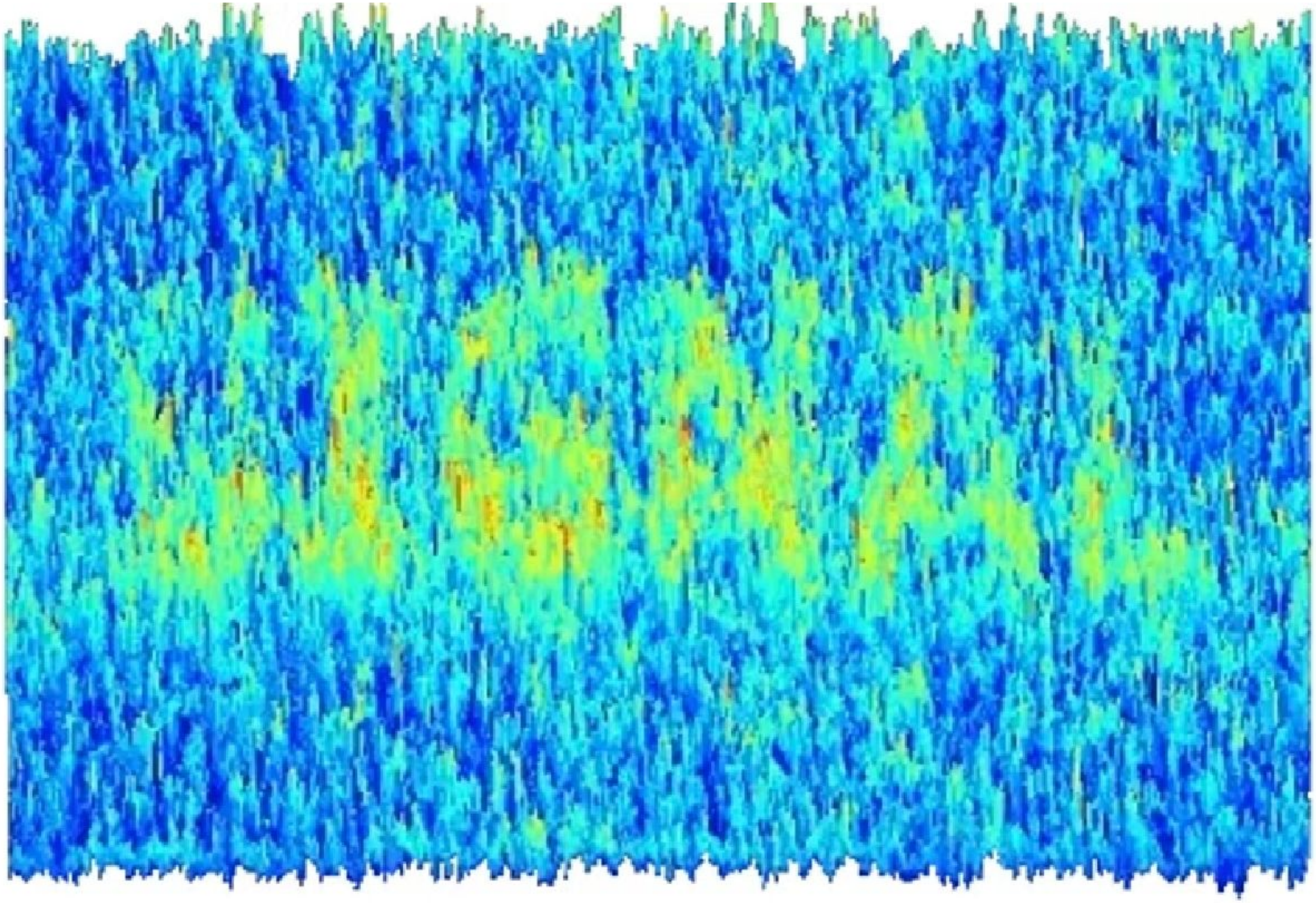
Finding Signal in a Noisy World during a Fourth Turning

EXAMINING HISTORICAL PATTERNS AND FUTURE TRENDS



Frans Basson
BasRock

AfriRock 2025
The Future of Rock Engineering

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EXAMINING HISTORICAL PATTERNS AND FUTURE TRENDS

Frans Basson
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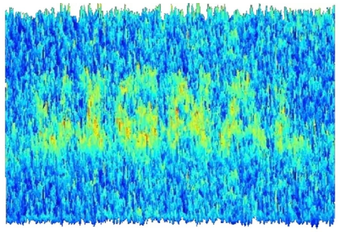
Jeff Booth



Due to the number of aspects covered in a short time frame, I will follow the advice from Danie Ras that he gave to me in ~2000:

"***A small bit of inaccuracy can safe tons of explanation***".

Agenda Outline

Introduction

- Inferential thinking

1. Gold & Monetary systems

- Why do monetary systems fail?

2. Cycles & The Fourth Turning

- What occurs during a Fourth Turning?

3. Technology & Adoption

- Can technology be stopped?

Conclusions

Geology & Structural models

History & Experience

Observations

Instrumentation

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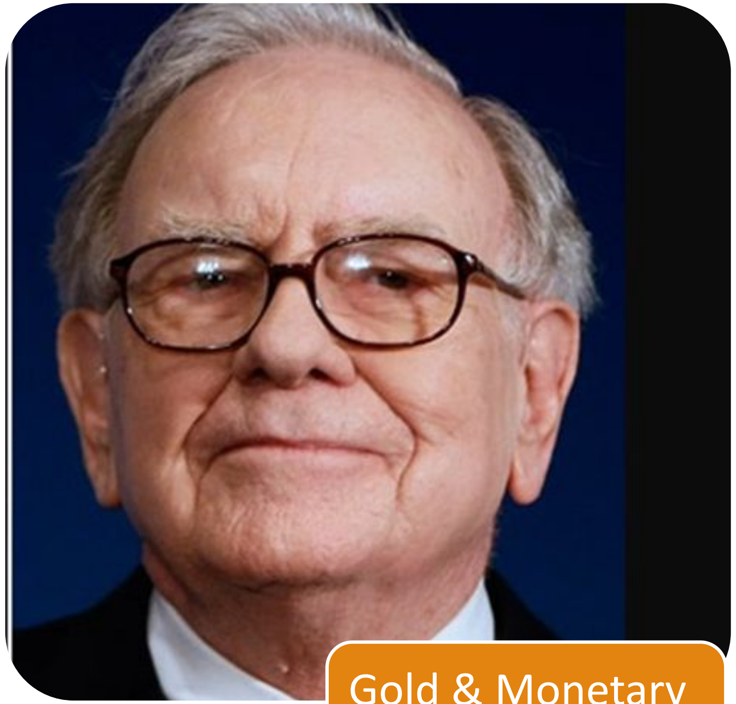
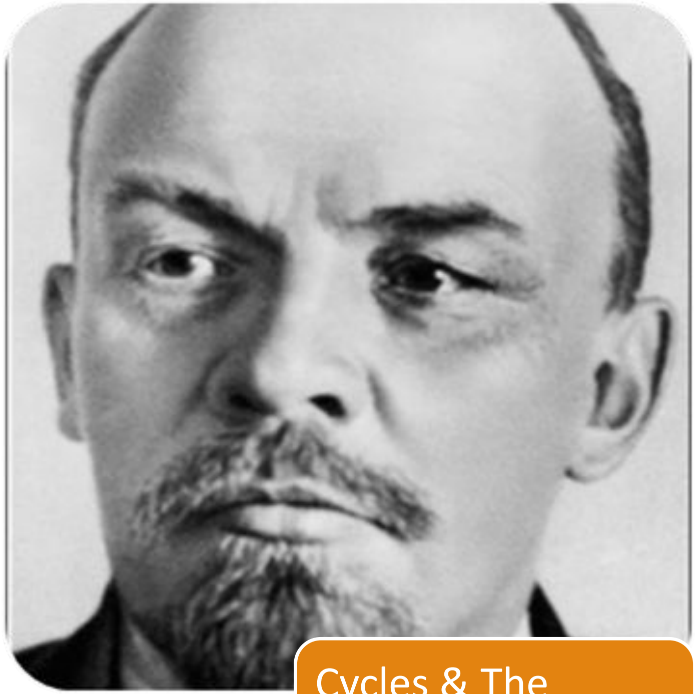


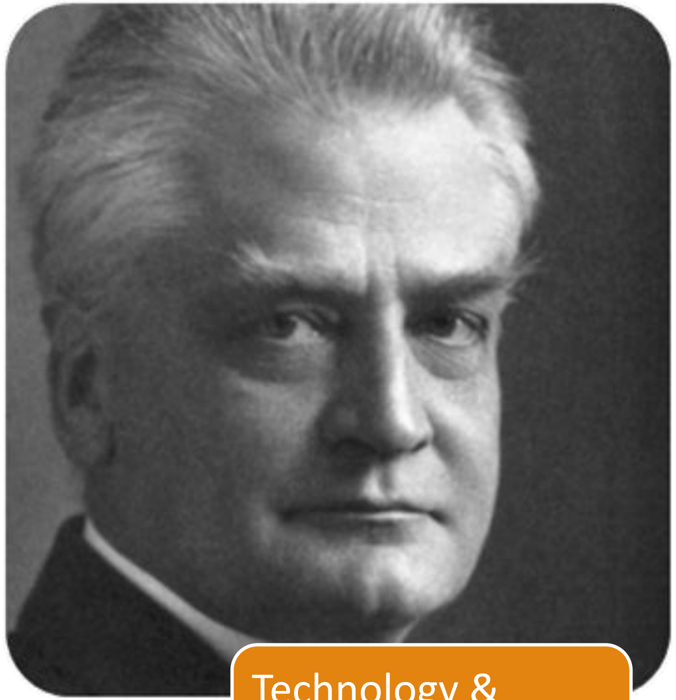
Gold & Monetary Systems

- Why do monetary systems fail?



Cycles & The Fourth Turning

- What occurs during a Fourth Turning?

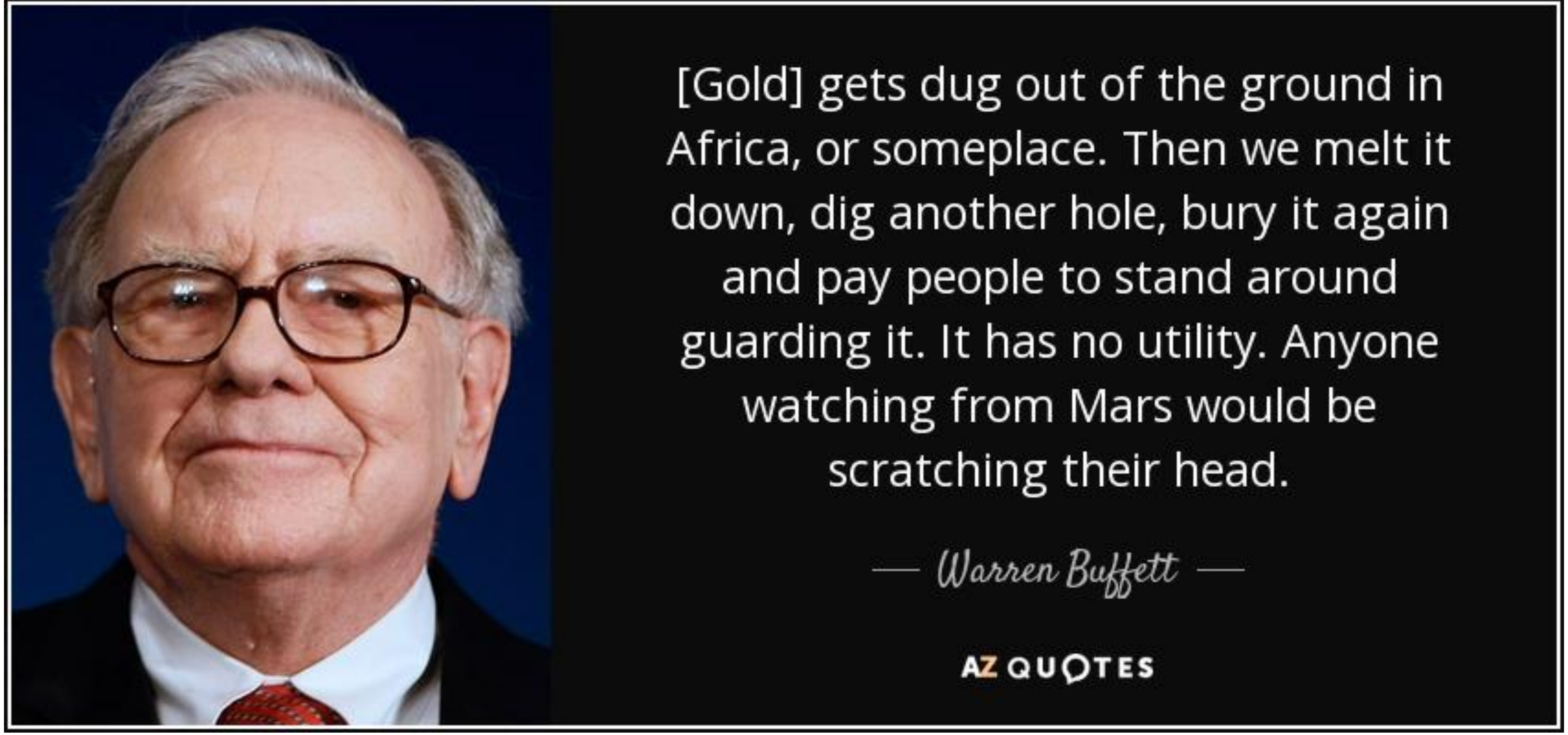


Technology & Adoption

- Can technology be stopped?

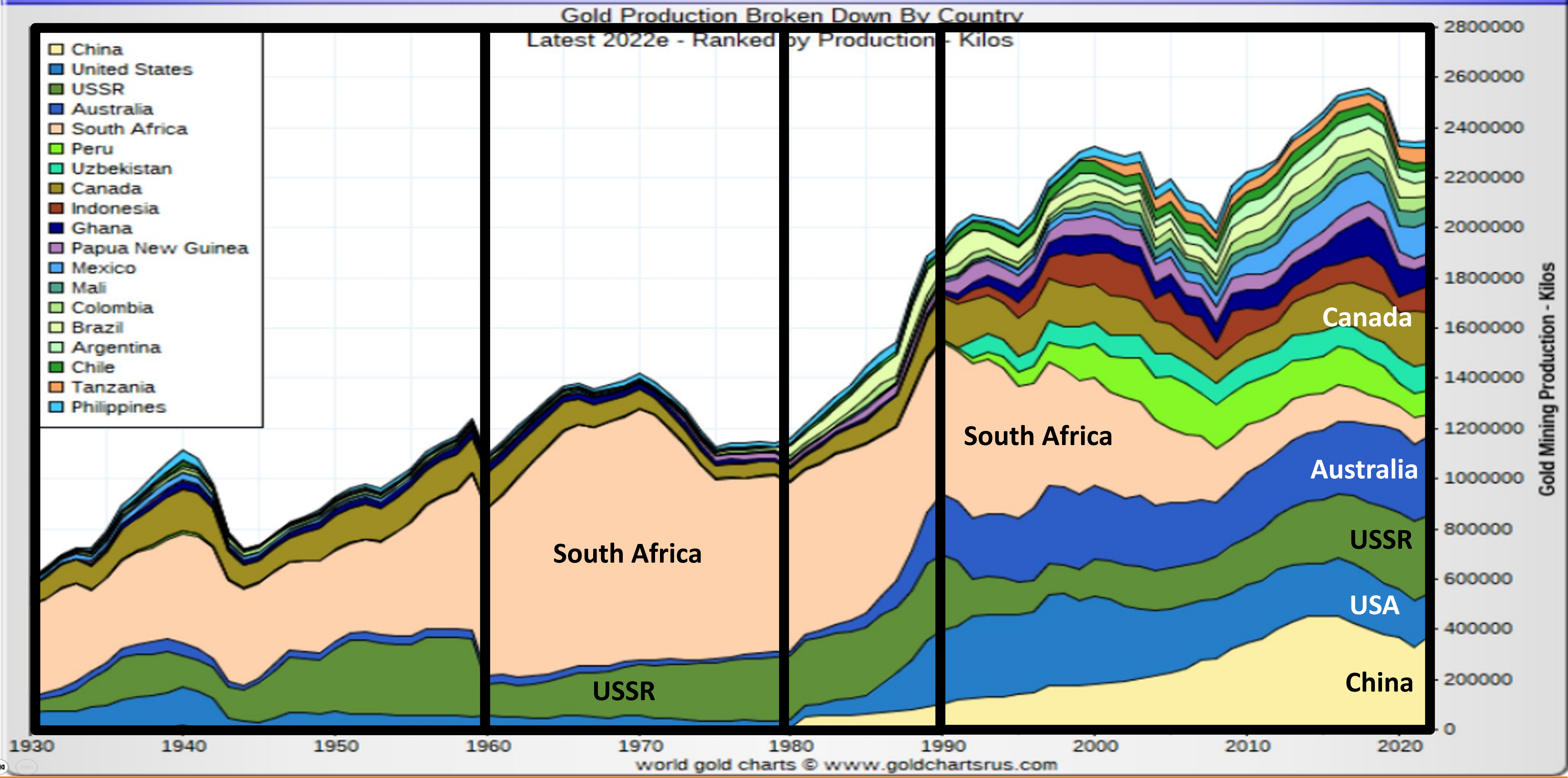
Gold & Monetary Systems

- Why do monetary systems fail?

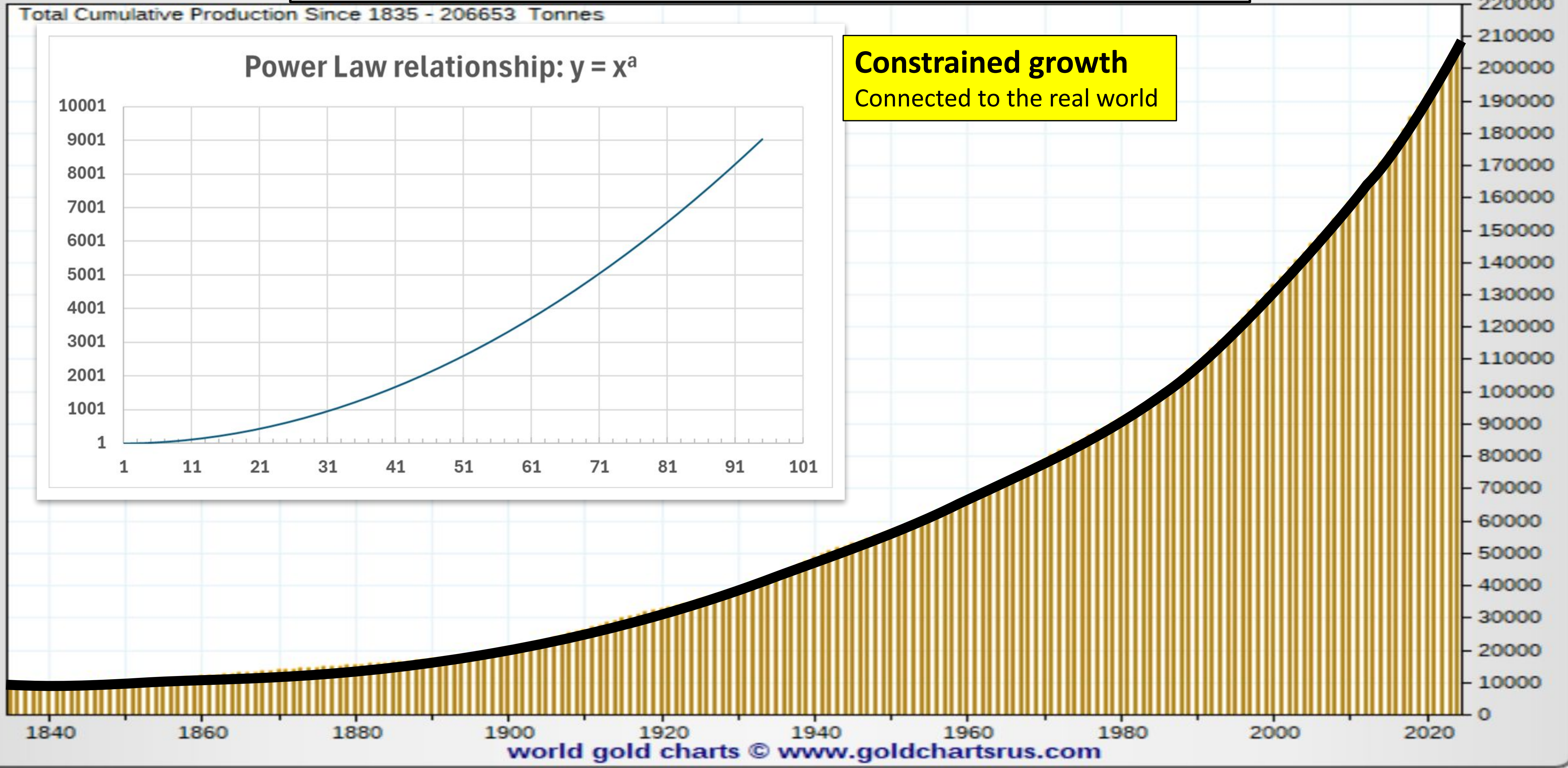


https://www.azquotes.com/quote/479257

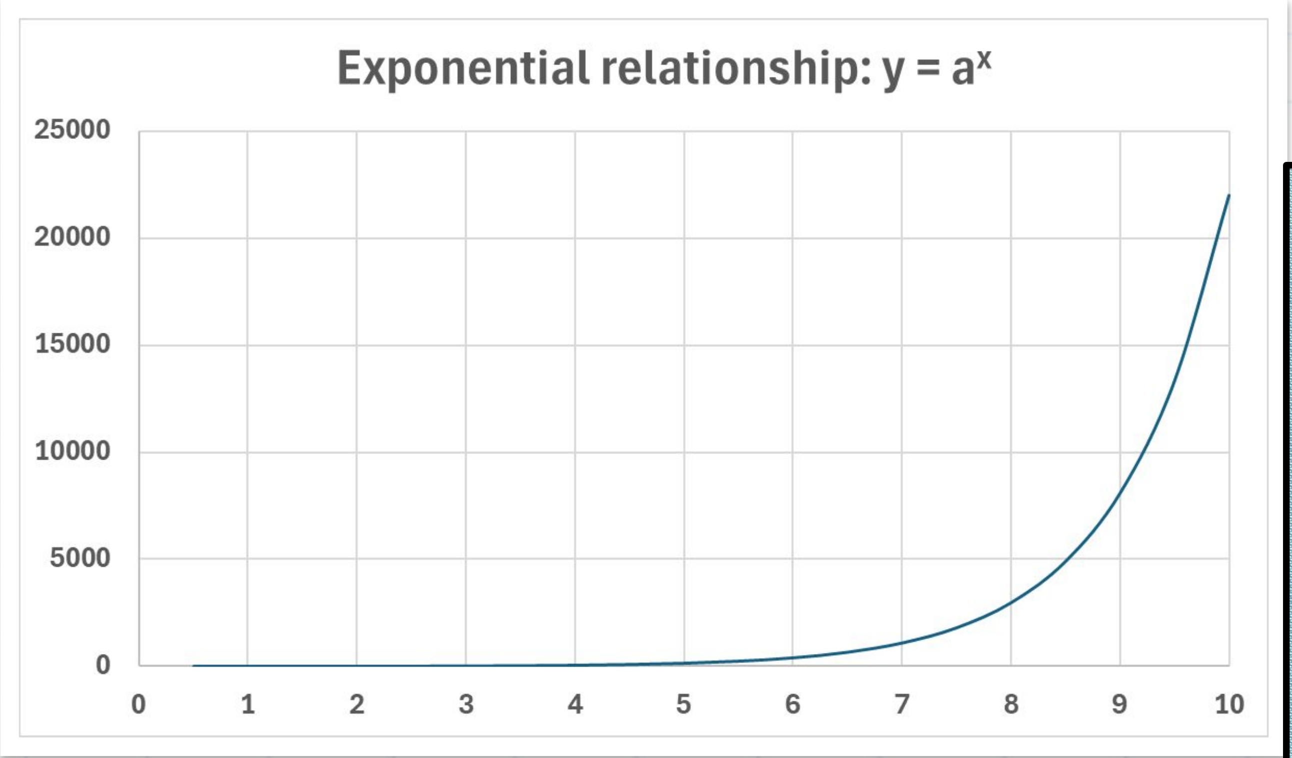
GLOBAL ANNUAL GOLD PRODUCTION



CUMULATIVE GOLD PRODUCTION in tonnes from 1835



CUMULATIVE VALUE OF PRODUCTION in Billions of US$

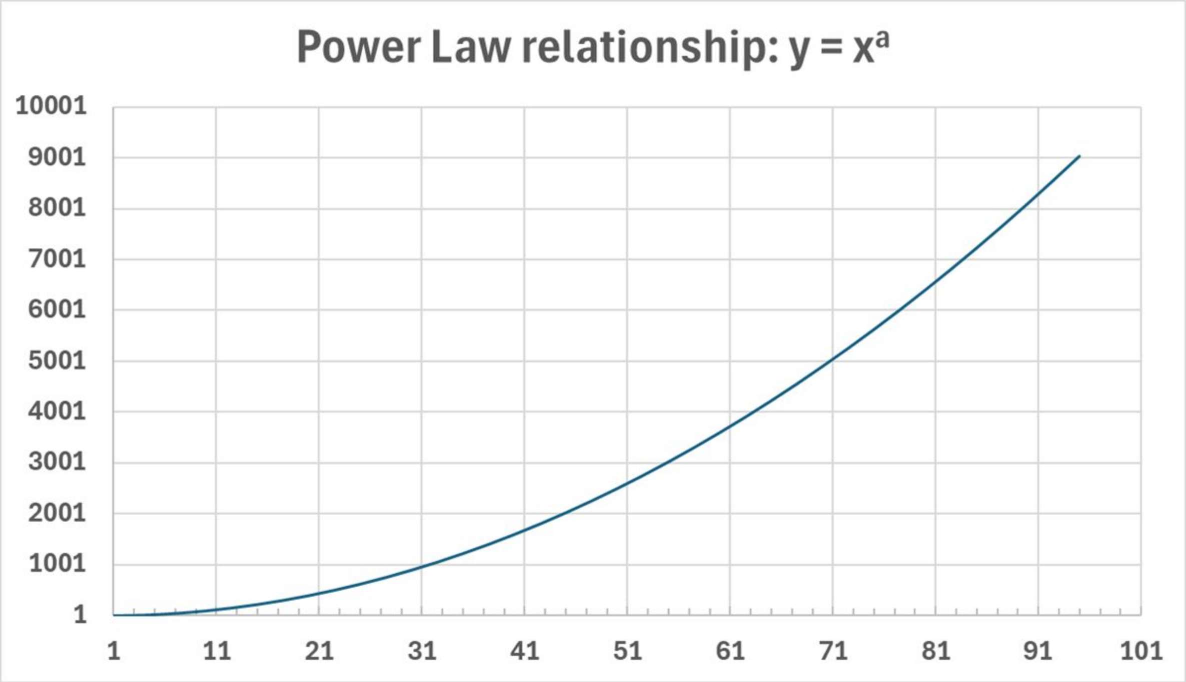


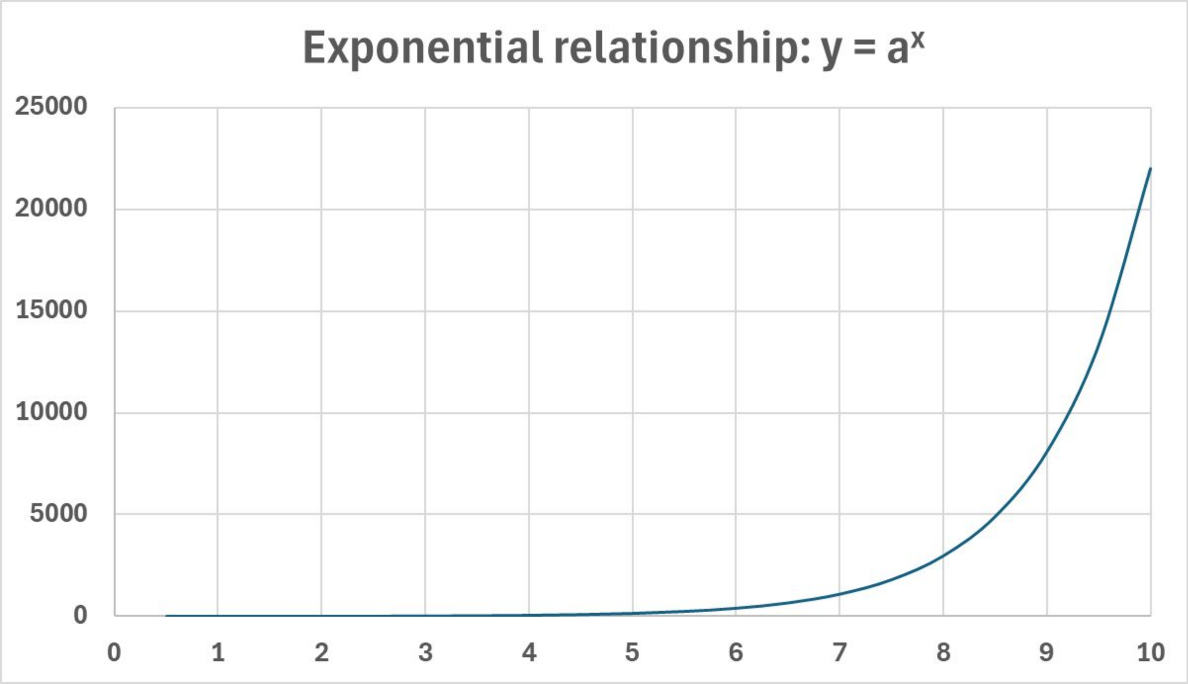
Unconstrained growth

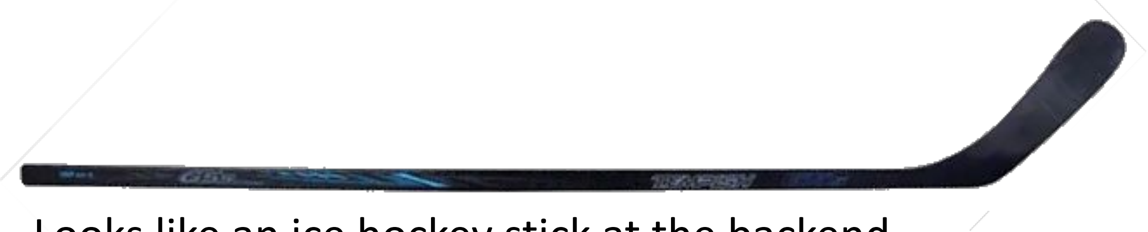
Currency creation is limitless

https://www.goldchartsrus.com
https://en.wikipedia.org/wiki/Zimbabwean_one_hundred_trillion_dollar_note

Do not confuse a Power Law with an exponential relationship



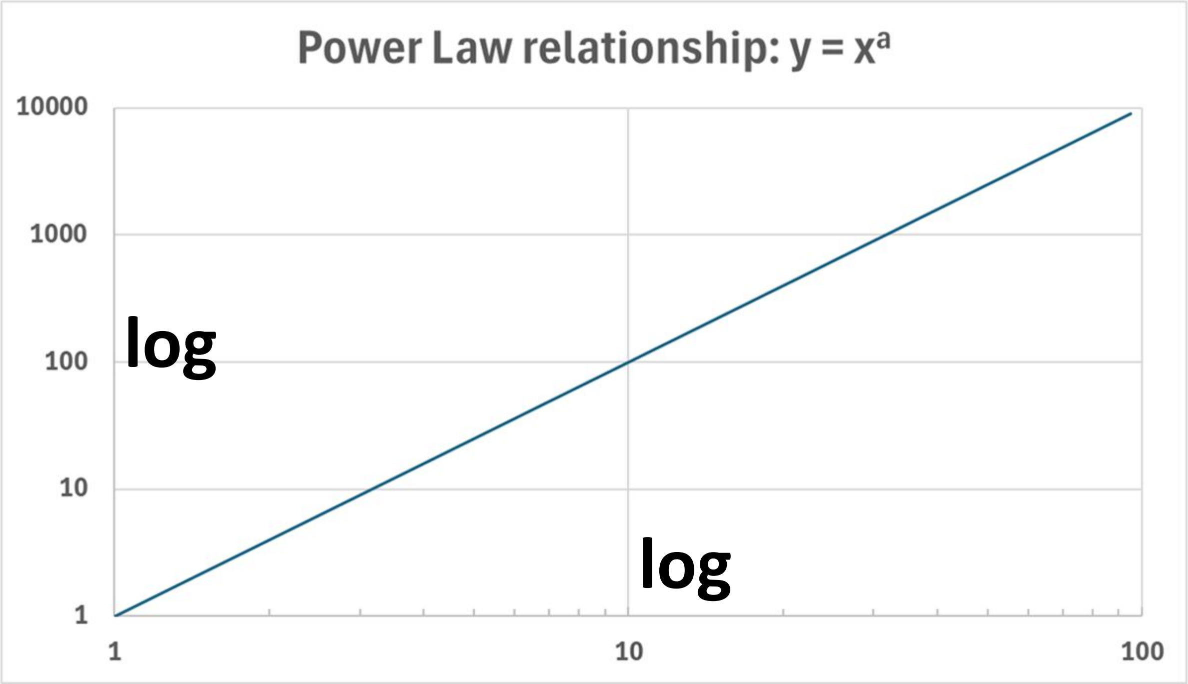


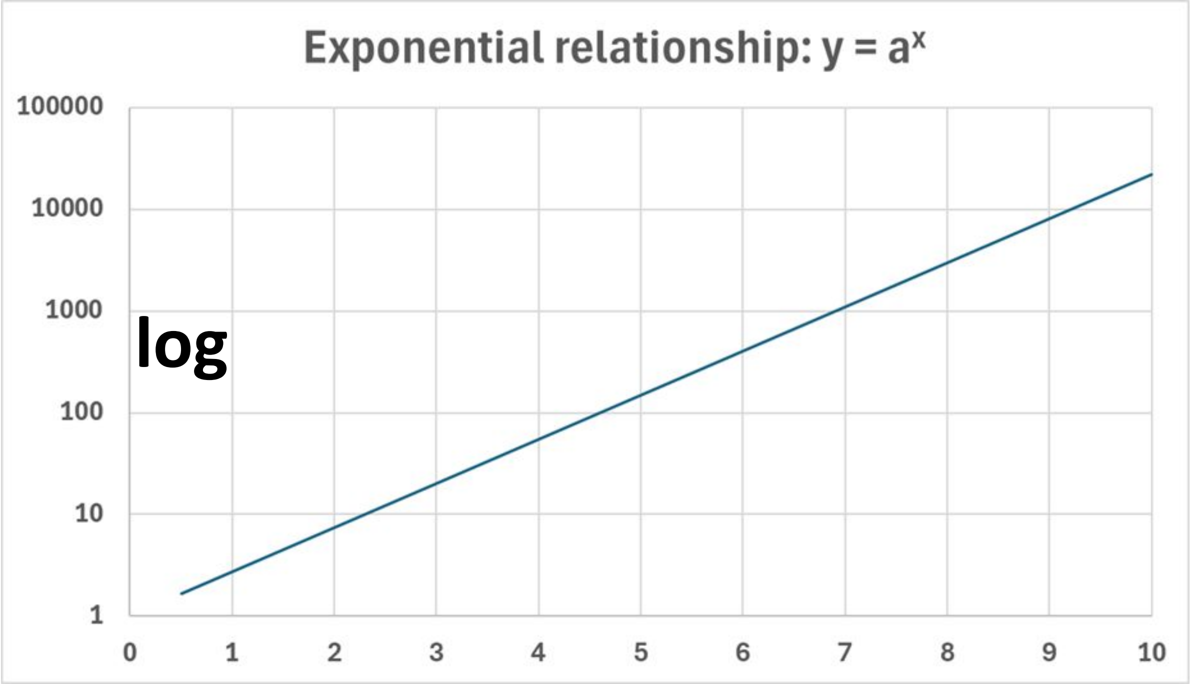


Gradual curve without the sudden upswing at the end

Looks like an ice hockey stick at the backend

Do not confuse a Power Law with an exponential relationship





Log both axes to get a straight line
Doubling time increases with time

Log one axis to get a straight line
Constant doubling time

Exponential example:

If you double the thickness of photocopy paper (0.10 mm) for 50 times, how high would the resultant stack be?

Thus, you take one piece of paper, then double the thickness, then double again for a thickness of four, and so forth:

1) 1 x 2 = **2**
2) 2 x 2 = **4**
3) 4 x 2 = **8**
4) 8 x 2 = **16**

etc.

Answer

Three-quarters to the Sun, which is 150 million km.

Bartering

- Lack divisibility
- Lack the double coincidence of wants
- Lack a common measure of value
- Bartering stopped being used as money was a better technology

Commodities

- Divisible
- Lack durability
- Lack portability (?)
- Lack uniformity
- Lack scarcity: farming technology improvements

Beads

- Divisible
- Durable
- Portable
- Recognisable
- Uniform
- Scarce in nature, but technology allowed the production of large numbers at low cost

https://vocal.media/trader/understanding-the-barter-system-a-simple-way-to-trade-goods-and-services
https://shop.fullersbookshop.com.au/p/african-trade-beads-their-10-000-year-history#:~:text=Author(s):%20Issa%20Traore,and%20manufacture%20and%20approximate%20date
http://www.ancientresource.com/lots/ancient-coins/gold-coins.html

Gold Coins

- Divisible
- Durable
- Portable
- Recognisable
- Uniform
- Accepted across borders
- Scarce
- Good store of value

Coinage gave governments much control, as they could increase the money supply without the permission from the public to pay for (mostly) wars.

Although, debasing coinage was a lengthy process, as coins had to be accumulated, smelt down, and cheaper metals such as copper and nickel added to increase the supply.

Fiat paper currency

- Divisible
- Durable
- Portable
- Recognisable
- Lack acceptance across borders
- Scarce (?)
- Store of value (?)

In 1971, President Nixon from the USA disconnected the US dollar from gold convertibility, and since then all currencies lost their connection to gold.

What is a fiat currency?

A fiat currency is a type of money that is declared legal tender by a government - not based on a physical commodity like gold.

Its value is primarily determined by the public's confidence in the issuing government and economic stability of the issuing country.

Is fiat currencies viable over long periods?

Paper currencies are susceptible to devaluation and even collapse due to factors like inflation, loss of public trust, and economic mismanagement. Historically, all fiat currencies eventually fail.

Fiat electronic currency

- Divisible
- Durable
- Portable
- Recognisable
- Lack acceptance across borders
- Lack scarcity
- Not a store of value

How is currency created today?

- **Commercial banks**
  Currency is created each time you make a loan at the bank - debt
- **Central Bank and Government bonds**
  Central Banks can buy government bonds – debt.

What is debt?

Debt is future consumption consumed today.

What is money?

Money is a way to store your energy for future consumption.

Money thus became:

- The opposite of what it is supposed to be.
- A number on a computer screen and can be created with the stroke on a keyboard.

Jerome Powell
2022

Chair of the US Federal Reserve
As a Central Bank, we have the ability to create money, digitally, and do that by buying Treasury Bills or bonds or other Government Securities that actually increases the money supply.

We also print actual currency, and we distribute that to the Federal Reserve Banks.

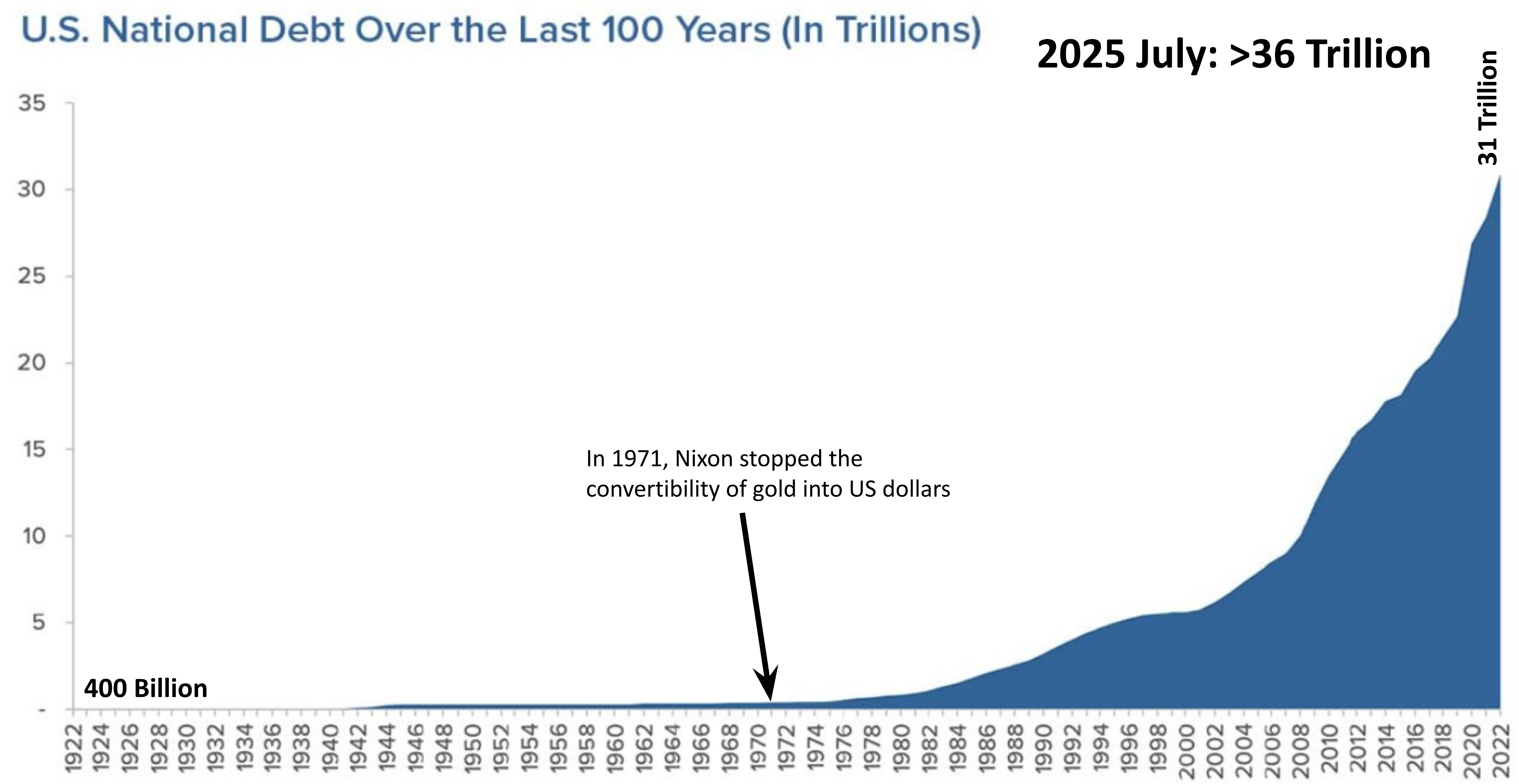
Neel Kashkari
2023

President and CEO of the Federal Reserve Bank of Minneapolis
There's an infinite amount of cash at the Federal Reserve

Why can a country (apart from the USA) then go bankrupt?

Countries can only print their own currency, and they often make debt in US dollars, which they cannot print.

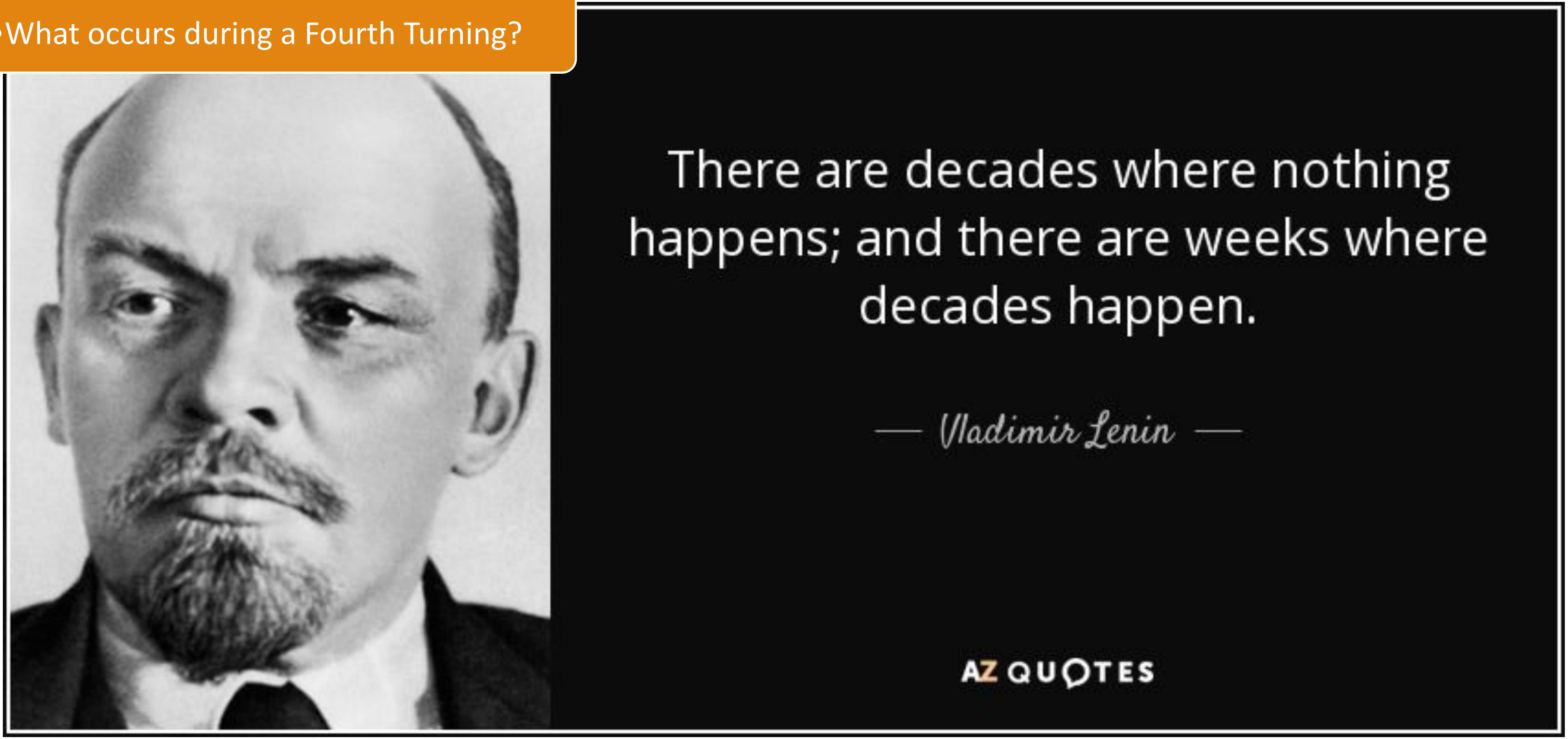
https://www.youtube.com/watch?v=ZN4vmZSPkFQ
https://www.youtube.com/watch?v=Q6mZCTnTXoQ

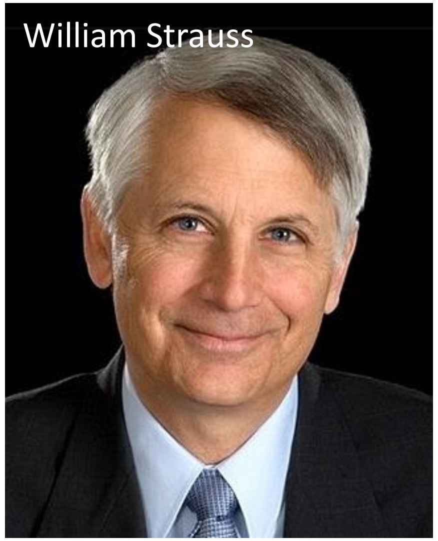


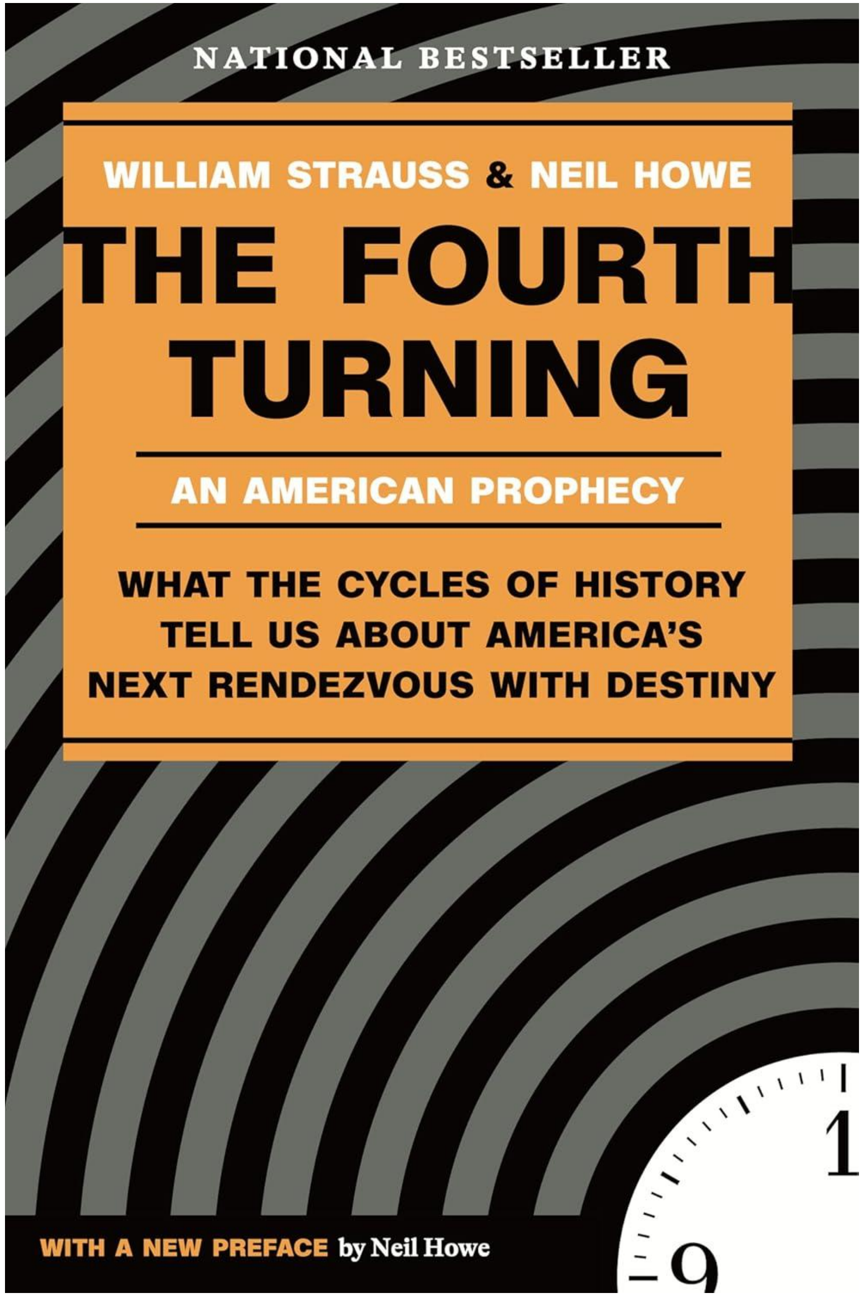
https://westwoodgroup.com/insight/the-growing-u-s-debt/

Cycles & The Fourth Turning

- What occurs during a Fourth Turning?



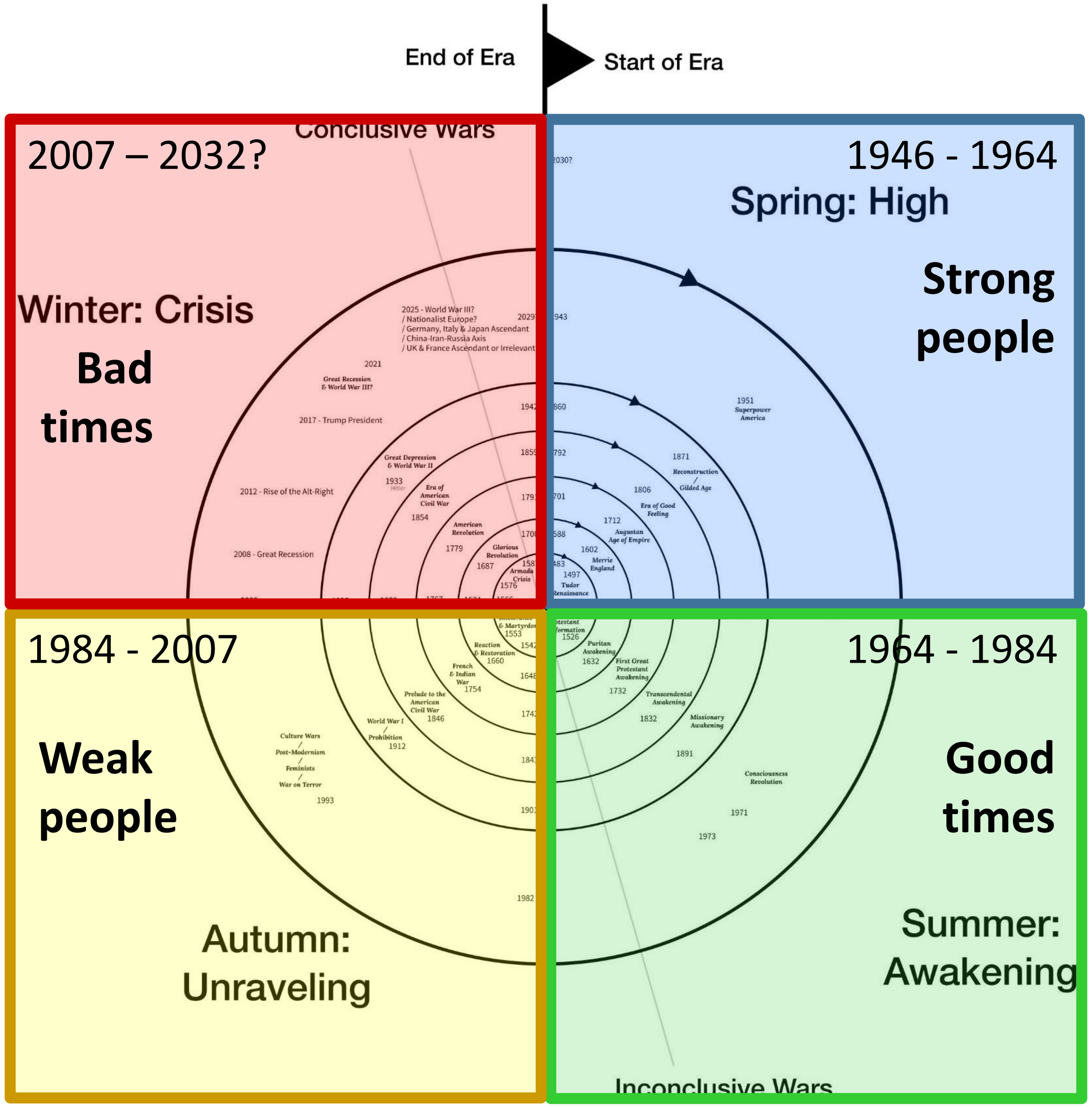

William Strauss


NATIONAL BESTSELLER
WILLIAM STRAUSS & NEIL HOWE
THE FOURTH TURNING
AN AMERICAN PROPHECY
WHAT THE CYCLES OF HISTORY TELL US ABOUT AMERICA'S NEXT RENDEZVOUS WITH DESTINY
WITH A NEW PREFACE by Neil Howe


Neil Howe

Anglo-American History 1483-2030

According to the Strauss-Howe Generational Theory



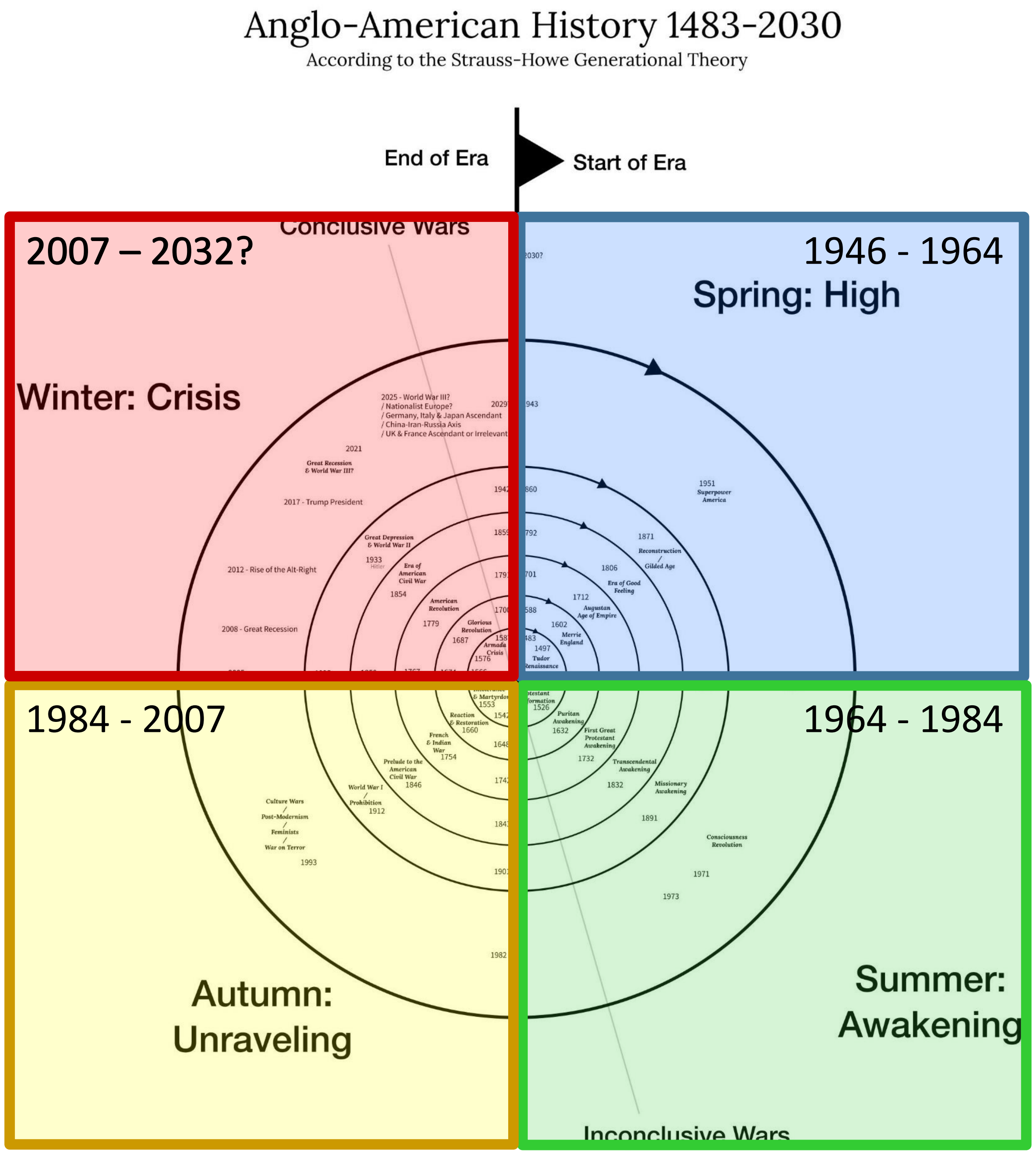
chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.revistaespacios.com/a18v39n27/a18v39n27p03.pdf
https://medium.com/discourse/the-crisis-of-2020-according-to-a-1991-book-319e8b279c63

The Fourth Turning predictions

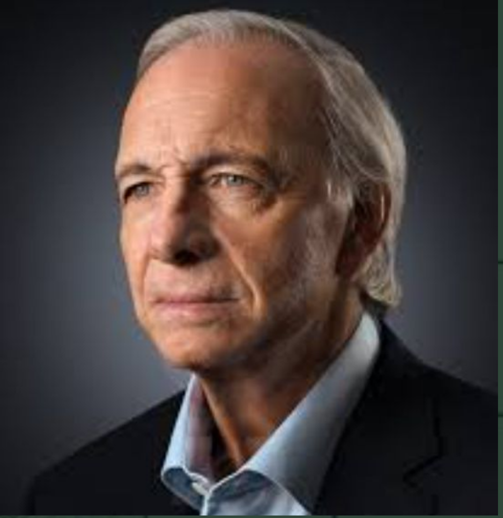
- Time of significant geopolitical shifts - often the decline of a dominant world power.
- Period of crises, characterised by conflict and upheaval.
- Financial instability.
- Social breakdown and civil violence.
- Decline of public trust in institutions and leaders.

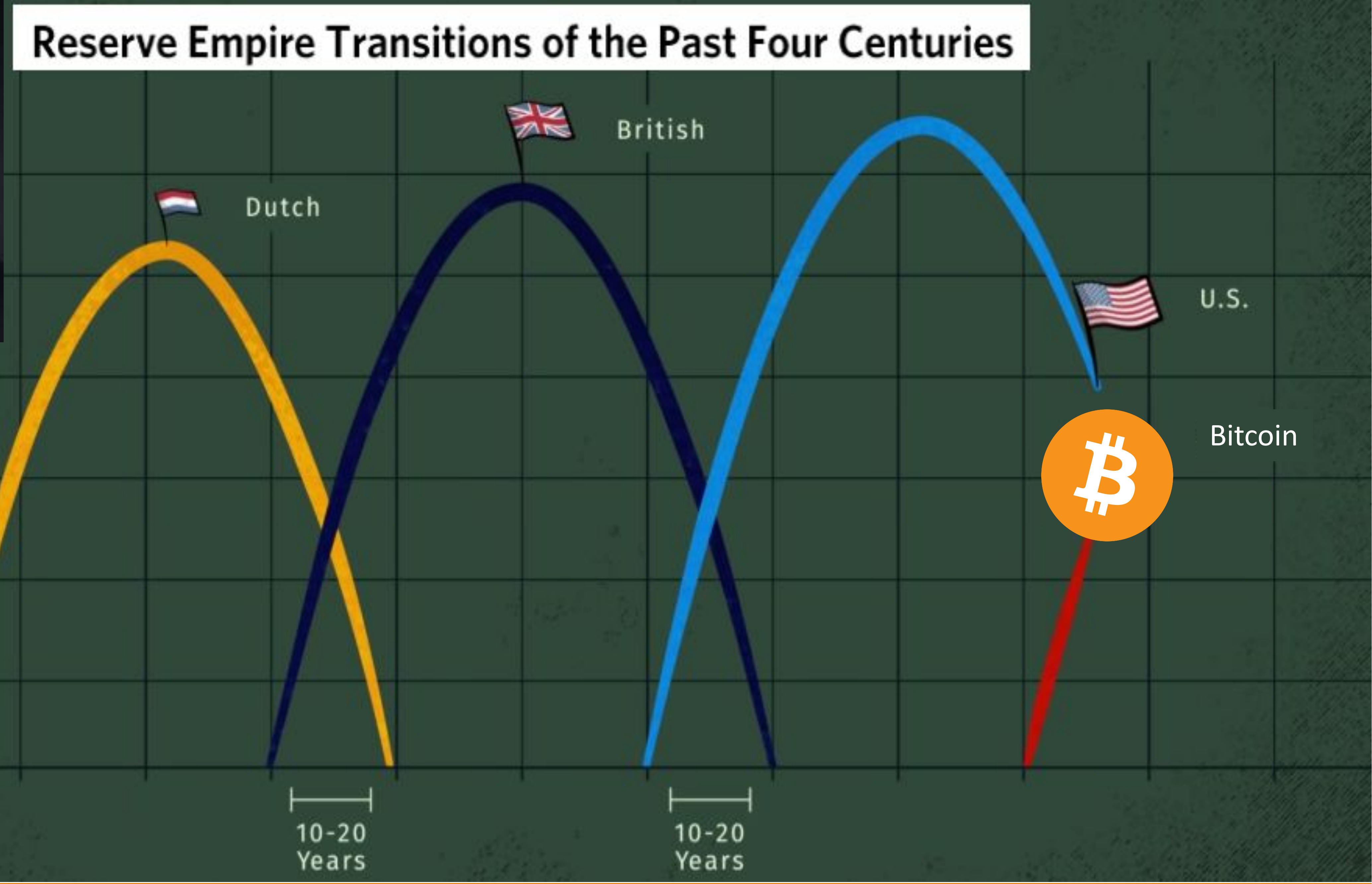
First Turning (next cycle) predictions

- Recovery of public trust in institutions.
- New civil order.
- Decline in individualism.
- Strong emphasis on community, social cohesion, and collective effort.
- Sense of optimism and progress as society tackles large-scale problems.



https://www.reddit.com/r/generationology/comments/1gngrpv/strauss_howe_in_one_chart/



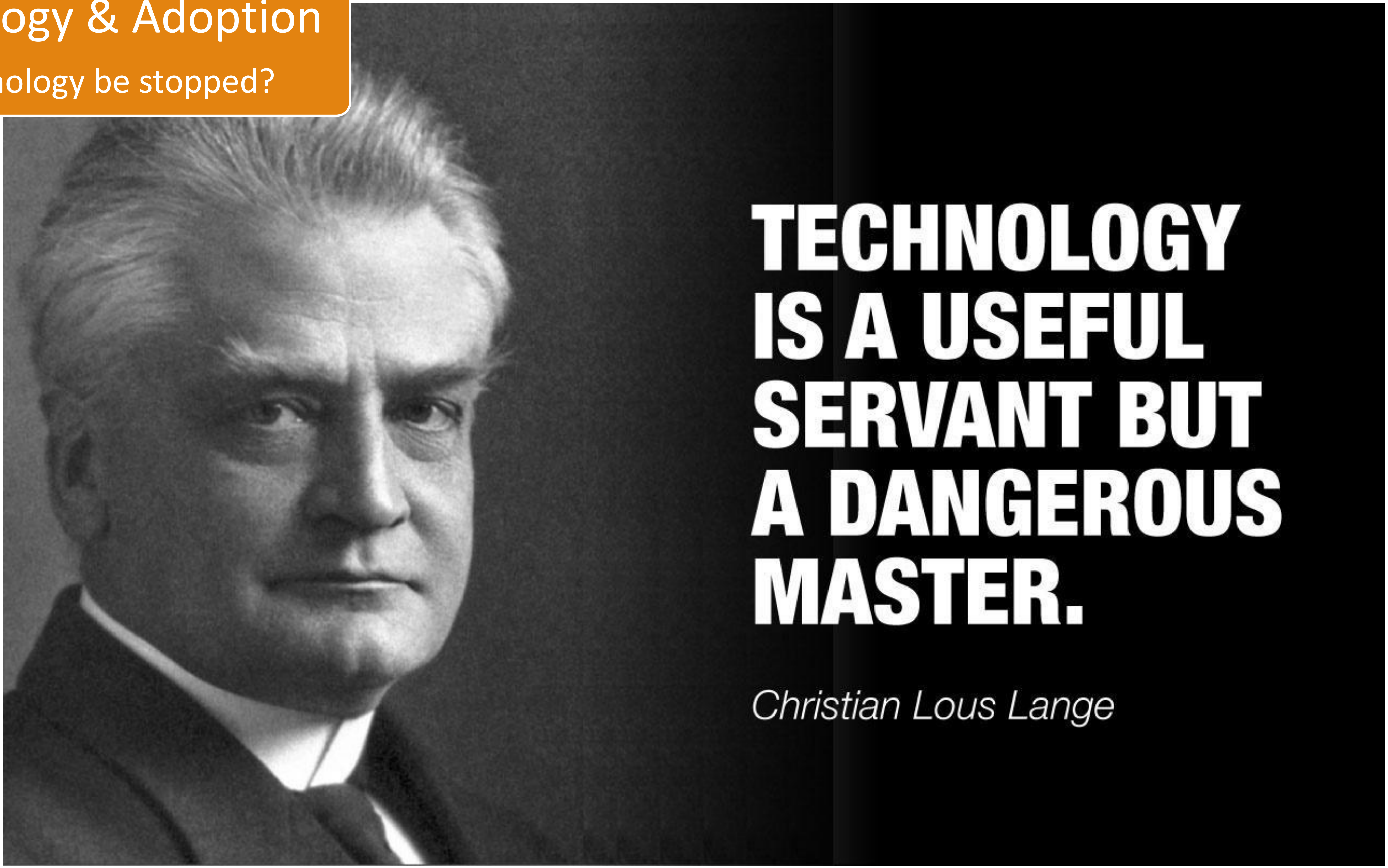


https://www.linkedin.com/pulse/understanding-debt-crises-ray-dalios-framework-made-simple-anh-phan-ibrlf/

BasRock

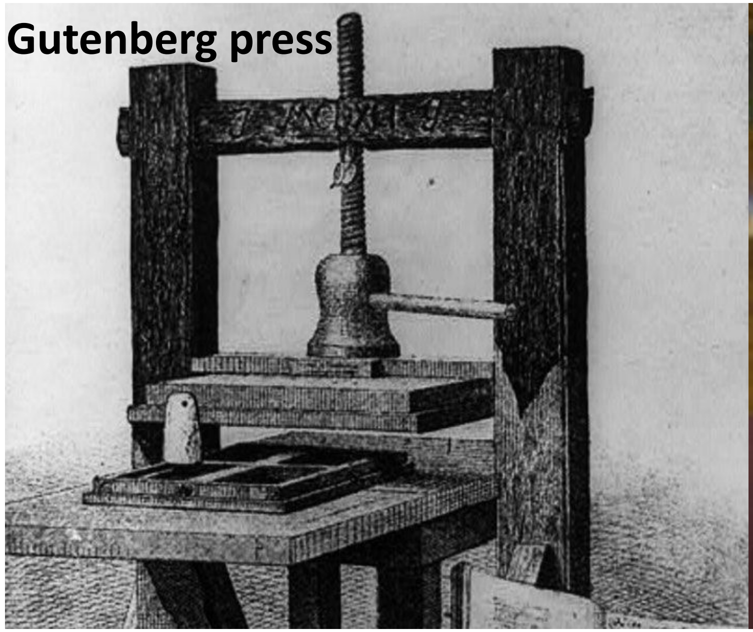
Technology & Adoption

- Can technology be stopped?



1. Printing Press (~1440)

1. Allowed for the distribution of knowledge.
2. Which led to a challenge to the Church’s authority.
3. Which led to the division between State and Church.

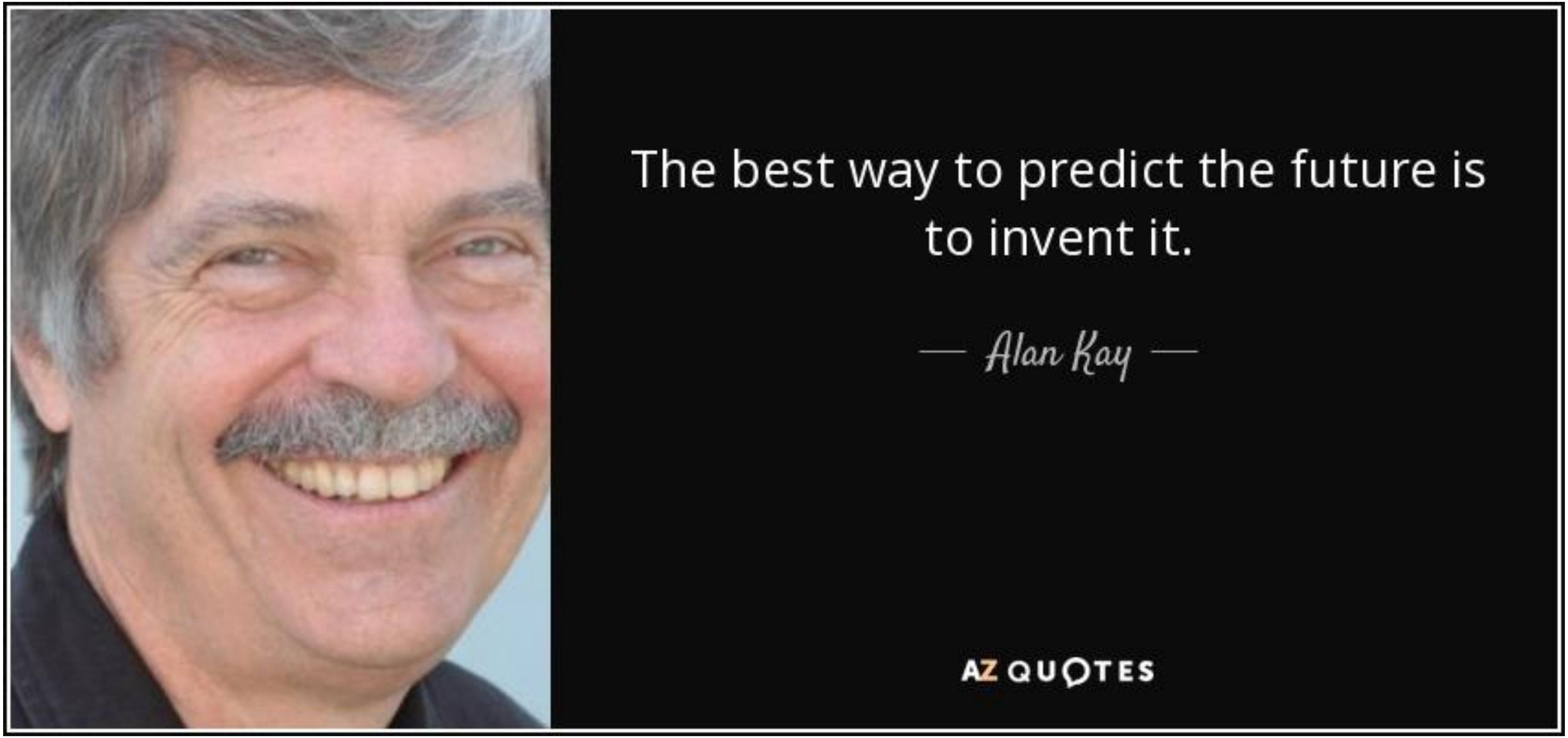


2. Telegraph (~1830)

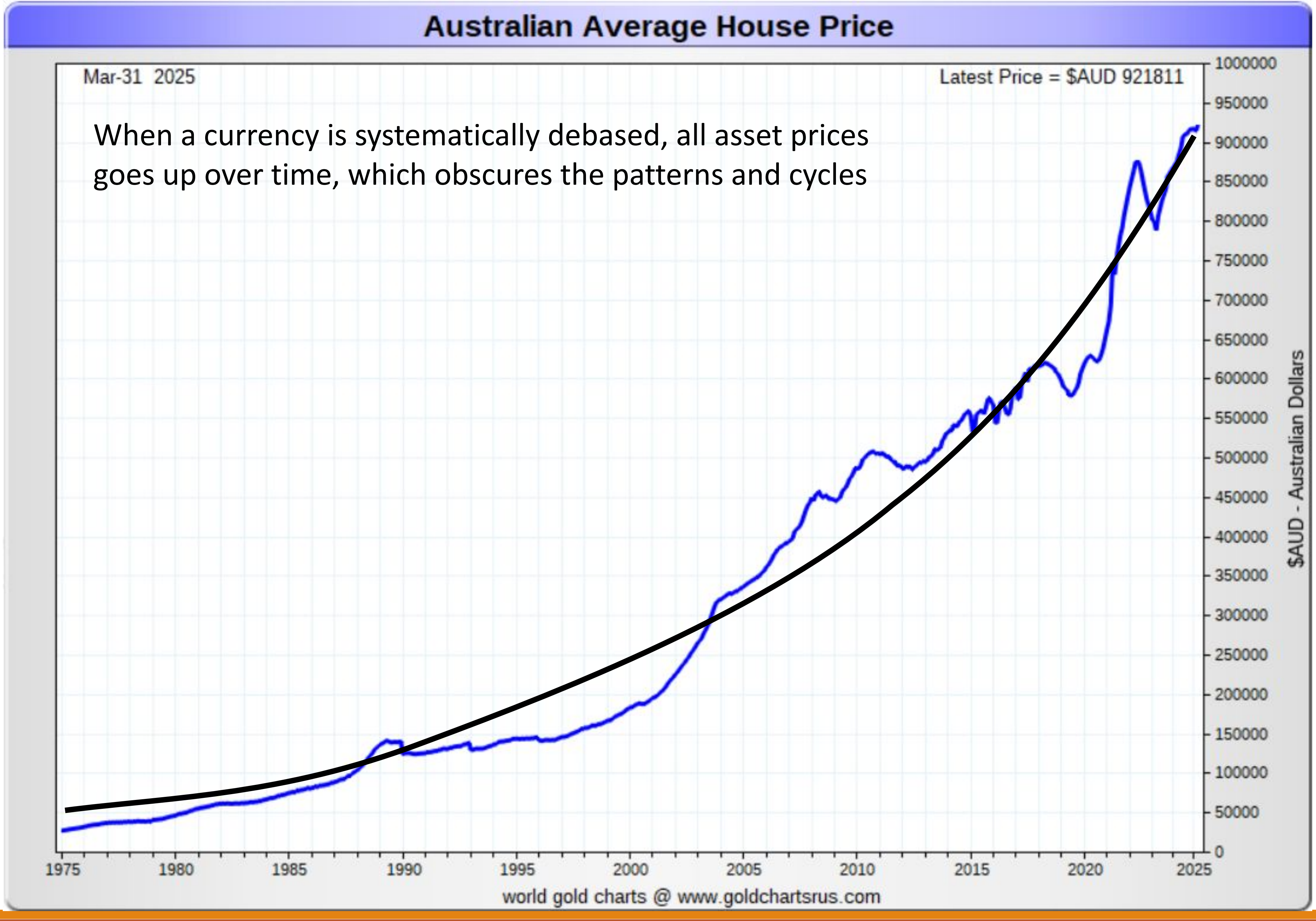
Resulted in the failure of gold coins as money, as transactions could now move quicker than physical gold.

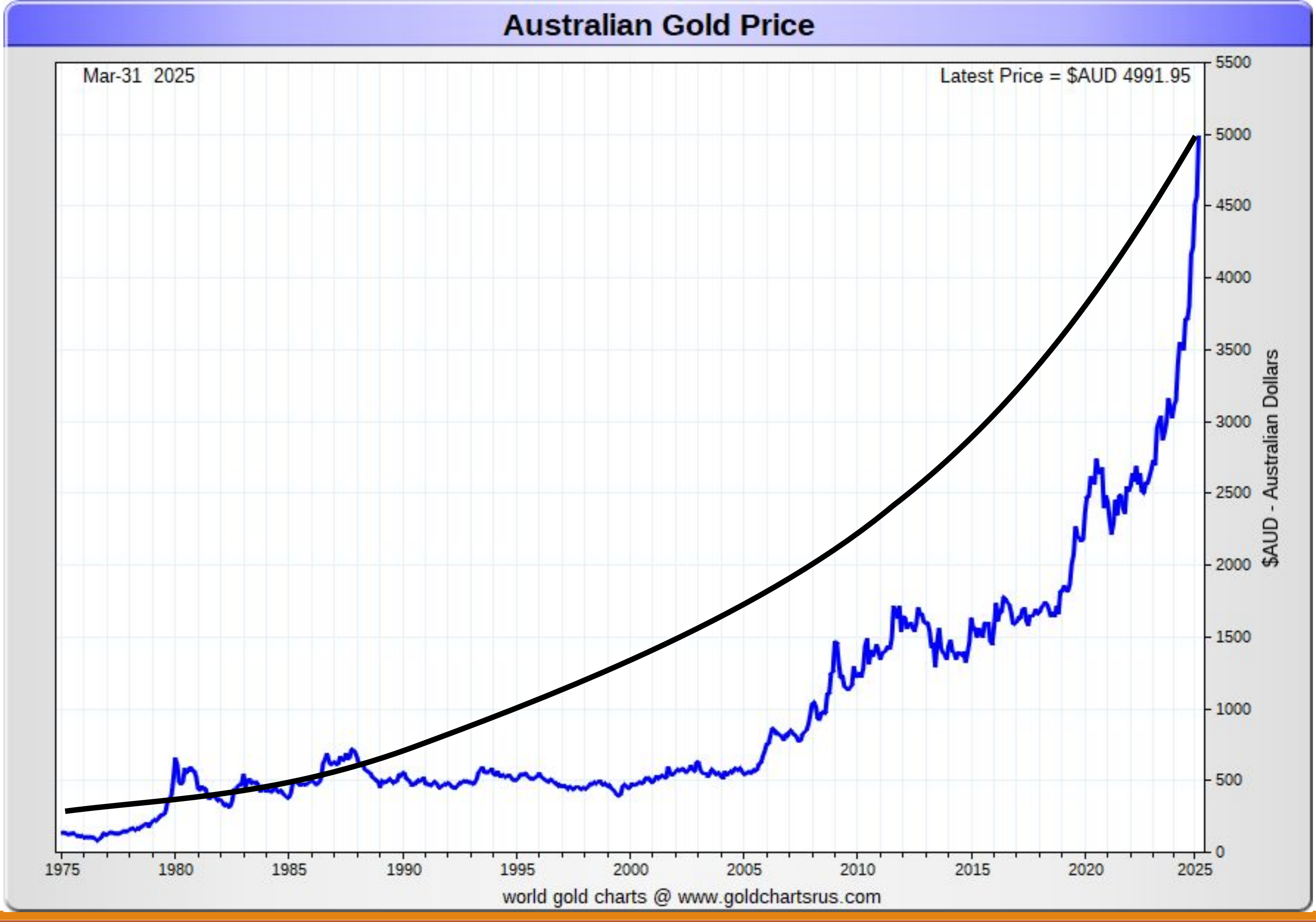
3. Industrial Revolutions (1st ~1750, 2nd ~1920)

https://www.reddit.com/r/Damnthatsinteresting/comments/lk0tf5/these_pics_were_taken_13_years_apart_same_place/



https://www.azquotes.com/quote/500215


Australian Average House Price
Mar-31 2025
Latest Price = $AUD 921811
When a currency is systematically debased, all asset prices goes up over time, which obscures the patterns and cycles
1000000
950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
$AUD - Australian Dollars
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
world gold charts @ www.goldchartsrus.com


Australian Gold Price
Mar-31 2025
Latest Price = $AUD 4991.95
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
$AUD - Australian Dollars
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
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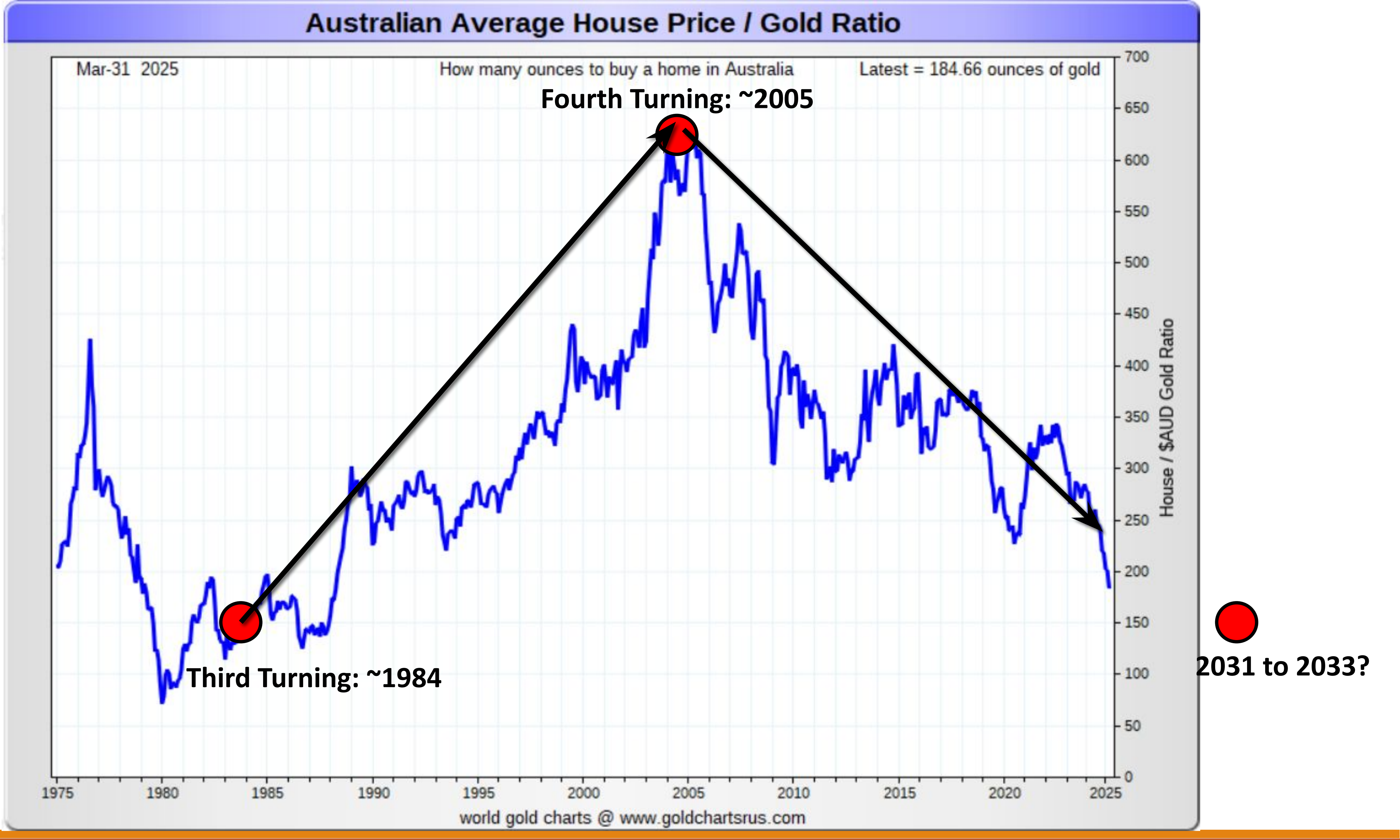
world gold charts @ www.goldchartsrus.com

BasRock


Australian Average House Price / Gold Ratio
Mar-31 2025
How many ounces to buy a home in Australia
Latest = 184.66 ounces of gold
Fourth Turning: ~2005
Third Turning: ~1984
2031 to 2033?
House / $AUD Gold Ratio
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
world gold charts @ www.goldchartsrus.com

- Fiat currencies are systematically debased, which distort reality - rather compare assets against one another.
- Do not confuse the debasement of a currency with price inflation.
- Money should be able to save your time and energy for future consumption. If it cannot satisfy this function, it is a currency and not money.
- Do not save your time and energy in a currency – remember the glass beads lesson.
- Technology adoption is near impossible to stop, even when attempted by powerful lobby groups or even governments.

- We are affected by historical cycles, and all indications are that we are in the middle of a Fourth Turning.

- The US dollar is losing dominance in the world, who will replace the dollar as a reserve currency:

1. Chinese Yuan backed by gold?
   Capital controls and not neutral neutral.

2. Monetary metals such as Gold and Silver?
   Very long track record as sound money but cannot be used for transactions over the internet.
   But, gold is still a monetary metal and currently aggressively bought by Central Banks.
   20+ trillion-dollar asset

3. Bitcoin?
   Short 15-year track record, but compatible with the digital word and internet payments.
   It is gaining acceptance as an asset class.
   A 2+ trillion-dollar asset..

Questions?