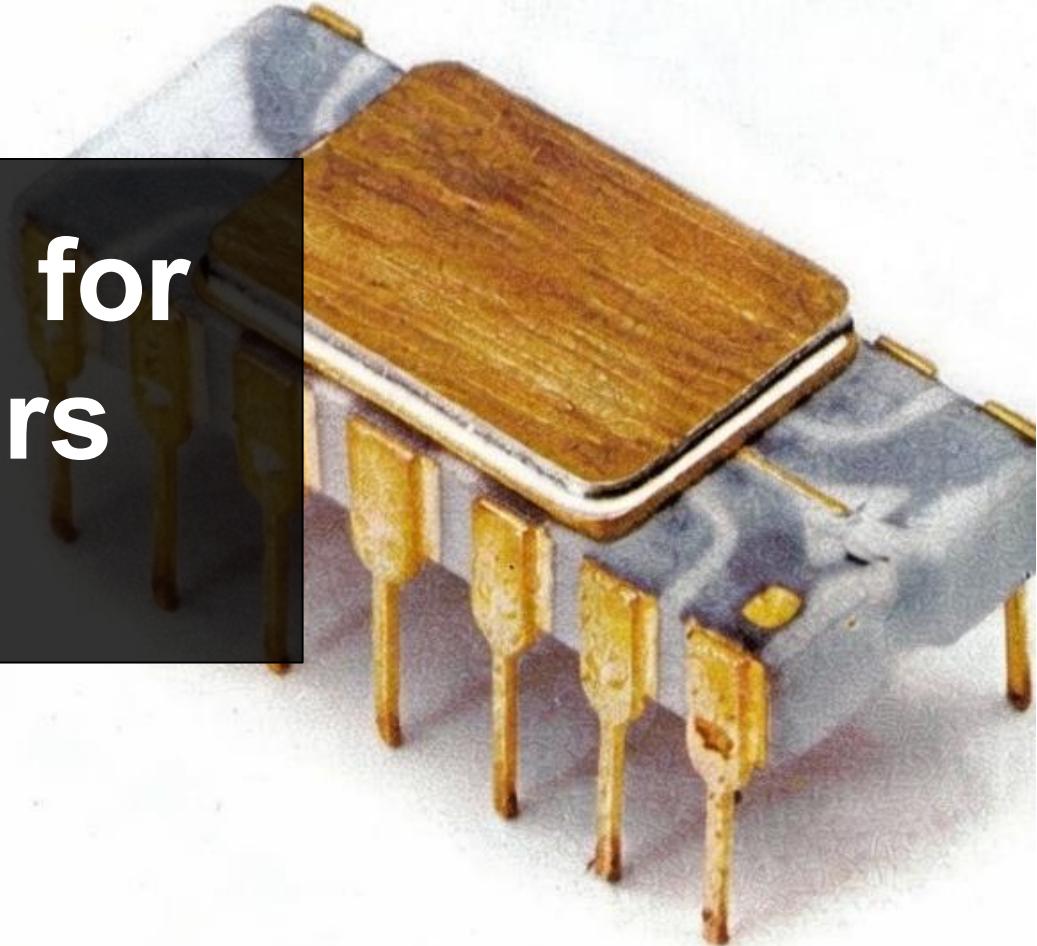


Intro to Bitcoin for Banking Leaders

Andrew Begin
CSO, Galoy



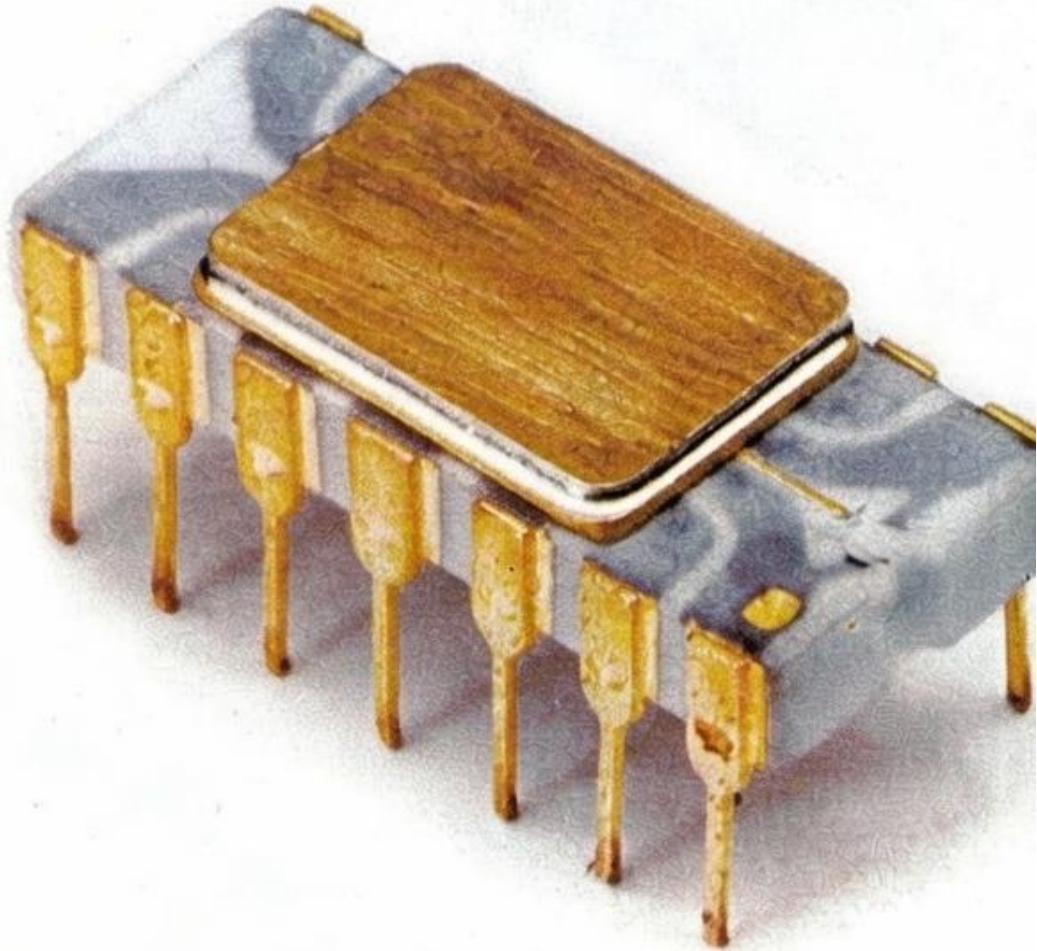
Galoy

Agenda

Digital Transformation of Money

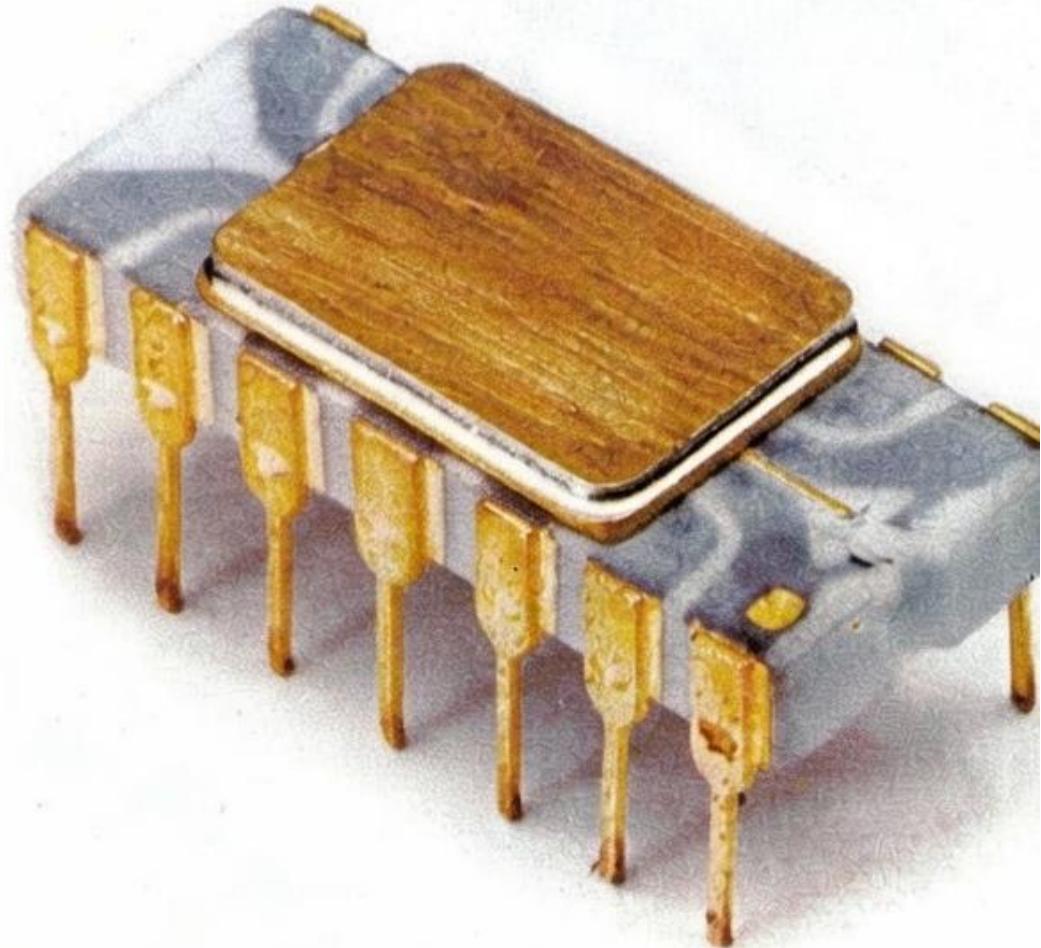
Opportunity for Banks

Q&A and Further Reading



**"There is no
reason anyone
would want a
computer in
their home."**

**Ken Olsen, 1977
Founder, Digital Equipment
Corporation (DEC)**



THE TIMES

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£1.70



Eat Out from £5
More than 900 great restaurants, including four Gordon Ramsay favourites from E&S

Israel prepares to send tanks and troops into Gaza



Chancellor on brink of second bailout for banks

Billions may be needed as lending appears tighter

By Steve Webb, David Willetts and
Chris Grayling, Conservative MP

George Osborne has been forced to admit that the economy is not recovering as quickly as he had hoped. He has admitted that the economy is not recovering as quickly as he had hoped. He has admitted that the economy is not recovering as quickly as he had hoped. He has admitted that the economy is not recovering as quickly as he had hoped.

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99p



Michael Gove
First, Novice
and I can
...
We bring culture
big ideas to life
and down to
Earth

China is big
The best again
on the planet

Sisterhood
I Want to Marry
Again

Giant killing?
Gordon in the
City That's Resilient

.....ÿÿÿM.ÿÿ..
..EThe Times 03/
Jan/2009 Chancellor
on brink of
second bailout f
or banksÿÿÿ...ò.
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THE TIMES

Eat Out from £5
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Chancellor on brink of second bailout for banks

Billions may be needed as lending appears tighter

99p

Photo: Bitcoin Shirt

...an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party.

**Satoshi Nakamoto, 2008
Bitcoin Whitepaper**



"Bitcoin looks like a clever notion that will likely amount to little more than a curiosity."

The Economist, 2011



"You have to really stretch your imagination to infer what the intrinsic value of Bitcoin is. I haven't been able to do it."

Alan Greenspan, 2013
Former Fed Chair



MATT
RIDLEY

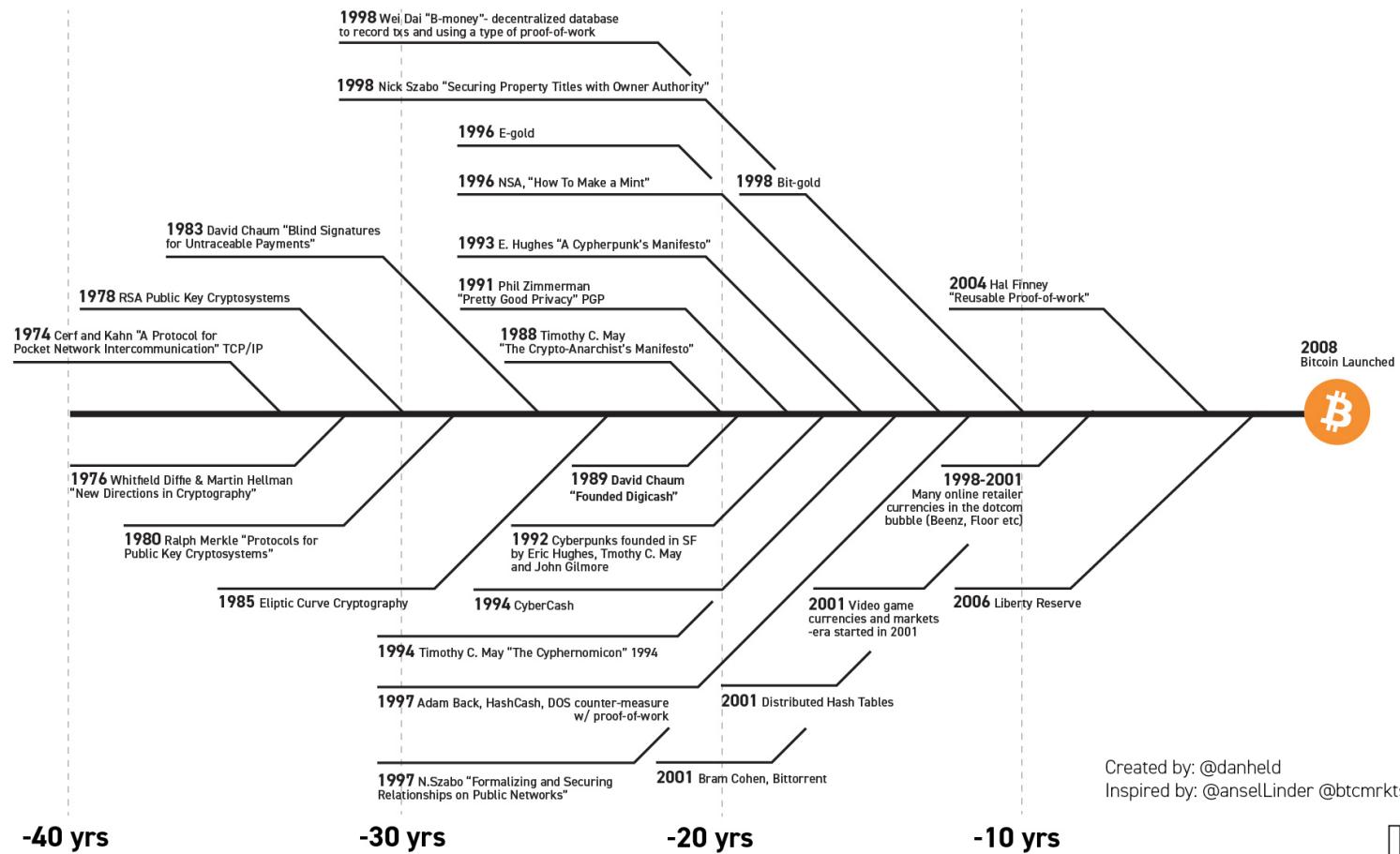
New York Times Bestselling Author of
The Rational Optimist

HOW
INNOVATION
WORKS

And Why It
Flourishes in
Freedom

"Opinionated, often counterintuitive,
full of delicious stories, always provocative."
—Kirkus Reviews (starred review)

Bitcoin prehistory - It's the result of 40 years of research, development and demand



-40 yrs

-30 yrs

-20 yrs

-10 yrs



Personal Realization

Personal Realization

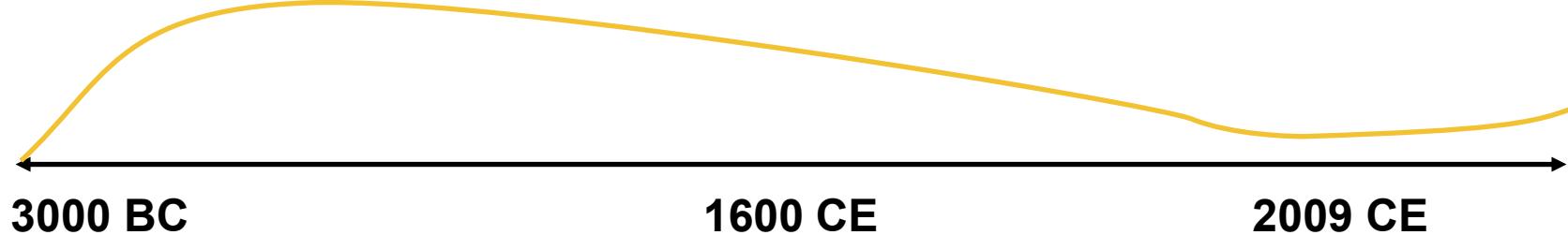
1. Our financial system is built for a world that requires intermediaries.

Personal Realization

- 1. Our financial system is built for a world that requires intermediaries.**
- 2. We no longer live in that world.**

Three monetary epochs

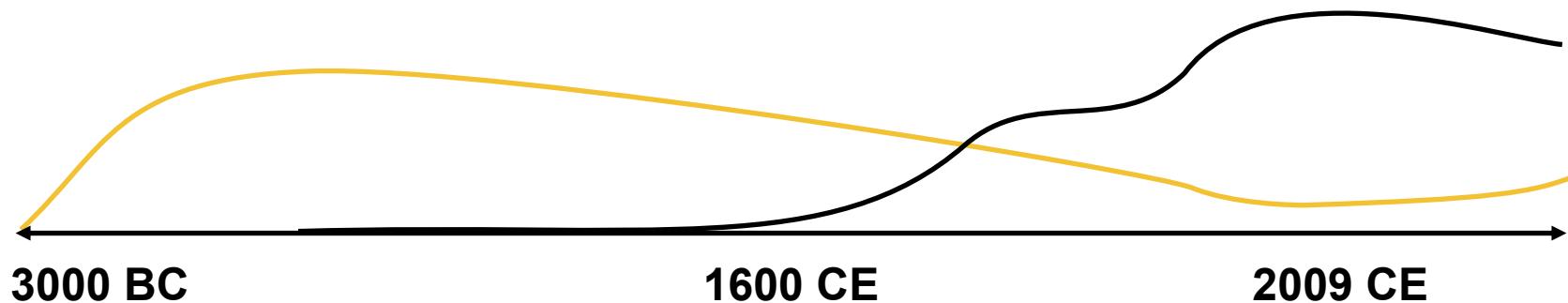
Asset-based
physical money



Three monetary epochs

Asset-based
physical money

Debt-based
ledger money

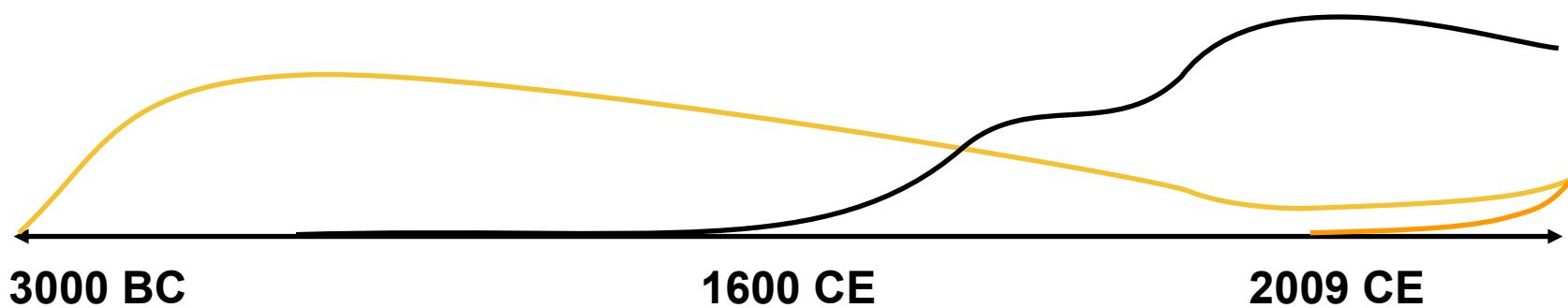


Three monetary epochs

Asset-based
physical money

Debt-based
ledger money

Asset-based
ledger money





Post



Dave Parker

@Xentagz



The moment you understand #Bitcoin you will have a panic attack.

8:28 AM · Oct 7, 2021

68

184

1.1K

23



1000 Years of Technological Disruption

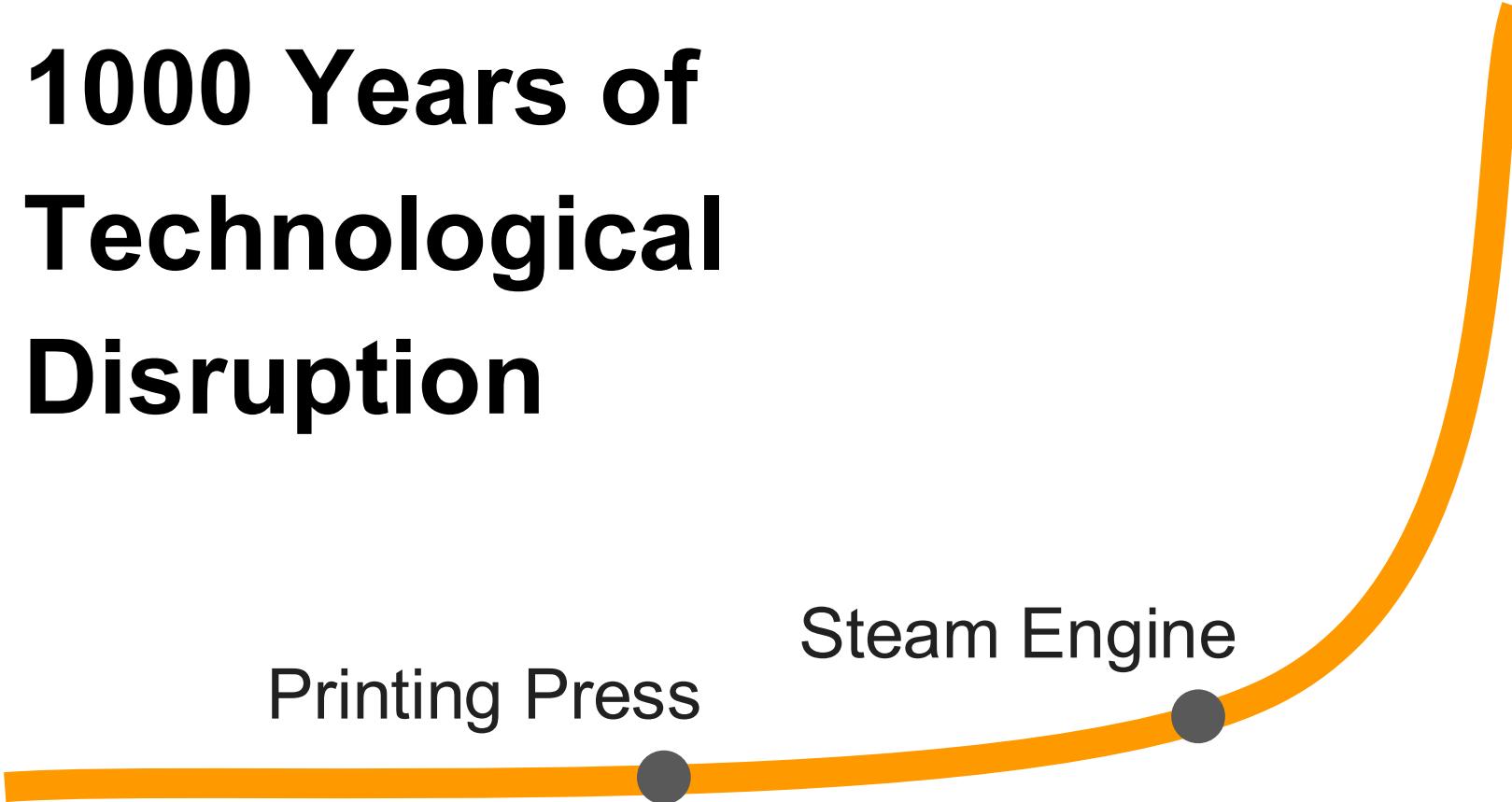


1000 Years of Technological Disruption

Printing Press



1000 Years of Technological Disruption



1000 Years of Technological Disruption



1000 Years of Technological Disruption



1000 Years of Technological Disruption



What Is So Disruptive About Bitcoin?



A photograph of a waterfall cascading down a rocky cliff into a pool of water. The water is white and turbulent as it falls, creating a misty spray. The cliff face is dark and textured. In the background, there are lush green trees and mountains under a clear blue sky.

“Banking is simple, it is just pools and flows”

Pools:

Where money rests – deposits, reserves, and capital powering stability and growth.

Flows:

How money moves – payments, loans, and investments driving economic activity.

Bitcoin

|

asset

|

network

|

“~~Banking~~ is simple, it is just ~~pools~~ and ~~flows~~”

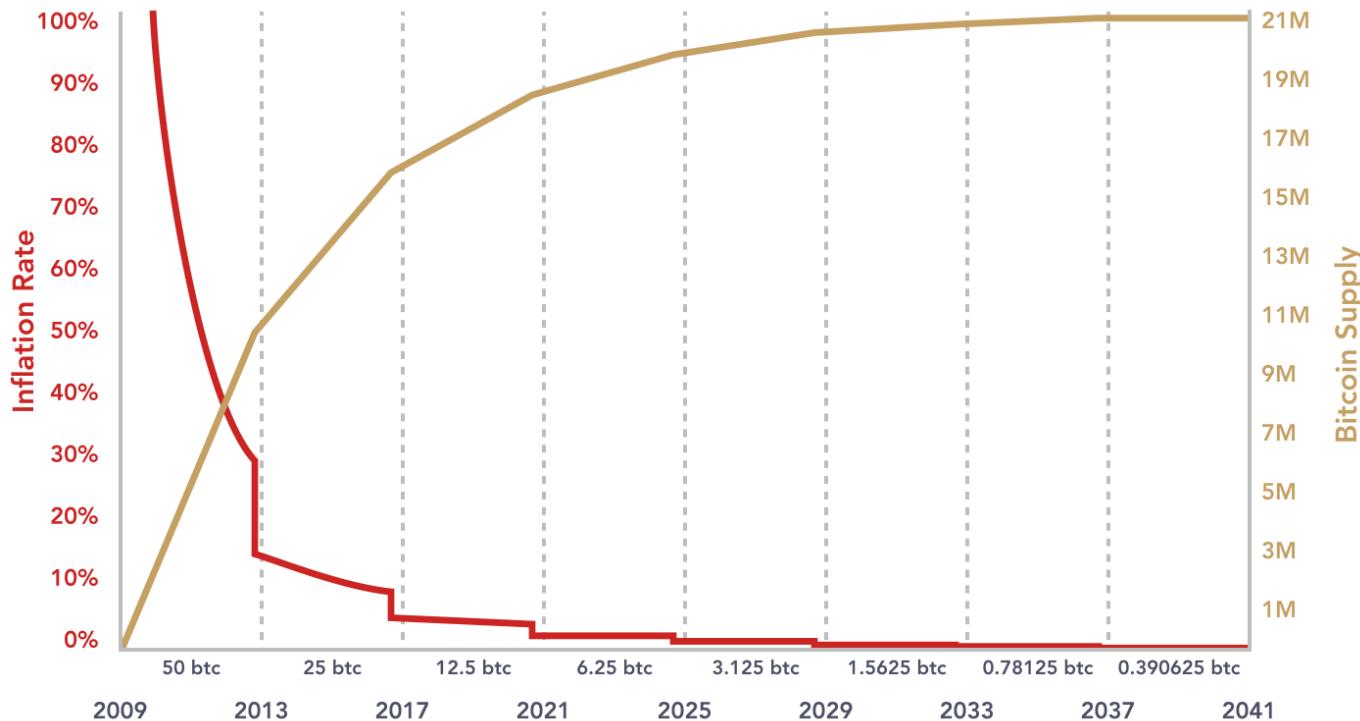
Bitcoin

scarce **decentralized**
| |
asset **network**
| |

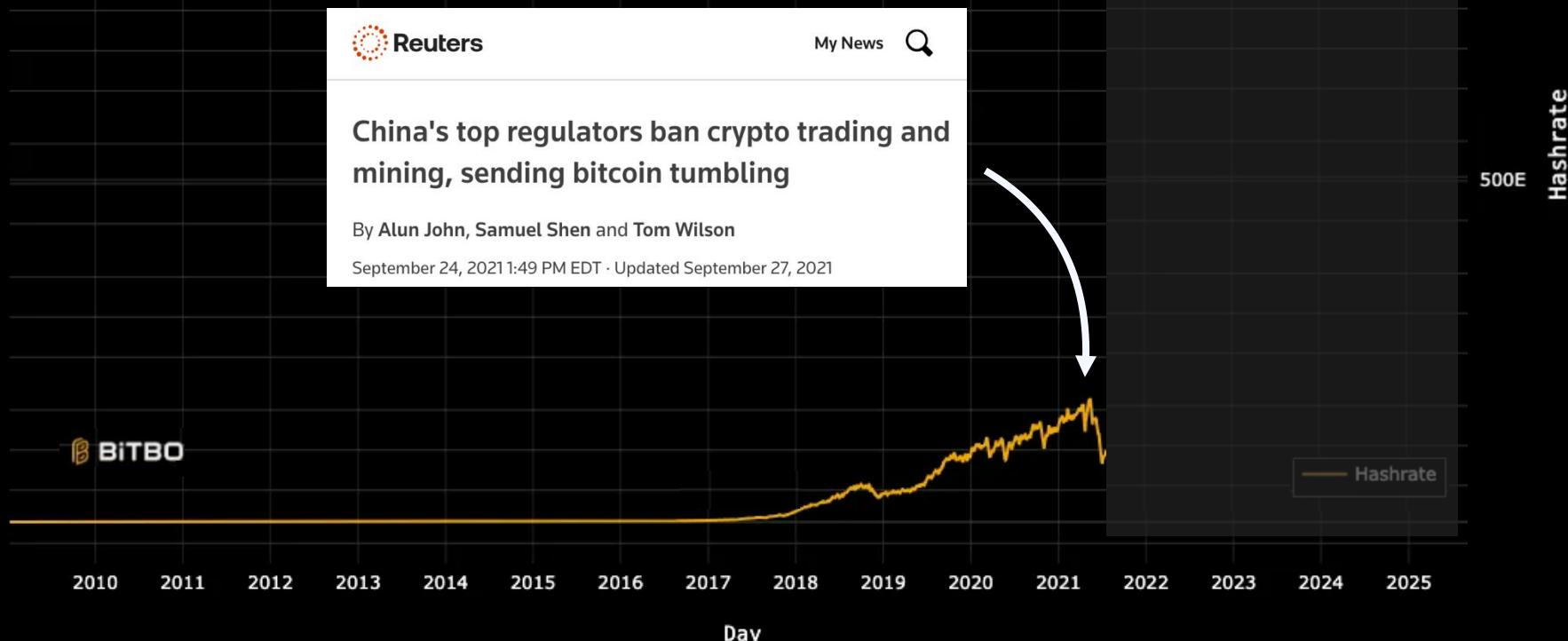
“Banking is simple, it is just pools and flows”

Scarce Asset

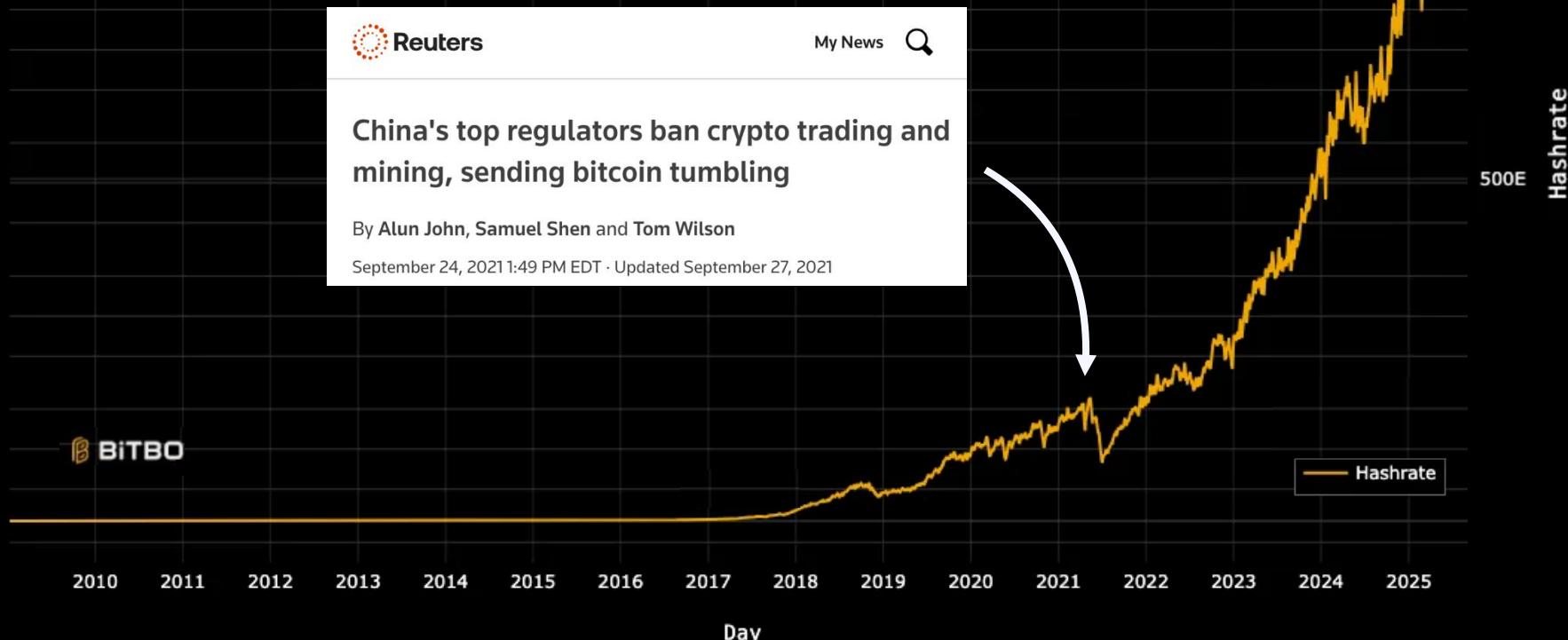
Bitcoin Supply Inflation Rate



Decentralized Network



Decentralized Network

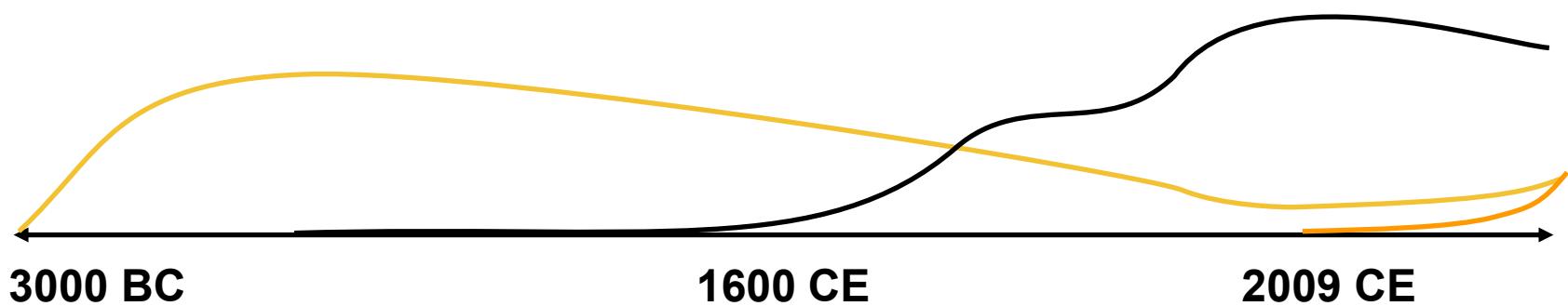


Three monetary epochs

Asset-based
physical money

Debt-based
ledger money

Asset-based
ledger money



“Bitcoin’s Value is Driven by its Enforceable Scarcity”

Fidelity, 2023
Bitcoin-First: Revisited

| | GOLD | BITCOIN | FIAT CURRENCY |
|--------------|------|---------|---------------|
| DURABLE | + | + | - |
| DIVISIBLE | - | + | + |
| FUNGIBLE | + | + | - |
| PORTABLE | - | + | + |
| VERIFIABLE | - | + | - |
| SCARCE | + | + | - |
| TRACK RECORD | + | - | - |

While all are physically durable, fiat currency has not maintained purchasing power durability over time

Physical gold is only divisible to small pieces; bitcoin is divisible to eight decimals

Gold and bitcoin are fungible, but fiat currency is not fungible with other fiat (i.e. U.S. dollar is not fungible with Canadian dollar)

Gold has a high value-to-weight ratio, but compared to the others, is still heavy and cumbersome to transport

Both gold and fiat currency have been counterfeited; gold can be verified, but only through cumbersome testing

Gold is relatively scarce, bitcoin is scarce and finite; the only supply constraint on fiat currency is willingness of government or central bank

Gold has the longest track record as money and maintaining purchasing power; bitcoin's history is the shortest; fiat currency has poor track record²

| | GOLD | BITCOIN | FIAT CURRENCY |
|-----------|------|---------|---------------|
| DURABLE | + | + | - |
| DIVISIBLE | - | + | + |
| FUNGIBLE | + | + | - |

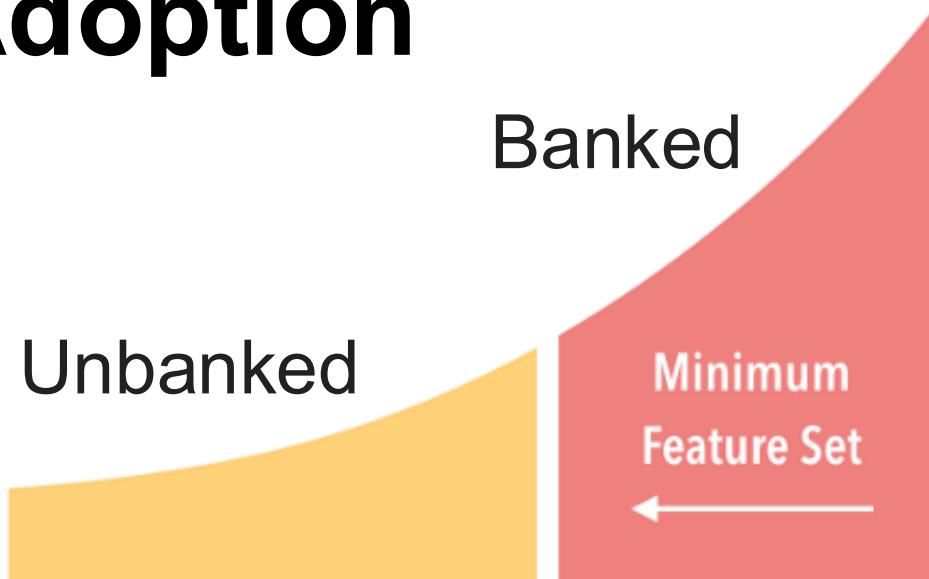
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| PORTABLE | — | + | + | Gold has a high value-to-weight ratio, but compared to the others, is still heavy and cumbersome to transport |
|--------------|---|---|---|--|
| VERIFIABLE | — | + | — | Both gold and fiat currency have been counterfeited; gold can be verified, but only through cumbersome testing |
| SCARCE | + | + | — | Gold is relatively scarce, bitcoin is scarce and finite; the only supply constraint on fiat currency is willingness of government or central bank |
| TRACK RECORD | + | — | — | Gold has the longest track record as money and maintaining purchasing power; bitcoin's history is the shortest; fiat currency has poor track record ² |

Three Cohorts of Adoption



Banks

Whole Product
Solution

The Unbanked



The “Unbanked”



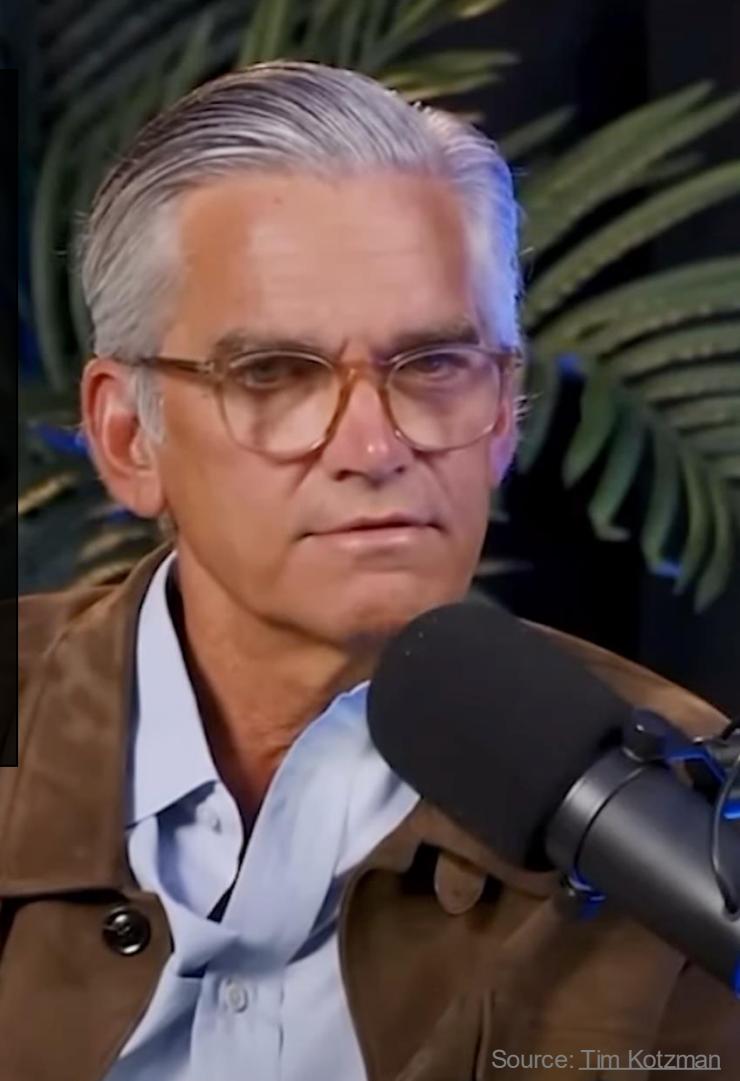
The Banked



**“You can put all your
money in the S&P 500
and you’re not gaining
any relative wealth at all.**

That’s a startling insight.”

Tad Smith
Former CEO, Sotheby's



The Banks



**“BlackRock’s U.S.-based
Bitcoin exchange-traded
product (ETP) was the largest
exchange-traded product
launch in history”**

Larry Fink
CEO, Blackrock

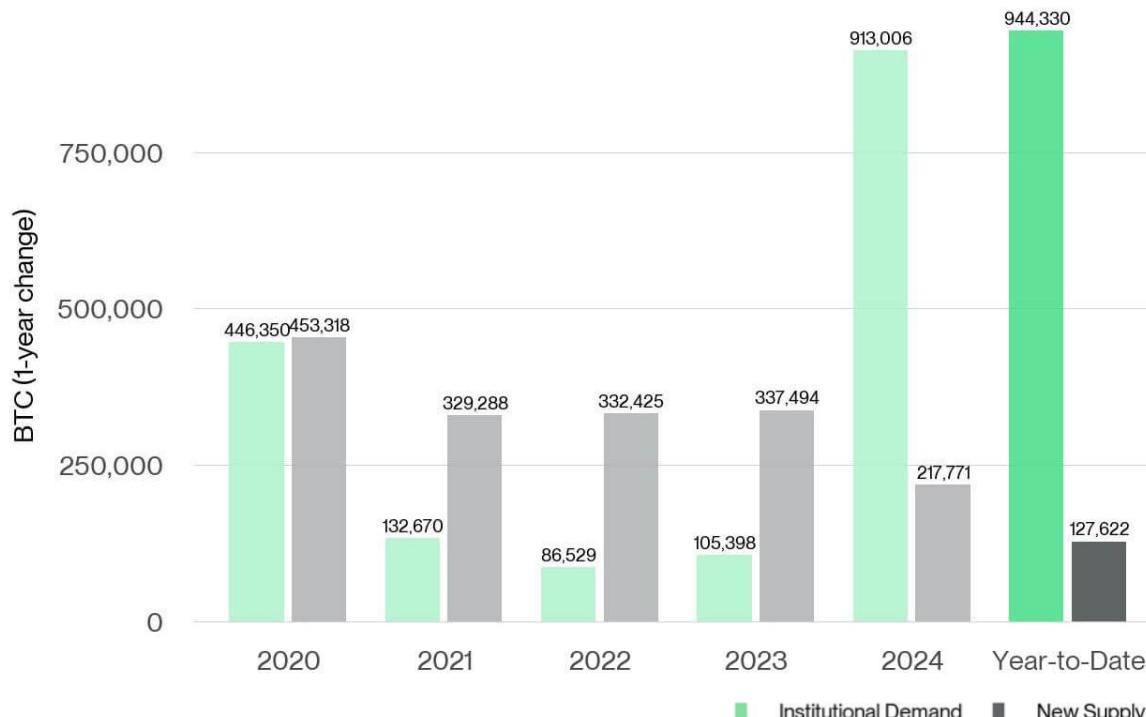
Source: [Blackrock](#)

“If the U.S. doesn’t get its debt under control, if deficits keep ballooning, America risks losing that position to digital assets like Bitcoin.”

Larry Fink
CEO, Blackrock

Source: [Blackrock](#)

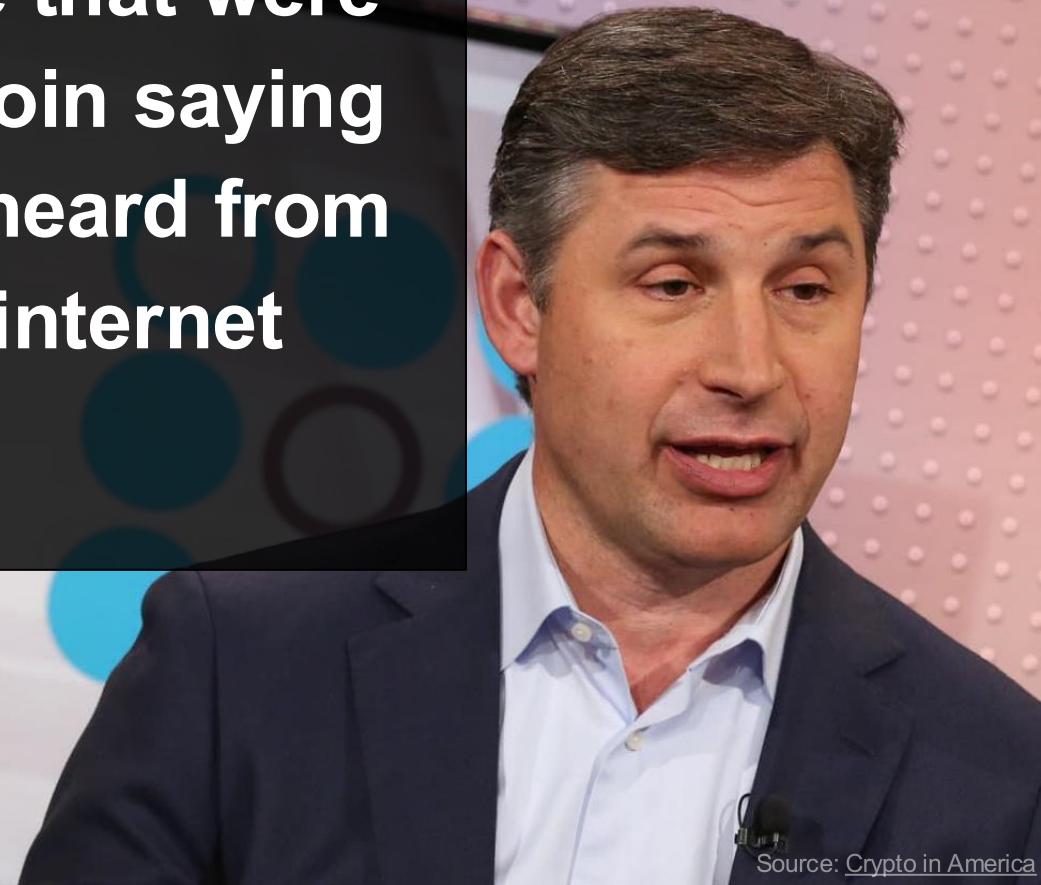
Demand = 7.4x Supply



Source: Bloomberg, Glassnode, bitcointreasuries.net, Bitwise Europe
Institutional Demand = Global BTC ETPs & Public Treasury Companies
Latest data as of 2025-10-08

Source: [Andre Dragosch](#) - Updated for legibility

“I heard many people that were naysayers about bitcoin saying many of the things I heard from naysayers about the internet back in 1999-2000.”



Anthony Noto
CEO, SoFi

“This looks real, this is something going on here. It could lead to radical changes in our business. And wouldn’t that be interesting and exciting.”

Abigail Johnson
CEO, Fidelity



Source: a16z crypto

It's Still Early

14 of top 25 largest US banks reportedly have or are building bitcoin products.

Bitcoin Products by Top 25 Banks in the U.S.

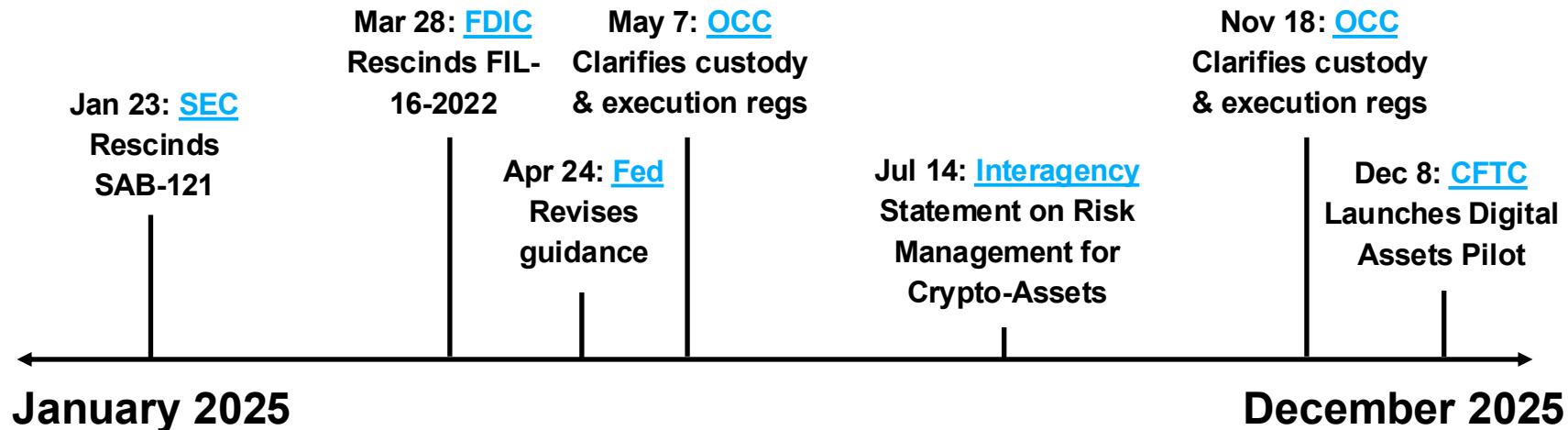
| Rank | Bank | Custody | Trading |
|------|--------------------|------------------|----------------------|
| 1 | JP Morgan Chase | Not yet | Announced |
| 2 | Bank of America | Not yet | Not yet |
| 3 | Citigroup | Exploring | HNW Clients Only |
| 4 | Wells Fargo | Not yet | HNW Clients Only |
| 5 | Goldman Sachs | Not yet | HNW Clients Only |
| 6 | Morgan Stanley | Not yet | HNW Clients Only |
| 7 | US Bank | HNW Clients Only | Not yet |
| 8 | PNC Group | Launched | Launched |
| 9 | Truist Financial | Not yet | Not yet |
| 10 | TD Bank (US) | Not yet | Not yet |
| 11 | Capital One | Not yet | Not yet |
| 12 | Charles Schwab | Not yet | Announced |
| 13 | BNY Mellon | HNW Clients Only | Not yet |
| 14 | State Street | Announced | Not yet |
| 15 | BMO Financial (US) | Not yet | Not yet |
| 16 | American Express | Not yet | BTC Rewards Card |
| 17 | HSBC (US) | Announced | Not yet |
| 18 | First Citizens | Not yet | Not yet |
| 19 | USAA | Not yet | Exchange Integration |
| 20 | Citizens Financial | Not yet | Not yet |
| 21 | Fifth Third | Exploring | Exploring |
| 22 | UBS (US) | Not yet | Not yet |
| 23 | M&T Bank | Not yet | Not yet |
| 24 | Huntington Bank | Not yet | Not yet |
| 25 | Barclays (US) | Not yet | Not yet |

As of December 2025



Source: River Financial, Inc.

2025 Regulatory Updates



Sources: SEC, FDIC, OCC, Federal Reserve, National Law Review - Not an exhaustive list of related regulatory activity

Opportunity for Banks



Opportunity for Banks

1. Education & Guidance

4. Payments

2. Custody & Safekeeping

5. Asset-backed Lending

3. Currency Exchange

6. Correspondent Banking

Education & Guidance



Education & Guidance



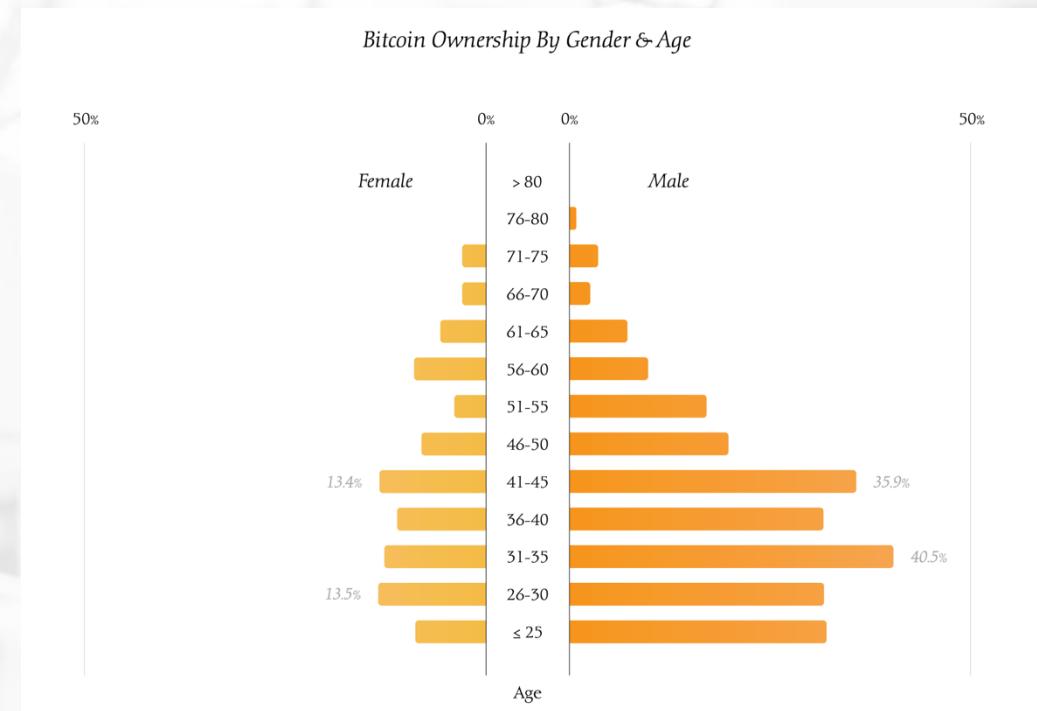
14% of US Adults own crypto

35% of US Adults “Know something about crypto”

This happened largely outside their banking relationship

Education & Guidance

**40% of males and
13% of females aged
31-35 own Bitcoin**



Custody & Safekeeping

Custodian Integration → *Partner with qualified custodian*

Self-Custody Support → *Customer-controlled*

Bank-Managed Custody → *Bank-controlled*

BTC/USD Exchange

**Enable customers to invest without leaving
the trusted environment of the bank**

Add net new fee revenue

Reduce “soft-switching” toward fintechs

Payments

On-chain bitcoin payments (akin to Fedwire)

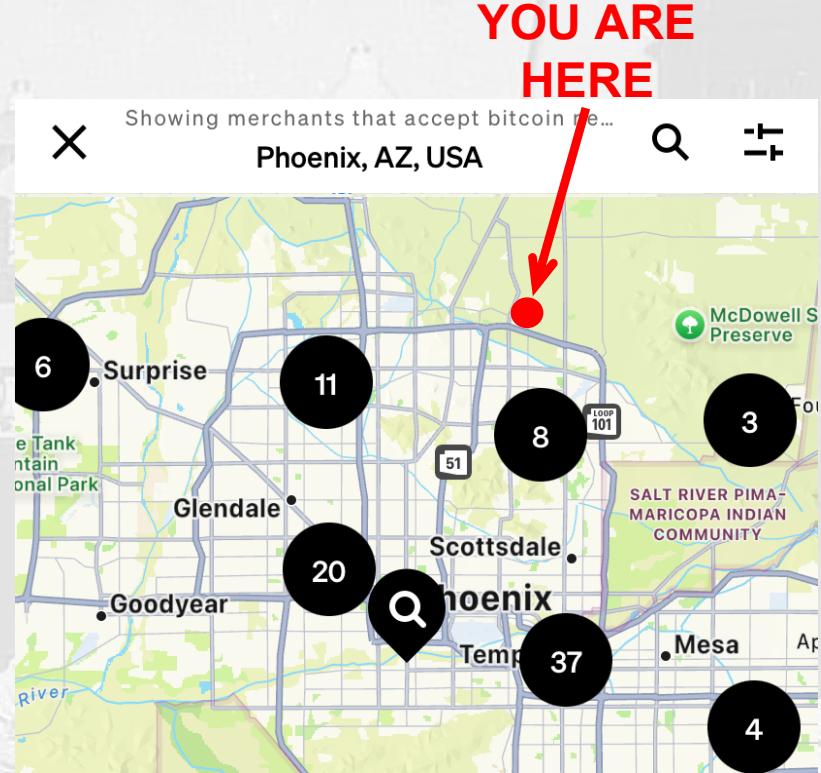
Layer 2 Lightning Network (real time payments)

Digital bitcoin wallet (eBanking, mobile channels)

Payments

Square: 4M US merchants can accept BTC (or USD) via Lightning Network (Nov '25)

SoFi & Lightspark:
Remittances payments over
Lightning: USD → BTC → MXN



Asset-backed Lending

A win for banks

- Overcollateralized (~50% LTV)
with liquid, 24/7-priced collateral
- Higher interest rates with lower
credit risk
- Continuous collateral monitoring
improves balance sheet efficiency

Asset-backed Lending

A win for banks

- Overcollateralized (~50% LTV) with liquid, 24/7-priced collateral
- Higher interest rates with lower credit risk
- Continuous collateral monitoring improves balance sheet efficiency

A win for customers

- Access liquidity without selling long-term assets
- Borrow from a regulated, trusted bank counterparty
- Avoid reliance on opaque or untested counterparties

Correspondent Banking

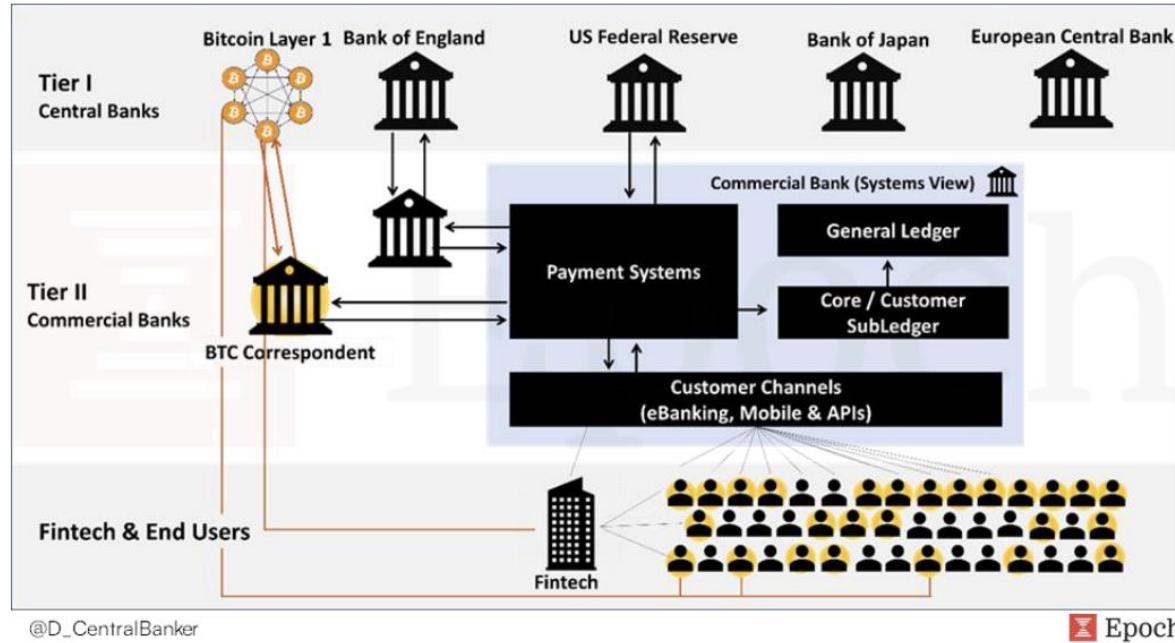
Operate Bitcoin banking infrastructure for other banks

Institutional custody, exchange, and settlement rails

Extend distribution using existing compliance and operations capabilities

Correspondent Banking

Figure 9: Near-Term Future State — the Bitcoin Correspondent

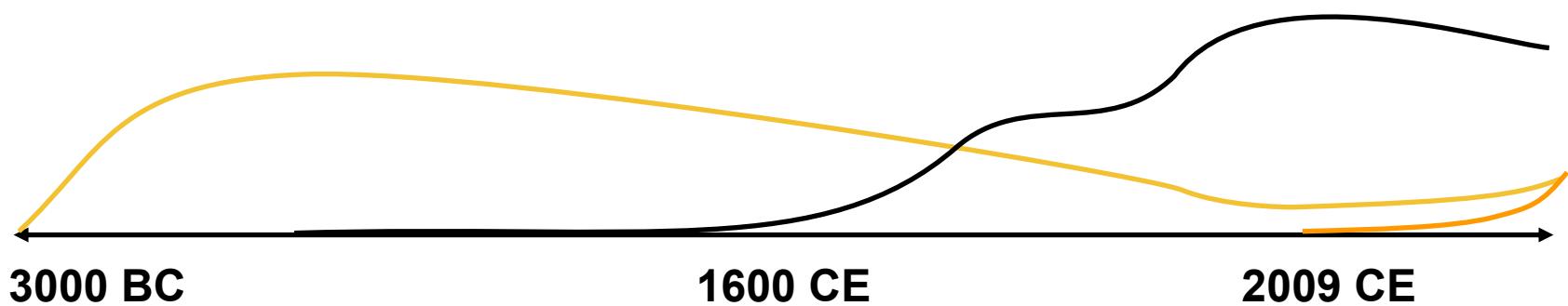


Three monetary epochs

Asset-based
physical money

Debt-based
ledger money

Asset-based
ledger money



Wrap-Up

- 1. Bitcoin is disruptive technology**
- 2. Banks are uniquely positioned**
- 3. The decision is how to engage**

Next Steps

- 1. Answer: “Is it real?”**
- 2. Analyze: Use cases and business models**
- 3. Act: Build, buy, or partner**

Thank you

Andrew Begin
CSO, Galoy

Galoy



X / LinkedIn
@agbegin