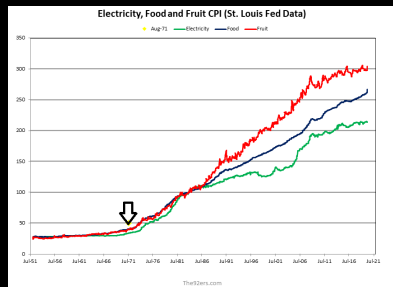
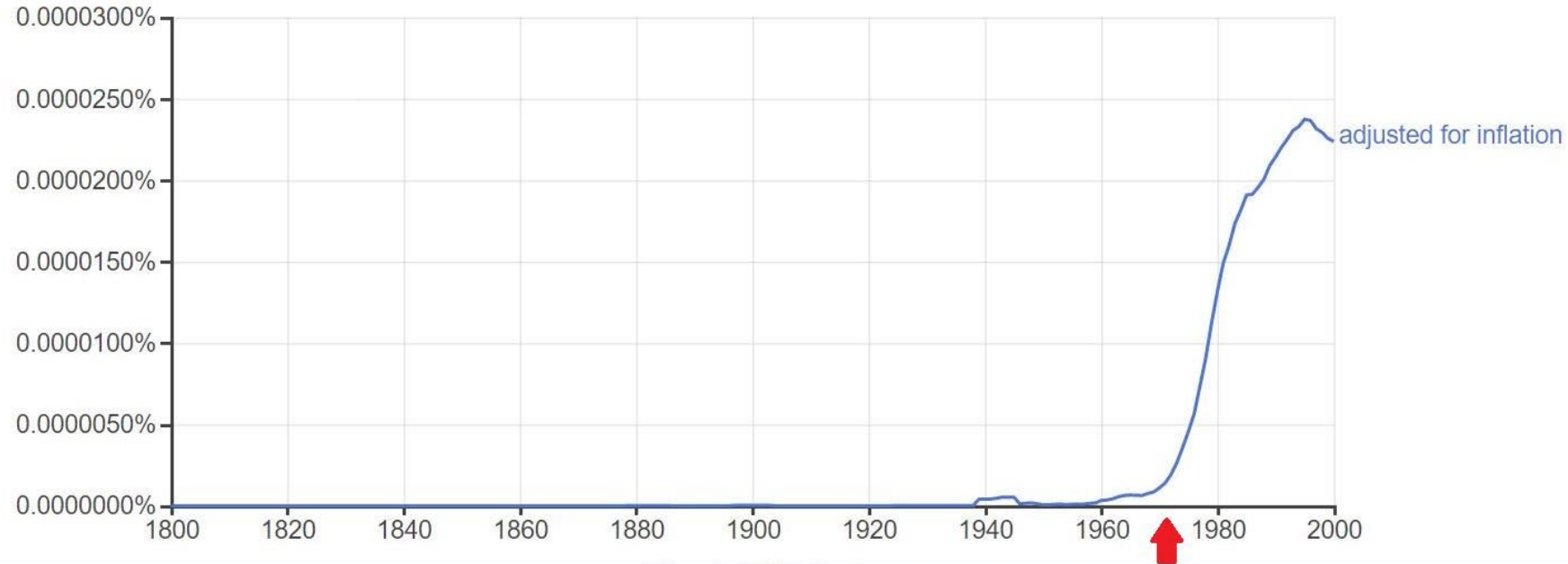


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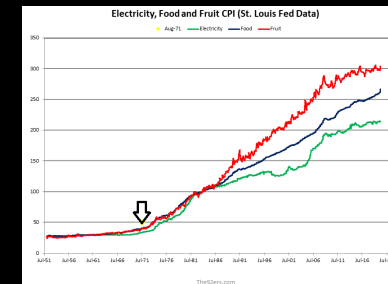
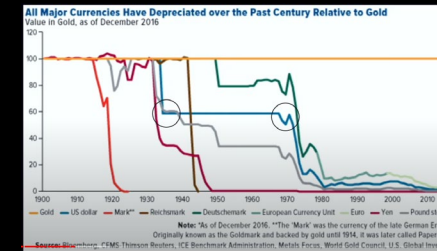
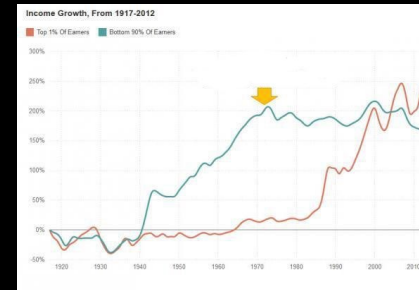
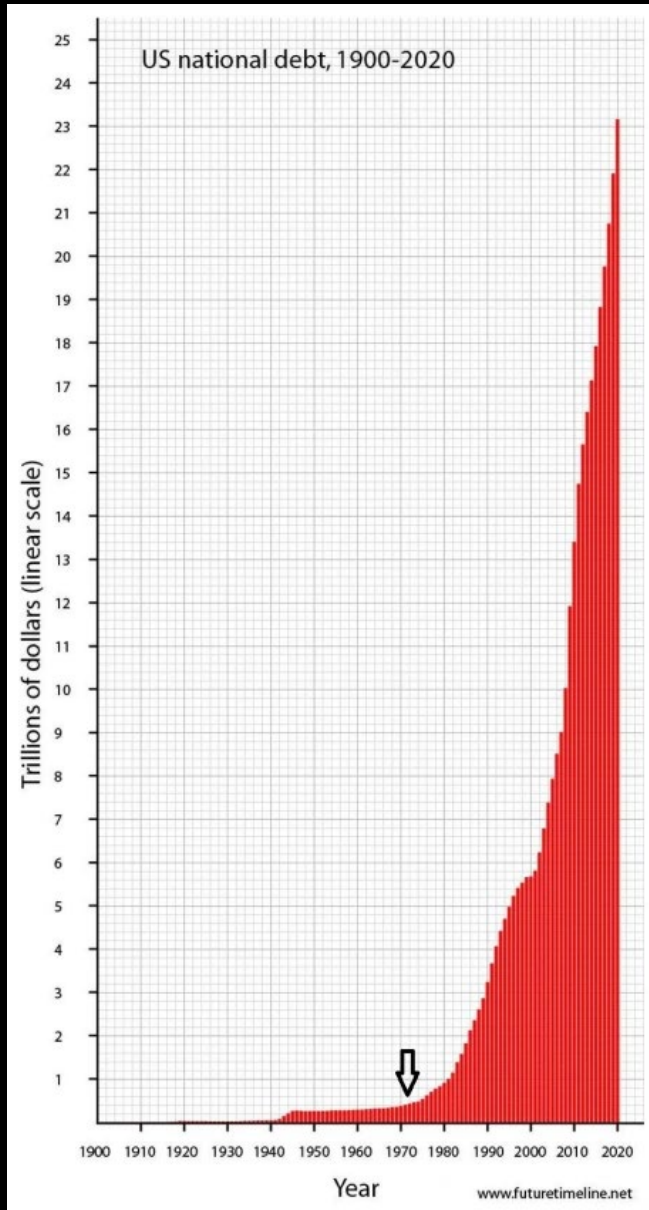




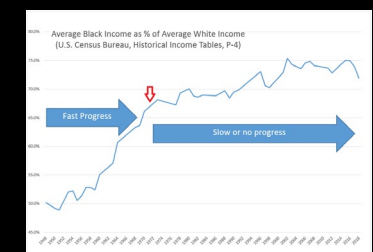
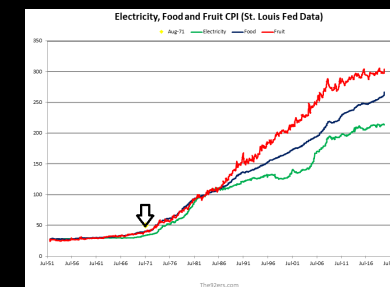
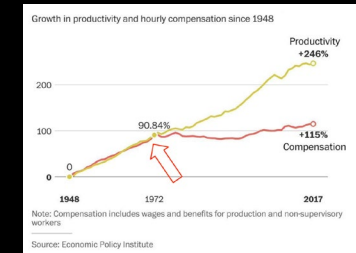
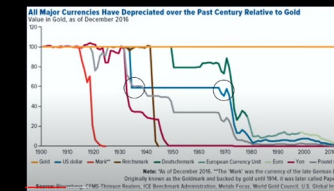
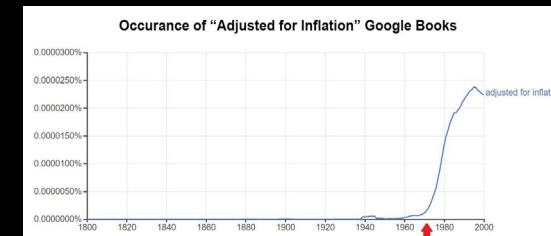
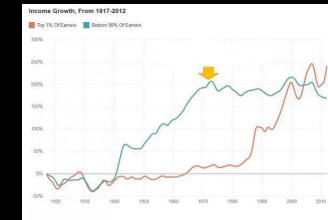
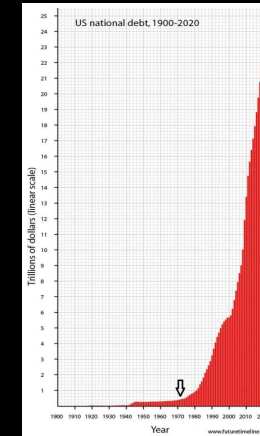
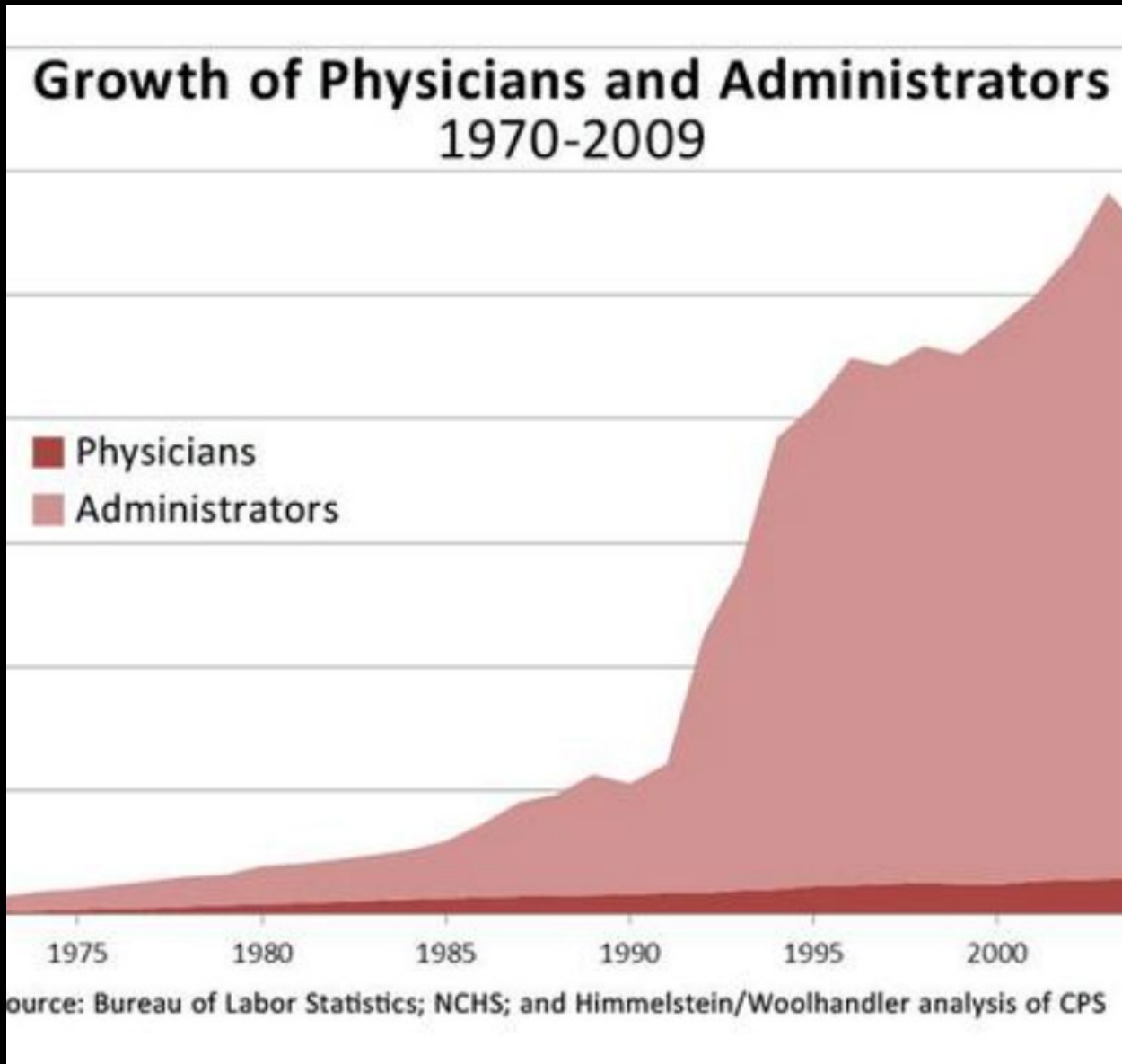
Occurance of "Adjusted for Inflation" Google Books



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The 'Deep State'



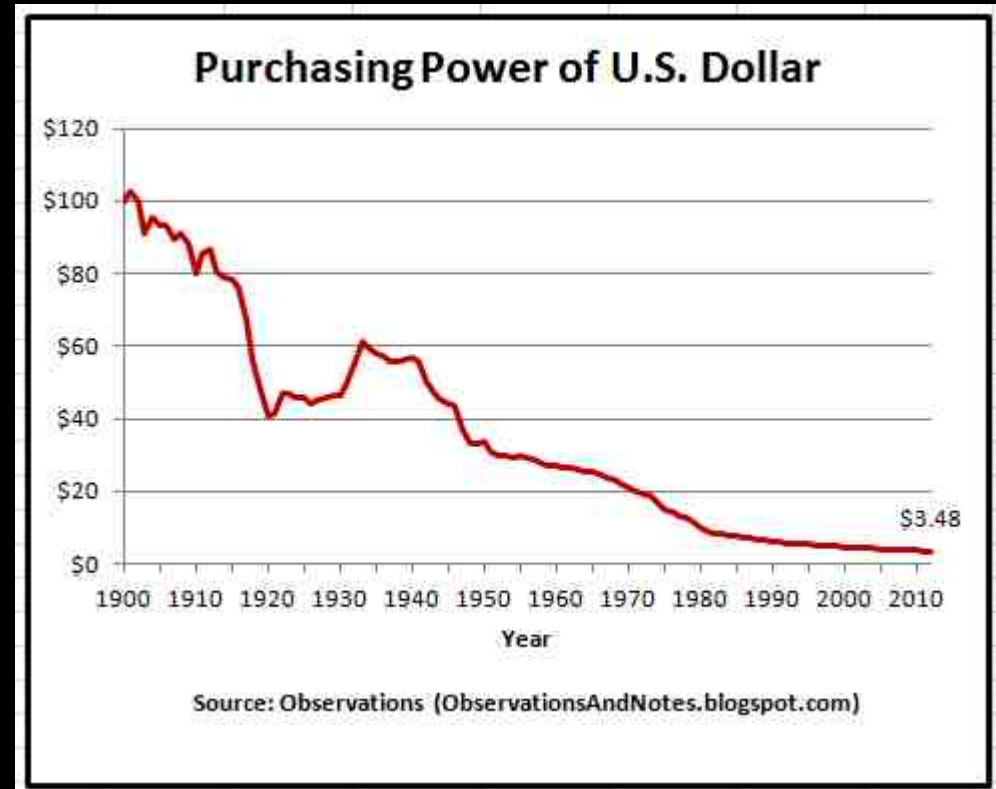
Central Banks



"I believe that banking institutions are more dangerous to our liberties than standing armies..."

If the American people ever allow private banks to control the issue of their currency... the banks and corporations that will grow up around them will deprive the people of all property until their children wake up homeless on the continent their Fathers conquered."

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A homeless encampment in San Francisco (2016)

Part 2: Bitcoin Fixes What Banking Has Broken



What is Bitcoin?



Digital Money



Bitcoin: A Peer-to-Peer Electronic Cash System

Satoshi Nakamoto
satoshin@gmx.com
www.bitcoin.org

Abstract. A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending. We propose a solution to the double-spending problem using a peer-to-peer network. The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.

1. Introduction

Commerce on the Internet has come to rely almost exclusively on financial institutions serving as trusted third parties to process electronic payments. While the system works well enough for most transactions, it still suffers from the inherent weaknesses of the trust based model. Completely non-reversible transactions are not really possible, since financial institutions cannot avoid mediating disputes. The cost of mediation increases transaction costs, limiting the minimum practical transaction size and cutting off the possibility for small casual transactions, and there is a broader cost in the loss of ability to make non-reversible payments for non-reversible services. With the possibility of reversal, the need for trust spreads. Merchants must be wary of their customers, hassling them for more information than they would otherwise need. A certain percentage of fraud is accepted as unavoidable. These costs and payment uncertainties

- Bitcoin is a peer-to-peer **digital cash system** invented in 2008 by an unknown person using the pseudonym Satoshi Nakamoto
- A digital solution to cash had been sought since the beginning of computers and especially after the invention of the internet
- But... digital objects are easily copied, making 'double spending' a prohibitive problem to digital cash
- Satoshi solved the digital cash dilemma of double-spending using a combination of hashing algorithms, public/private key cryptography, and the blockchain

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Payment Options Before Bitcoin



There were only two ways to make payments *prior* to Bitcoin

1. Cash

- (Must be) done in person
- Immediate and final
- Requires no trust between parties
- Requires trust in the issuer (bank)
- Potentially dangerous

2. Intermediated payments (electronic or checks)

- Can be done remotely (parties not physically together)
- Requires a trusted third party (PayPal, Visa, Venmo, etc.)
- Additional costs (fees for third party)
- Risk of third-party compromise
- Risk of payments blocked
- Slow to settle (usually months)



Payment Options Before Bitcoin



There were only two ways to make payments prior to Bitcoin

1. Cash

- (Must be) done in person
- Immediate and final
- Requires no trust between parties
- Requires trust in the issuer (bank)
- Potentially dangerous

2. Intermediated payments (electronic or checks)

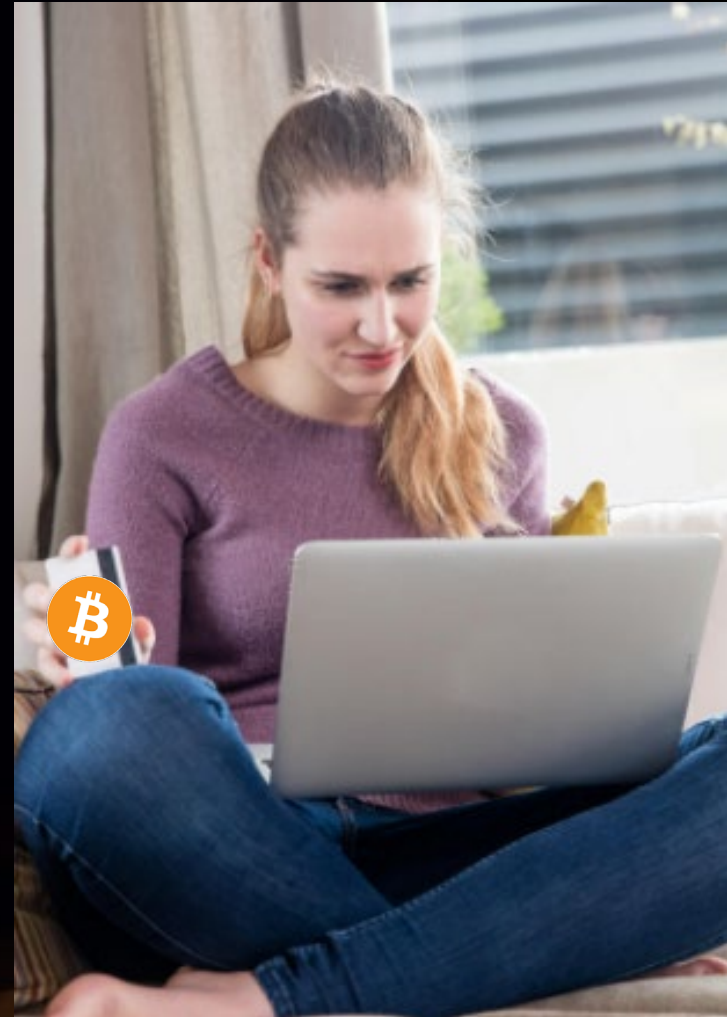
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Bitcoin



- Bitcoin is a peer-to-peer **digital cash system**
- Bitcoin combines the immediacy and finality of cash with the non-locality of electronic payments... *without* a trusted third party
- Bitcoin fees extremely low and independent of the size of the monetary transaction
- No risk of blocked (censored) payments
- No personal information must be divulged



Financial Sovereignty



Bitcoin Allows Financial Sovereignty (no trusted third party)

1. Restriction-resistant (all access, all the time)

- Banks usually impose spending limits
- Governments impose spending restrictions

2. Confiscation-resistant

- Police / governments cannot seize your money

3. Censorship-resistant

- Governments cannot censor transactions
- Private entities cannot censor transactions:
GoFundMe cancels campaigns they don't like, for example

4. Personal responsibility

- You are your own bank
- No one to cry to if you lose your funds or they are stolen

- There is a learning curve to using Bitcoin, but is it not *worth it*?

Financial Freedom & Inclusion



1. Bitcoin does not discriminate; has no knowledge of race, religion, political beliefs, social status, or anything else of users
2. Bitcoin serves the impoverished and unbanked people of the world. For example, 100% of a BTC donation goes to recipient (instantly)
3. Bitcoin does not belong to any country; it is a global currency native to the internet. Remittances can be sent instantly with extremely low fees
4. Bitcoin is *decentralized*. There is no single point of failure, and the rules are enforced by thousands of users globally (running Bitcoin nodes)



Afghan women who use bitcoin

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BTC vs USD



1. USD is *centralized* (central bank = Federal Reserve); a small group of people control monetary policy
2. Unlimited supply; the Fed can print as much money as they want
 - “We’re not going to run out of ammunition.” – Jerome Powell, Chairman of Federal Reserve
 - Increasing supply causes inflation, a form of theft (or taxation)
3. Digital (i.e., internet) payments require a trusted third party
 - Prone to censorship and confiscation
4. Scalability of scale = 10^4
 - One penny = 0.0001 of \$100 bill

1. BTC is *decentralized*; controlled by “rules not rulers” enforced by users
2. Fixed supply; there will never be more than 21 million bitcoins per the Bitcoin protocol
 - New bitcoins are minted on a fixed schedule until the 21 million are reached
 - High salability across time = good store of value
3. Highly salable across time and space without a trusted third party
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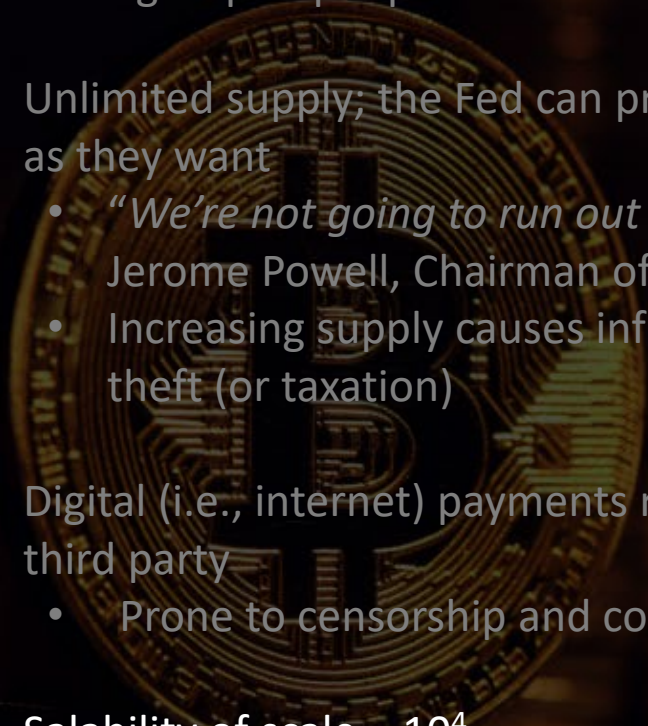


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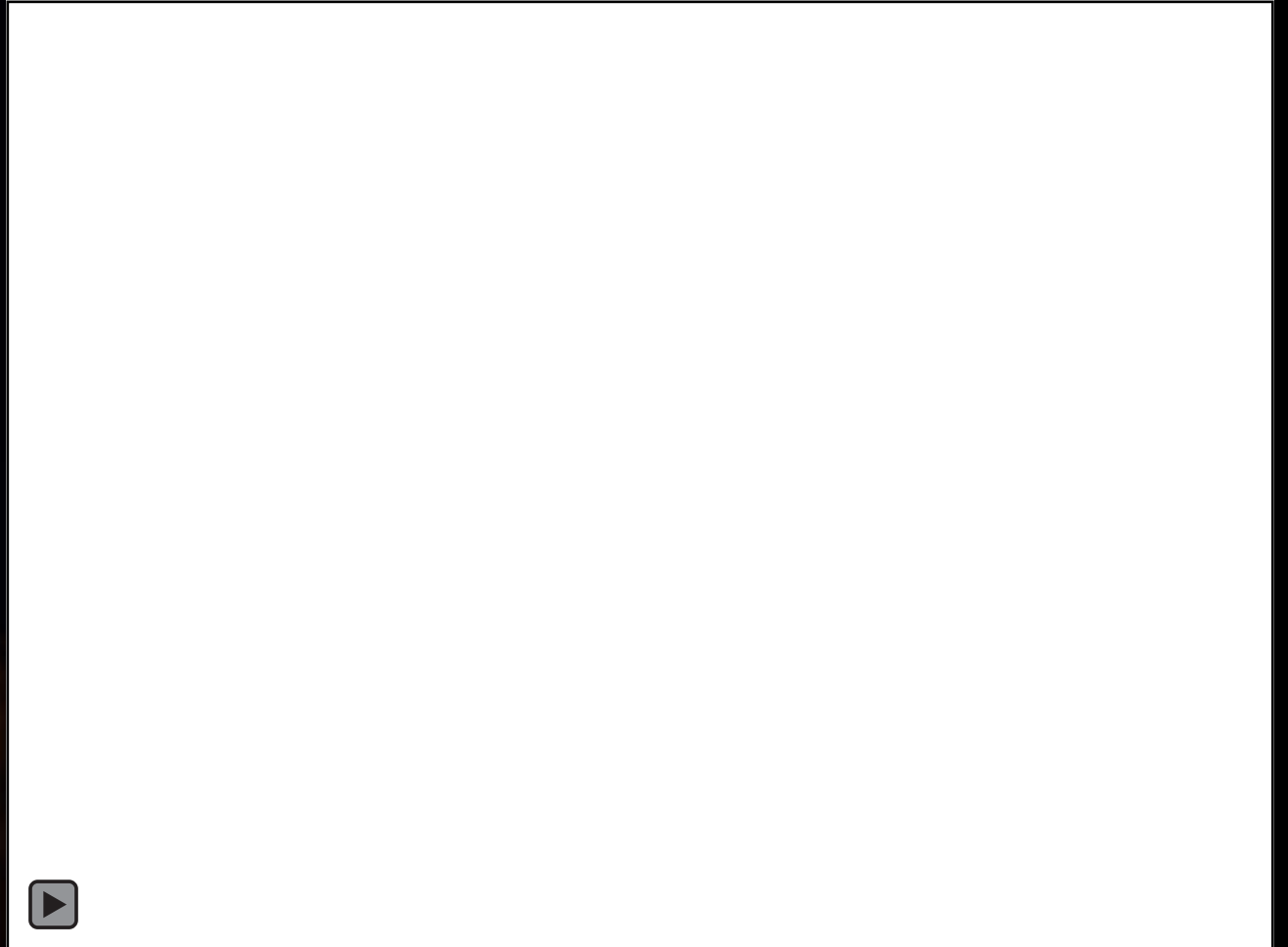
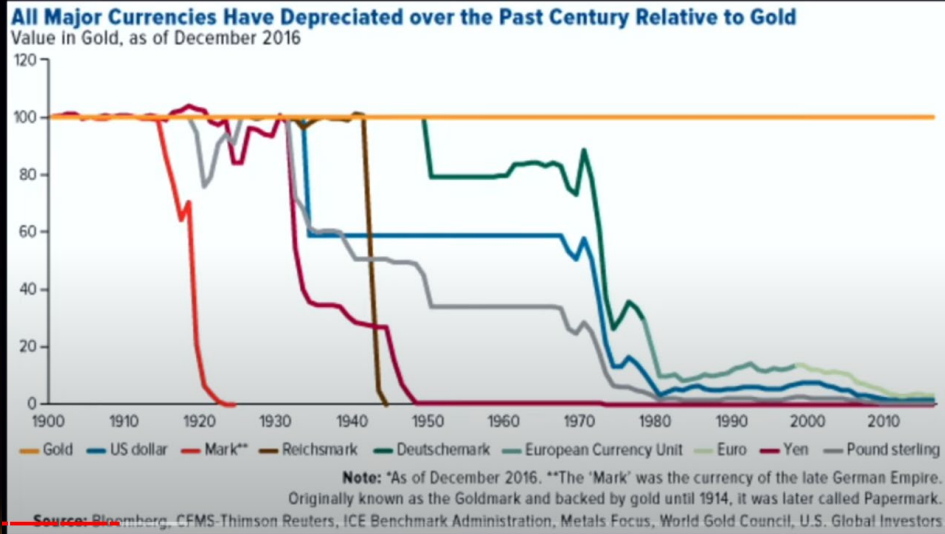
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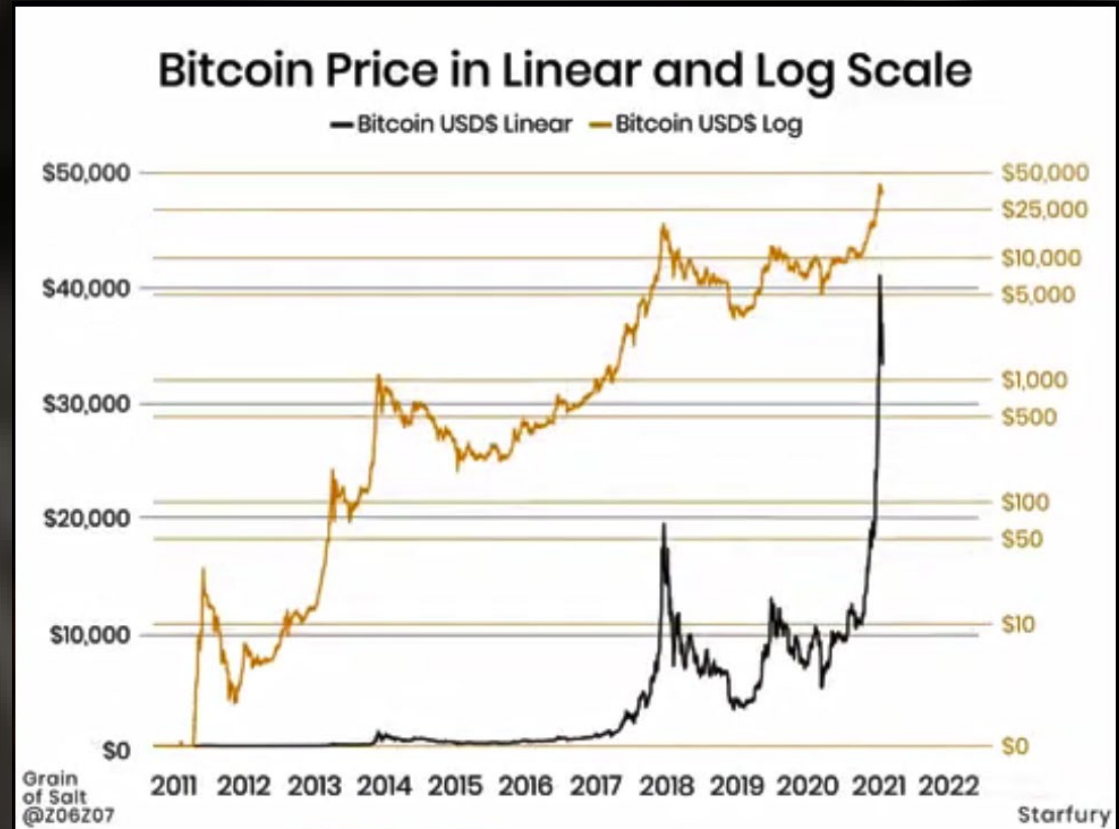




Price of Bitcoin



- The price of bitcoin in USD is **irrelevant**
- Must distinguish *price* from *purchasing power*
- The price of bitcoin is *infinite* – there is no top to BTC because there is no bottom to USD





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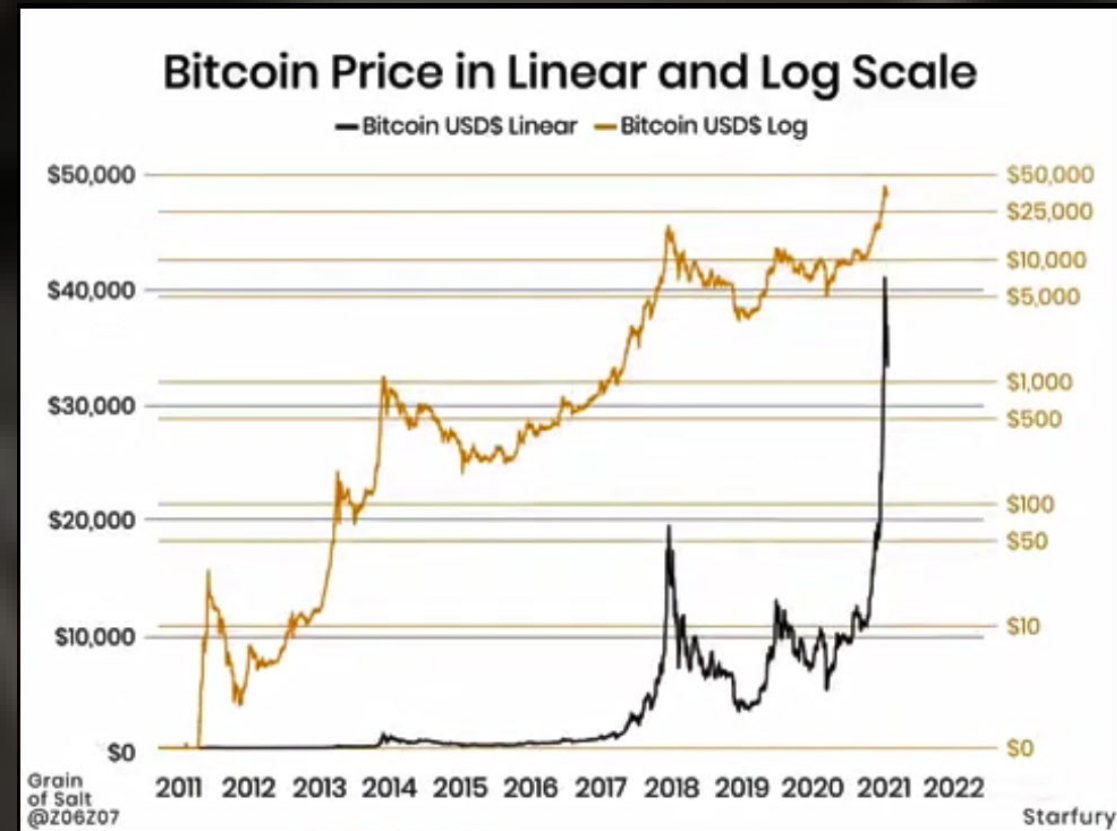


1850: 1 oz gold = \$18.93

2021: 1 oz gold = \$1823.04



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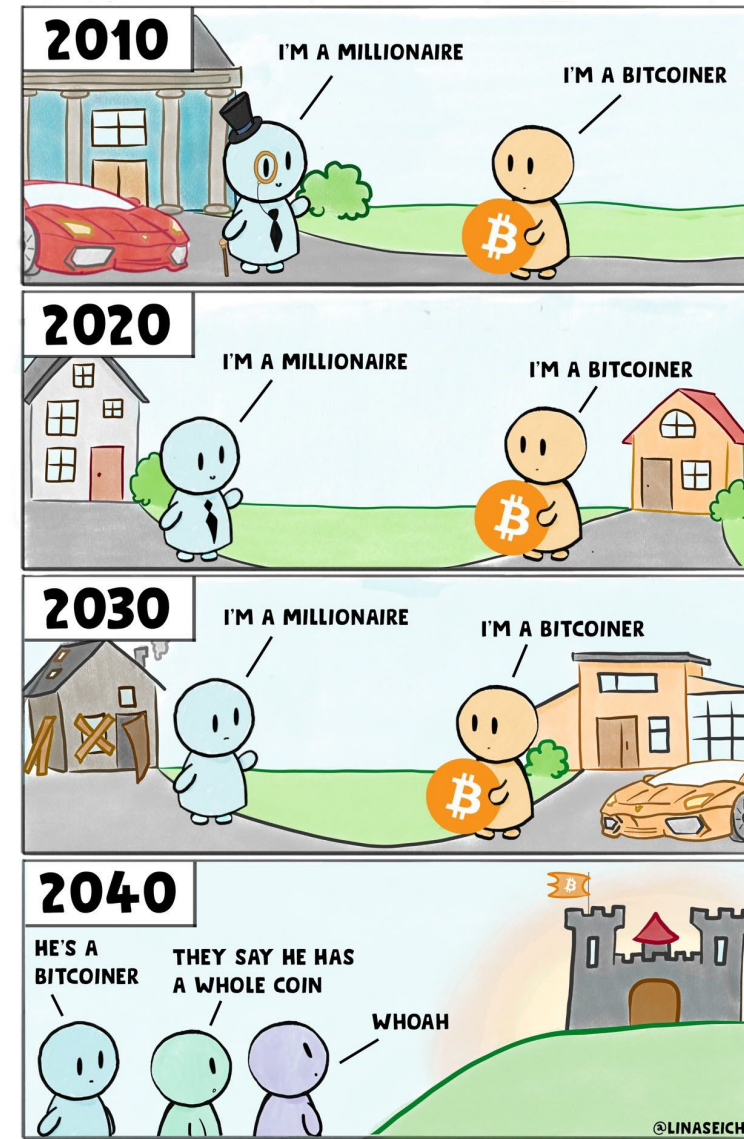




The Inevitability of Bitcoin



*"I'm sure that in 20 years there will either be very large transaction volume or no volume."
- Satoshi Nakamoto*





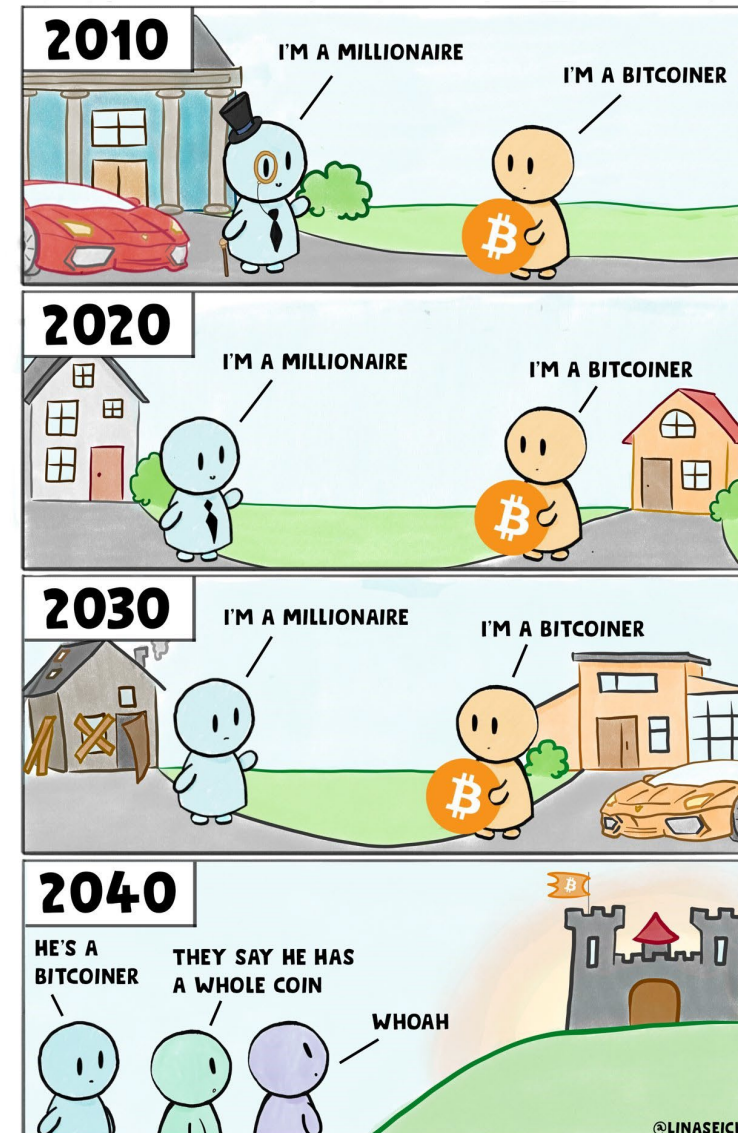
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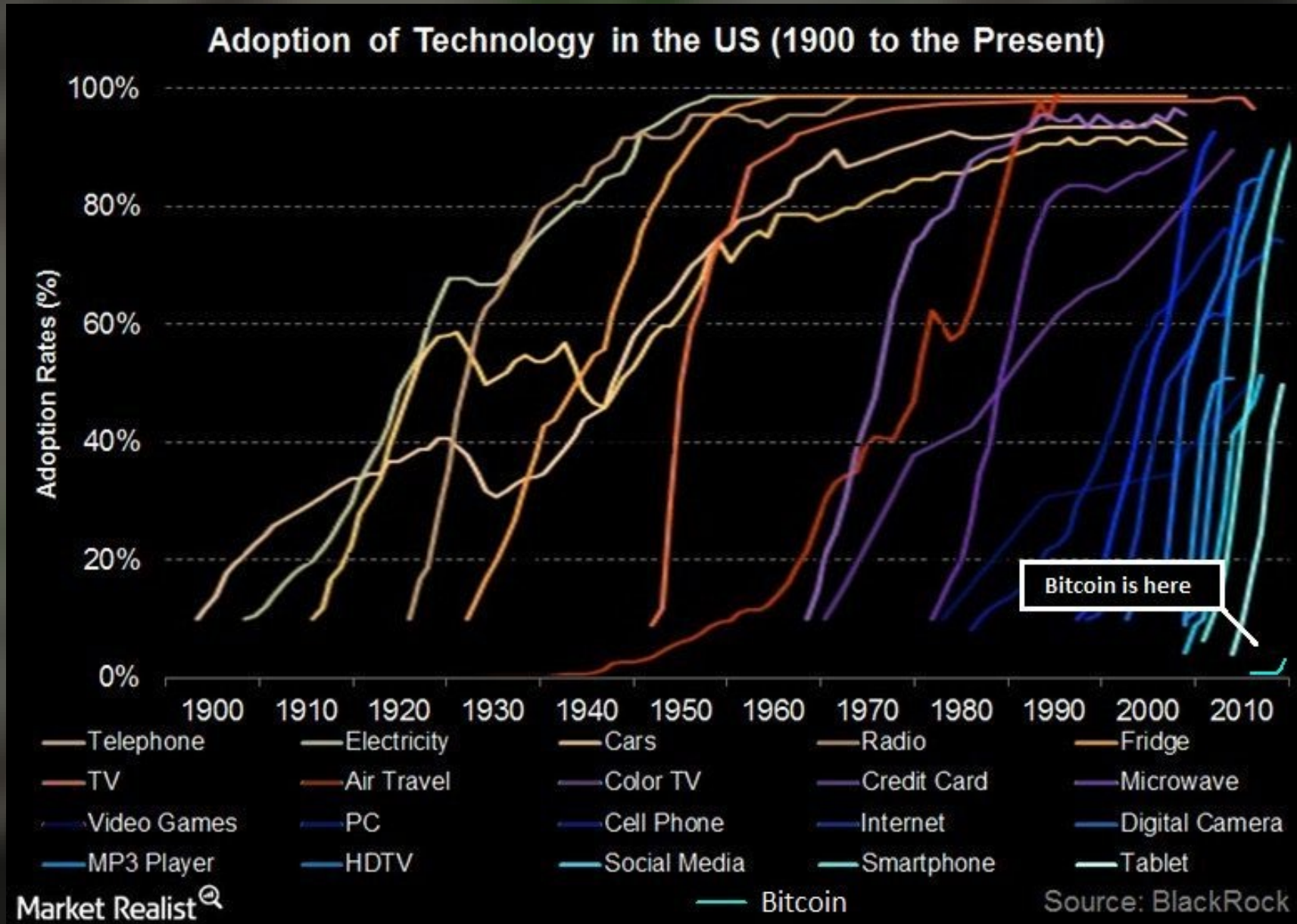
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- *Global bitcoin adoption surged 880% last year; 2,300% since 2019*
 - *Same number of people using bitcoin today as using the internet in 1998*
- *46 million Americans (17%) already own bitcoin*
- *VISA and MasterCard, Paypal, Venmo, Cash app adopt bitcoin*
- *Sheetz, AMC theatres, hotel chains, etc. will start accepting bitcoin*
- *El Salvador makes bitcoin legal tender, Sept 2021*





The Inevitability of Bitcoin





CBDCs



- *FIGHT Central Bank Digital Currencies (CBDCs) like your life depends on it... because it does!*

“And the second beast required all people small and great, rich and poor, free and slave, to receive a mark on their right hand or on their forehead, so that no one could buy or sell unless he had the mark —the name of the beast or the number of its name.” Rev. 13:17



CBDCs



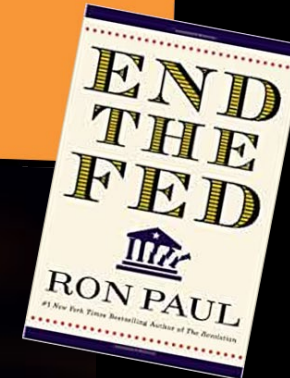
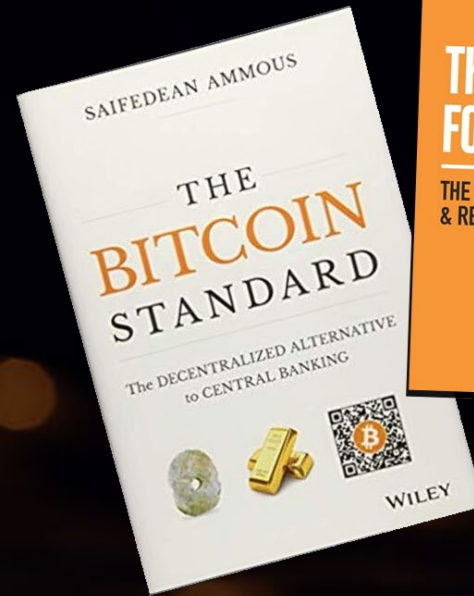
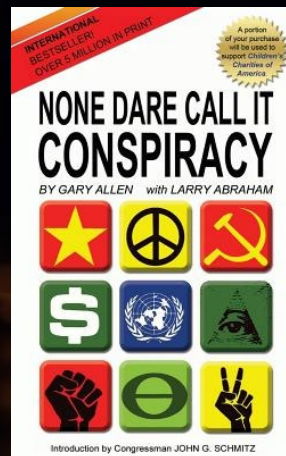
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“Take the vaccine, or you can’t access your money.”

1. Understand Bitcoin Basics
2. Create a Bitcoin wallet
3. Swap some bitcoin
4. Safely store your bitcoin

Next... Part 2: Using Bitcoin



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