DEFCON 33

"Shaping the Future of Money...
with AI, Crypto and Gold"

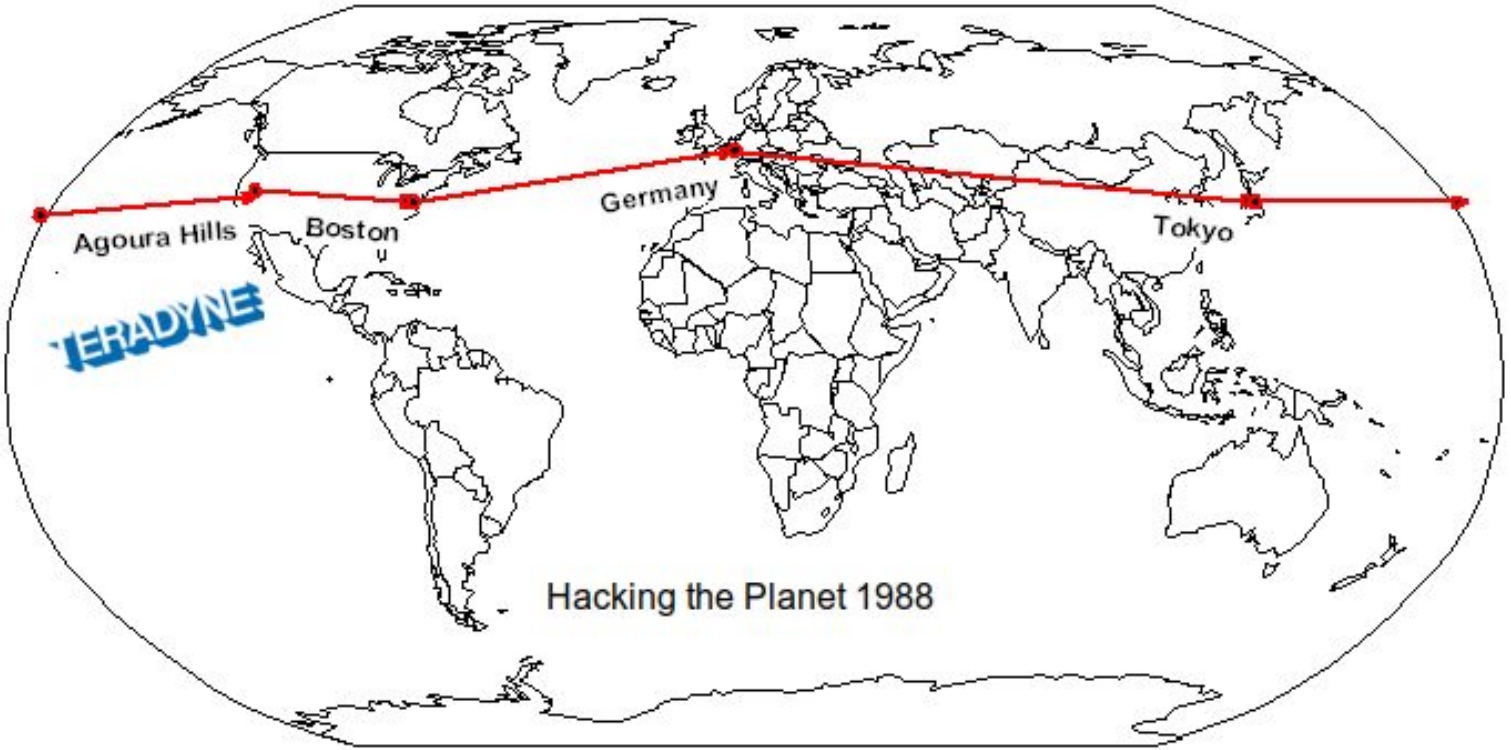
A Disruptive Venture

Presentation Overview

- Introduction
- History
- Gold Token White Paper
- Token Platform (SDT)
- Results
- Certain Things Are Likely

Hacking The Planet (1988)

The original intro for my DEFCON 13 presentation
but I swapped it out at the last minute



Why Listen To Me?

Synopsis: A stablecoin proposal for State governments, including some history, economics, gold depositories, Bitcoin reserves, pending legislation, impact of “vibe coding”.

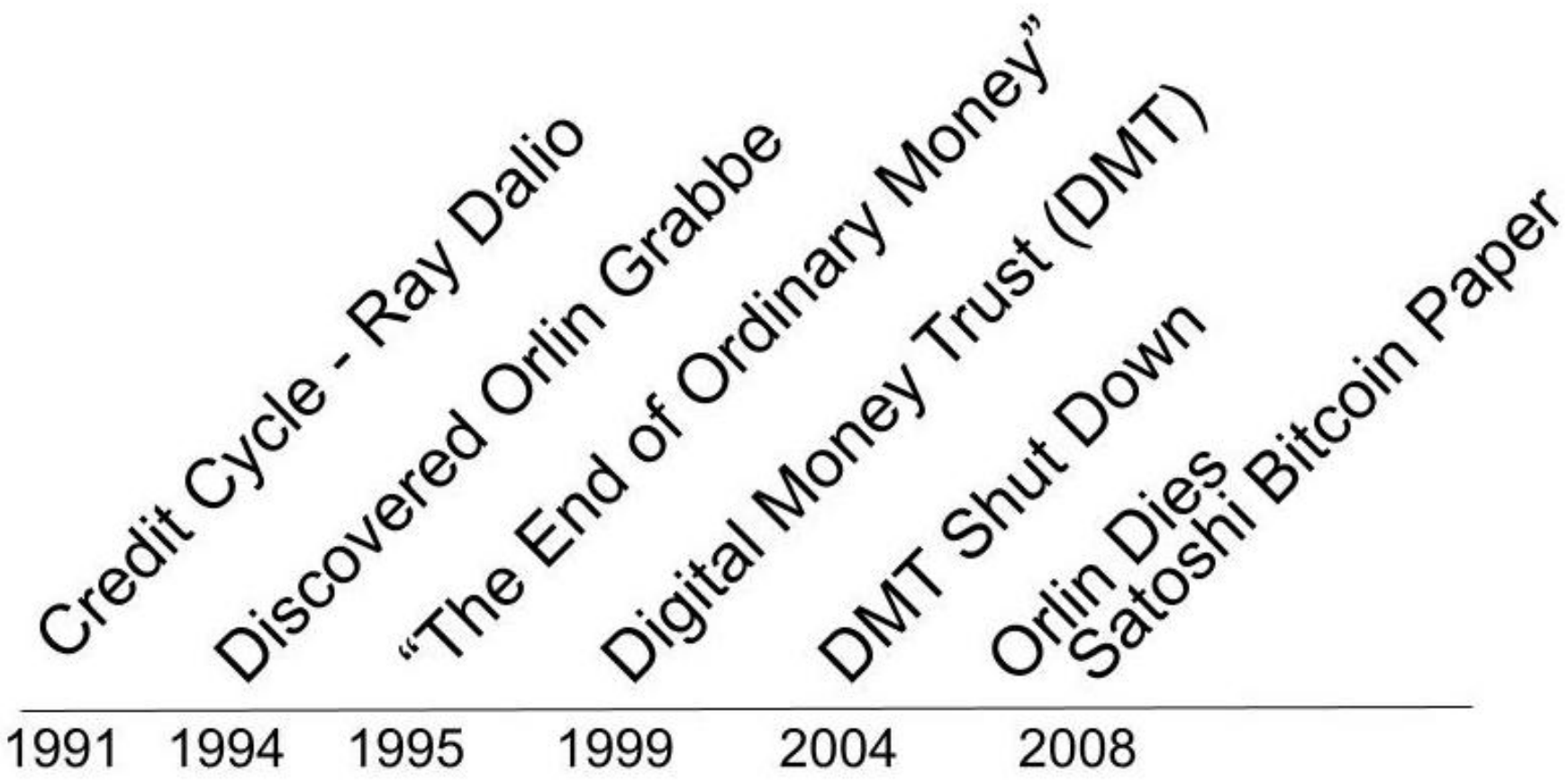
- 35 Years Of Software Development
- 7 Tech Startups
- Digital Money Trust (Grabbe) in 1994
- 3 DEFCON Presentations On Predictive Analytics, 2005-2007
- Sila Money Stablecoin, 2018

After My Defcon 13 Presentation (2005)

Facebook began in 2004 Twitter began in 2006 Analytics took off

History

Money Timeline



Texas Gold Bullion Depository

Many folks won't recognize what the Texas Gold Bullion Repository is but I did, thanks to Orlin Grabbe.

So I've expected this since 2018...

Gold Token White Paper

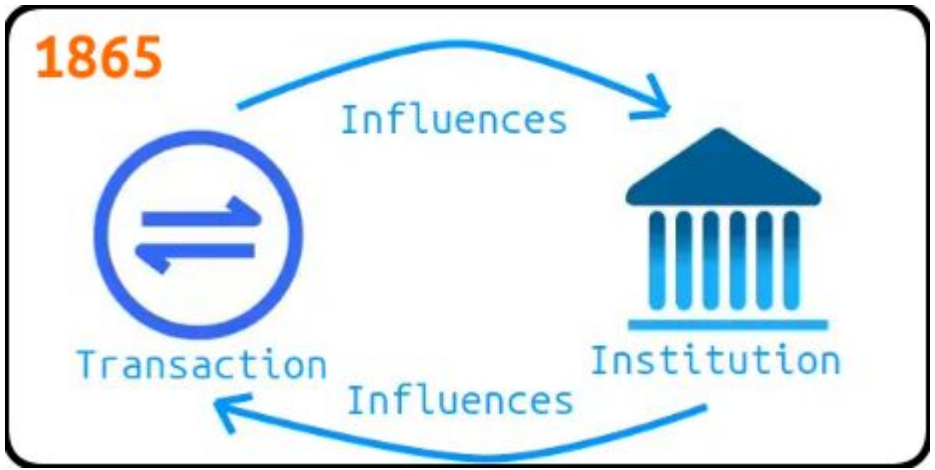
First mailing in April 2023

White Paper Overview

- Original paper created with ChatGPT
- A comprehensive (I hope) national strategy
- Mostly about WHY, not HOW
- Based on Transaction Theory / Law of Demeter

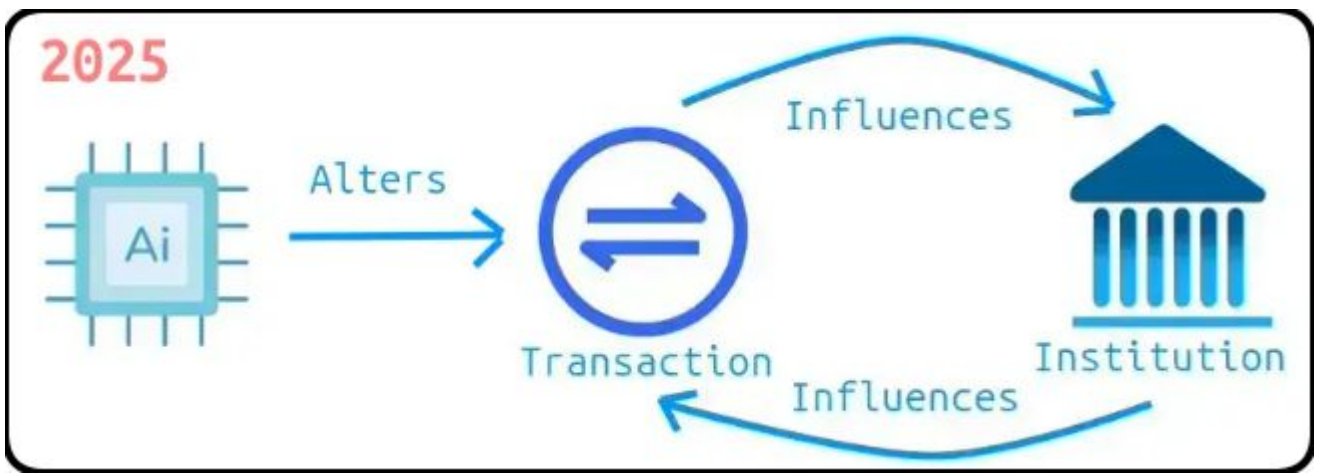
Law Of Demeter is almost the opposite of Globalization. An object should only interact with its immediate dependencies.

Transaction Theory



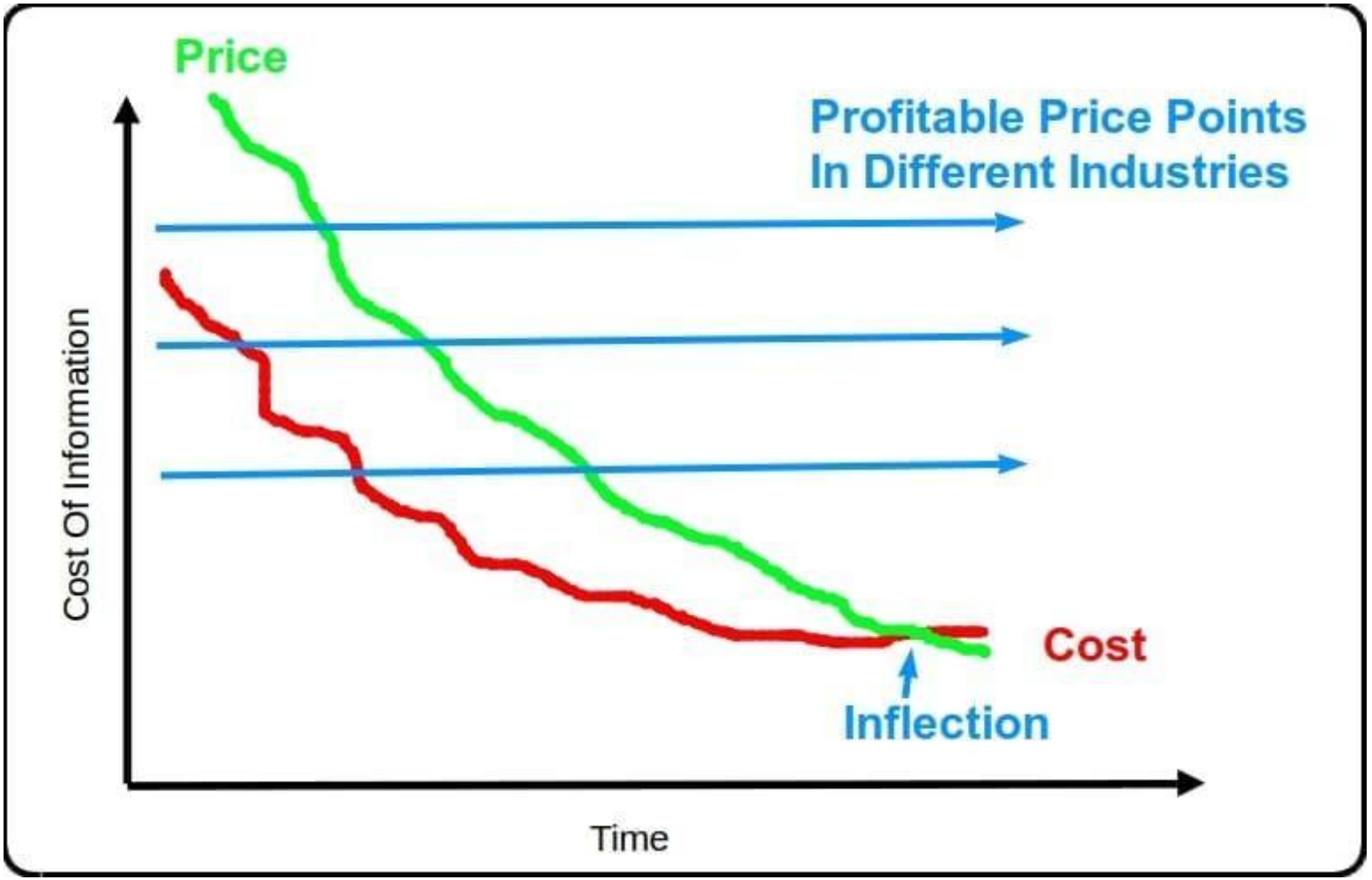
“the role which transaction costs do, and should, play in the fashioning of the institutions” - Ronald Coase

What was problematic in 1865…



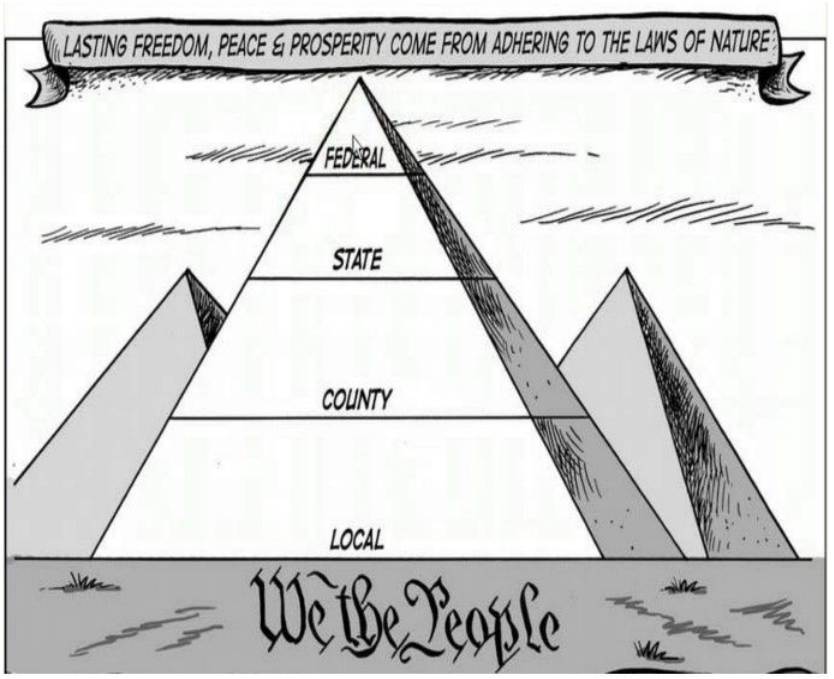
is an opportunity in 2025

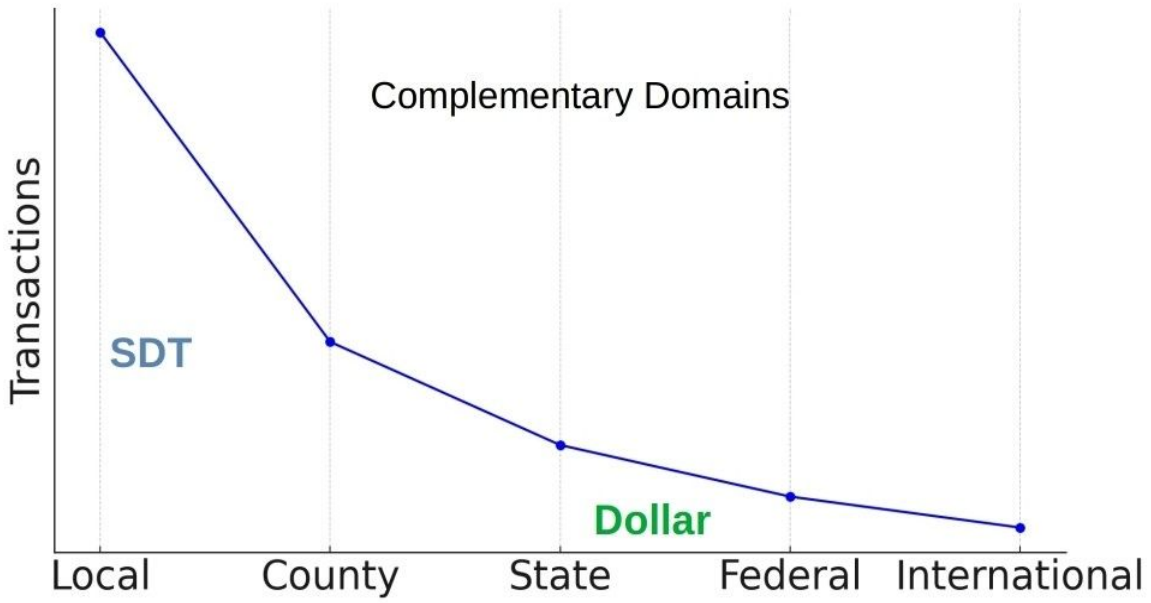
Falling Transaction Costs Create Opportunity



Parasocial Money

Parasocial relationships are one-sided, where one party expends effort on an oblivious recipient, like a celebrity and their fans.
Or today's dollar and American taxpayers.



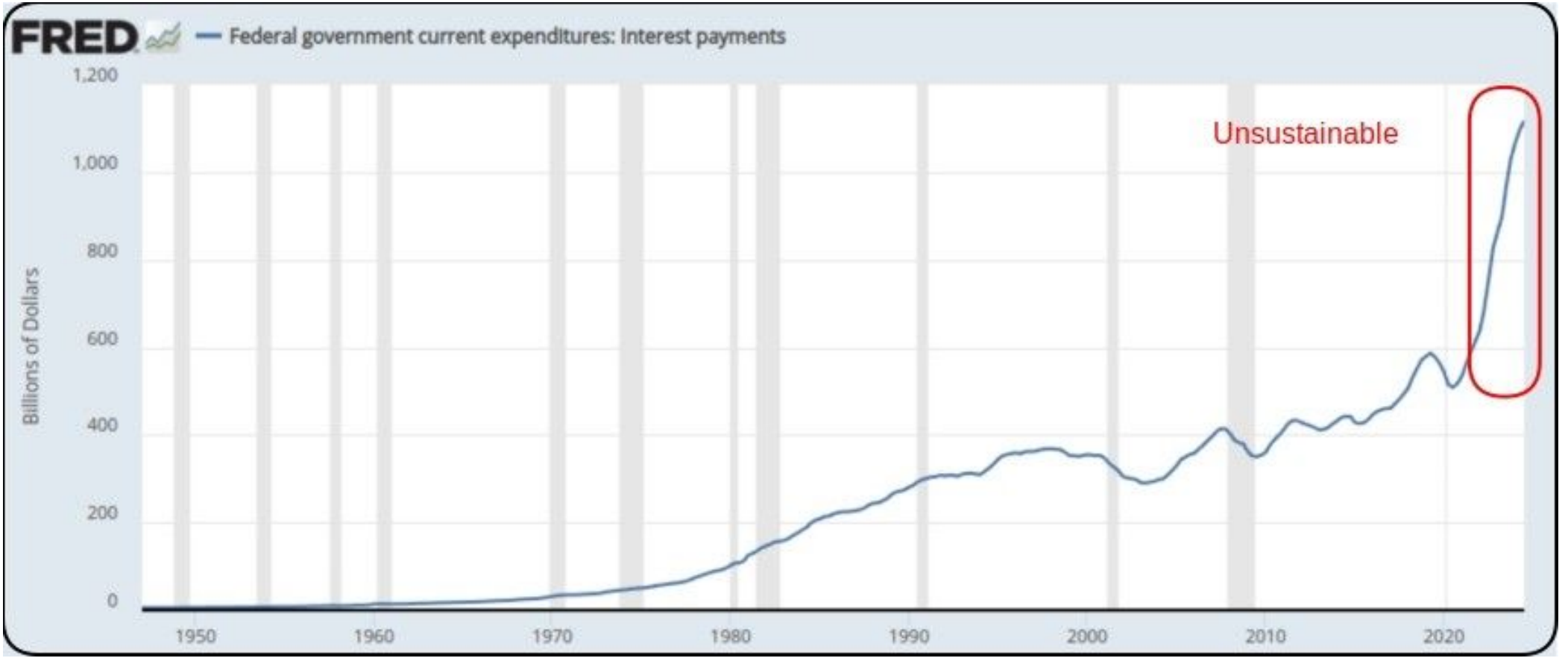


Hegemonic Empires Last 95 Years

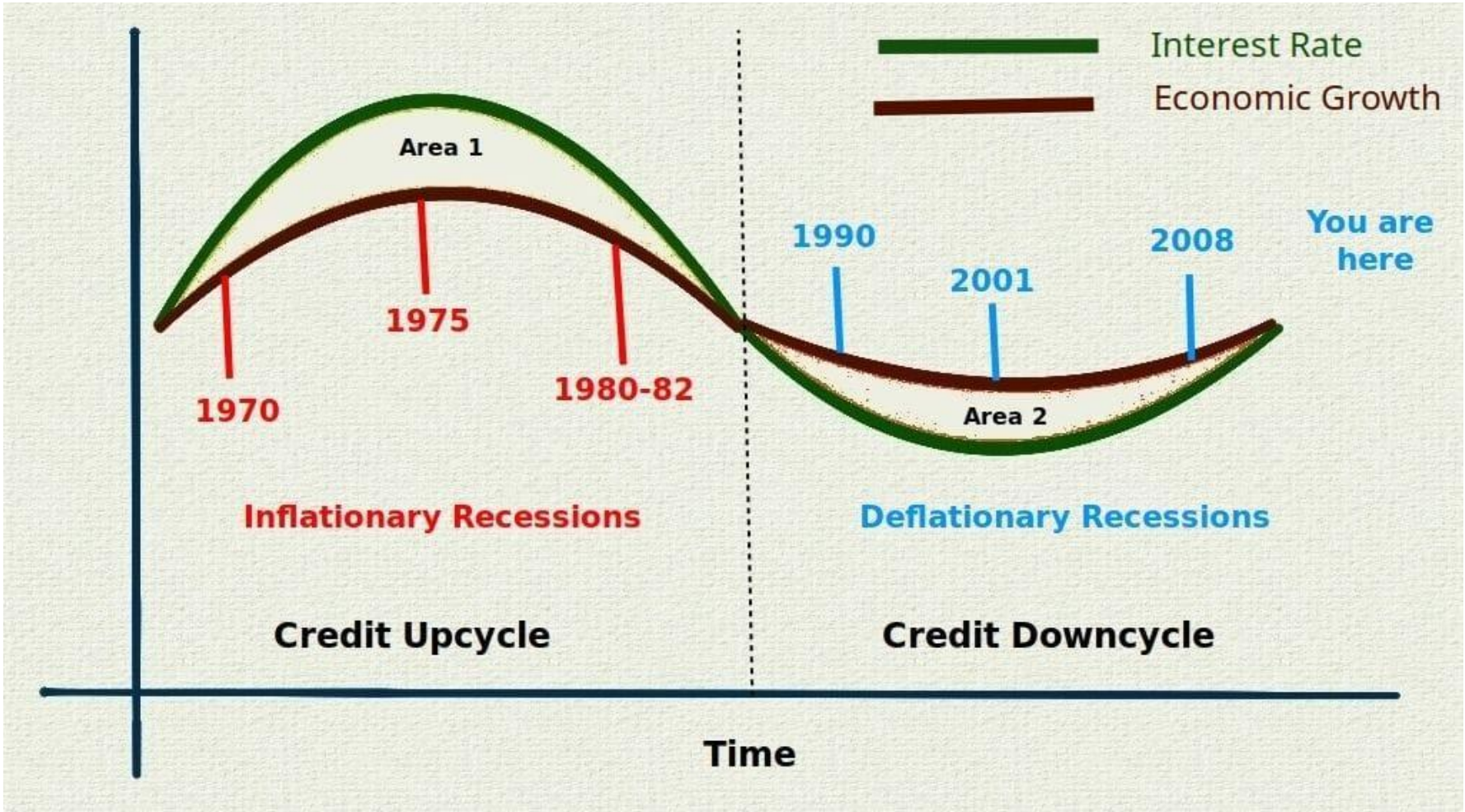
United States is past the average expiration date

Country	Dates	Duration	Currency
Portugal	1450 to 1530	80 years	Real
Spain	1530 to 1640	110 years	Escudo
Netherlands	1640 to 1720	80 years	Guilder
France	1720 to 1815	95 years	Franc
Great Britain	1815 to 1920	105 years	Pound
United States	1920 to 2025	105 years	Dollar

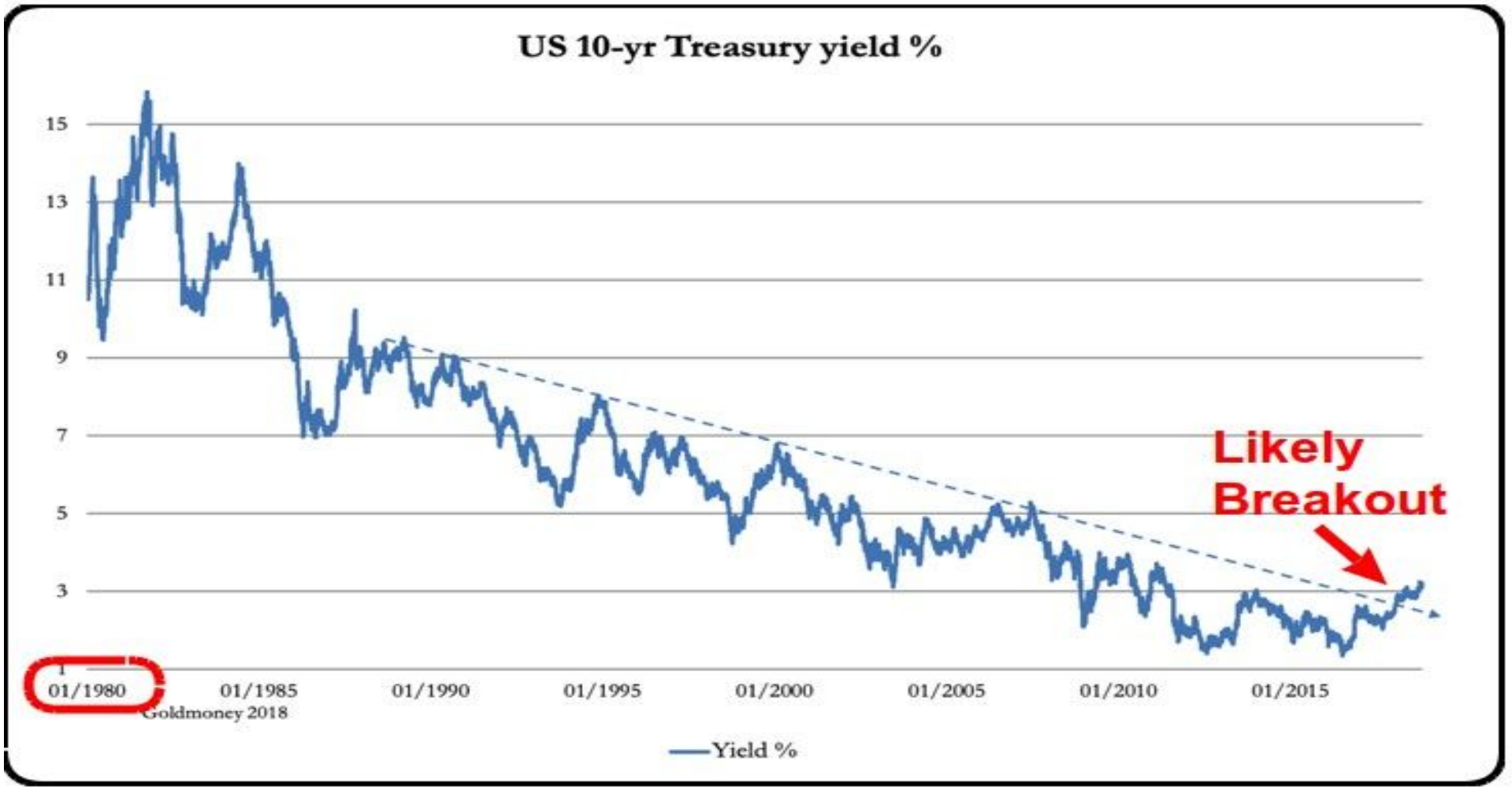
Unsustainable Federal Interest Payments



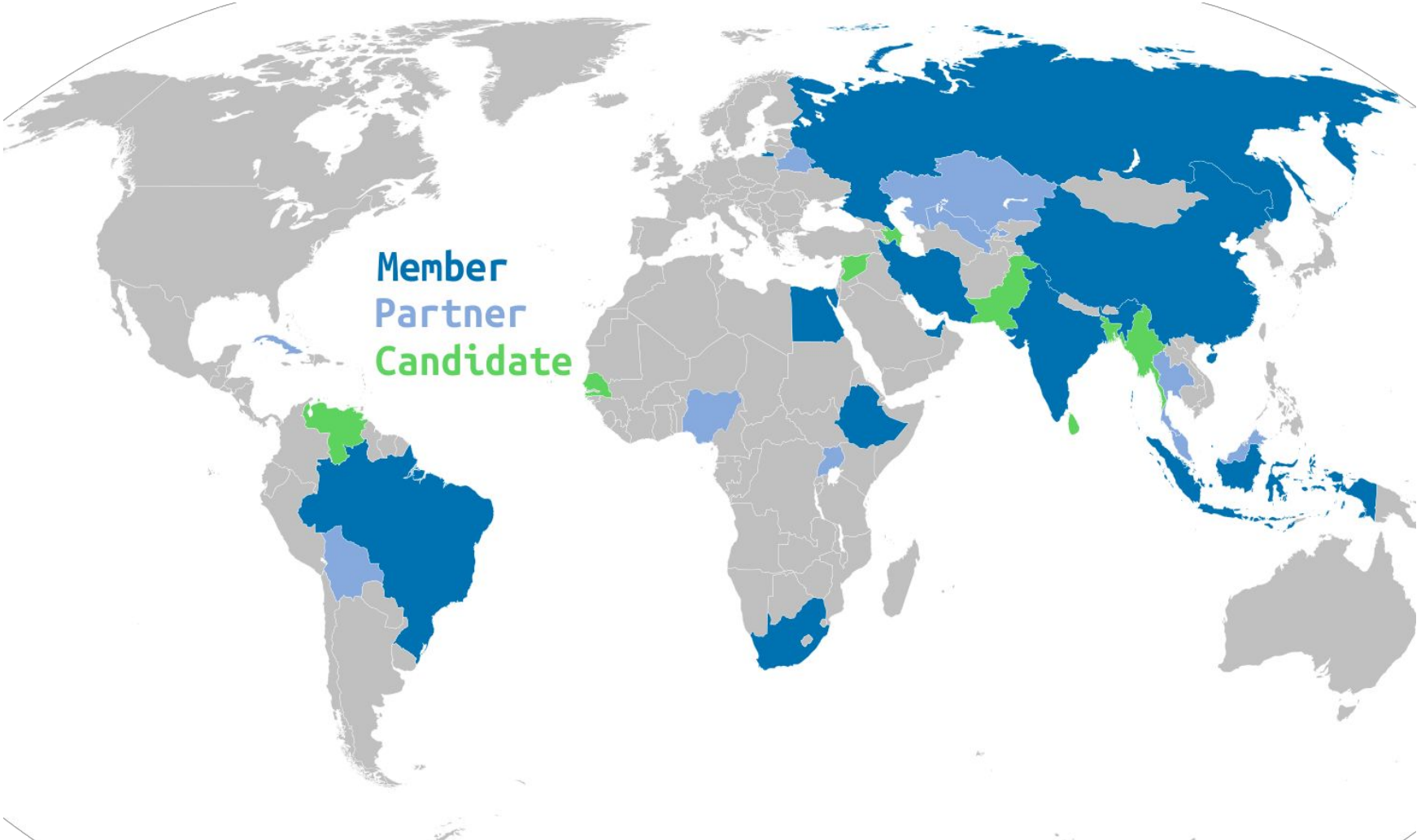
Full Credit Cycle / Ray Dalio (60 Years)



Half Credit Cycle, Interest Rates Likely To Rise

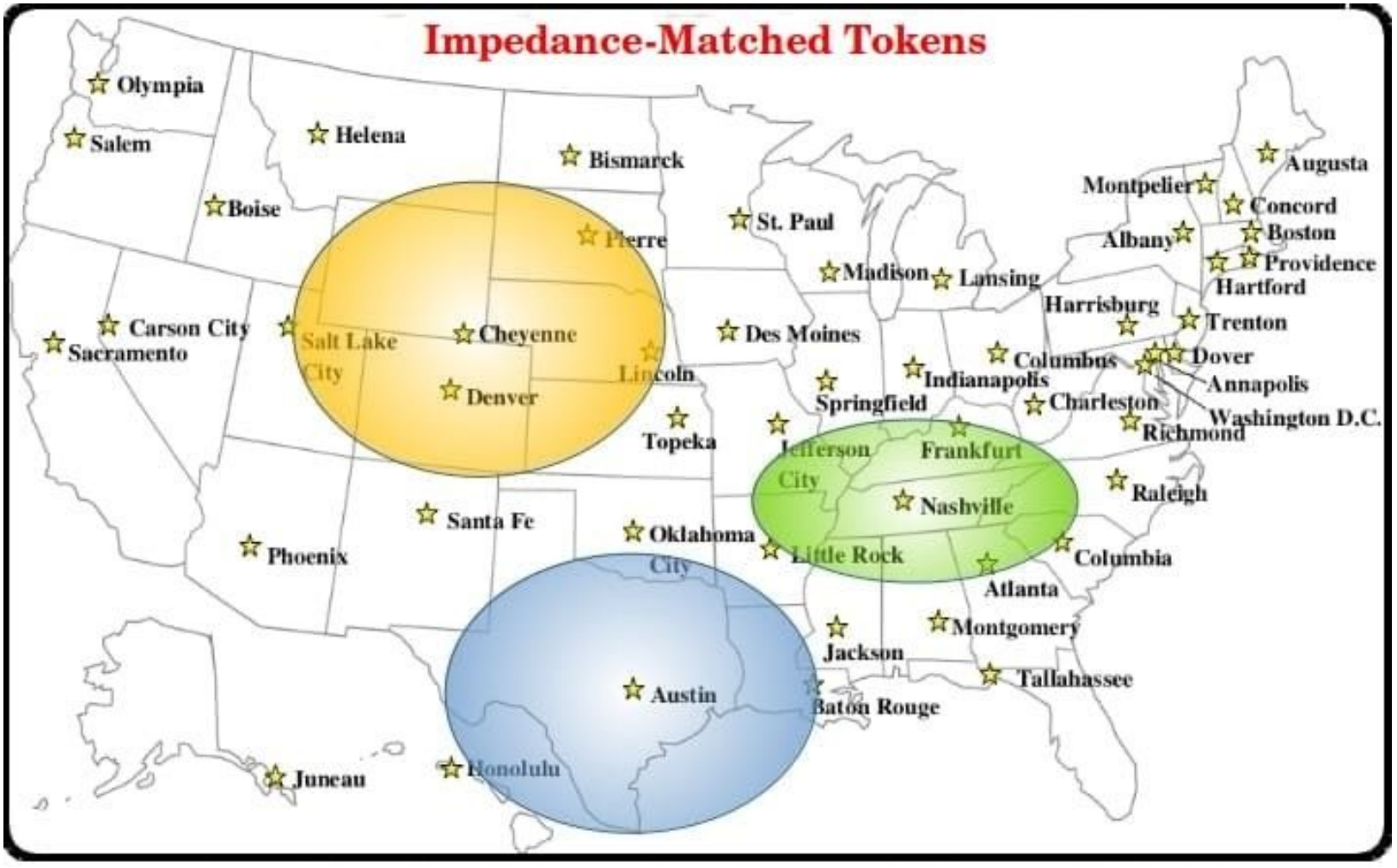


BRICS De-Dollarization Risk

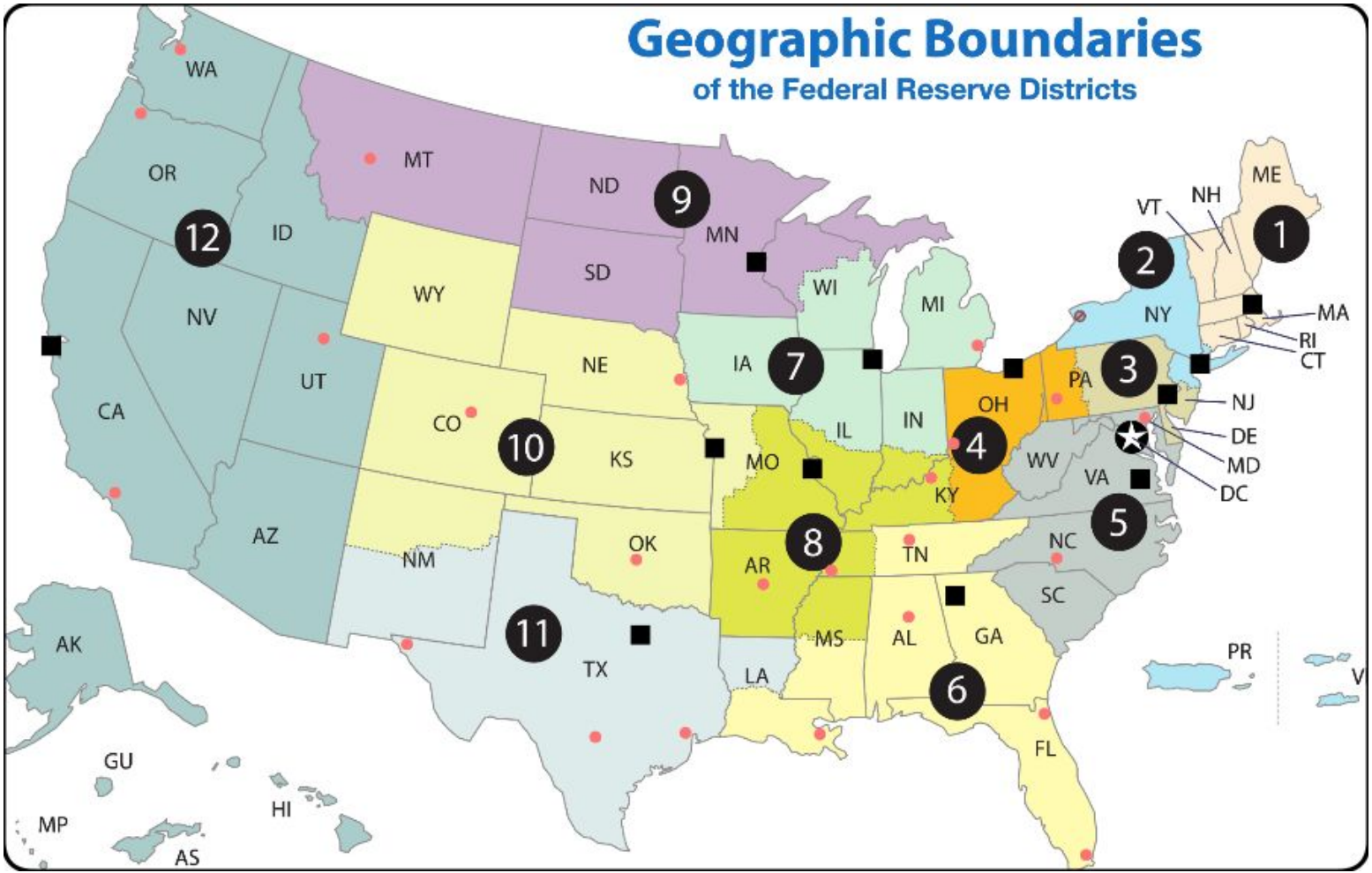


Token Platform
(SDT)

Impedance-matched Tokens

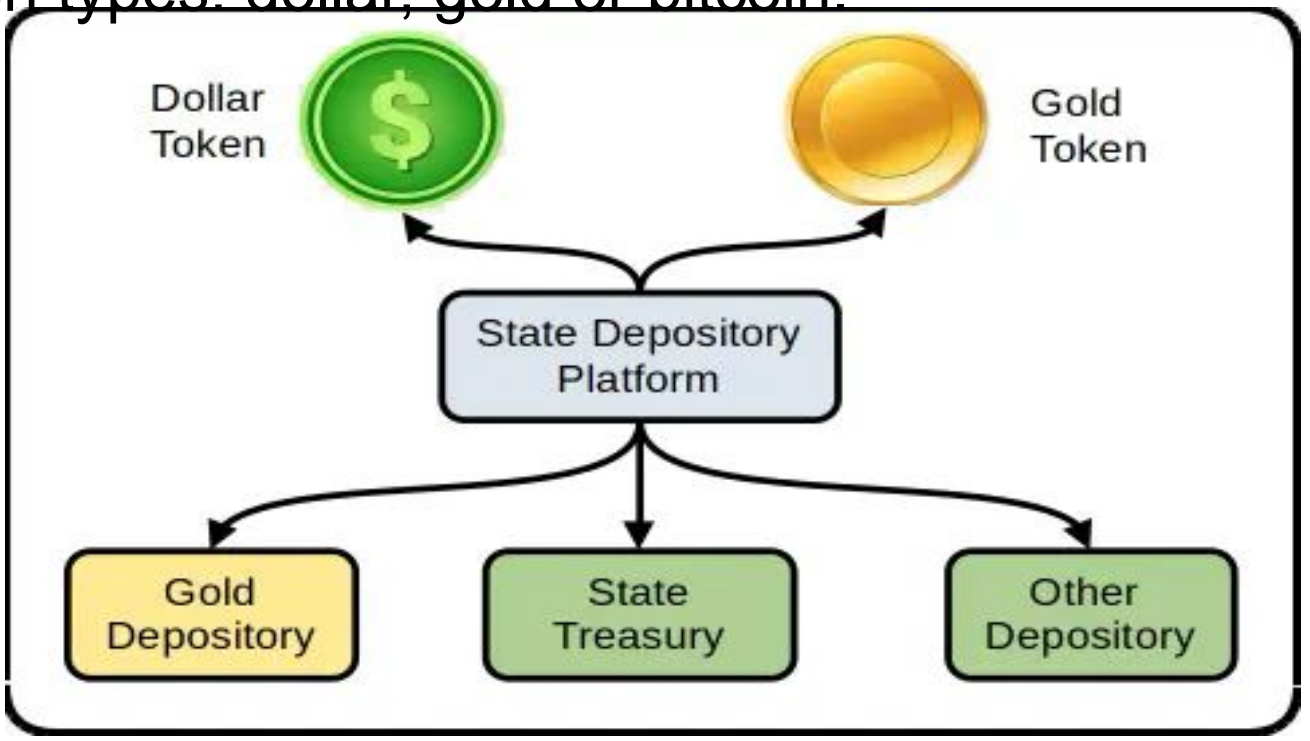


Similar to Federal Reserve Banks

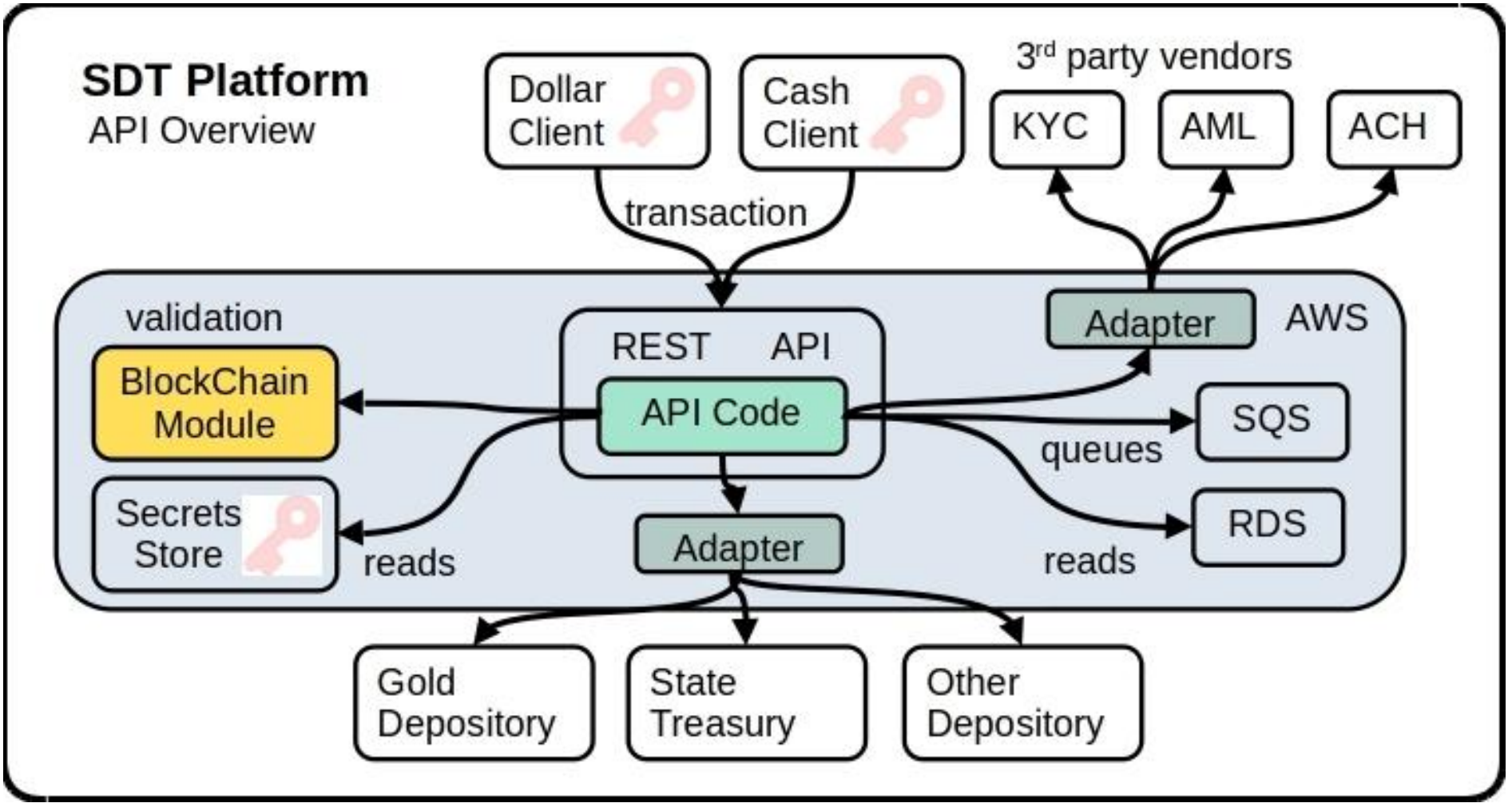


SDT Platform

A token platform adapts to regional conditions and provides multiple token types: dollar, gold or bitcoin.



Functional Overview



ChatGPT Research

15 Components glued together by AI code.

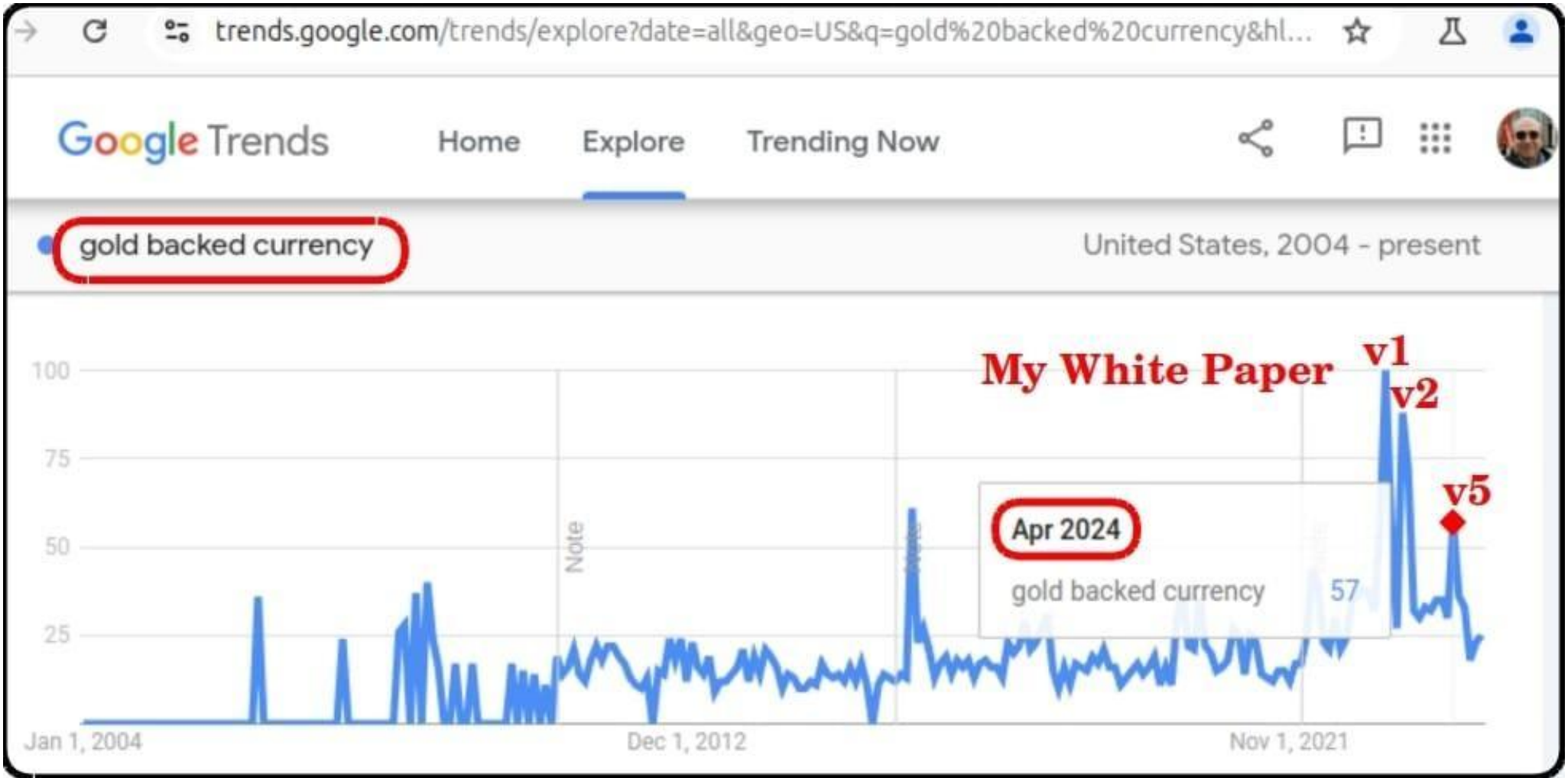
ACH, KYC & AML: 3rd-party API
Language: Python ver 3.9
Blockchain: Quorum
Database: AWS RDS
ORM: Django
Transport: AWS Lambda
Security: MPC Library mpyc

Queue: AWS SQS
Vault: AWS Nitro Enclave
Schema: OpenAPI - Editor
Stablecoin: Quorum Custom
Depositories: Proprietary API
Config Mgmt: SimpleJson
Integration Test: Localsource

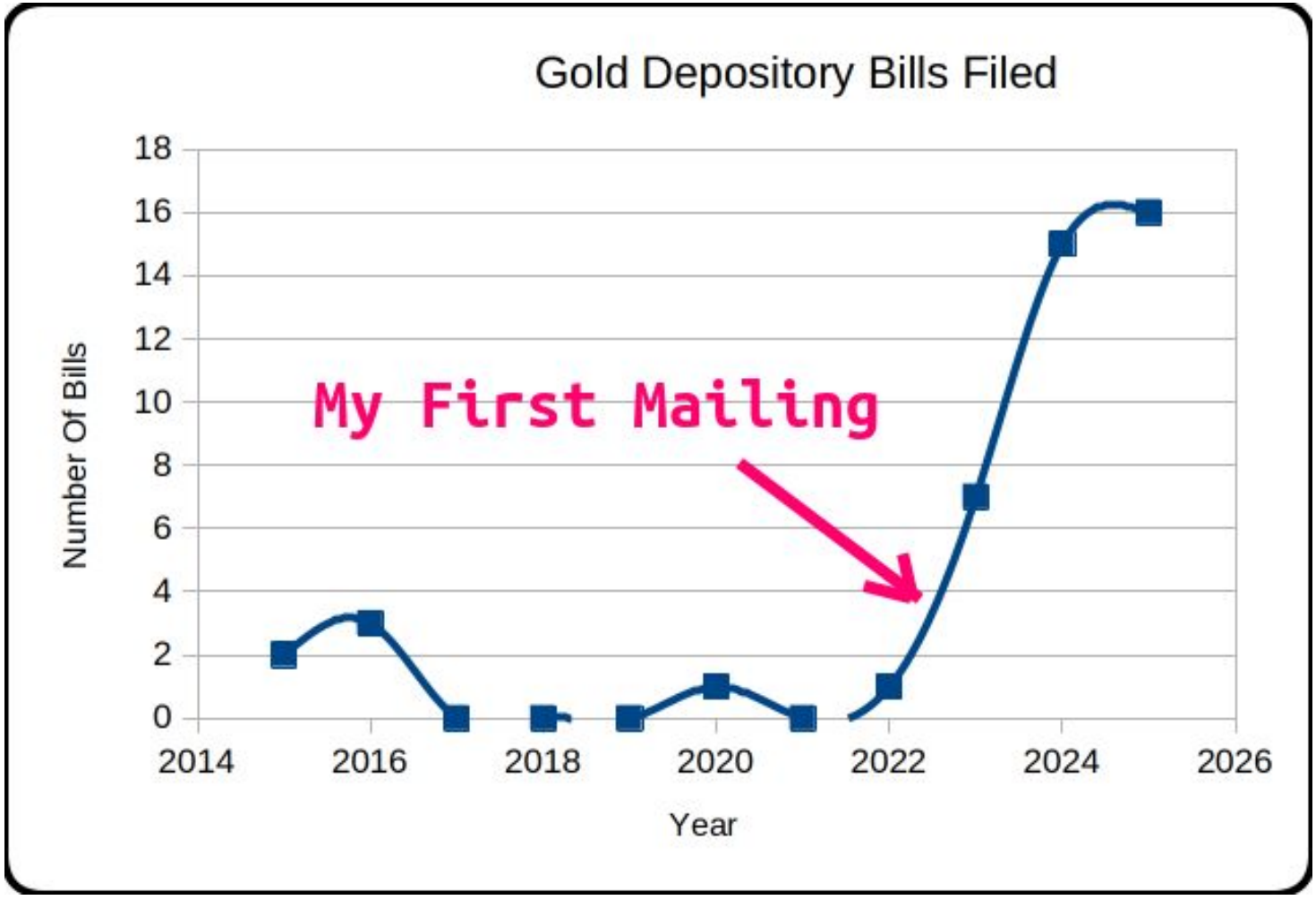
RESULTS

Mailed 600 copies to 8% of all legislators (7,386)

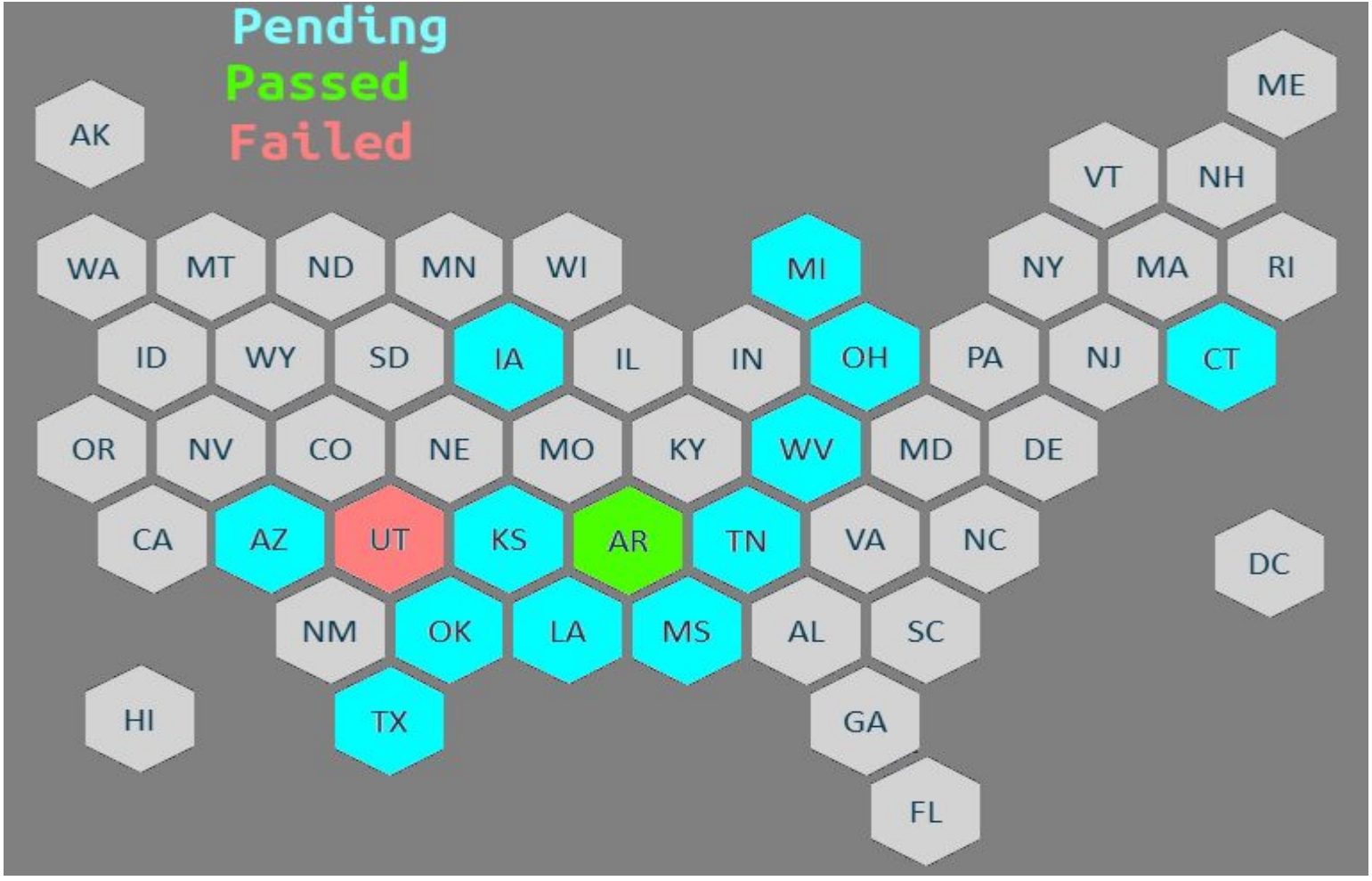
2023 Google Trends Feedback



Gold Depository Bills Submitted (2015-2025)



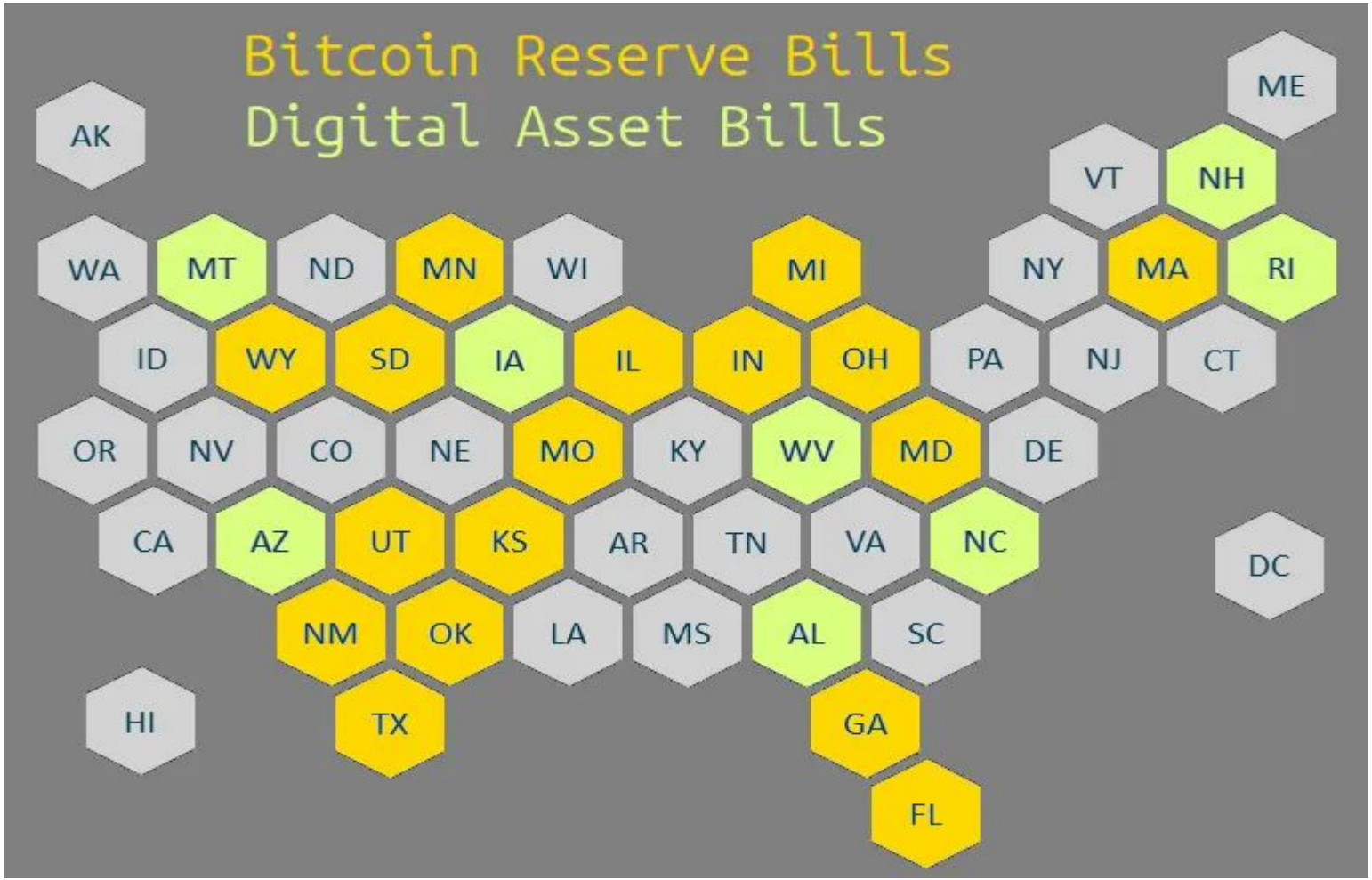
2025 Alt Currency Legislation



Top Ten State Pension Funds At Risk (Grok, 2025)

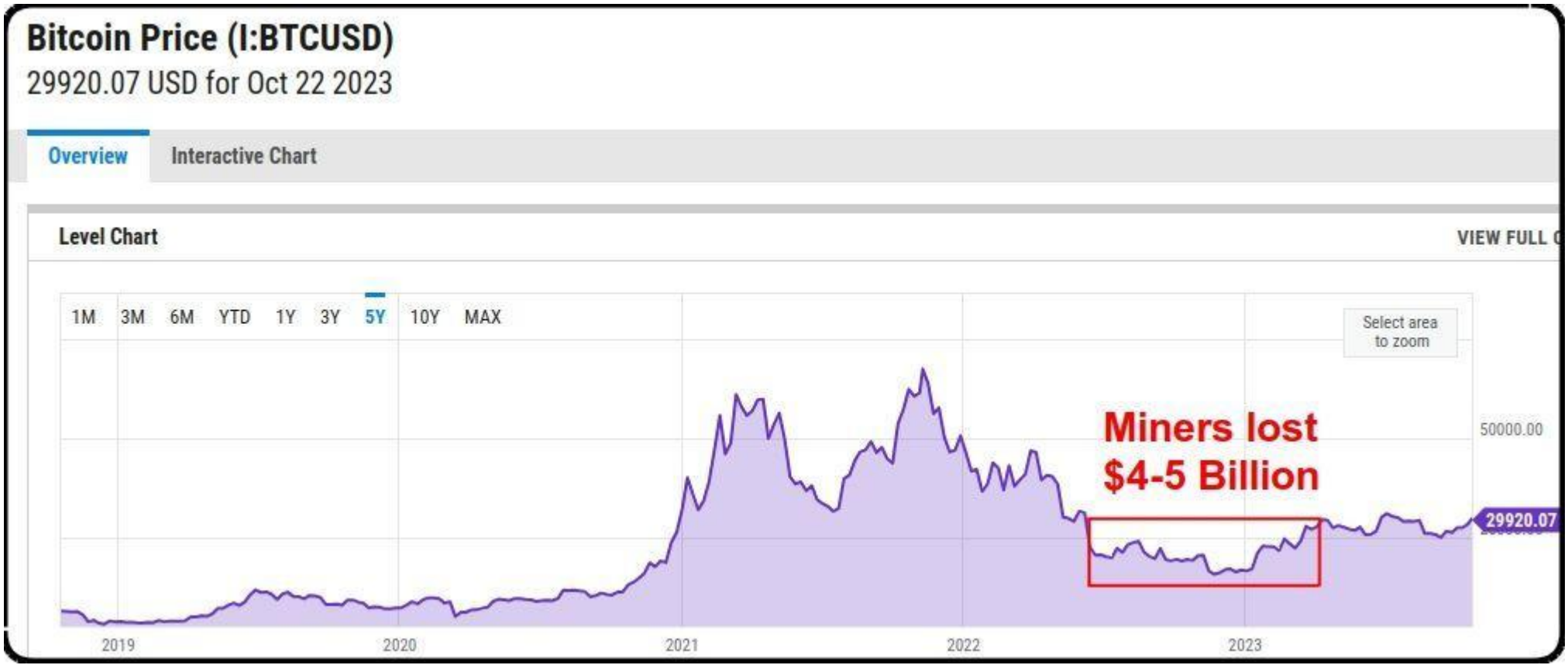
State	Assets	Year of Data
California CALPERS	$496 billion	2023
California CALSTRS	$316 billion	2023
New York Public	$248 billion	2023
Florida	$184 billion	2023
Texas	$146 billion	2018
New York Teachers	$141 billion	2023
Washington	$125 billion	2023
Wisconsin	$122 billion	2023
North Carolina	$116 billion	2018
Ohio	$101 billion	2023

2025 Bitcoin Reserve Legislation



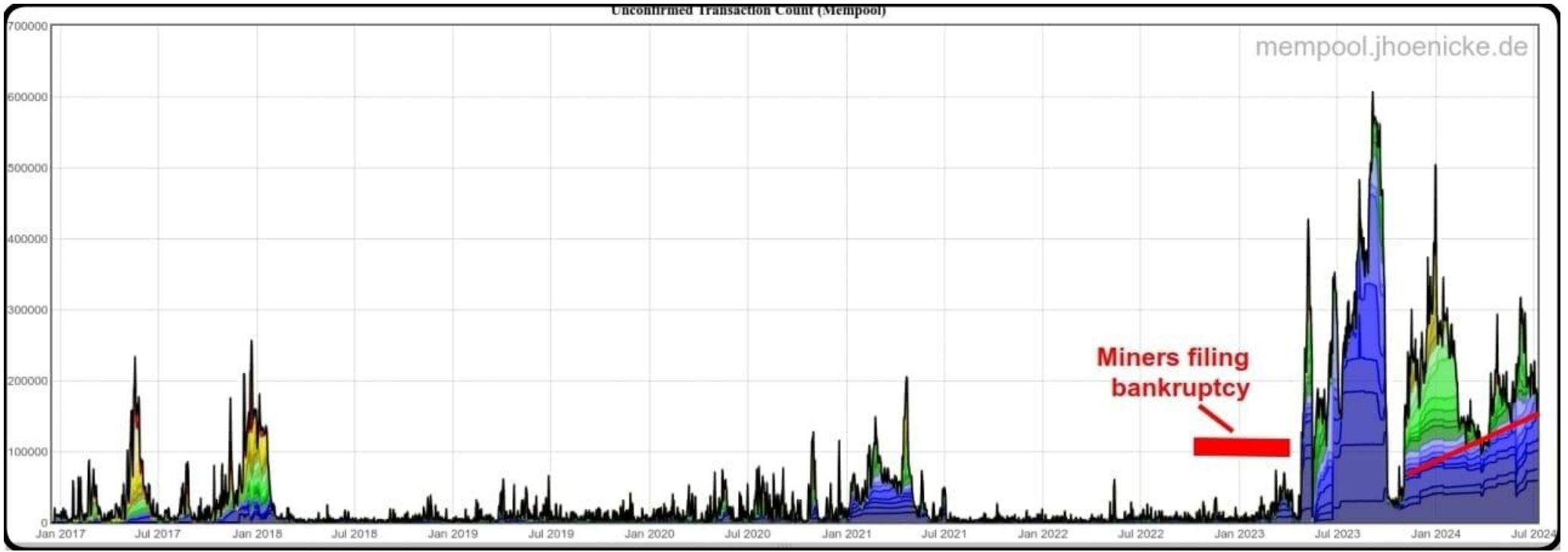
Bitcoin Reserve Considerations

Miner Crash in 2022-2023



Crash Impact On Bitcoin Mempool

Mempool overflowed but it's all about the ETFs!
1% to 5% of transactions expiring for 18 months



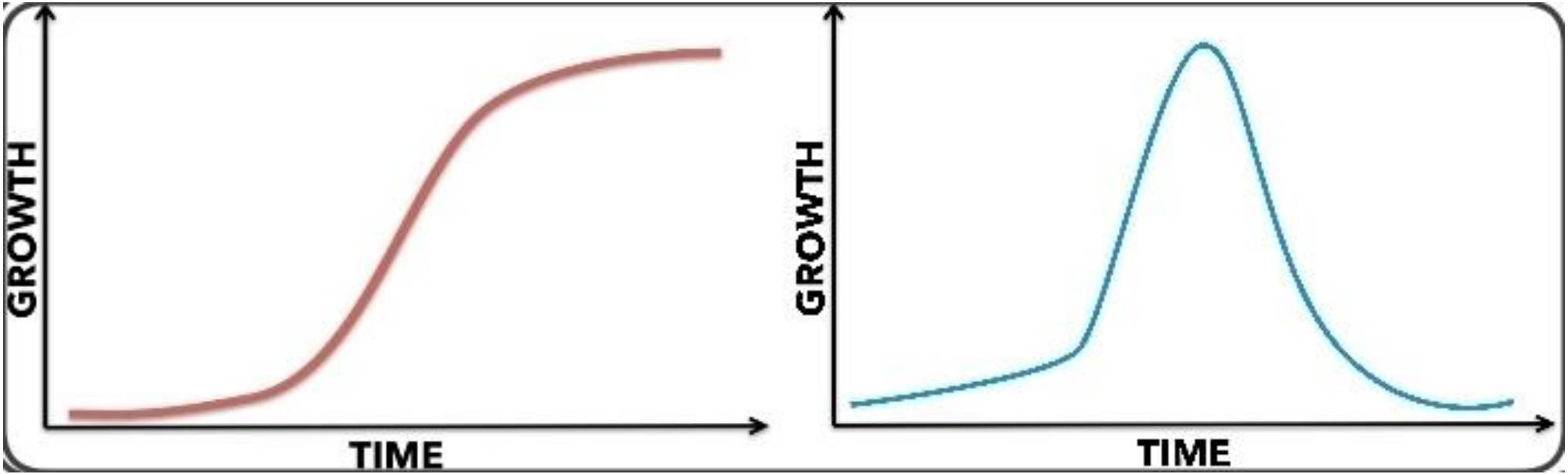
Certain Things Are Likely

Predictions

- Most bills won’t pass, some will resume in 2026
- Increased crypto legislation in 2026 (diffraction)
- Commodity tokens for oil and cattle
- State purchase of private depositories
- Bitcoin mining discontinued and coin limit raised
- Explicit AI development methodology
- AI will commoditize crypto; tokens will displace intrinsic coins
- Private gold-backed cryptos may falter

Bitcoin Scenarios: S-Curve Or A-Curve

Bitcoin uses 180 Terawatts annually, about $20 billion
Energy consumption is rising 25% per year
By the 2028 coin halving, energy cost will be close to $40 billion



AI Augmentation

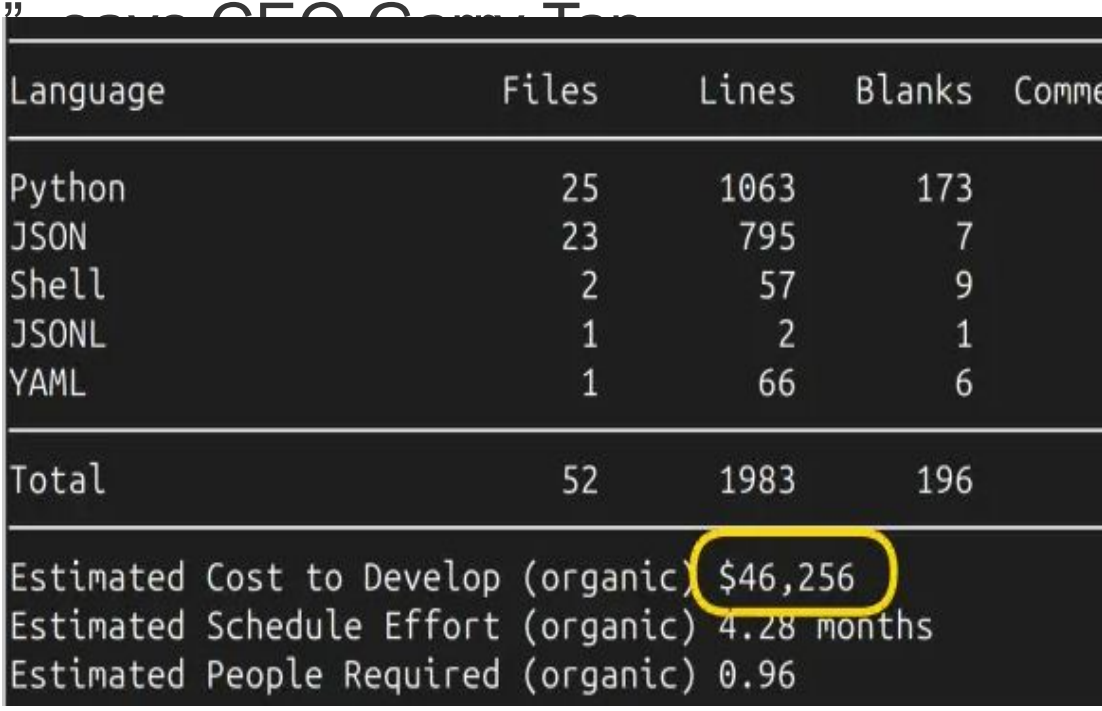
Y Combinator's current startups are 95% written by AI.

“10 Engineers do the work… of 50” [illegible]

SCC: 1 person X 4 months

2x to 3x increase in productivity.

I created this in two weeks with a few months of python experience



Language	Files	Lines	Blanks	Comme
Python	25	1063	173	
JSON	23	795	7	
Shell	2	57	9	
JSONL	1	2	1	
YAML	1	66	6	
Total	52	1983	196	

Estimated Cost to Develop (organic) $46,256
Estimated Schedule Effort (organic) 4.28 months
Estimated People Required (organic) 0.96

AI Augmentation

Marijuana businesses might use a token system because it can act like cash. ChatGPT listed these similar markets:

- Adult Entertainment & Sex Work
- Firearms & Ammunition Industry
- Gambling & Online Betting
- Psychedelic & Alternative Medicine Industry
- Cryptocurrencies & Decentralized Finance (DeFi)
- Unregulated Herbal & Supplement Markets

AI Considerations

- **Non-deterministic** nature impacts repeatable process
- Use a modified development methodology
- Confirmation bias is an issue in research use
- Creativity - Wordperfect example, Abstract Factory
- Security issues from hallucinations
- Security risk from hosted instances (Gmail example)

Legislation Surprises in 2025

- New York A 7807: Fiat-collateralized stablecoins as **a form of bail**
- Texas SB 2922: Issuance and regulation of an **oil-backed stablecoin**
- Wyoming Stable Token Commission
- West Virginia HB 2463: make gold, silver, and **crypto currency** legal tender
- West Virginia HB 2464: To create the **State Bank** of West Virginia
- USDKG: USD-pegged, gold-backed stablecoin from Kyrgyzstan

Private Gold-backed Cryptocurrencies (Grok, 2025)

They don’t age well

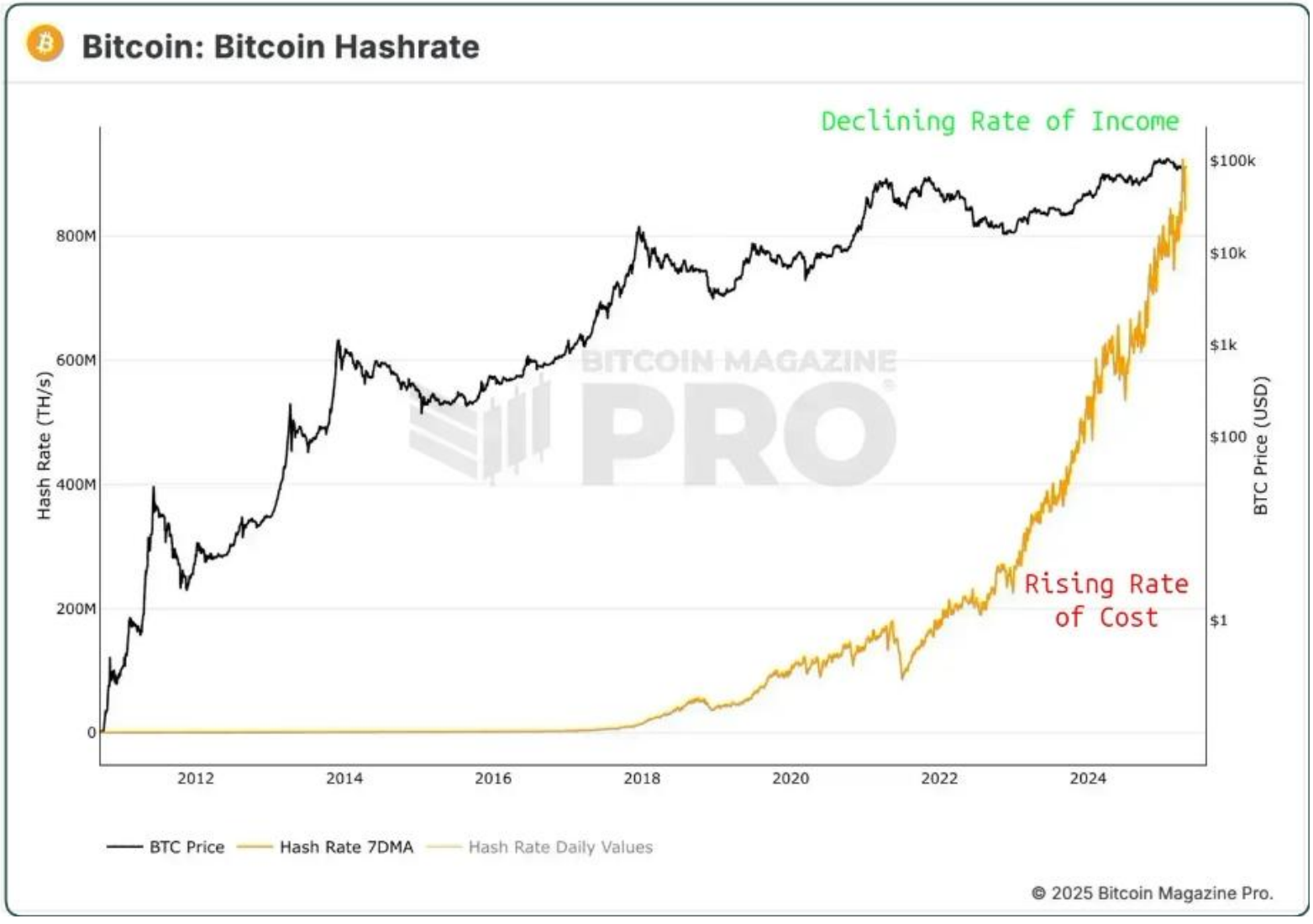
Cryptocurrency	Year Created	Still in Business (April 2025)	Cryptocurrency	Year Created	Still in Business (April 2025)
Midas Rezerv	2015	No	Golden Currency	2018	No
Xaurum	2015	No	Perth Mint Gold	2018	No
Digix Gold Token	2016	No	PAX Gold	2019	Yes
Goldzip (Gz)	2017	No	Tether Gold	2020	Yes
GramGold Coin	2017	No	AABB Gold Token	2021	Yes
Auric	2018	No	Meld Gold	2021	Yes
Magma Coin	2018	No	AurusGOLD/TXAU	2021	Yes
			Kinesis Gold	2021	Yes

Gold

Gold rose from $35 to $850 in the 1970s, a 24X increase.

The 2020s are probably a similar situation, currently at a 3X increase from $1100

The End


Bitcoin: Bitcoin Hashrate
Declining Rate of Income
Rising Rate of Cost
Hash Rate (TH/s)
BTC Price (USD)
800M
600M
400M
200M
0
$100k
$10k
$1k
$100
$1
2012
2014
2016
2018
2020
2022
2024
BTC Price
Hash Rate 7DMA
Hash Rate Daily Values
BITCOIN MAGAZINE PRO
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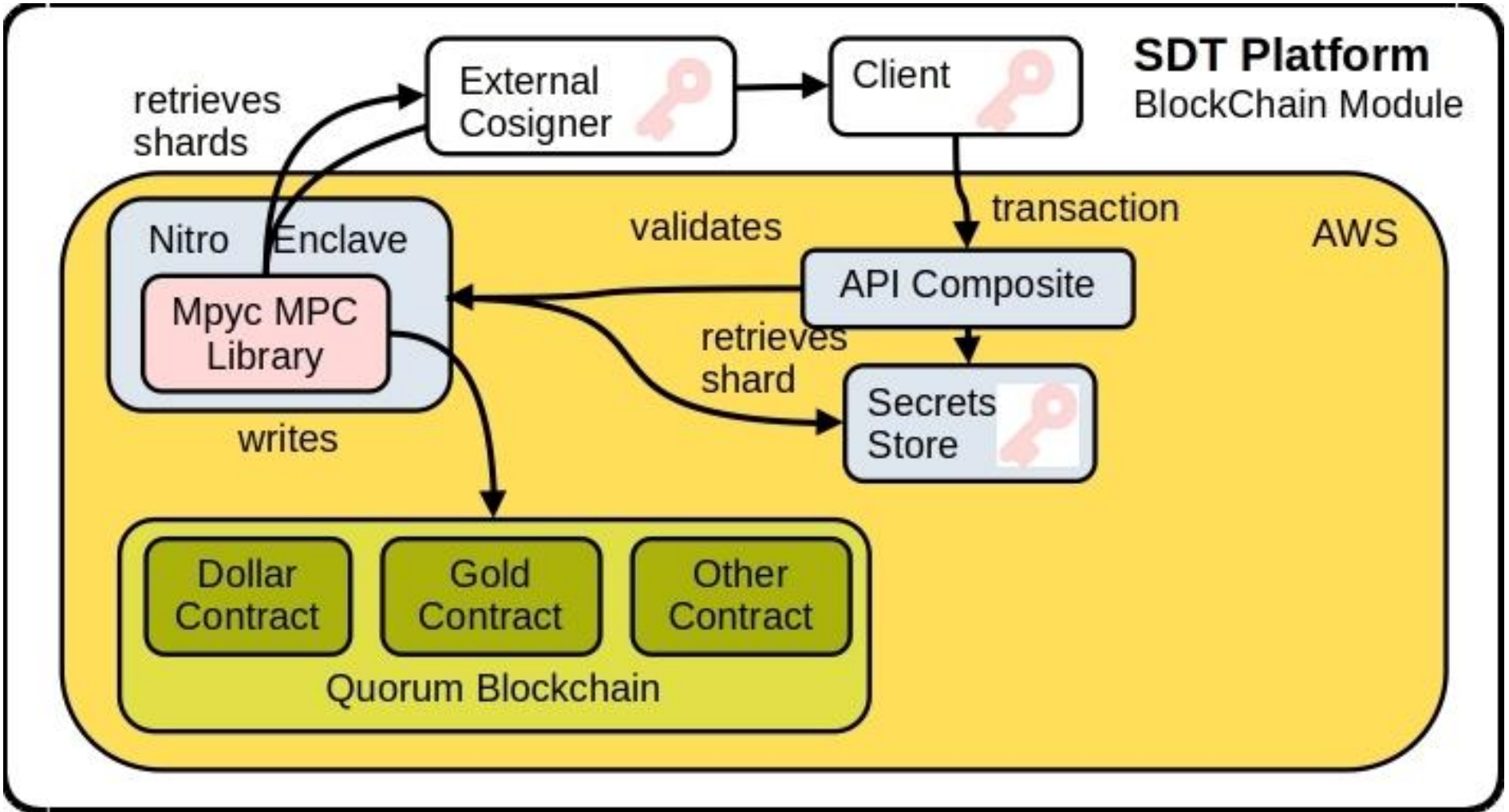
Supplementary Slides For Questions / Comments

Private Crypto versus State Crypto

- Annual income of largest Bitcoin miner, MARA: $650 million
- Annual budget of State of Louisiana: $45 billion, almost 100X more.

- Identify an impending problem (The Dollar)
- Find a unique solution (State Depository)
- Use AI to overcome roadblocks (Paper, research, coding)
- Develop a feedback process (Trends and Open Spaces)

Blockchain Module



Misc Considerations

- Dollar/gold represent complex objects as one number, PRICE
- Crypto platform can add more dimensions, a more accurate model
- Fungible support
- Token versus Intrinsic value (Bitcoin) - Lost or Stolen is replaceable
- Bank Centralization

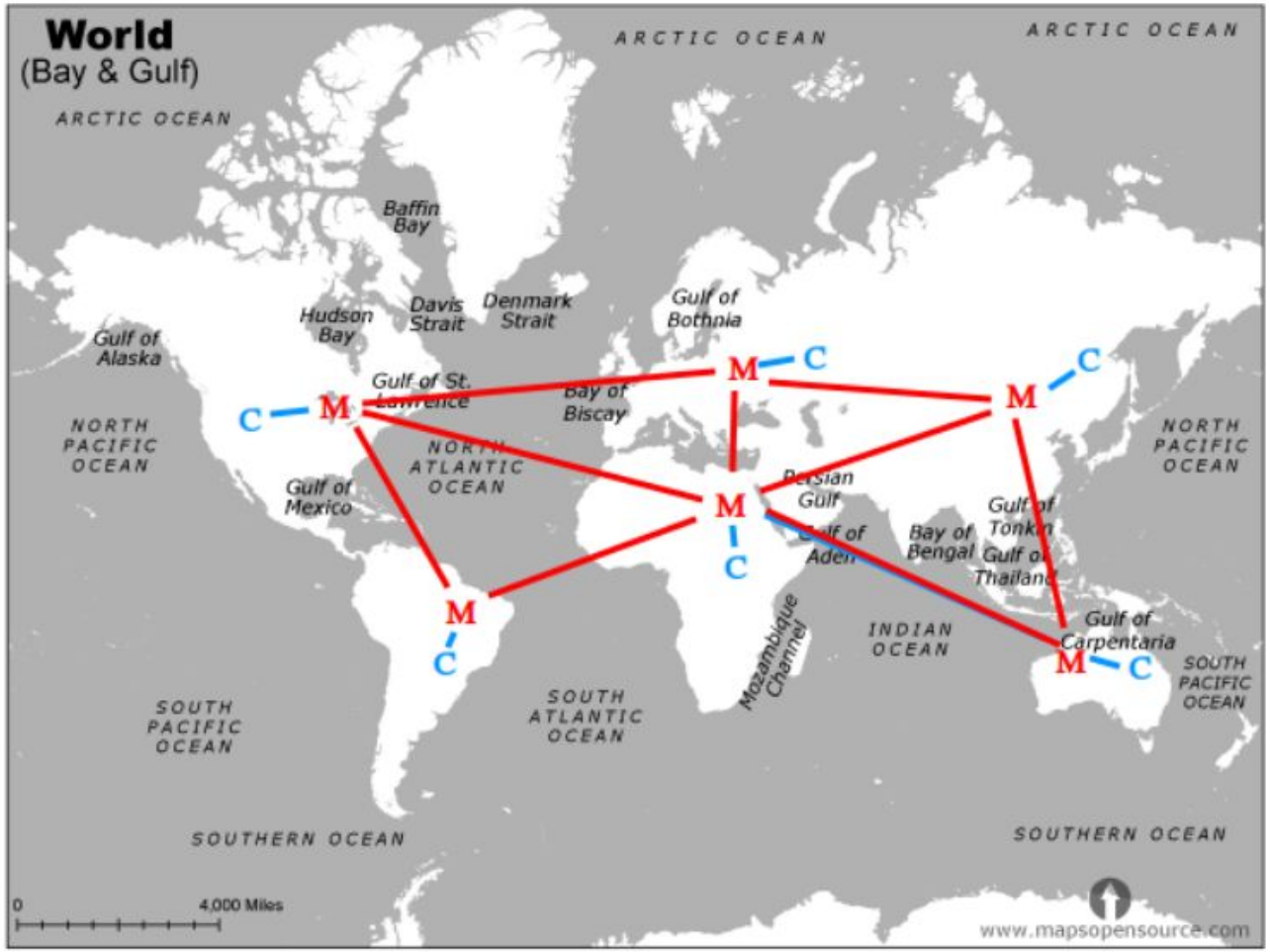
Marijuana State Intersection

The intersection of marijuana-legal States and State depository candidates (blue names have bills for 2025)

Illinois
Massachusetts
Montana
Michigan
Arizona

New Jersey
New York
Rhode Island
Missouri
Ohio

Bitcoin Miner Crash

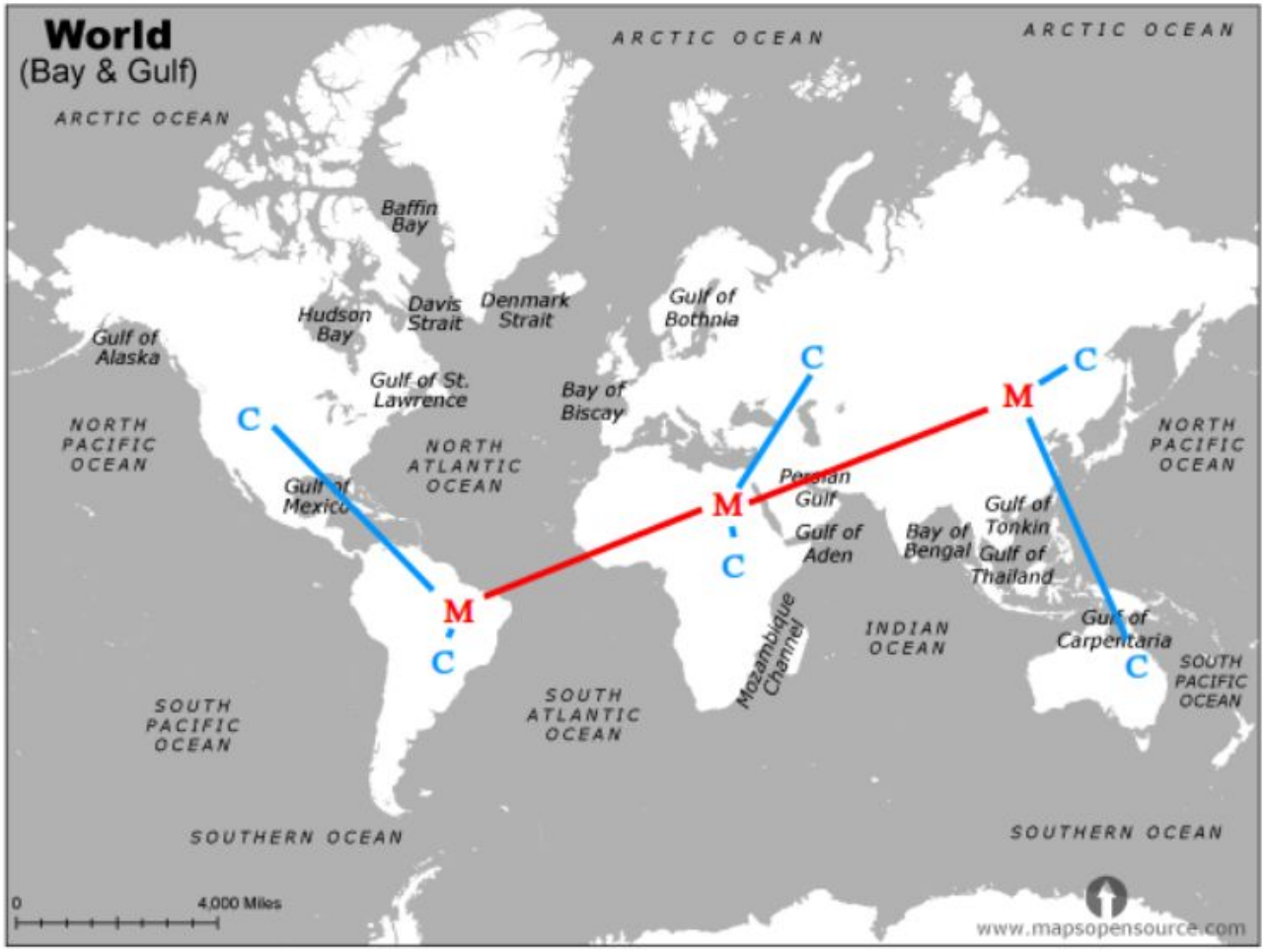


Conceptual Diagram

Miner : Wallet ratio
1 million : 200 million

1 : 200

Bitcoin Miner Crash



Conceptual Diagram

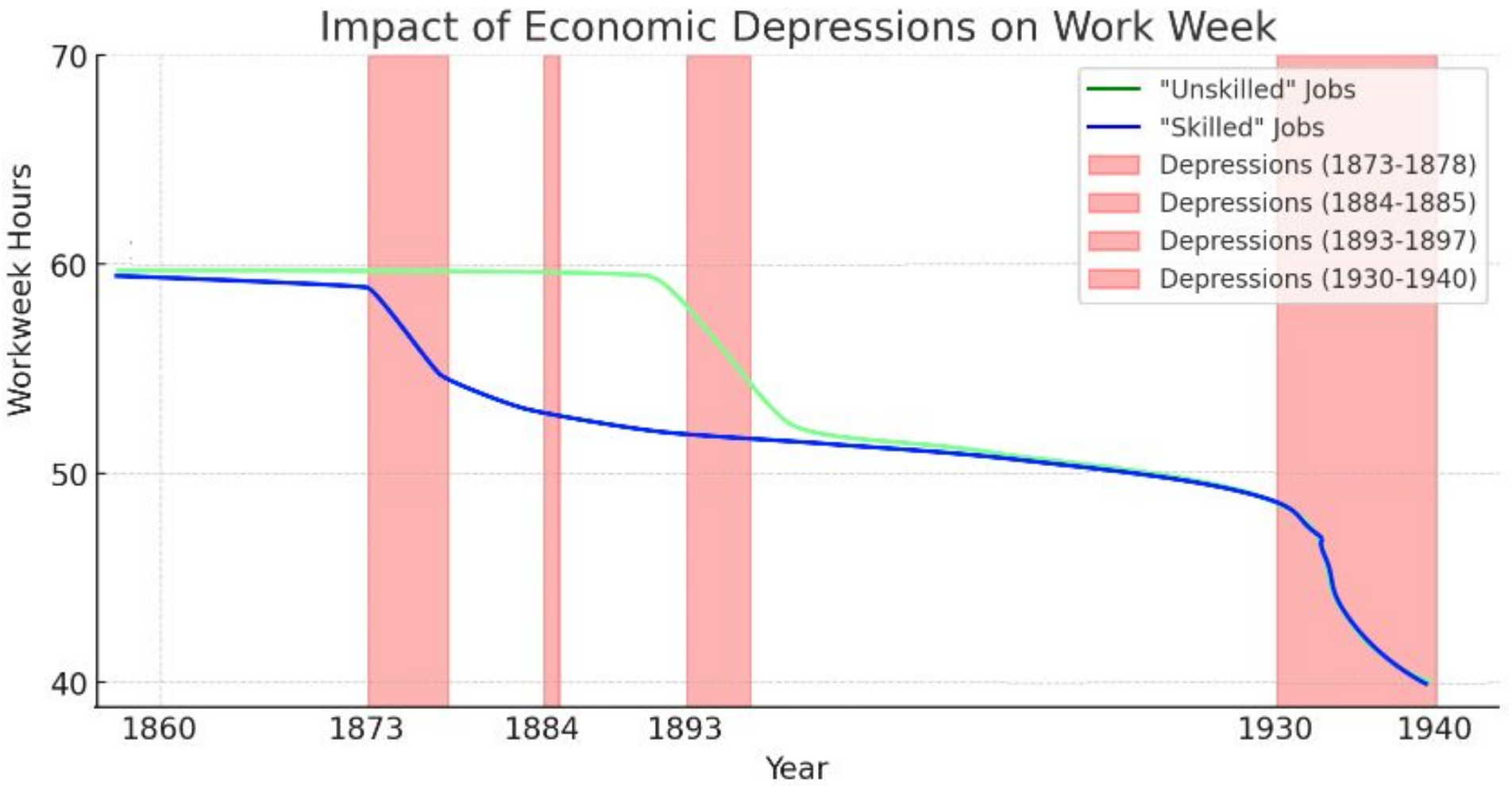
Miner : Wallet ratio
500K : 200 million

1: 400

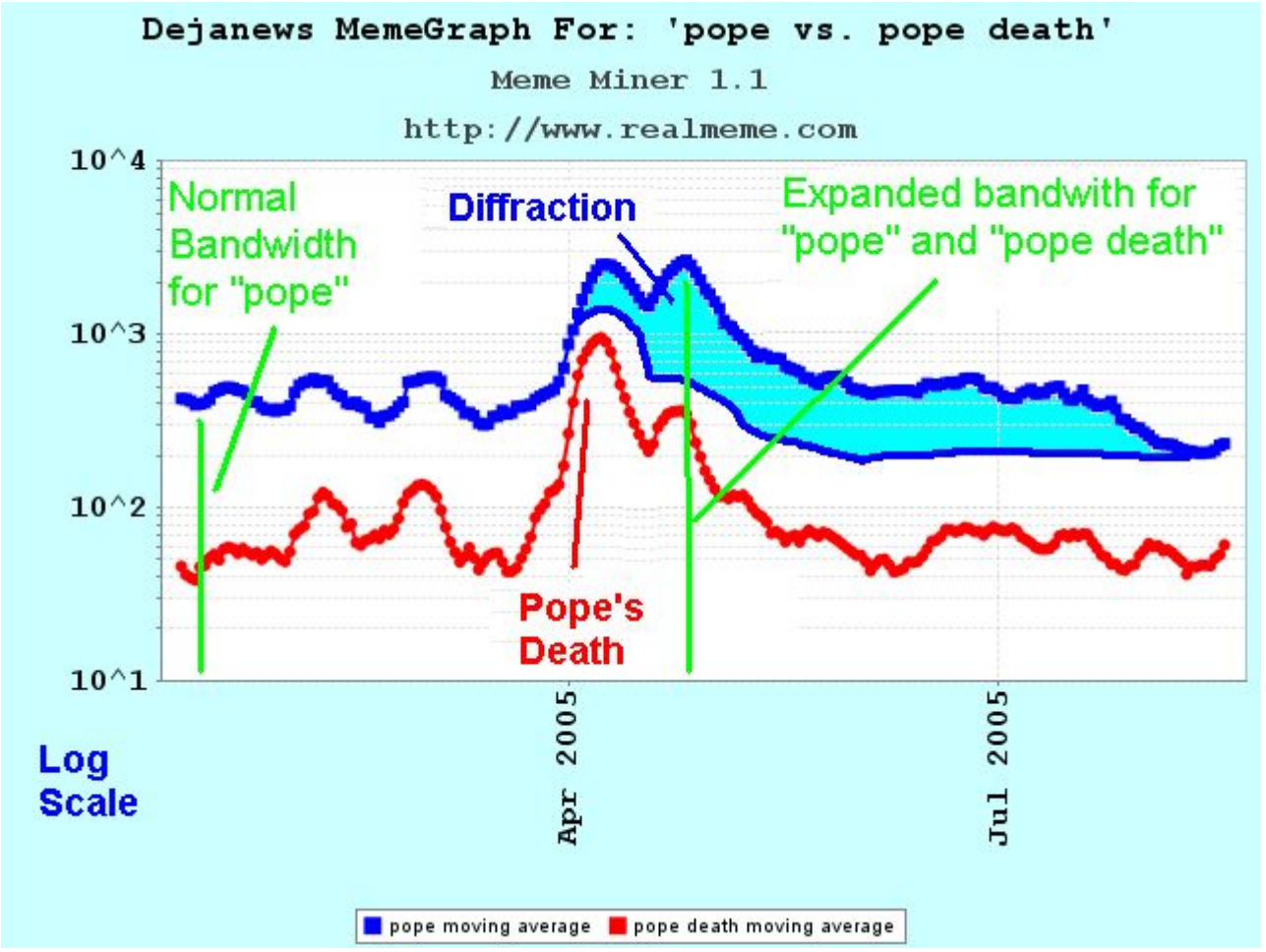
Each miner now serves twice as many wallets and over longer distances

Crash Impact On Confirmation Time

Likely Reduction In Workweek



A Little Bit Of NLP

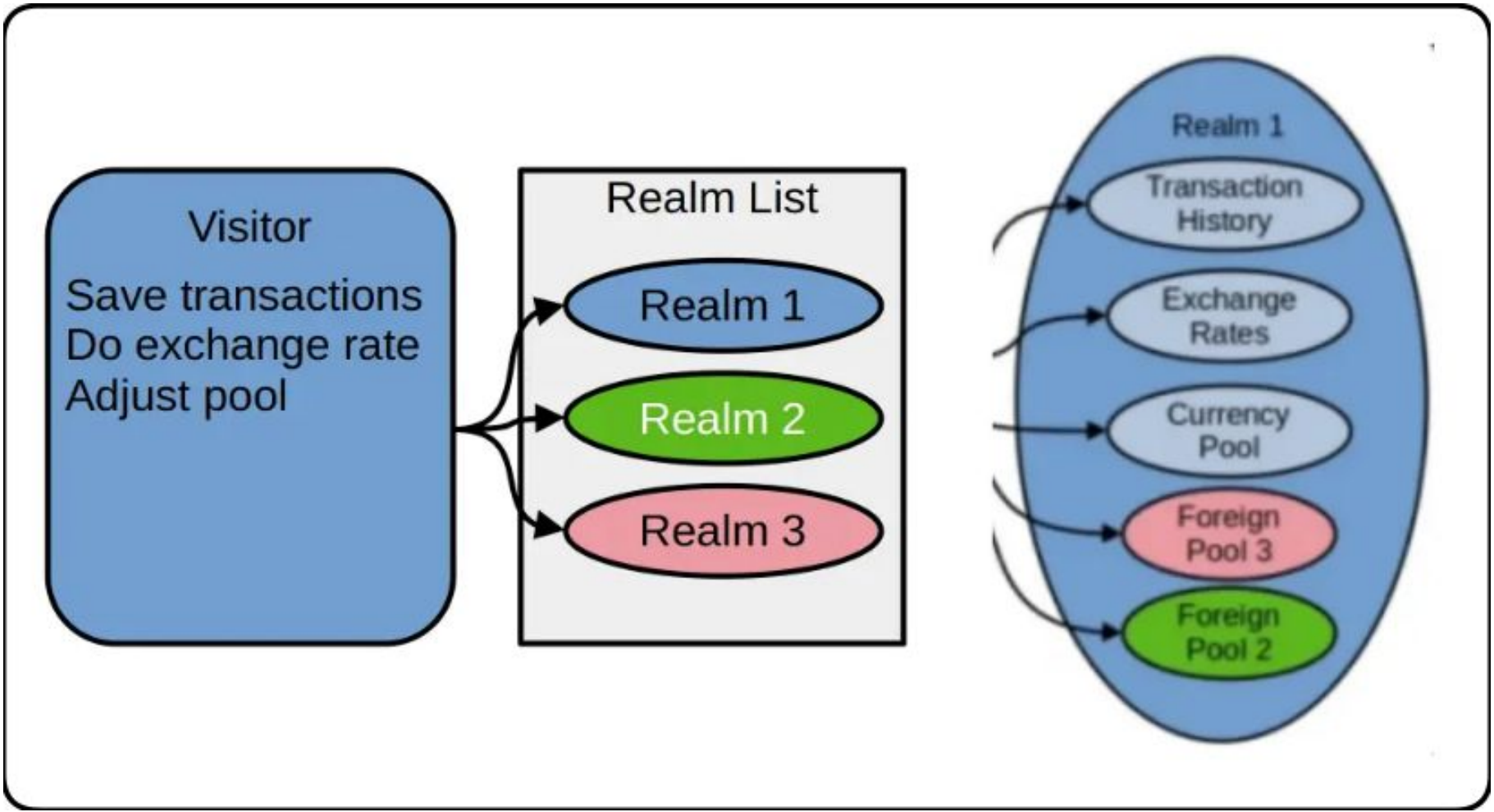


Diffraction aliases:

- Shock Doctrine
- Disaster Capitalism
- Overton Window

A sudden shock jars people out of their everyday habits and frees mental bandwidth which can be captured by other ideas.

BRICS Visitor Pattern



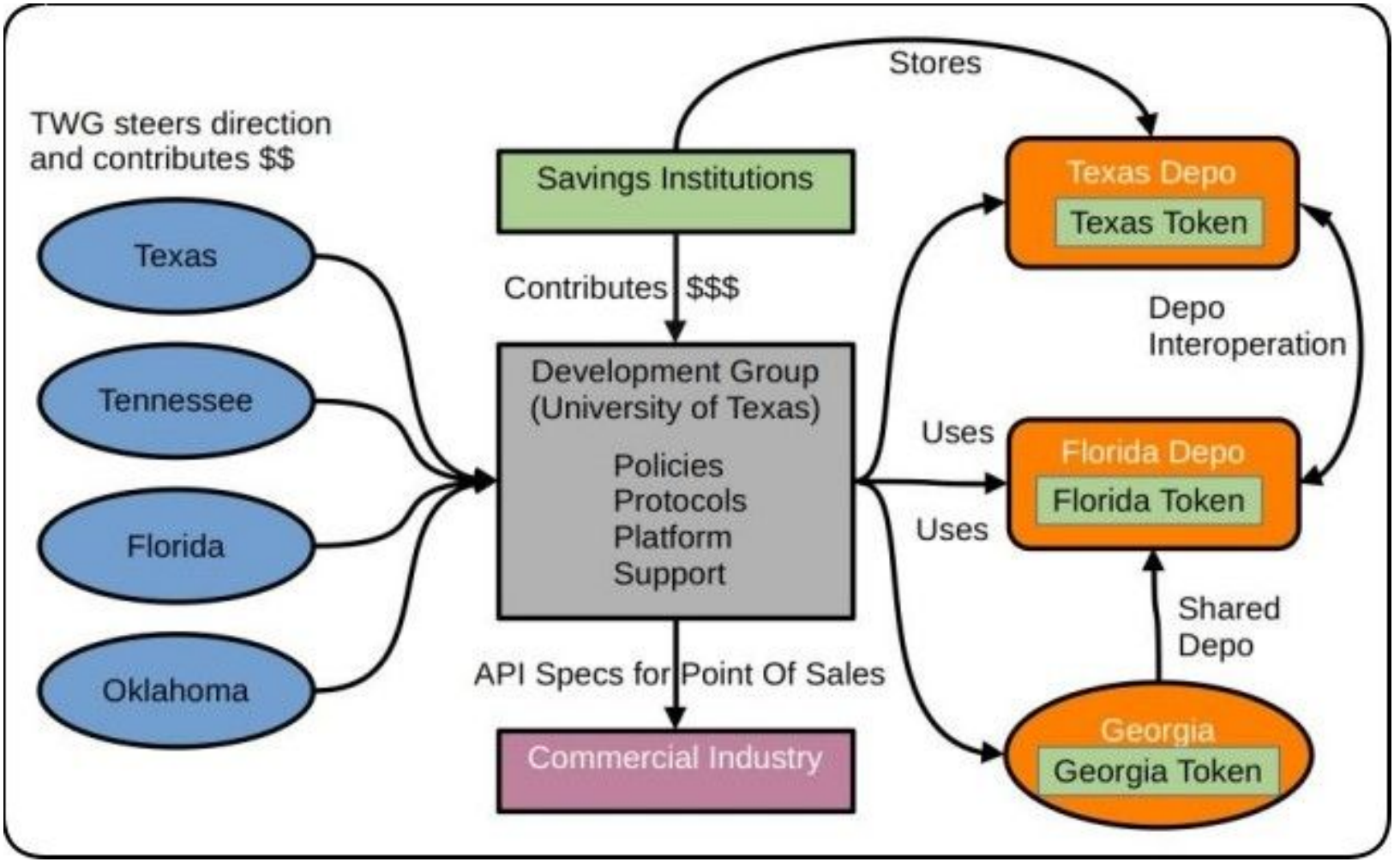
ChatGPT Script Example

generate a json schema which has user, address, account, transaction, history and status objects, generate a matching postgres DDL script, a python REST API using Flask and matching test json objects.

generate a react client which has a data entry screen for each of the KYC data, ACH data and AML data

generate a docker instance which imports four REST API servers written in python and starts them up automatically on non-competing ports

Technical Working Group (TWG)



J. Orlin Grabbe

Financial Trading

Conspiracy Theorist

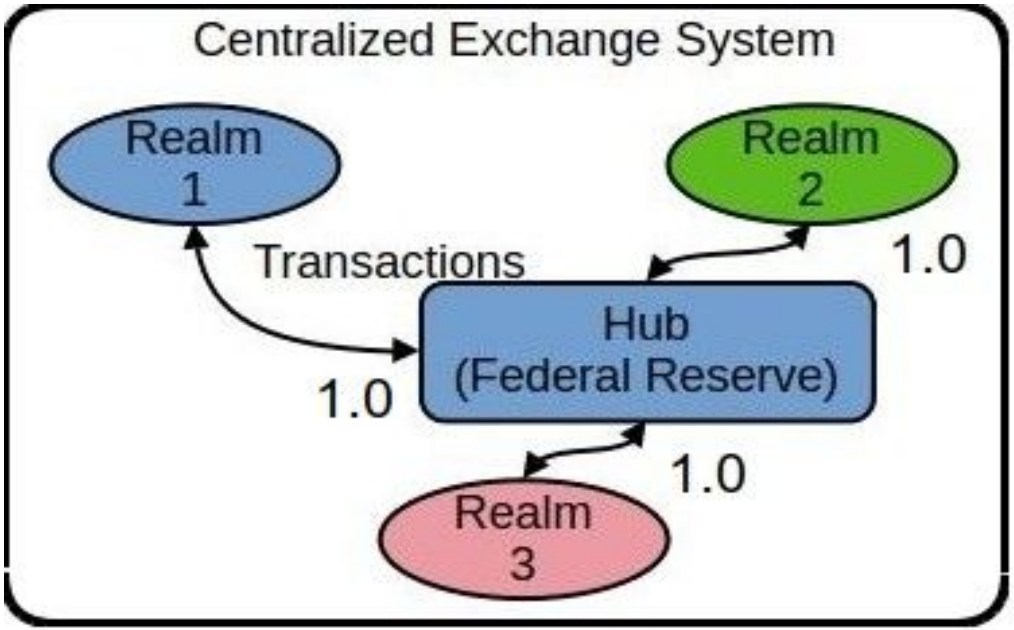
The End Of Ordinary Money (1995)

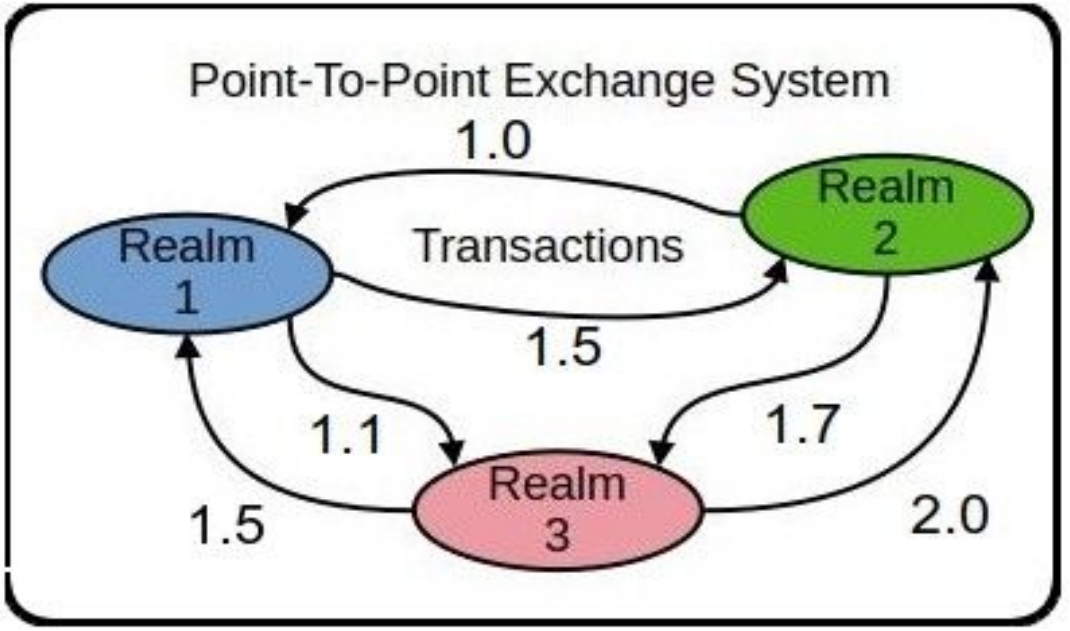
Digital Money Trust (1999-2004)

State Exchange System (SXS)

- Hub and Spoke: centralized, scalable, simple but rigid
- Point-to-Point: flexible but complex and limited scale

Point-to-point allows multiple, asymmetrical exchange rates
and probably the how the new BRICS currency system works





Private Gold-backed Cryptocurrencies (Me, 2023)

They don’t age well

Currency	Blockchain	Status
OneGram	Graphene, C++, probably custom written	last tweet was 2019
Digix Gold Tokens	Ethereum	Digix ceased operations 21 March 2023
Gold Bits Coin	Ethereum	last news was 2019
Goldmint	based on the original pBFT protocol	last news was Aug, 2022
ZenGold	NA	last news was 2019
Puregold Token	Ethereum	last news was Feb 2020
HelloGold	Ethereum	shut down in Jan 2023
Xaurum	Ethereum	active
PAXG	Ethereum	active
XAUT	Ethereum	Tether
PMGT	Ethereum	ceased operations
GLC	Ethereum	active