

Structural Shifts in the Global Economy

- 2023 Federal Reserve Jackson Hole Meeting
 - Christine Lagarde, EU Central Bank
 - Rapid change & uncertainty
 - War in Ukraine
 - Global Energy Crisis
 - Energy Transformation

central banks need to be more flexible & agile and prepared to take unconventional measures if necessary

Elite's obsessions

- Climate Change...Climate Reality
 - Scapegoat for bad policy decisions
- Energy Transition
 - 145 years of electrification
 - Obsolete infrastructure
 - France ~70% nuclear power
 - Reactor life expectancy is 30 years...average age is 39

Structural Shifts in the Global Economy

80 years ago...

- End of WWII

- USA only major economy not devastated by war
- Wartime technologies applied to civilian use
- Population explosion
 - 1946 ~2.3 billion people...today 8 billion...>300%

From Empires to ISMs

- Capitalism
- Socialism
- Soviet Communism
- Chinese Communism
- Marxism
- OPECism
- Extractionsim
- Drug Lordism

Industrial Policy & Strategic Trade

Population Growth...rising tide lifts all boats

- All systems “worked” because of population growth & DEBT
- Since 1946 real global GDP grew ~3.5%/year

Population + Technology + DEBT = Growth

Global Finance (DEBT) pre-WWII to present

- Bank of International Settlements (1930)
- Import-Export Bank of USA (1934)
- Japanese Sanctions & Seizures (1940)
- Lend/Lease (1941)
- Brenton Woods Agreement (1944)
 - World Bank & IMF
- Marshall Plan (1948)
- **Bottomless Foreign Aid**
 - (buying allies & Strategic Trade)
- New Economic Policy (1971)
- Plaza Accord (1985)
- **Japan & Soviet Union implode (1991)**
- China joins WTO (2000)
- USA Quantitative Easing (2008)

~45 years after WWII

- 1990's Boomers peak productivity
- Urbanization slows population growth
- WWII Technologies & Industrial Policies run their course
- ISMs economies starts to unwind
 - Japanese bubble bursts (#2 global economy) 1991
 - Soviet Union collapses (#2 superpower) 1991

USA sole superpower & China factory to the world

Post-Cold War Peace Dividend (1990s-2000s)

- Boomers post peak (negative)
- Population increase slowing (negative)
- Peace Dividend (positive)
 - Former Soviet Block & 3rd World now open for trade
 - China & Asia emerge as low cost producers (deflationary)
 - Asia considered as a non-military threat
 - Cold War technologies applied to civilian use
 - Internet
 - GPS, Satellites & Telecom

After 30 years the Peace Dividend has come to an end

2008 Financial Crisis & 2020 Pandemic

- Population growth slowdown
 - Expansion of trade agreements
- Declining productivity
- Global Bad Debt...extend & pretend
- Quantitative Easing
- Negative & Near Zero Interest Rates

15 years of free money

Japan invented Quantitative Easing

- Japan's economy peaked in 1991
- Japan debt to GDP is the highest in the world 260%
- Implemented negative interest rates in 2016...just going positive
- Depopulation is DEFLATIONARY
 - 1991 fertility rate: 1.57 (about where USA is today)
 - 2023 fertility rate: 1.33 (above China)
 - Japan's population will half by 2097 or sooner (two generations)
- Depopulation & Technology (deflationary) have allowed Japan's massive debt

Can the Global Economy imitate Japan?

Structural Shifts in the Global Economy

- Population stagnation & decrease
- China Factory to Foe
- Strategic Competition & Industrial Policy
- End of Era of Cheap Money?

Population Population Population

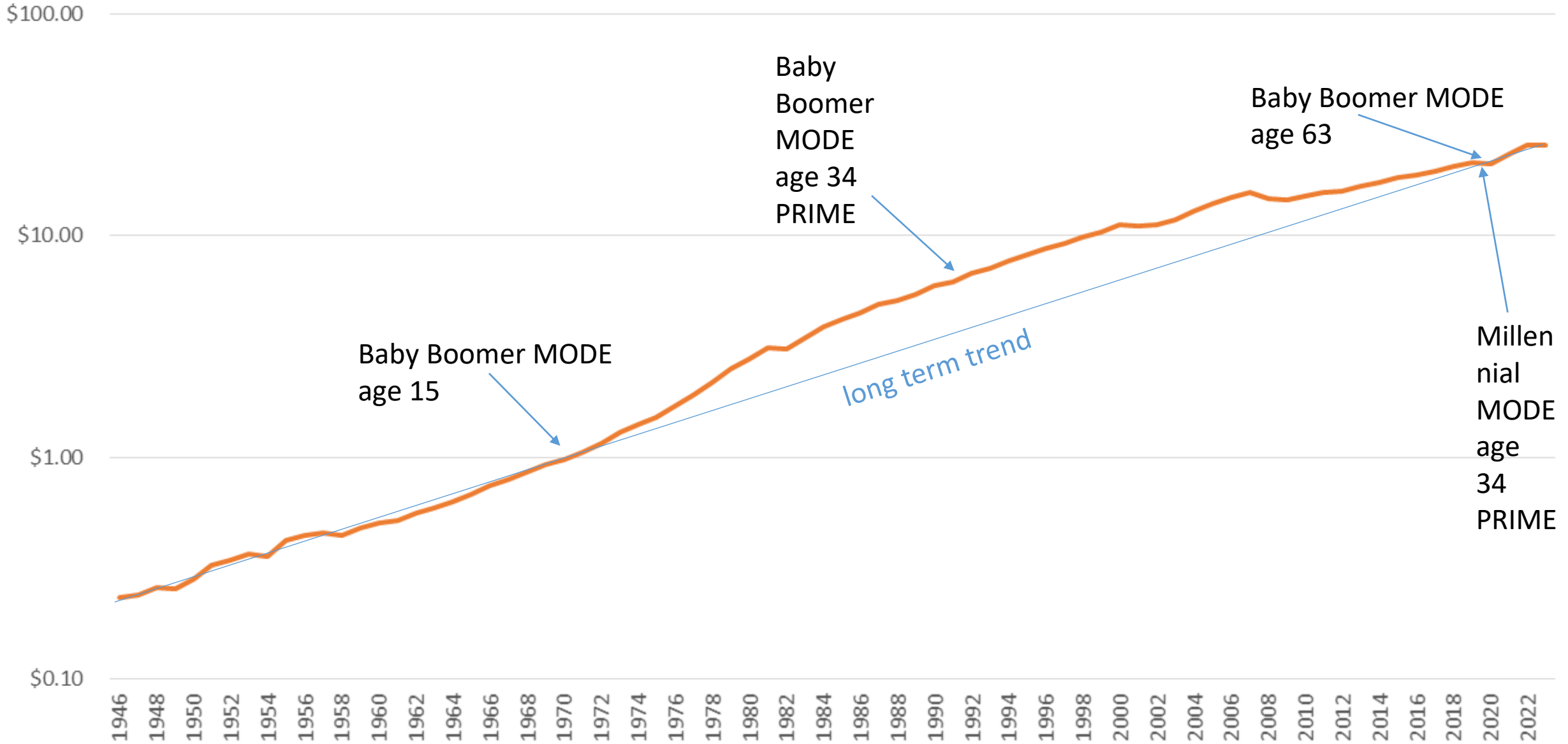
- Global fertility is 2.3
- Sustainable rate is 2.1
- Highest fertility rates are in countries that can't feed themselves (sub-Saharan Africa)
- Post-Pandemic fertility rates have PLUMMETED
 - USA 1.6
 - Europe Union 1.53
 - China 1.16
 - India 2.0

Global GDP forecast <3% into the future

- The ISMs economies didn't support growth...growth came from population increases
- Without population increase there is no growth
- Past Global GDP 3.5%
- Poverty purgatory for 7 billion people

Any gains from AI will further decrease the value of human labor

US GDP trillions



— US GDP trillions

China Factory to Foe

- Peak Globalization & De-risking from China means HIGHER COSTS
- Persistent inflation
- China's growth & low costs were never sustainable
- China's future is at a cross roads
 - Japanification
 - Soviet style militarism

No other country or region has the attributes that made China successful

Strategic Trade...Strategic Competition

- Failure of Diplomacy
 - ISMs economies are not and have never been compatible
 - G20 is no more compatible than BRICS+
- ISMs economies only grew because of Population, Tech & Financial Innovation

Wars and rumors of Wars

Is the Era of Cheap Money Over?

- 2008-2022 era QE & near zero interest rates in USA
- Rates are NOT too high
- Yield Rule of Thumb
 - Nominal GDP Growth = 10 Year Treasury Rate
 - Nominal GDP ~4.9%
 - 10 Year Treasury ~4.67%

36% of Russell2000 Small Cap Index is NOT profitable...will they let these Zombie companies die?

We're the Recession?

- Leading Economic Indicators have been in decline for 18 months
- The S&P500 has been in decline for 3 months
- The S&P500 peaked 20 months ago (4,796.56 on 1/3/2022)
- The RUSSELL2000 is below its 4 year moving average & 30% below its record high (2,458.86 on 11/21/2021)

\$1.7 Trillion in deficit spending

US Dollar has lost >98% of it's 1920 value

- But...

1920 dollar didn't buy much