

METAMORFÓZA

Těla, duše a ducha

Bohatství a budoucnost národů Co můžeme vědět? V co můžeme doufat?

The Metamorphosis of the Economy: Body to Spirit, Planetary Soul

A philosophical, theological, reflection (a second step of Enlightenment)

Two metaTrends

- *Abstractization*
- *Planetization*

One Future

- *Planetary New Republic of
Internet*

The Metamorphosis of the Economy: Body to Spirit, part II.

A philosophical, theological, reflection (a second step of Enlightenment)

- Riches of the Soul (we are migrating to the world of symbolic representations. Quote Matrix
 - Art (primitive to abstract representations)
 - Math - richer in time: more complex and abstract
 - Science - more abstract
 - The Soul economy
 - Body less economy
 - Money
 - Feminism
 - Age of a child
 - Birth of dominance of non-tangible economy
 - From things to thinks
 - GDP and Energy consumption (Swiss, Sweden, Czech Republic, Poland)
 - Banks during Covid, GDP Domestic truly
 - IBM-MS-Google
 - Percentage of ppl using internet
 - Prices of memory chips
 - The world that matter only detesting entity could not see /understand /notice
- Growth of Riches of the Spirit (?)
 - Morals measure?
 - Chamurapy code to Old testament to Declaration of human rights
 - Make love not war - -> make trade not war
 - Love your enemies (Germany was a founding country)
 - Love your opposition (Job, Christ) - -> release the spirit of others
 - Christianity has the most absurd goodness
 - Moral exoskeleton is better : pension system, general healthcare, mandatory schooling)
 - Freedom of religion, freedom of information, freedom of travel, political freedom, freedom of speech,
 - Spiritualization of money
 - From gold to paper, from paper (matter) to 0-1 magnetic symbols

Second megatrend: Expand

- The universe not only grew in Riches, it also expanded (picture: repeat of expanding universe)
- A principle well known in Economics: Specialization. In order to specialize there must be many of us, and all of us different
- Family - tribe - villages - city states - feudal kingdoms - empires - states - unions (USA, EU) - bipolar world (East vs West) - planetary - galactic
- Theory: From civilization 0 to civilization 18

Civilization No. 1

Planetary

We already have some institutions typical of type 2 civilization

- Internet
- Business
- Time (not other measures)

Evolution of trade - glue of nations (more than religion)





The Metamorphosis of the Economy: Future applications

A philosophical, theological, reflection (a second step of Enlightenment)

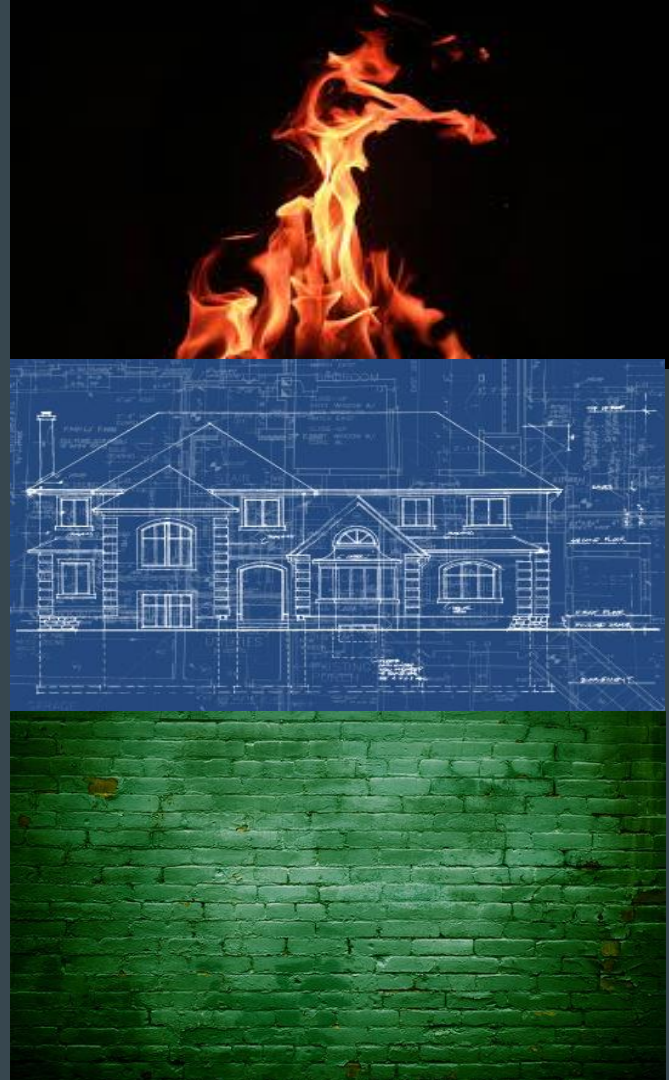
- Futures
 - The age of Windows - - > the age of Doors
 - Banks, insurance case study
 - Future of labour
- Omega point
- Ray Kurzweil: spermatitnzing all matter of the Universe into by our soul/logos
- Return of the hero (first tourism: spiritual adventure)
 - Analysis of paradise
 - Prodigal son (we leave to return to a rediscovered paradise:home)
 - Main direction in the Bible: return (from Egypt back to promised land)
 - Reconciliation of the father and son
 - Main story in our stories (Darth Vader and Luke Skywalker, Stalker, Christianity)
- Frodo confess back home to Bag End - this is the true paradise for Frodo, Sam and Pippin in the Middle Earth: a rescued mundane home.
- From Eden to New Jerusalem
 - Upgraded paradise
 - More people
 - More abstract
 - Light not from Sun (nature) but from the Spirit
 - 4 spatial dimensions
 - There are up to 11+½D
- Keynes prediction (vs. Dismal Economics of Malthus, Marx)
 - Ethics will be cheap
 - We will break the curse of labour, by Spirit and soul

Conclusions

- SSB inventura  
-
- Enough of Growth in Body, continuation in Soul and Spirit
 - Everybody and everything wants to grow: most of all spiritual people in their spirituality
- Have a lean body, feed your soul and be attentive to the Spirit
- See what things around us are d8ssaoear8nf from the material world
 - Books, CDs, maps, cameras
 - Touch
 - Boundaries:countries, gender

Franz Kafka: Touha stati se Indiánem

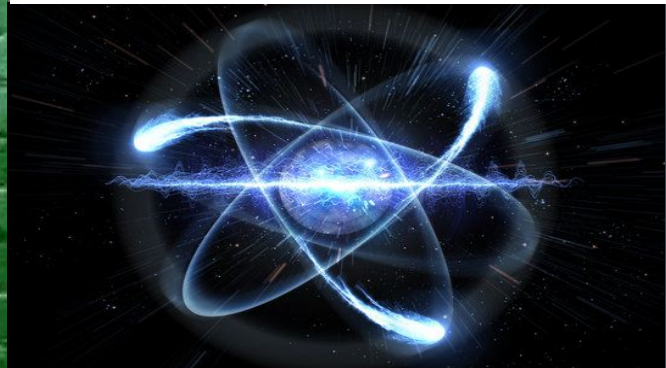
Kdyby tak člověk byl Indiánem, vždy pohotový, a předkloněn ve vzduchu na pádícím koni, stále znovu by se zachvíval krátkými otřesy země, až by nechal ostruhy ostruhami, neboť ostruh nebylo, až by odhodil uzdu, neboť uzdy nebylo, a sotva před sebou spatřil zemi jak hladce vysečenou step, už i bez koňské šíje a hlavy.



Body (matter): real

- Most intuitive reality: stuff
- Matter, made of atoms, periodic table
- Exclusive position in time and space
- Res Extensa, Descartes
- Has weight, width, volume

The image shows a standard periodic table of elements. Each element cell contains its atomic number, symbol, name, and atomic weight. The table is color-coded into groups: alkali metals (orange), alkaline earth metals (yellow), transition metals (blue), lanthanides (light blue), actinides (dark blue), metalloids (green), nonmetals (light green), noble gases (purple), and unknown properties (grey). A legend at the top right explains these color codes. The table is organized into periods (rows) and groups (columns).



Soul (logos): symbolic

- Invisible but objectively real
- Analytic, infinitely divisible
- Order, structures the real
- Symbolic realm
- Immortal
- Unchangeable, does not decompose
- Not exclusive in time-space Contains infinities and is thus infinite
- Every belief presupposes Two Worlds: “Exempt” and “Profane/Mundane”.
- Can be Copy-Paste
- Travels at the speed of light, has no spatial or temporal restrictions
- Exists only on a fictional soul-plane (Noomosphere)
- Can be detected, measured, stored, analysed
- Can be dead, low level of consciousness (soul/structure of an atom, software, pension scheme) or alive (animal soul, human soul, etc.)
- “logos” giving Creation structure (divides a day into day/night, waters from waters, waters from the land, days)
- Plato's world/realm of ideas.
- Descartes: more real than matter (immortal, not deceptible by senses,
- Detached yet attached world to matter
- Intellect, know how, logic, software
- Law, democracy, human rights, organisational structure of your company, money, language, mathematics - is only really actual in the real world if it is believed by its enactors. Pension scheme, banks insurance companies, tax system, traffic rules
- Laws of physics, chemistry etc.: gravitational force, weak and strong nuclear force, electromagnetism
- When you are in autopilot, doing things that have been done before, when you become software, kinds second body, “slave” in some “master-slave” function = you are living according to the soul (the spirit is somewhere else).

Spirit (creative force) - Hegel's WeltGeist, Keynes' Animal Spirits

- Even more invisible than the soul.
 - Optional. So intangible, it becomes a matter of (un)belief.
 - Meaning, purpose, telos, freedom, no a-priori rules.
Meaning outside of the entity.
 - Not intrinsic to the entity.
 - Not necessary to the functioning of the entity (soul is enough) nor the system (dualistic philosophy has a long tradition).
 - Comes and goes (possesses) as it pleases (if successful, leaves a soul structure behind)
 - It “attacks” us from outside (- “napadl mě nápad”).
 - Unlike soul, it's non-analytic, non-divisible, not controllable, non-predictable.
 - Cannot be Copy-Paste. It is the beginning of things (think of a library, draw a library, build a library)
 - Domain of Silence
- Hebrew El, creative “Spirit above Waters”, gives Creation meaning. Then comes “logos”, soul to structure creation with logic.
 - Presocratic Musaei, Plato's Daimonion: that *which wants out* from an artist and a philosopher
 - Holy Spirit - Christ God in Body, Holy Spirit God without a body
 - Jesus vs Pharisees till today:
 - Pharisees: (ethical) rules are the foundation of the Real,
 - Jesus: the foundation of the real is Spirit with no rules (love, forgiveness, mercy, compassion, father-son, no longer slaves but sons and friends of God The Spirit)
 - Hegel's WeltGeist
 - Extraterrestrial guiding spirit that gives history meaning
 - (Geist - gist of an argument, gejsir, Geisteswissenschaften)
 - Keynes' “anima spirit”
 - Wittgenstein “Of what we cannot talk about, we must pass in silence “Russell: But those are the most important things in life “- this is the silent realm of the Spirit. Radically new =no words.
 - M. Buber I-thou (not I-it) relationship.
 - Music vs rules of music. Sound versus the wavelength of sound. Spirit is the “it”.
 - When you co-create something new. Art. “Flow” (psychologist Mihály Csikszentmihályi, 1970). When you become possessed by inspiration (Newton famously could not move for hours when he was possessed by ideas)
 - Life² - Ezekiel the living creatures, Jesus the living water after which you will never thirst again
 - John3:6 “Flesh gives birth to flesh, but the Spirit gives birth to spirit. You should not be surprised at my saying, ‘You must be born again.’ The wind blows wherever it pleases. You hear its sound, but you cannot tell where it comes from or where it is going. So it is with everyone born of the Spirit.”

Example: Cell Phone - A History of Tortured Stone by Human Soul



-Soul: 60%-70% of GDP, 90% S&P 500

ČR: sektor služeb (62 %), podíl průmyslu činí 30 %, podíl stavebnictví 6 % a podíl zemědělství 2 %.(v roce 1993 to bylo 4,9 %)

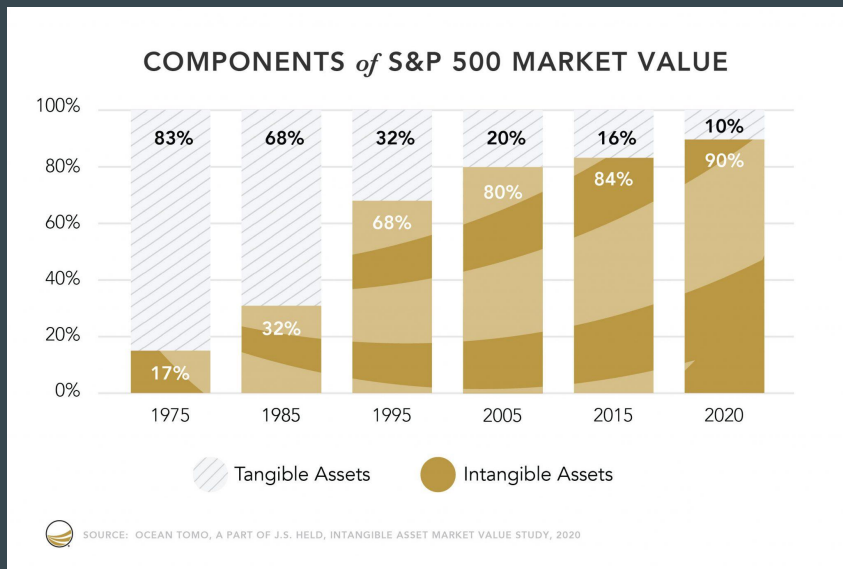
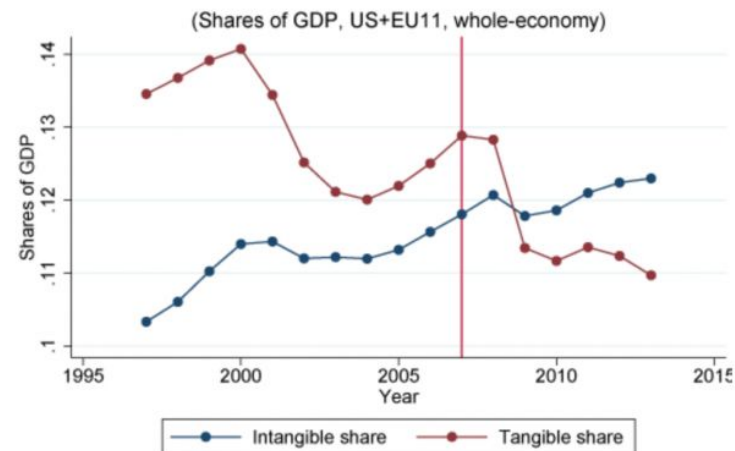


Figure 1 Tangible and intangible investment shares of GDP



Note: GDP adjusted to include intangibles.

The Body - Brief History of Enriching the Material Real

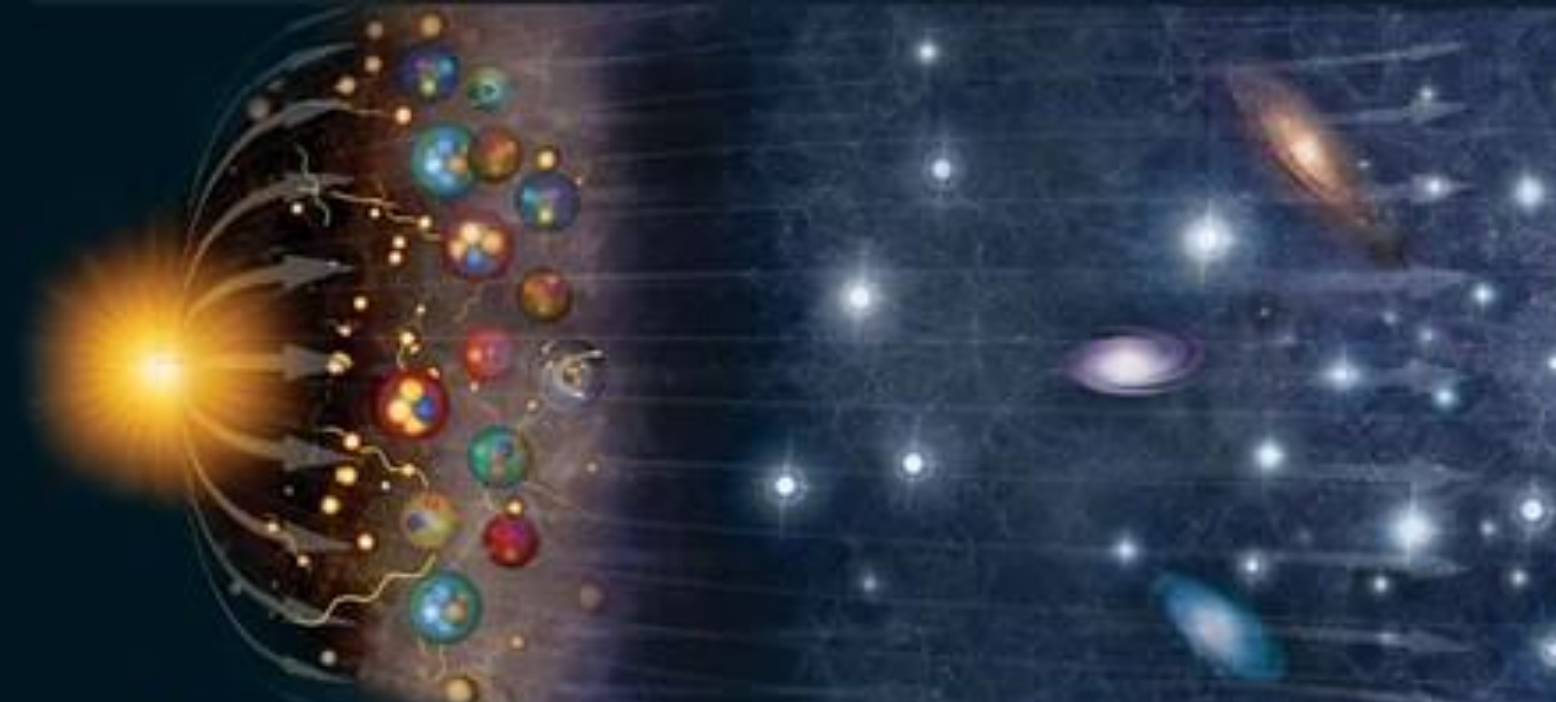
In the Beginning...

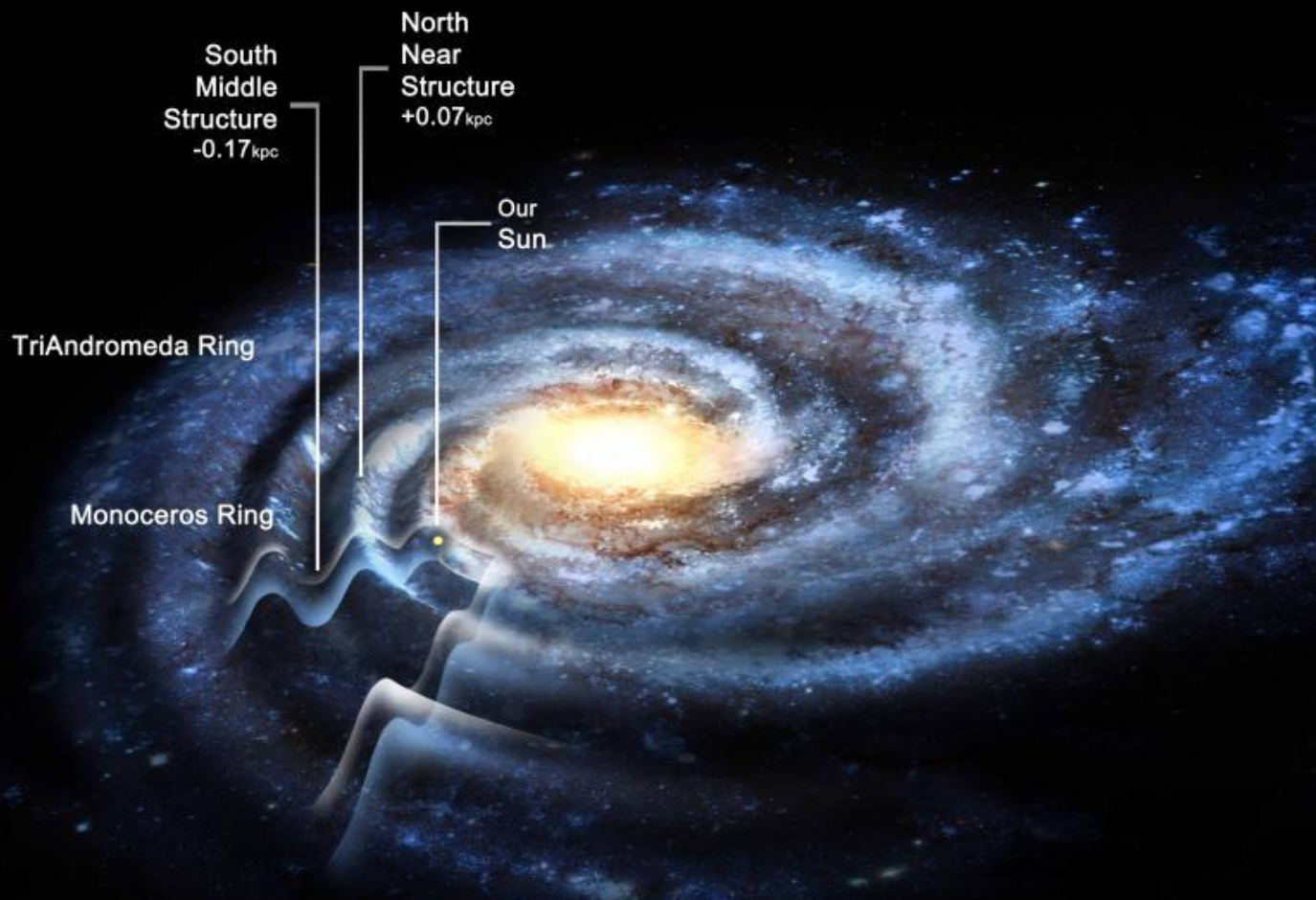
“In the beginning ...
the Spirit was hovering above the deep”

Genesis 1:1-2

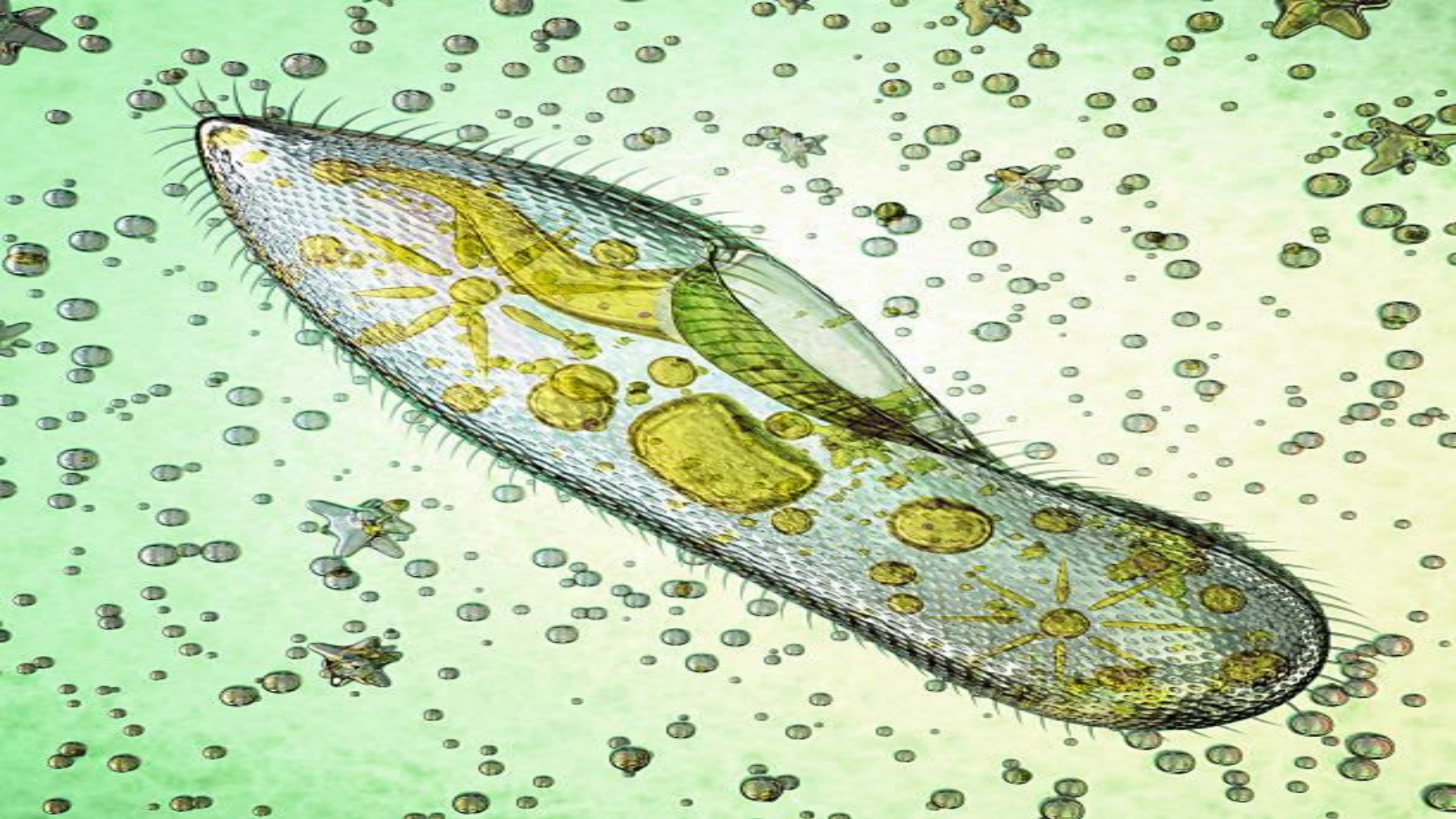
The Universe Was Poor

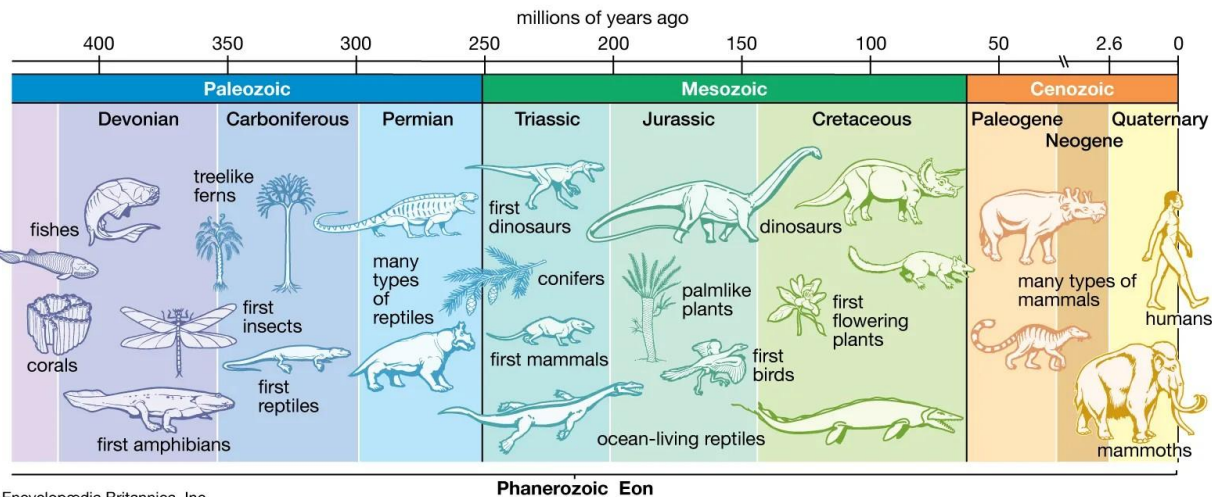
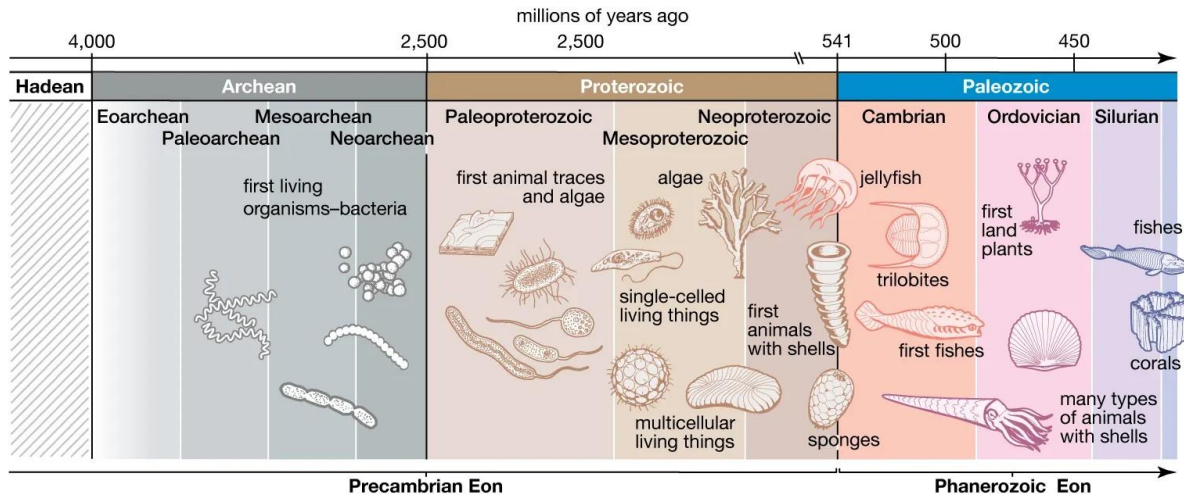


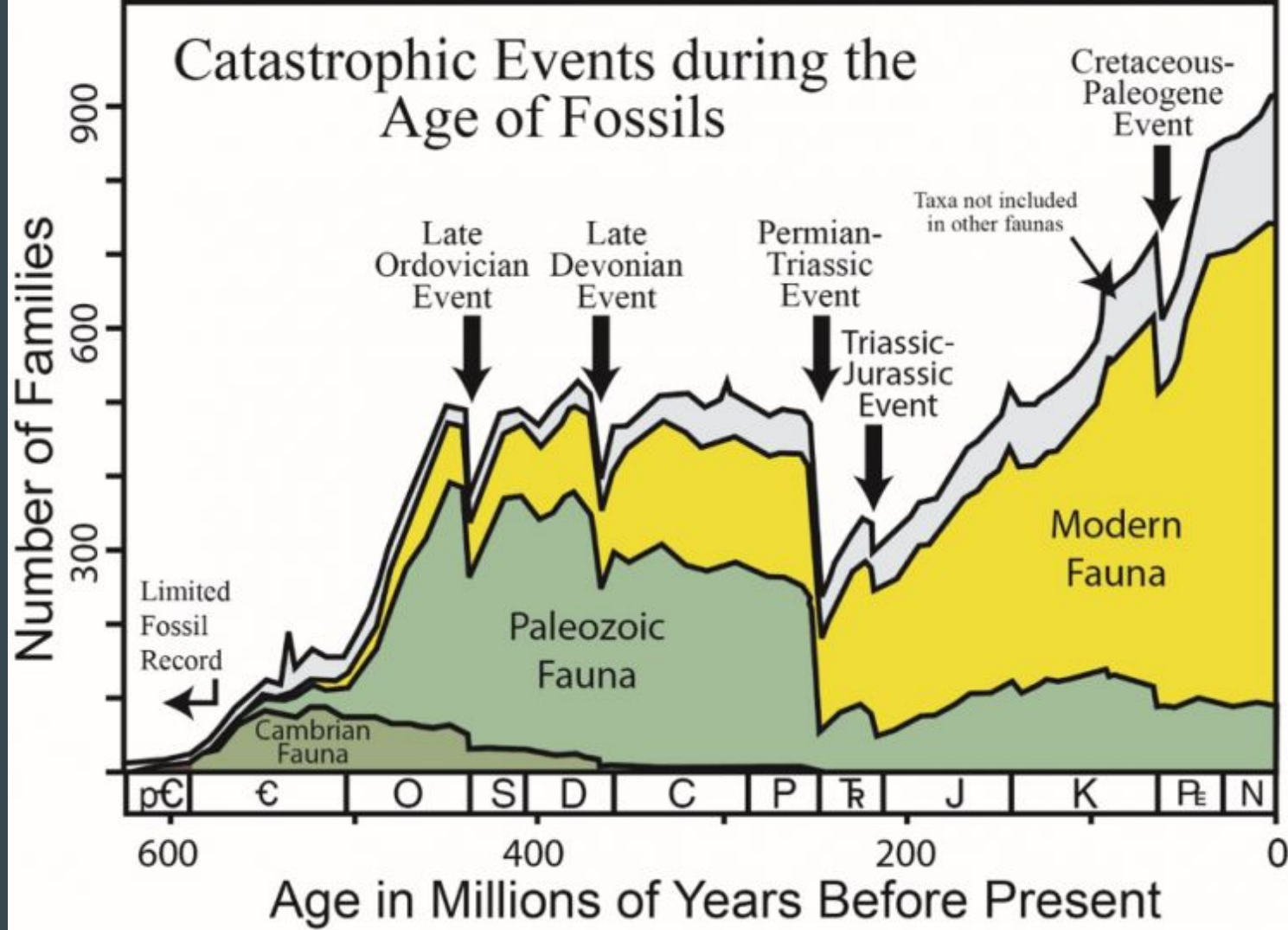




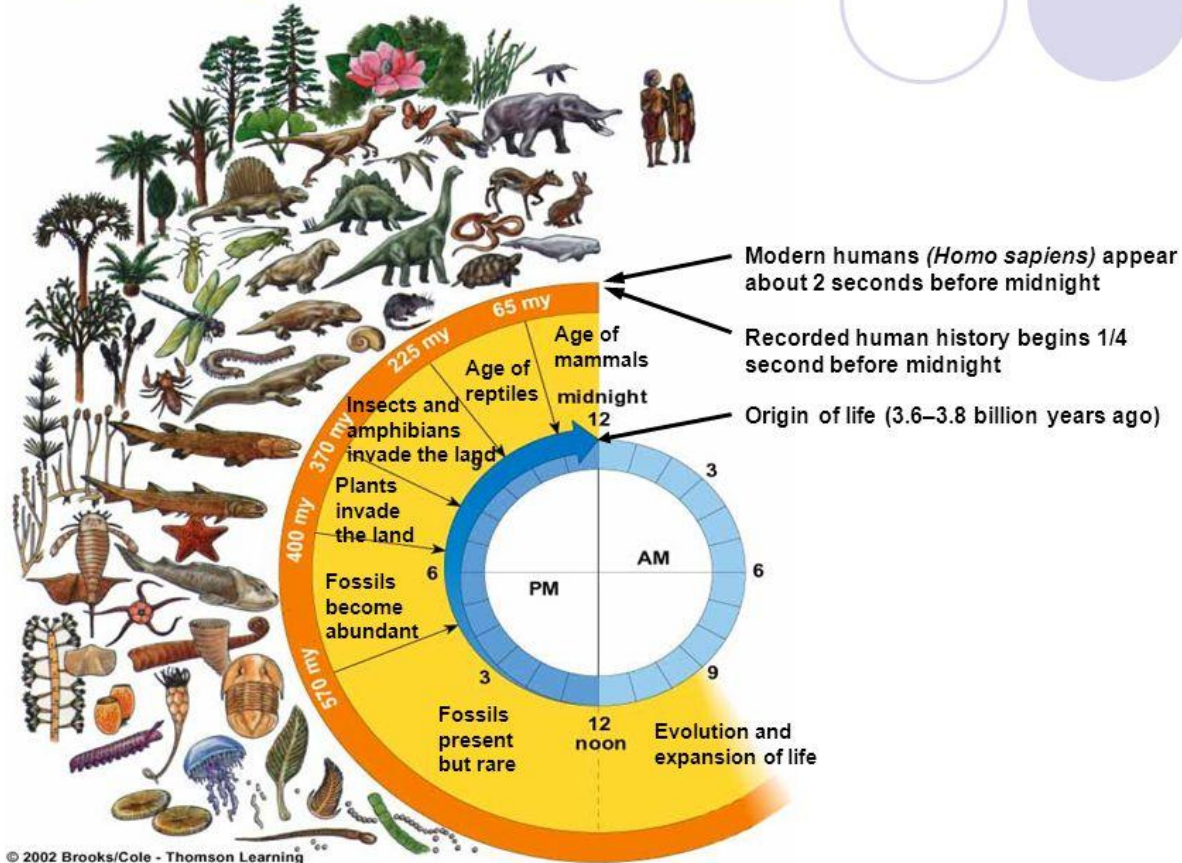








Biological Evolution



An Animal Possessed by a Spirit

- It could have happened to any other animal.
 - But it happened to us: we became naturally unnatural
 - We live in an artificial world
 - Body - city instead of forest
 - Soul - symbols instead of real
 - Spirit - it believes in
 - We are possessed to possess
- Stone in our hands became cellphone in our hands. (Stanley Kubrick, 2000 Space Odyssey, 1968)



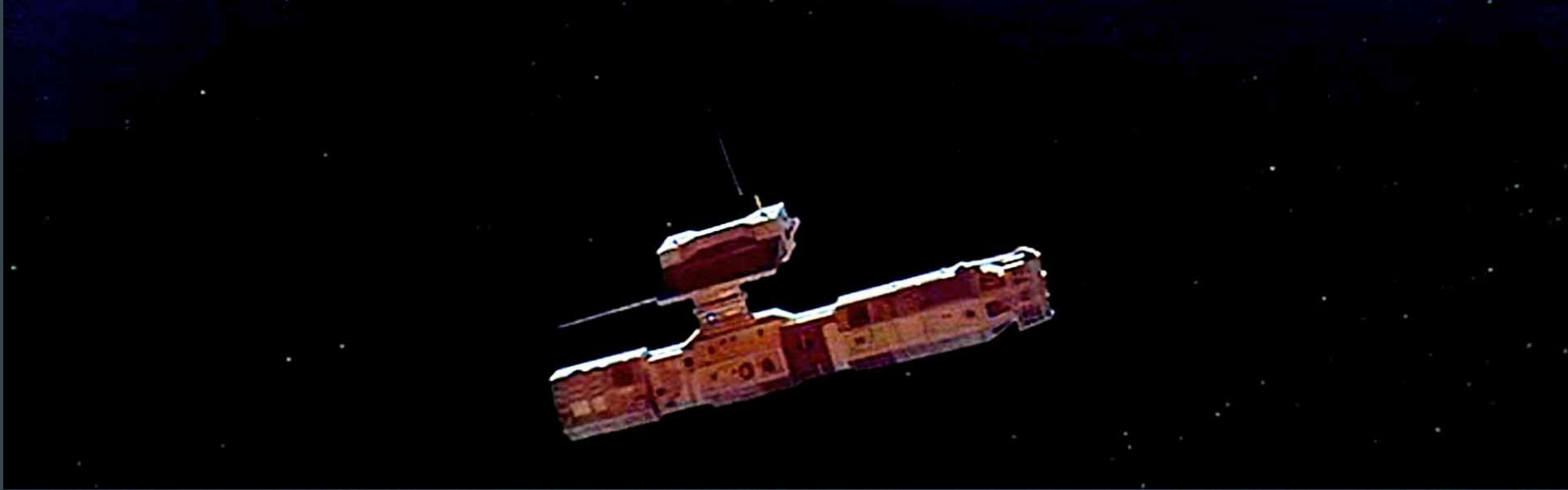








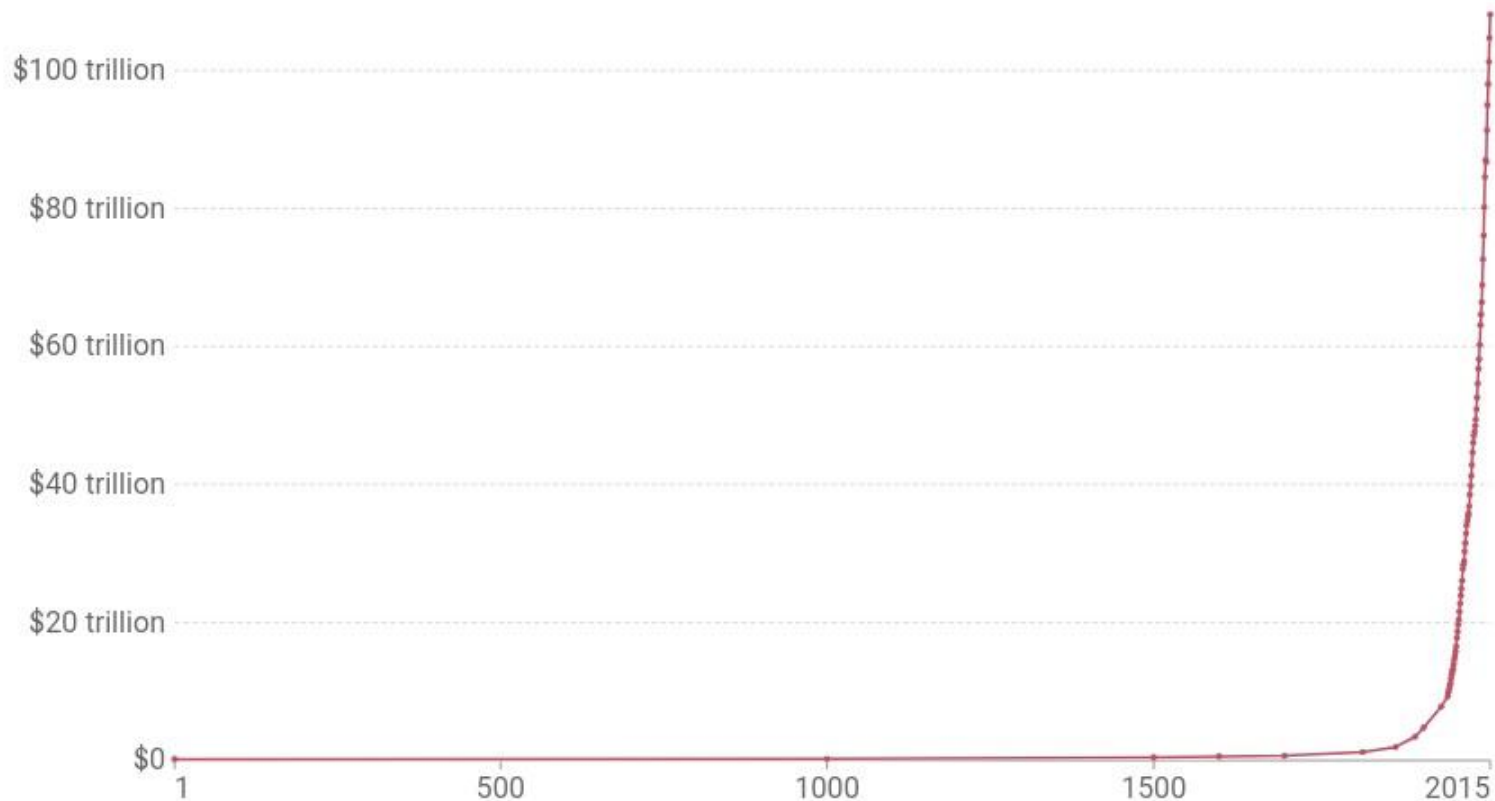




The 4,000,000-year cut

World GDP over the last two millennia

Total output of the world economy. This data is adjusted for inflation and differences in the cost of living between countries.



Source: Our World In Data based on World Bank & Maddison (2017)

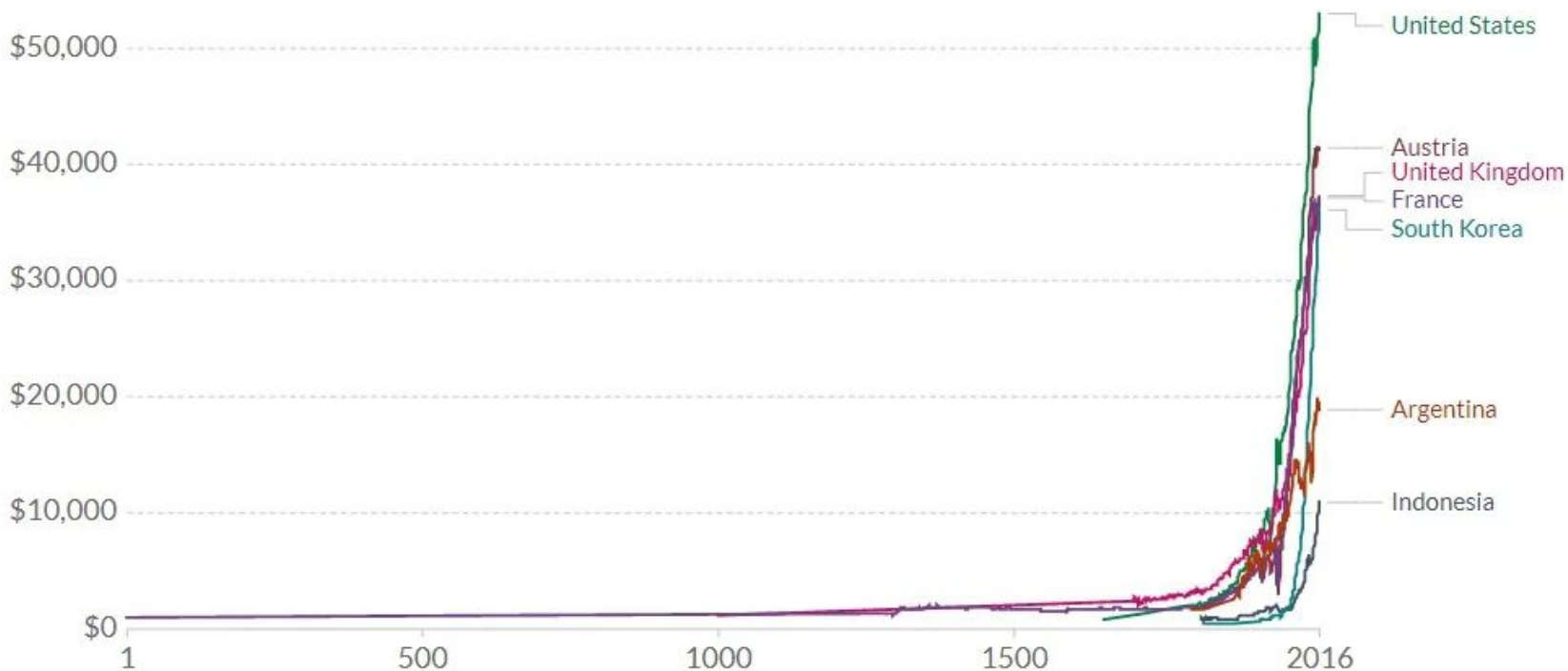
Note: This data is expressed in international-\$ at 2011 prices.

OurWorldInData.org/economic-growth • CC BY

GDP per capita, 1 to 2016

GDP per capita adjusted for price changes over time (inflation) and price differences between countries – it is measured in international-\$ in 2011 prices.

LINEAR LOG Relative change



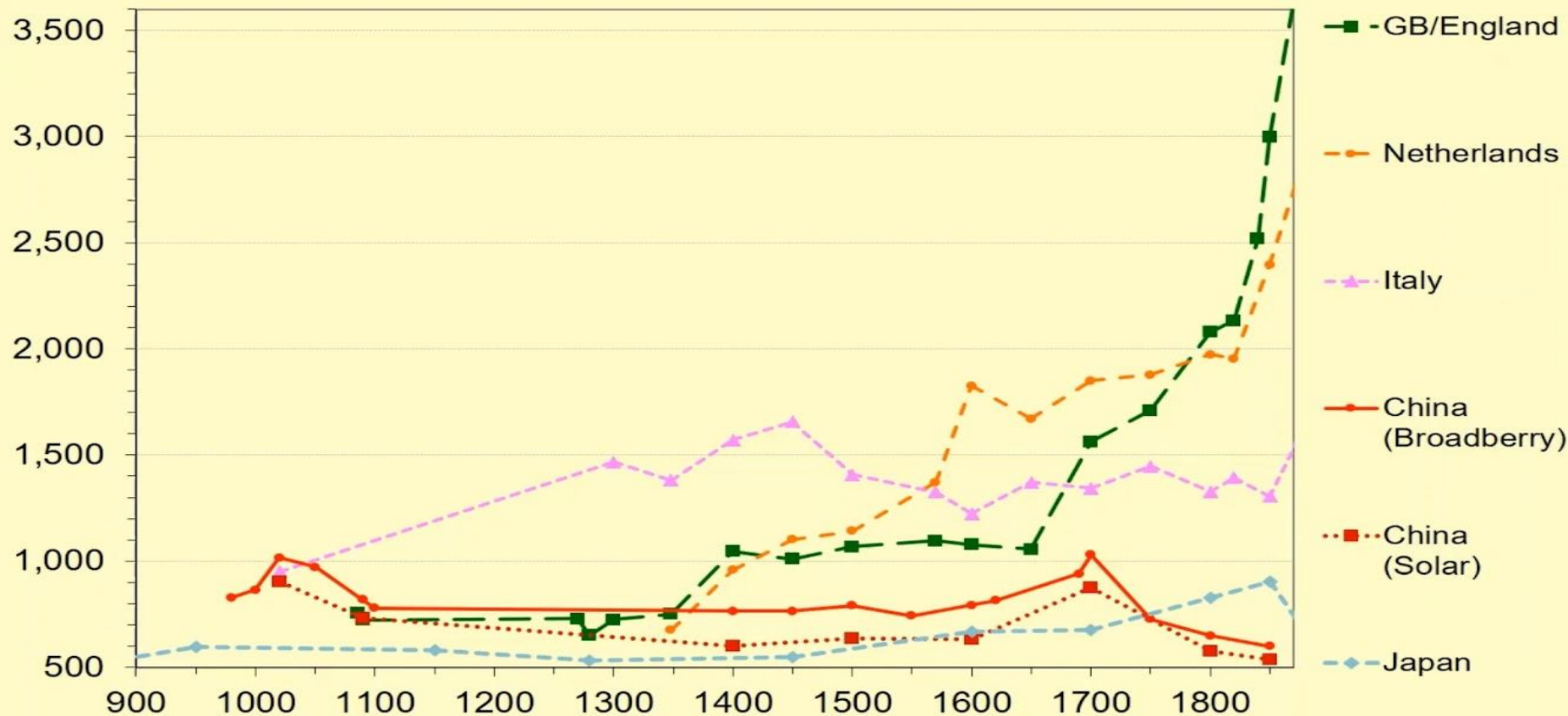
Source: Maddison Project Database (2018)

Note: The series are adjusted for price differences between countries based on only a single benchmark year, in 2011. This makes them suitable for studying the growth of incomes over time but not for comparing income levels between countries.

CC BY

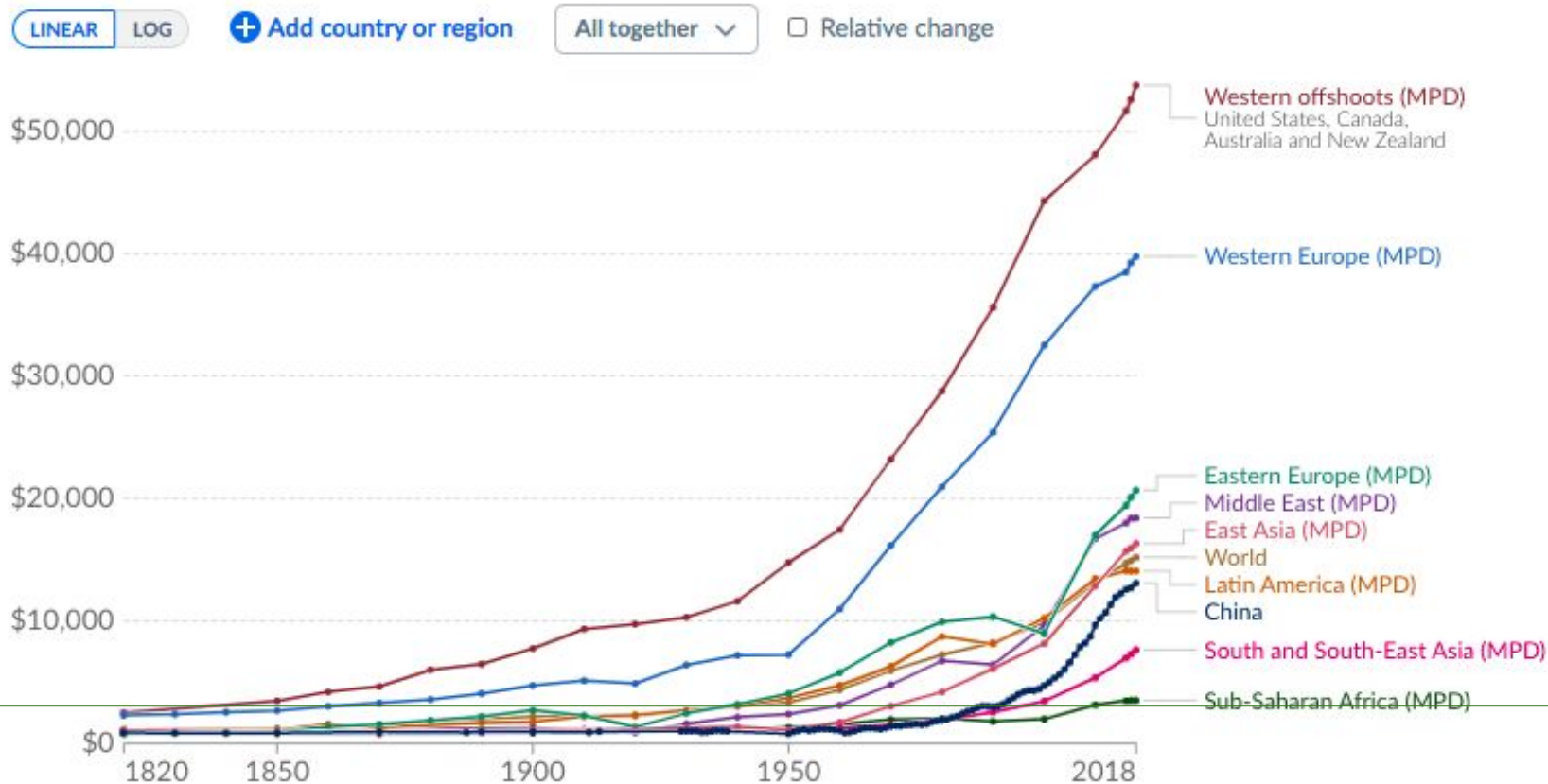
2016

The "Great Divergence", 1000-1870:
per capita GDP (1990 international dollars), 1000-1870



GDP per capita, 1820 to 2018

This data is adjusted for inflation and for differences in the cost of living between countries.



Source: Maddison Project Database 2020 (Bolt and van Zanden, 2020)

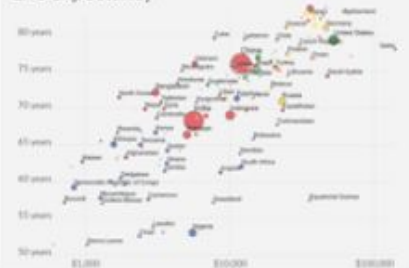
Note: This data is expressed in international-\$ at 2011 prices.

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How is life at different levels of income?

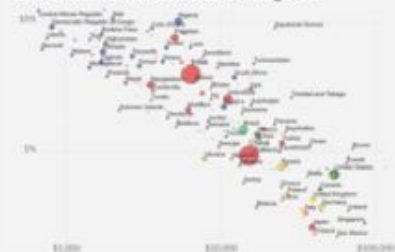
The horizontal axis of each of the 12 charts shows GDP per capita adjusted for price differences between countries to allow for comparisons between countries. The size of the circles corresponds to the population of the country. Their color represents the world region.

Life expectancy



Child mortality

share of children who die before the age of 5



Maternal deaths

per 100,000 births



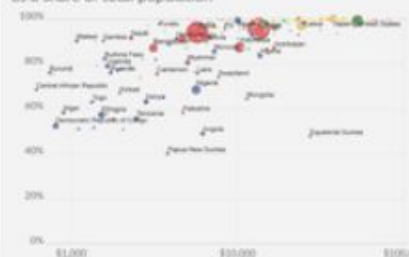
Medical doctors

per 1,000 people



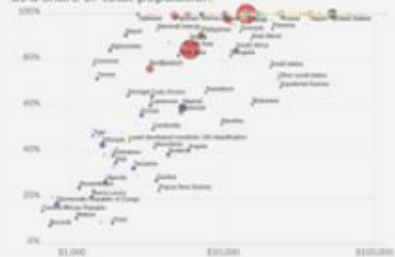
Access to improved drinking water

as a share of total population



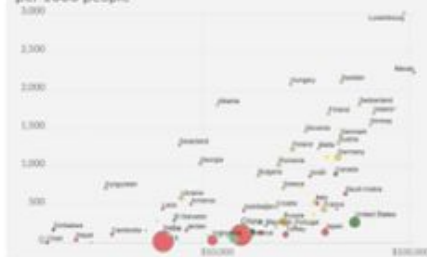
Access to electricity

as a share of total population

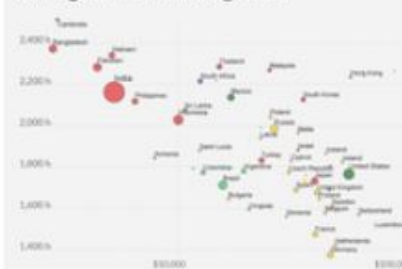


Tourist departures

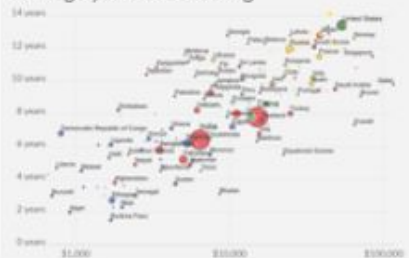
per 1000 people



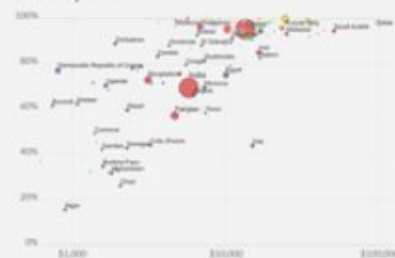
Average annual working hours



Average years of schooling

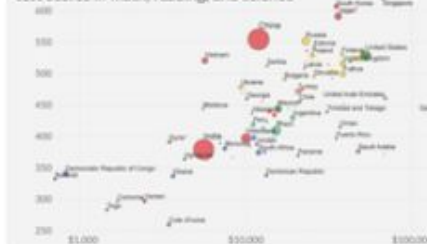


Literacy rate



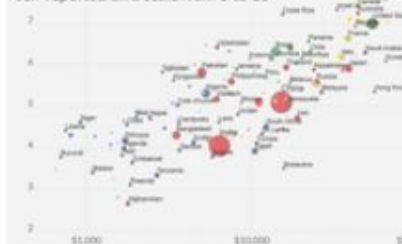
Learning outcomes

test scores in math, reading, and science

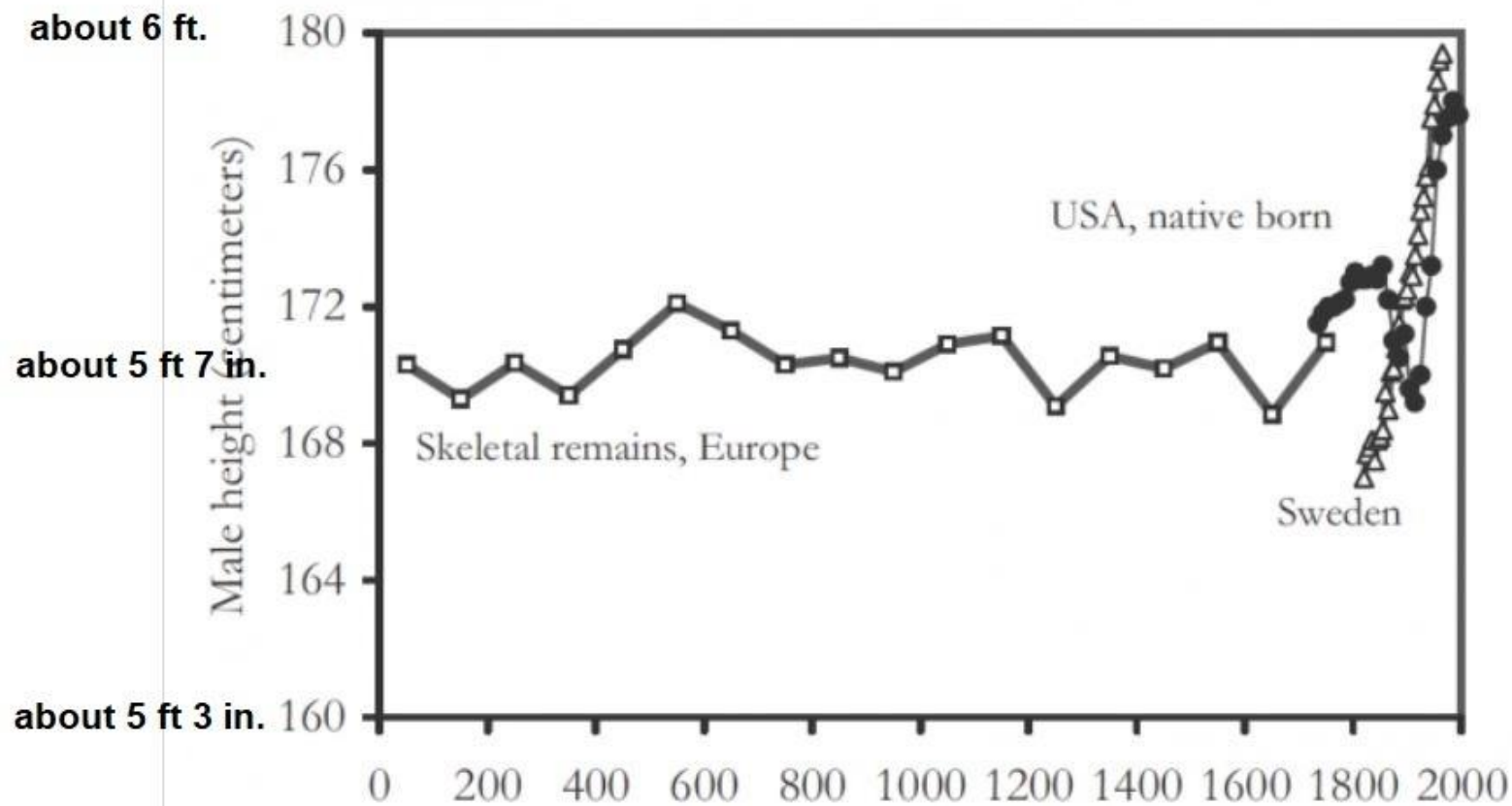


Life Satisfaction

self-reported on a scale from 0 to 10



Male heights from skeletons in Europe, 1-2000 – Clark³



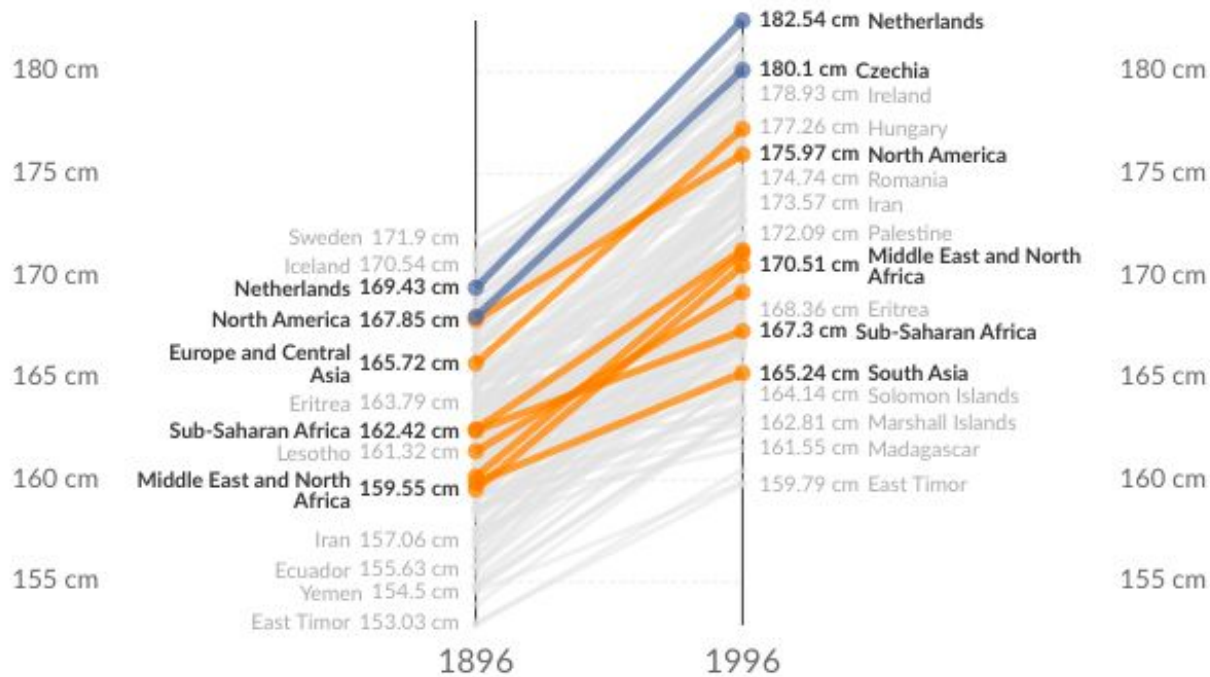
Period	Height (centimeters)
Mesolithic (a)	168 (67 kg)
Neolithic (a,b)	167
	173
1600-1800 (c)	167
1700-1800 (c)	165
1700-1850 (c)	170
Pre-Dynastic (d)	165
Dynastic (d)	166
2500 BC (e)	166
1700 BC (f)	166
2000-1000 BC (g)	169
300 BC-AD 250 (h)	161
1200-1600 (h)	159
1603-1867 (h)	158
1450 (i)	174
1650 (i)	173
1500-1750 (i)	174
1400-1800 (i)	173

Height of adult men, 1896 to 1996

Height of adult men by year of birth. Poor nutrition and illness in childhood limit human growth. As a consequence, the average height of a population is strongly correlated with living standards in a population.

 [Select countries or regions](#)

(North America 80,7 kg)



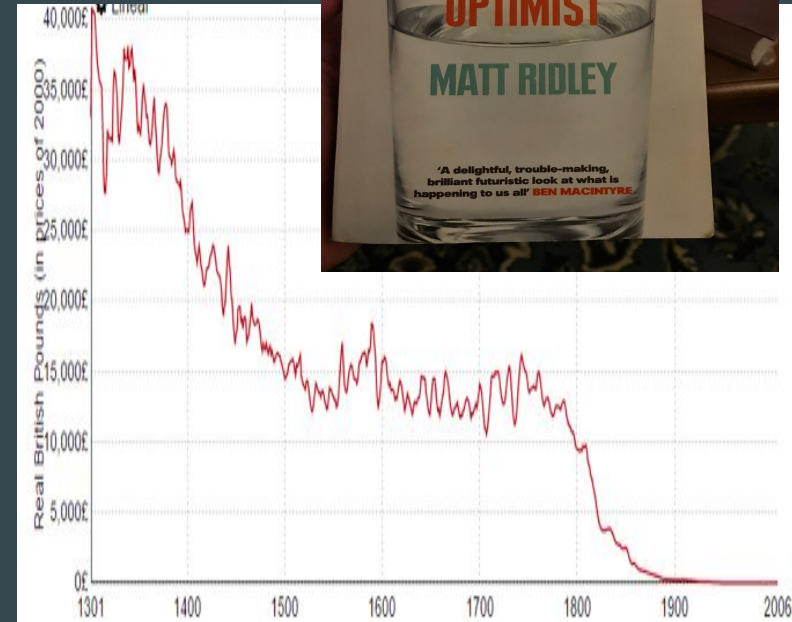
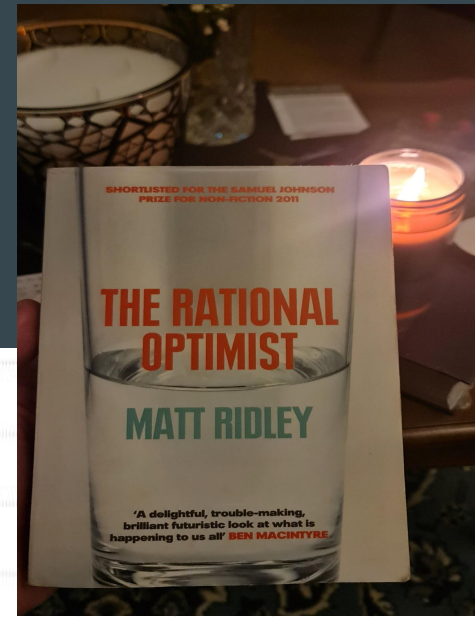
One hour of artificial light

“One hour of artificial light two thousand years before Christ cost a worker in Babylon more than fifty hours of work (sesame oil).

In 1800, an hour of average labor bought you ten minutes of artificial light to read by at night. That’s six hours of work for one hour of light.

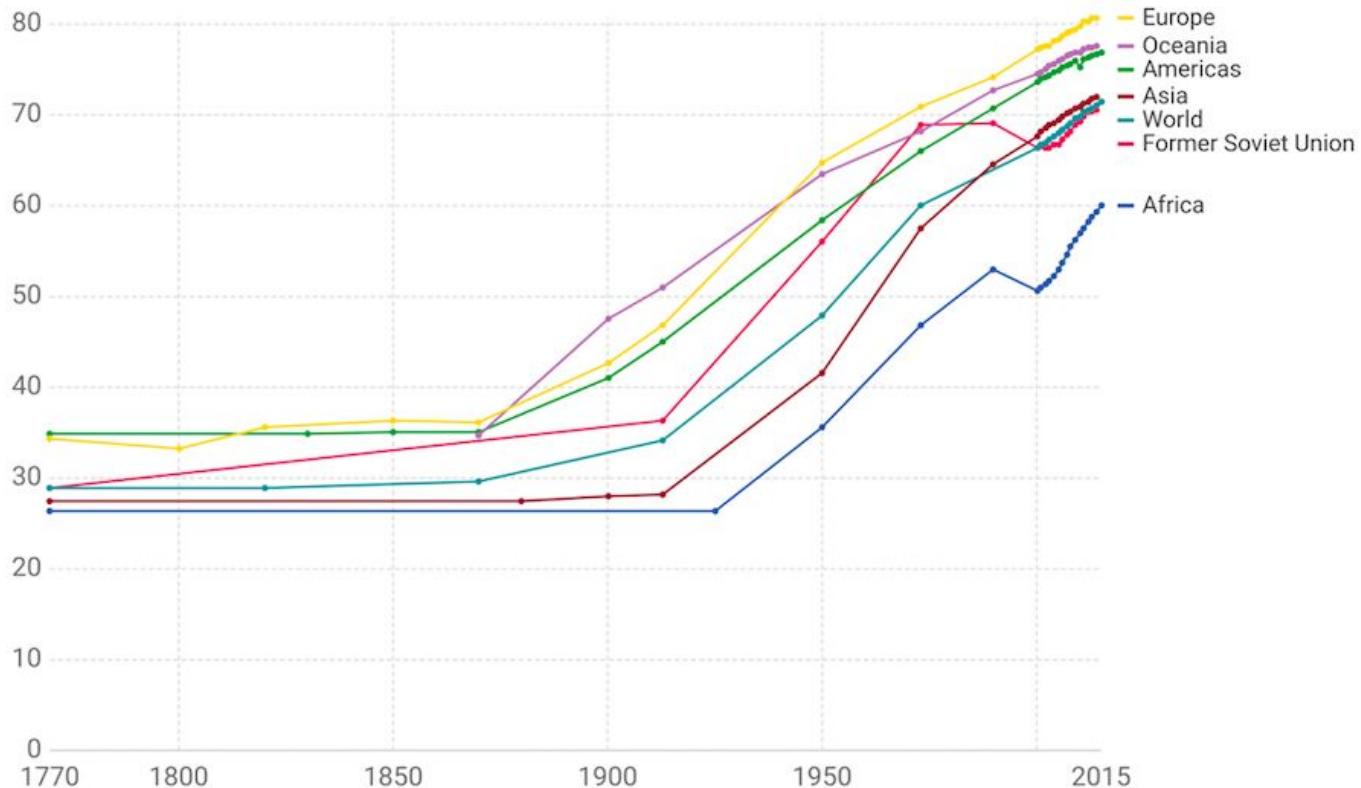
Today, the same sixty minutes of work can buy you 300 days of artificial light. You have to work hard for half a second for today’s hour of electric light with a modern energy-saving bulb.

That’s 43,200 times less than today.”



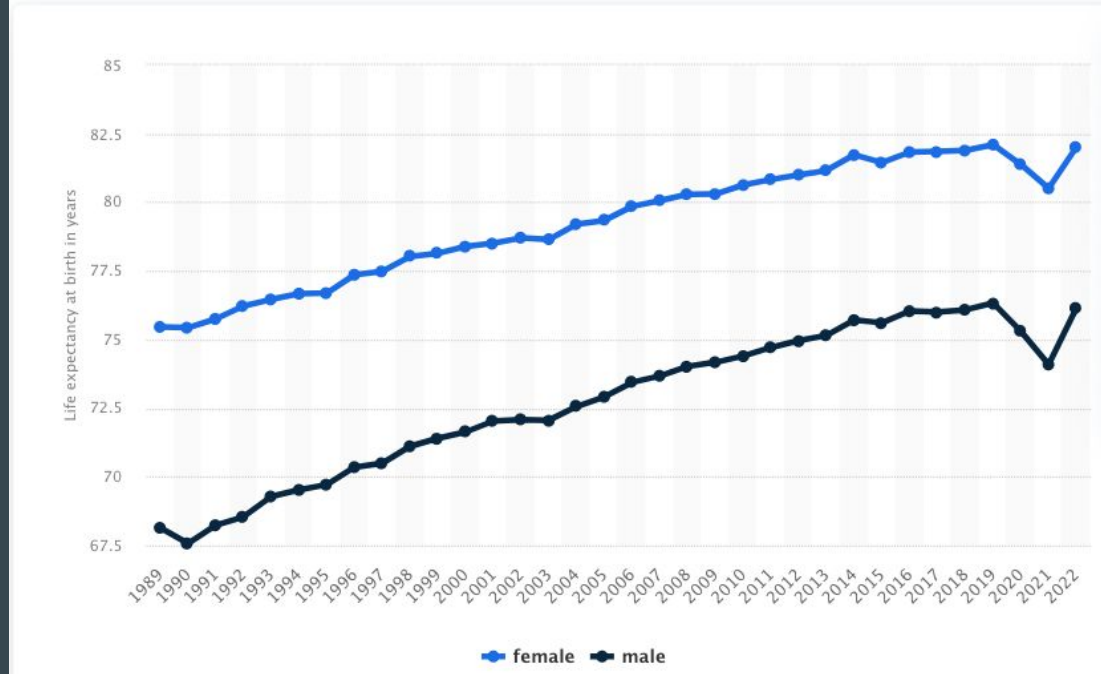
Data obtained from: Price for Light - Fouquet

Life expectancy globally and by world regions since 1770



Source: Life expectancy – James Riley for data 1990 and earlier; WHO and World Bank for later data (by Max Roser)
OurWorldInData.org/life-expectancy/ • CC BY-SA

Life expectancy at birth in Czechia from 1989 to 2022, by

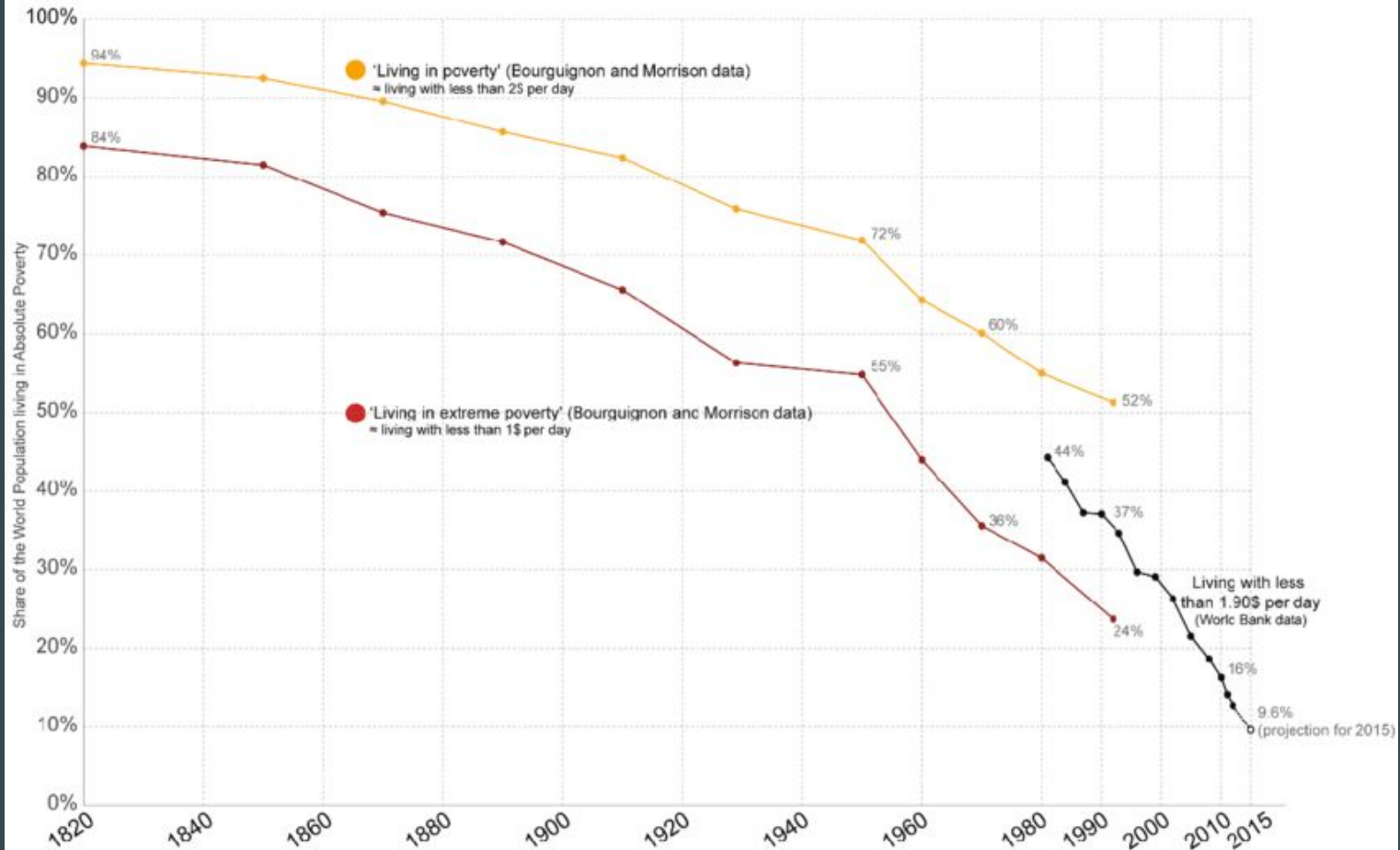


<https://www.worldometers.info/demographics/life-expectancy/>

#	Country	Life Exp ec.	Fema les	Male s
1	Hong Kong	85.83	88.66	83.00
4	Switzerland	84.38	86.05	82.63
27	Belgium	82.46	84.50	80.36
29	Slovenia	82.31	84.75	79.86
46	Czech Republic	79.82	82.58	77.02
47	United States	79.74	82.23	77.27
100	Russia	74.57	79.29	69.52

Share of the World Population living in Absolute Poverty, 1820-2015

All data are adjusted for inflation over time and for price differences between countries (PPP adjustment).



Data sources: 1820-1992 Bourguignon and Morrison (2002) - Inequality among World Citizens, in The American Economic Review; 1961-2015 World Bank (PovcalNet)

The interactive data visualisation is available at OurWorldinData.org. There you find the raw data and more visualisations on this topic.

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ENDING EXTREME POVERTY: RECENT PROGRESS AND FUTURE PROJECTIONS

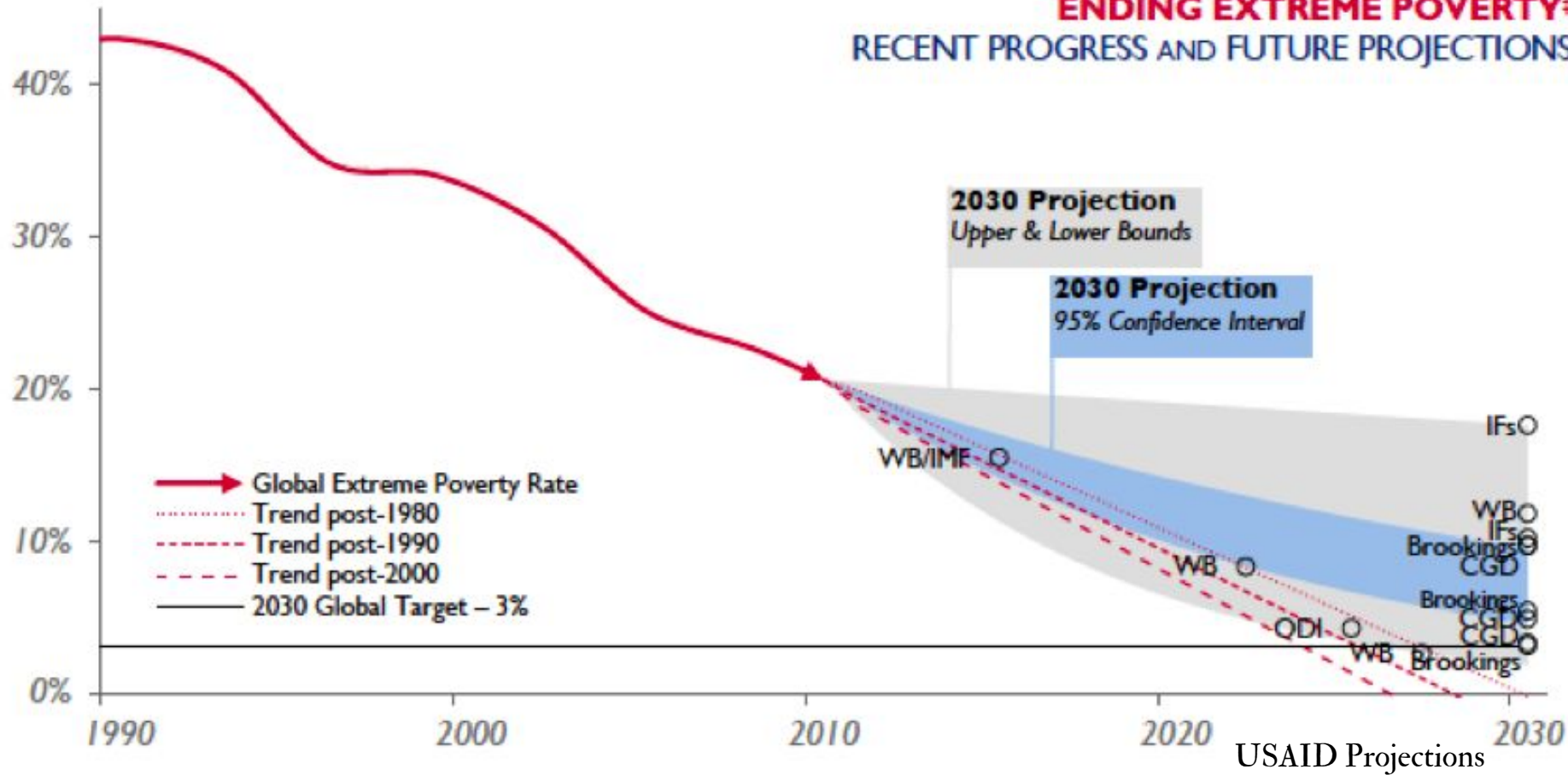
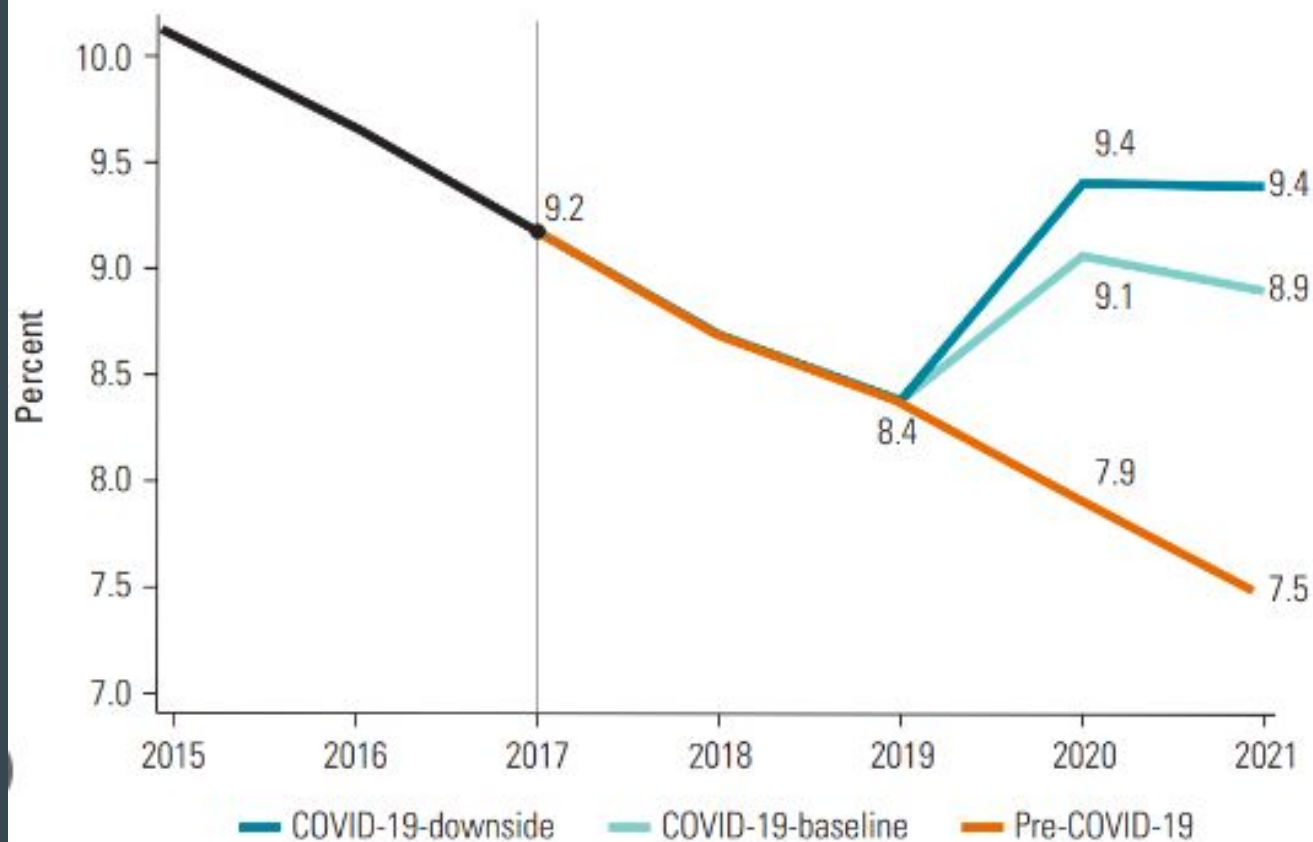


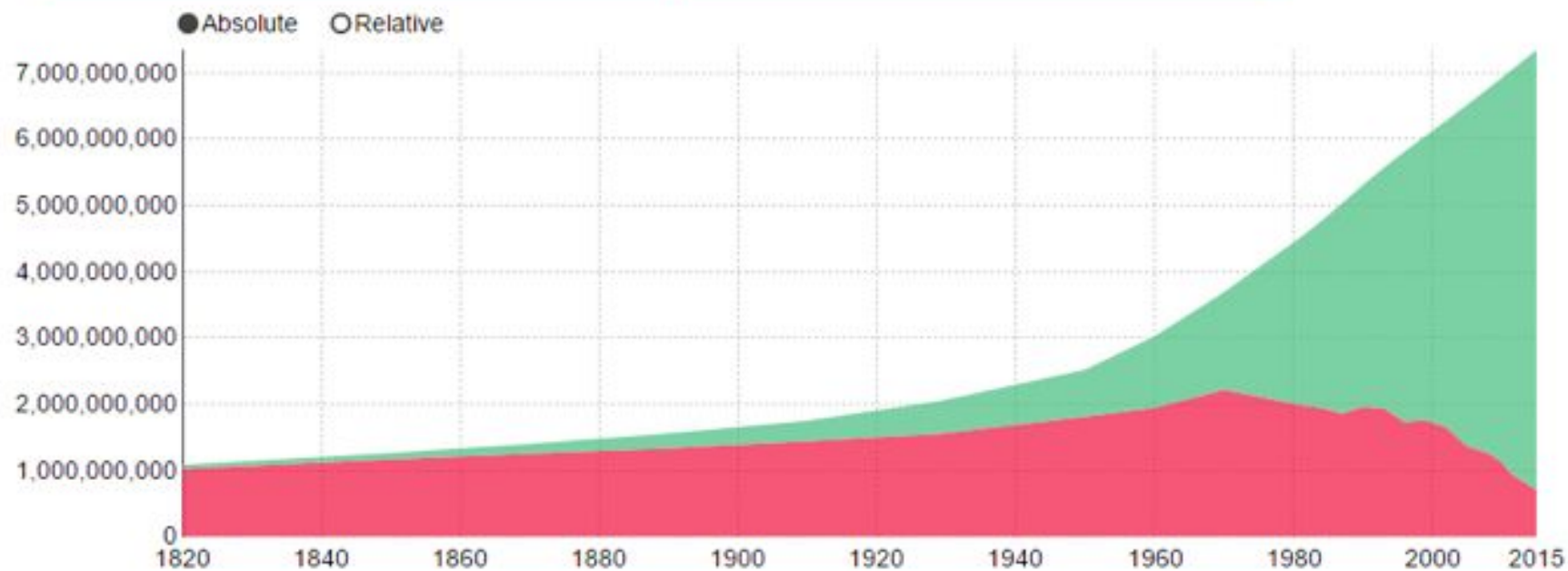
FIGURE 0.3 Nowcast of the Global Poverty Rate at the US\$1.90-a-Day Poverty Line, 2015–21



The pandemic could push an extra 150 million people into extreme poverty by 2021. Image: World Bank

World - Number of people living in extreme poverty

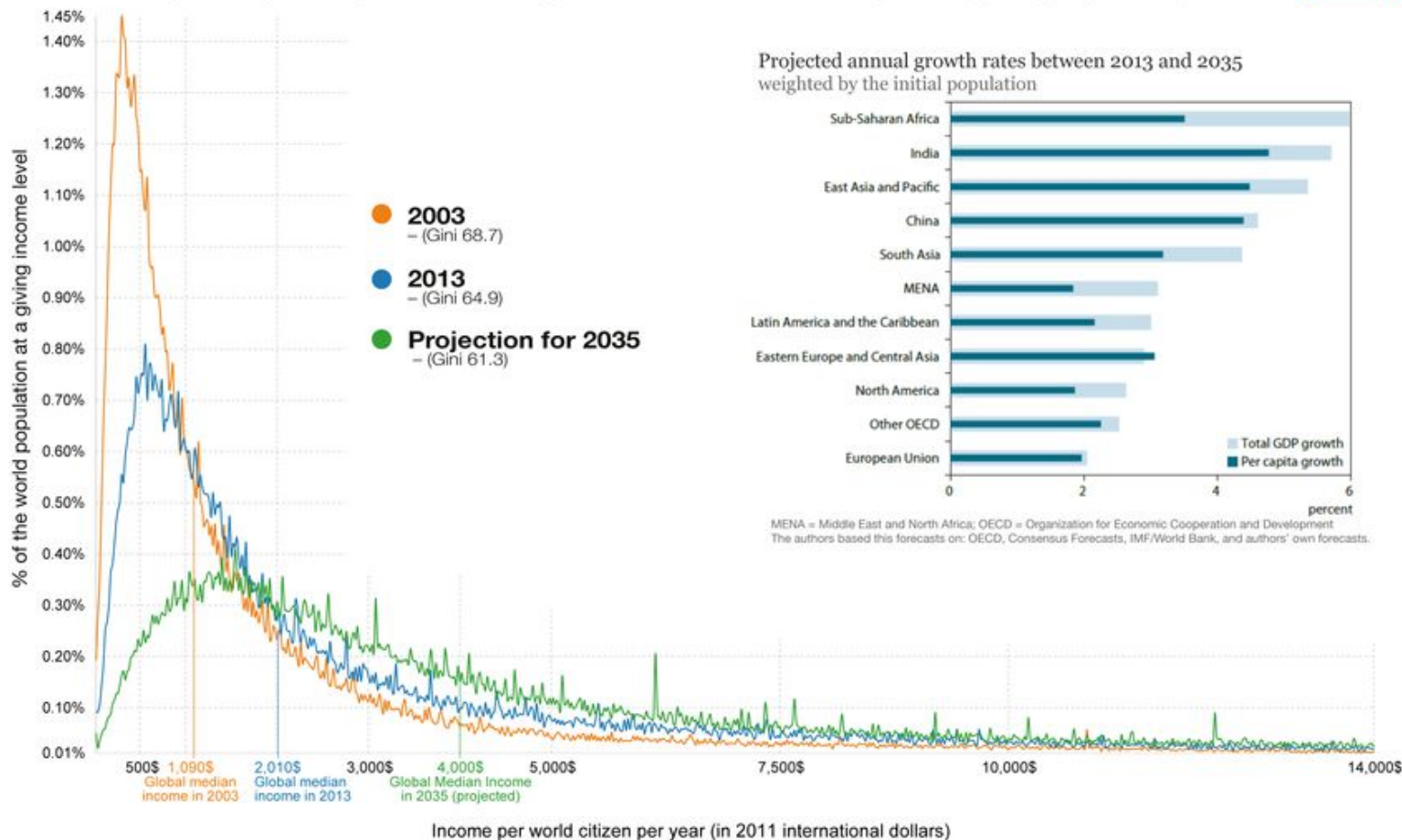
World - Number of people not in extreme poverty



Data obtained from: [World Poverty in absolute numbers](#) (Max Roser based on World Bank and Bourguignon and Morrisson (2002))

The global income distribution in 2003, 2013, and the projection for 2035

Incomes are adjusted for price changes over time and for price differences between countries (purchasing power parity (PPP) adjustment).

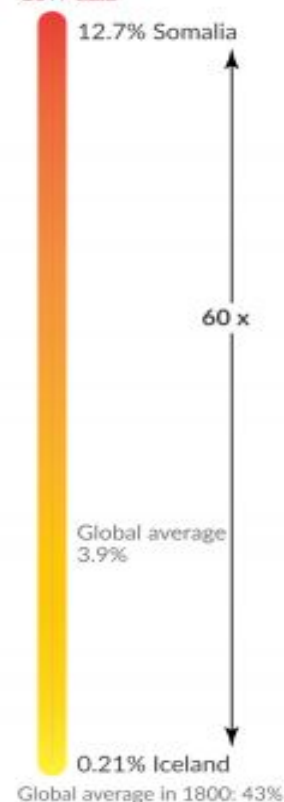


Global inequality in living conditions

between the world's worst-off and best-off countries

Mortality rate of children under the age of 5

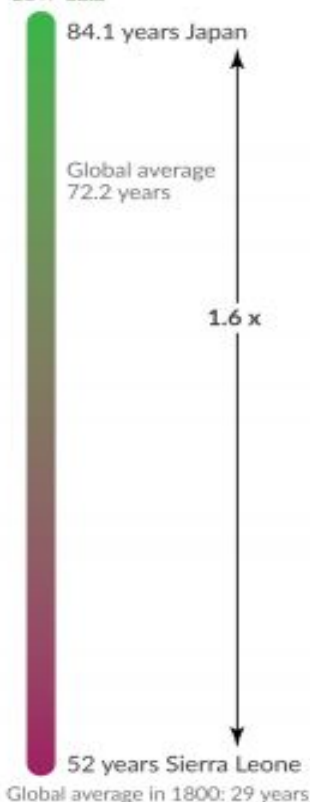
2017 data



Global average in 1800: 43%

Life expectancy at birth

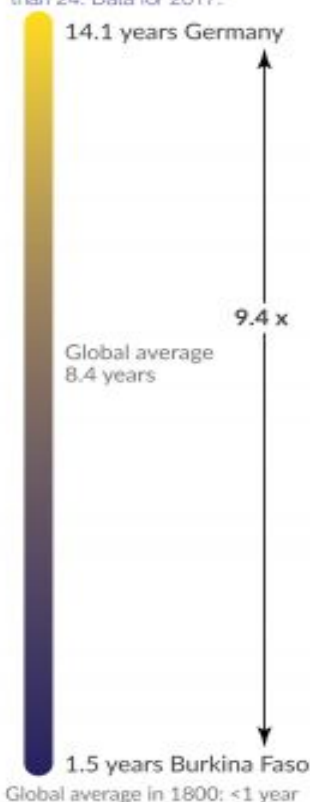
2017 data



Global average in 1800: 29 years

Mean years of schooling

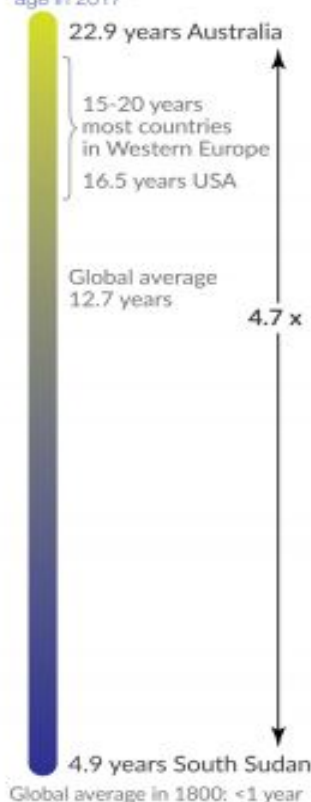
received by people older than 24. Data for 2017.



Global average in 1800: <1 year

Expected years of schooling

for a child of school entrance age in 2017

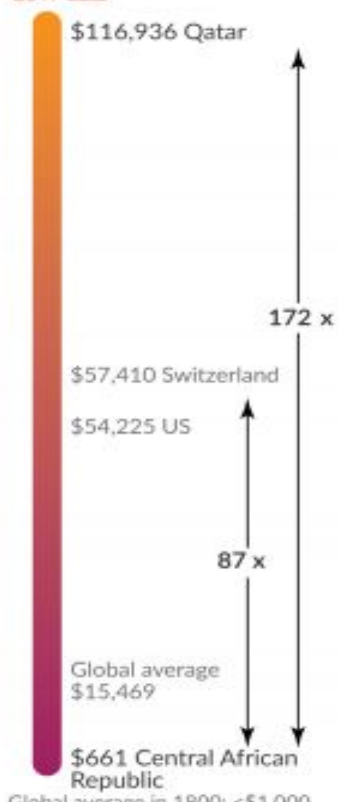


Global average in 1800: <1 year

Average income

(GDP per capita adjusted for price differences between countries)

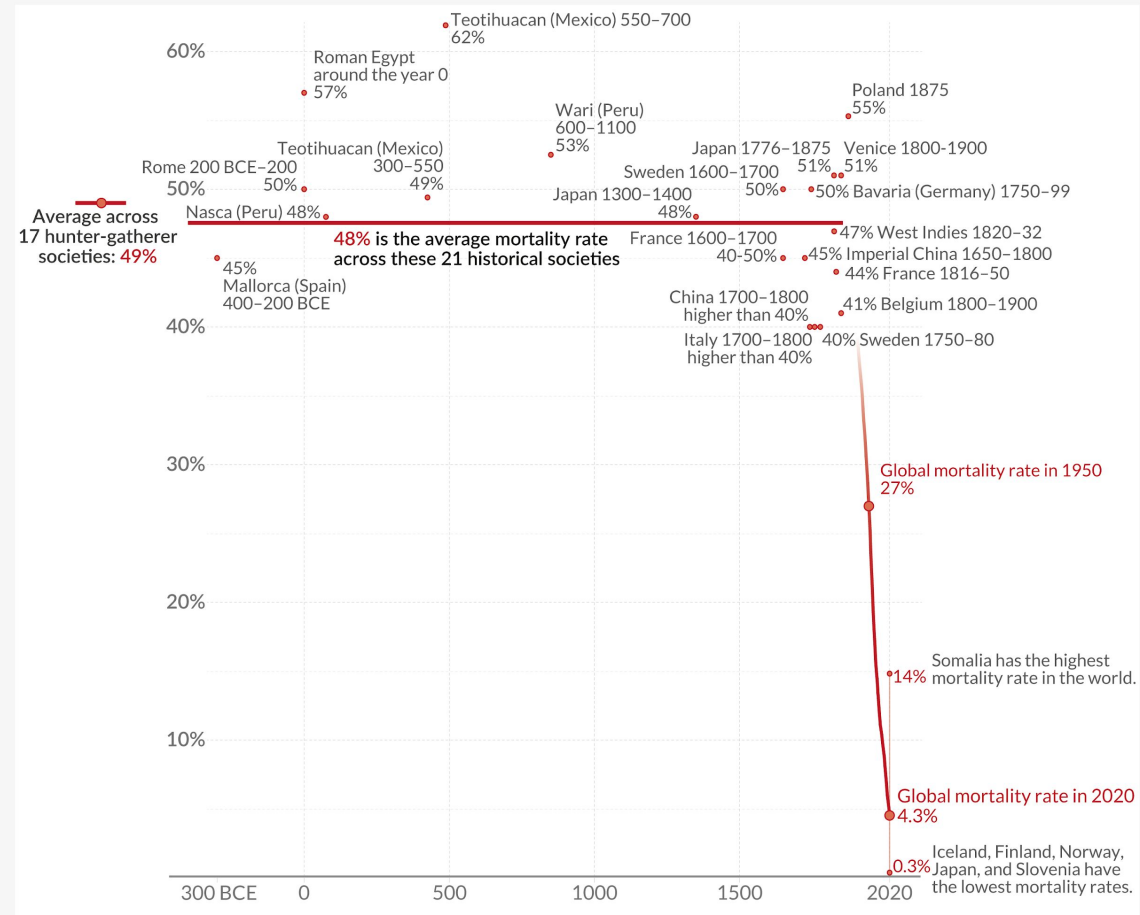
2017 data



Global average in 1800: <\$1,000

The long-run history of child mortality

Shown is the share of children who died before reaching the end of puberty.
The exact age cut-off differs slightly between studies, but is around the age of 15.

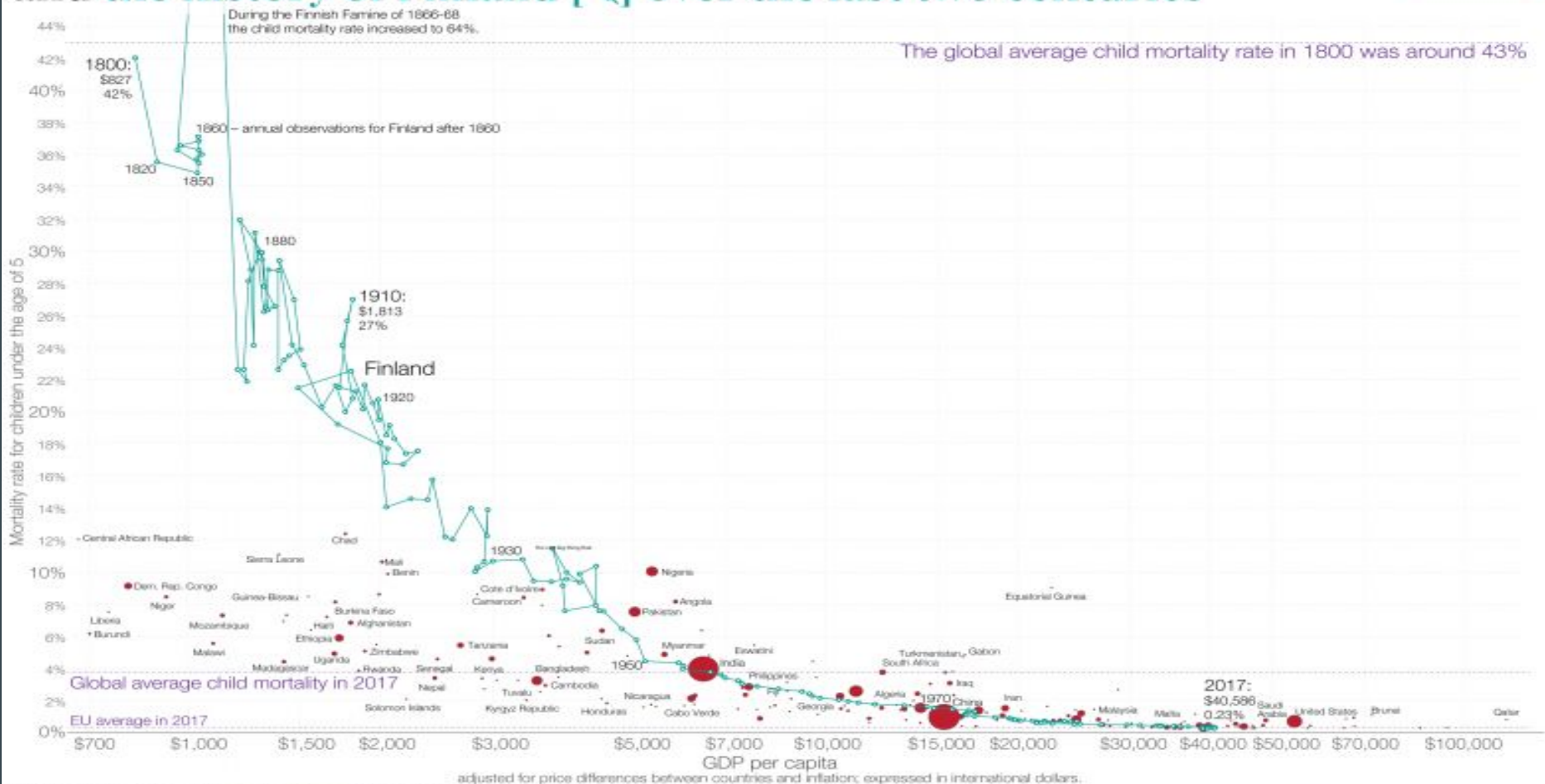


Data sources: Volk and Atkinson (2013), Human Mortality Database, and UN IGME

Licensed under CC-BY by the author Max Roser.

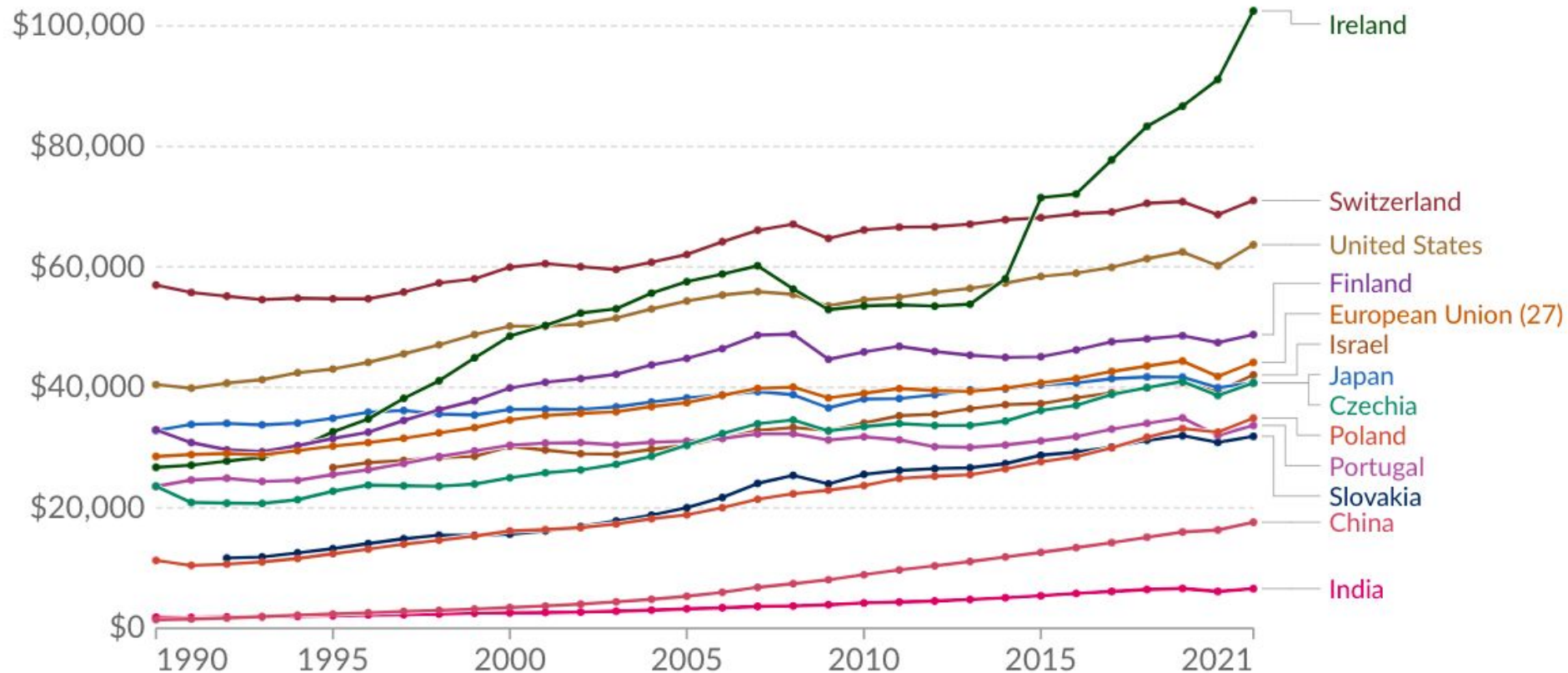
This is a visualization from OurWorldinData.org, the online publication for research and data to make progress against the world's largest problems

Child mortality and incomes [:●:] around the world in 2017 and the history of Finland [:line:] over the last two centuries



European Region

HDP na hlavu, PPP



Source: Data compiled from multiple sources by World Bank
Note: This data is expressed in international-\$ at 2017 prices.

OurWorldInData.org/economic-growth • CC BY

Riches of the Soul

- The intangible, invisible world that matter-only-detecting-entity could not see/understand /notice

Example: IBM-MS-Google

- The Soul economy, Body-less economy
 - Debodyzation of Money
 - Feminism
 - Age of a child
 - Birth of dominance of non-tangible economy
 - From things to thinks
 - Banks during Covid, GDP Domestic truly

Noosphere: the New Republic of Internet

Pierre Teilhard de Chardin

Cardinal Ratzinger:

“From very simple beginnings the path leads to ever greater and more complex unities, in which multiplicity is not abolished but merged into a growing synthesis, leading to the "Noosphere" in which spirit and its understanding embrace the whole and are blended into a kind of living organism. Invoking the epistles to the Ephesians and Colossians, Teilhard looks on Christ as the energy that strives toward the Noosphere and finally incorporates everything in its "fullness".

Eucharist and the final glorification of the cosmos.

Vladimir Ivanovich Vernadsky (1863-1945)

Geosphere - >biosphere - >Noosphere

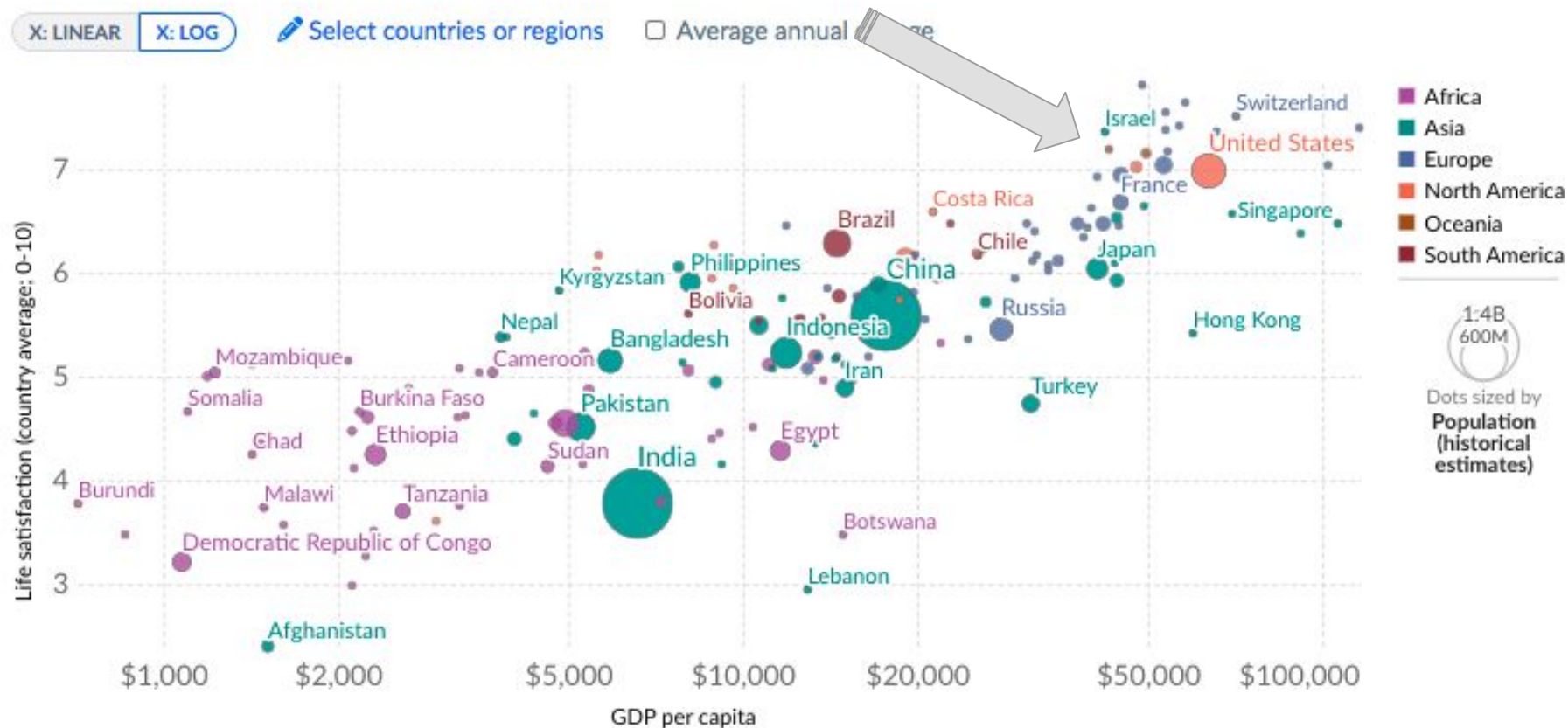
Best Example: West vs East Germany

GDP, Population, and GDP per capita comparison between East and West Germany

	East Germany			West Germany			
	GDP (1990 Int\$, millions) ^[21]	Population (thousands) ^[22]	GDP per capita (\$)	GDP (1990 Int\$, millions) ^[21]	Population (thousands) ^[22]	GDP per capita (\$)	East as a % of West
1950	51,412	18,400	2,794	213,942	50,000	4,279	65
1990/1989 ^[note 1]	160,000	16,400	9,679	1,182,261	62,100	19,038	51
Angus Maddison Data ^[23]							
1936	74,652	15,614	4,781.09	192,911	42,208	4,570.48	105
1950	51,412	18,388	2,795.95	213,942	49,983	4,280.30	65
1973	129,969	16,890	7,695.03	814,786	61,976	13,146.80	59
1990	82,177	16,111	5,100.68	1,182,281	63,254	18,690.69	27
1991	85,961	15,910	5,402.95	1,242,096	63,889	19,441.47	28

Self-reported life satisfaction vs. GDP per capita, 2022

Self-reported life satisfaction is measured on a scale ranging from 0-10, where 10 is the highest possible life satisfaction. GDP per capita is adjusted for inflation and differences in the cost of living between countries.

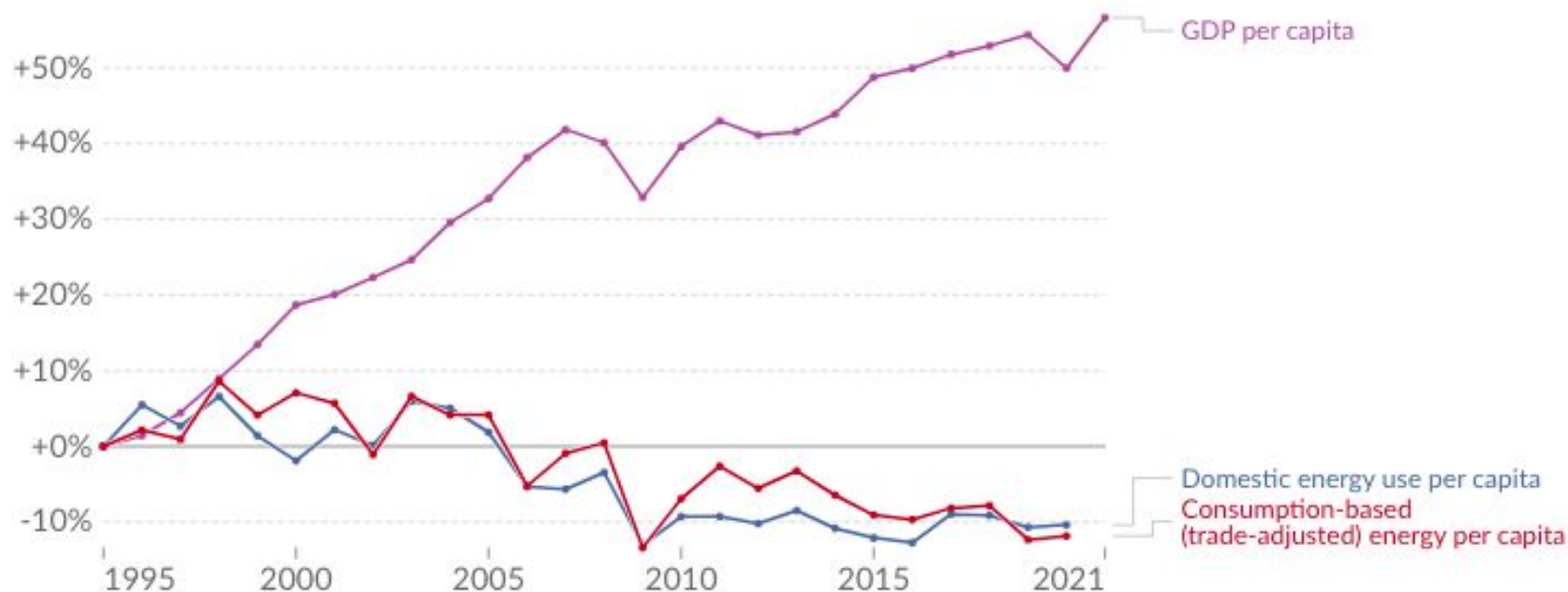


Changes in energy use vs. changes in GDP per capita, Sweden

Consumption-based (trade-adjusted) energy use measures domestic energy use minus energy used to produce exported goods, plus energy used to produce imported goods.

↻ Change country or region

All together ▾

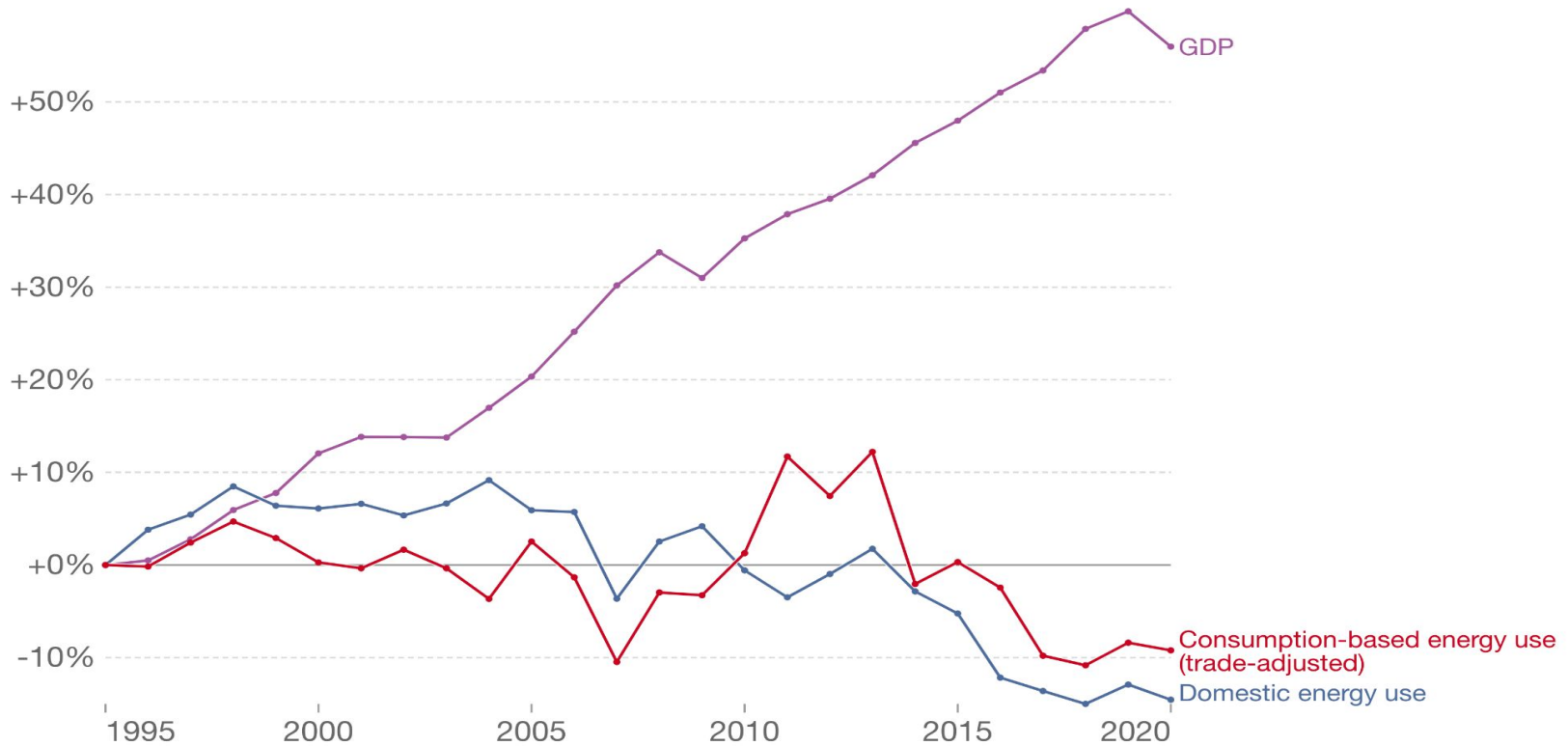


Source: Our World in Data based on BP; Shift Energy; UN Population & The World Bank

Note: Energy refers to primary energy, the energy input before the transformation to forms of energy for end-use (such as electricity or petrol for transport).

Changes in energy use vs. changes in GDP, Switzerland

Consumption-based (trade-adjusted) energy use measures domestic energy use minus energy used to produce exported goods, plus energy used to produce imported goods.



Source: Energy data is calculated by Viktoras Kulionis, based on the EXIOBASE v3.8.2 database; GDP data from the World Bank

Note: GDP is measured in 2017 constant international-\$ which adjusts for inflation and cross-country price differences.

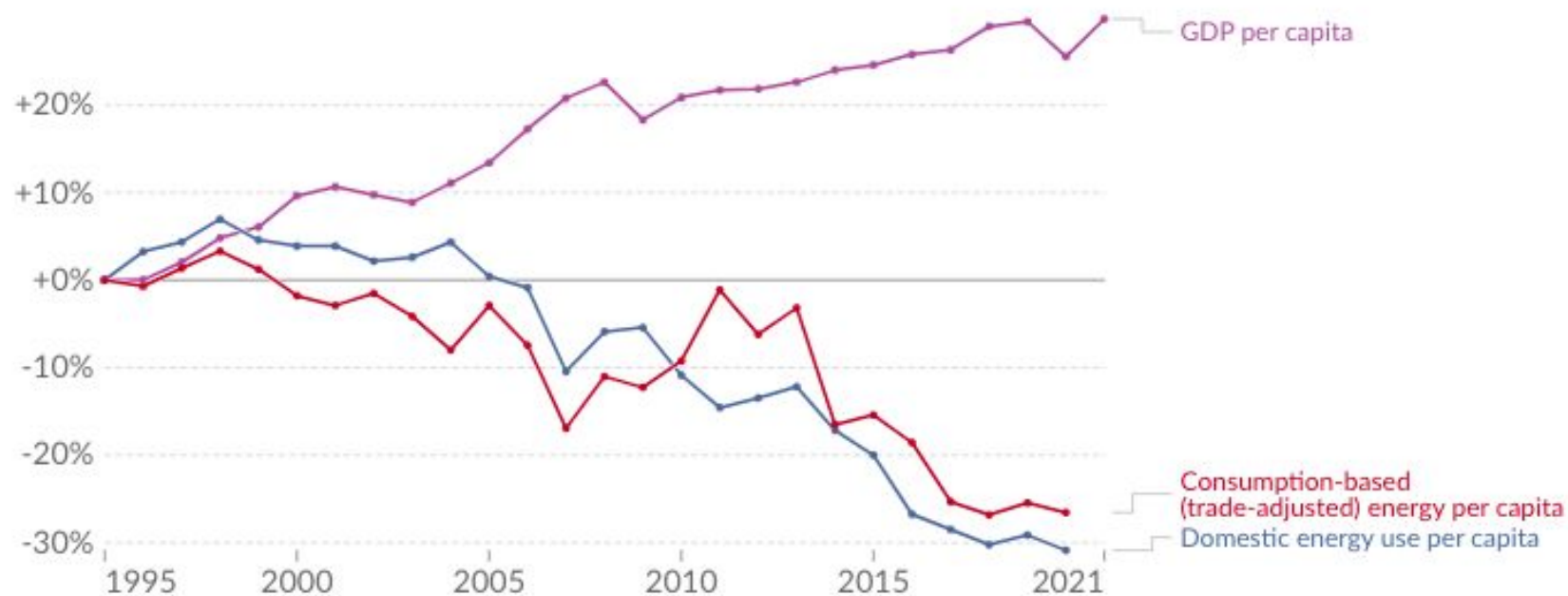
OurWorldInData.org/energy • CC BY

Changes in energy use vs. changes in GDP per capita, Switzerland

Consumption-based (trade-adjusted) energy use measures domestic energy use minus energy used to produce exported goods, plus energy used to produce imported goods.

↻ Change country or region

All together ▾



Source: Our World in Data based on BP; Shift Energy; UN Population & The World Bank

Note: Energy refers to primary energy, the energy input before the transformation to forms of energy for end-use (such as electricity or petrol for transport).

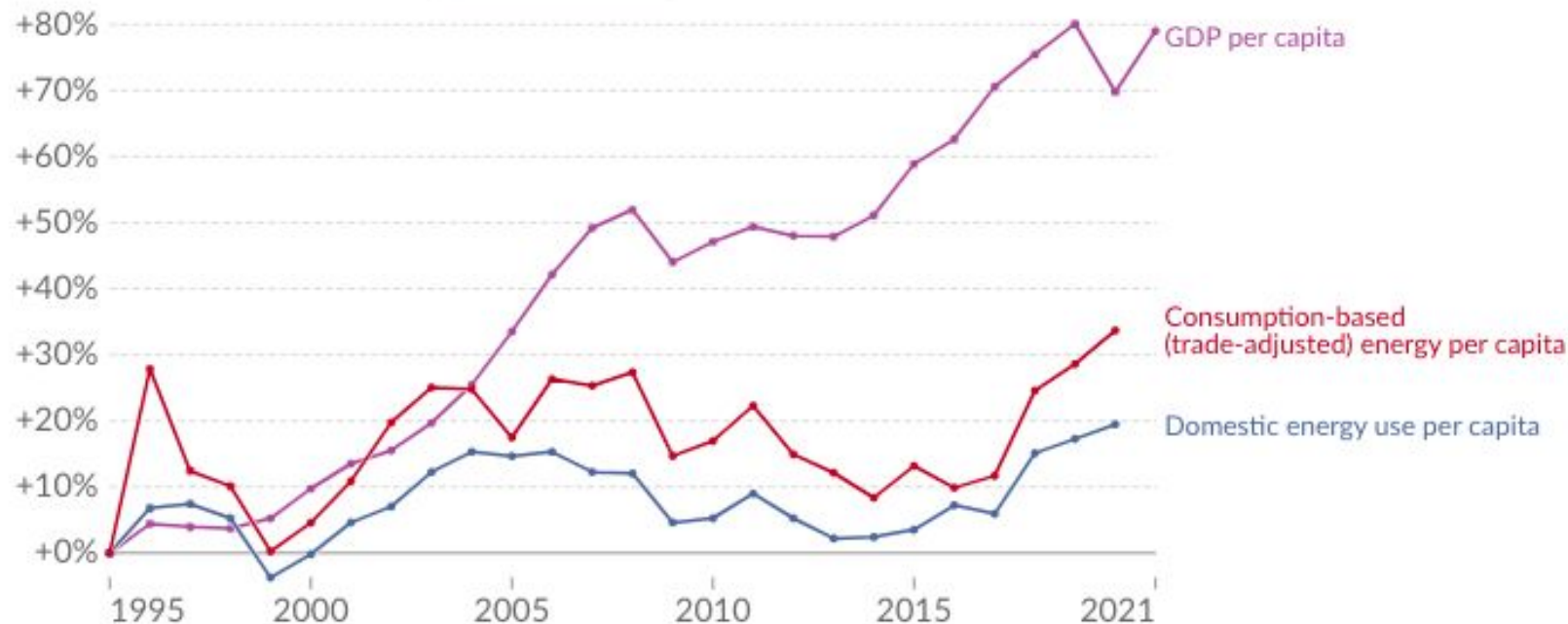
OurWorldInData.org/energy • CC BY

Changes in energy use vs. changes in GDP per capita, Czechia

Consumption-based (trade-adjusted) energy use measures domestic energy use minus energy used to produce exported goods, plus energy used to produce imported goods.

↔ Change country or region

All together ▾



Source: Our World in Data based on BP; Shift Energy; UN Population & The World Bank

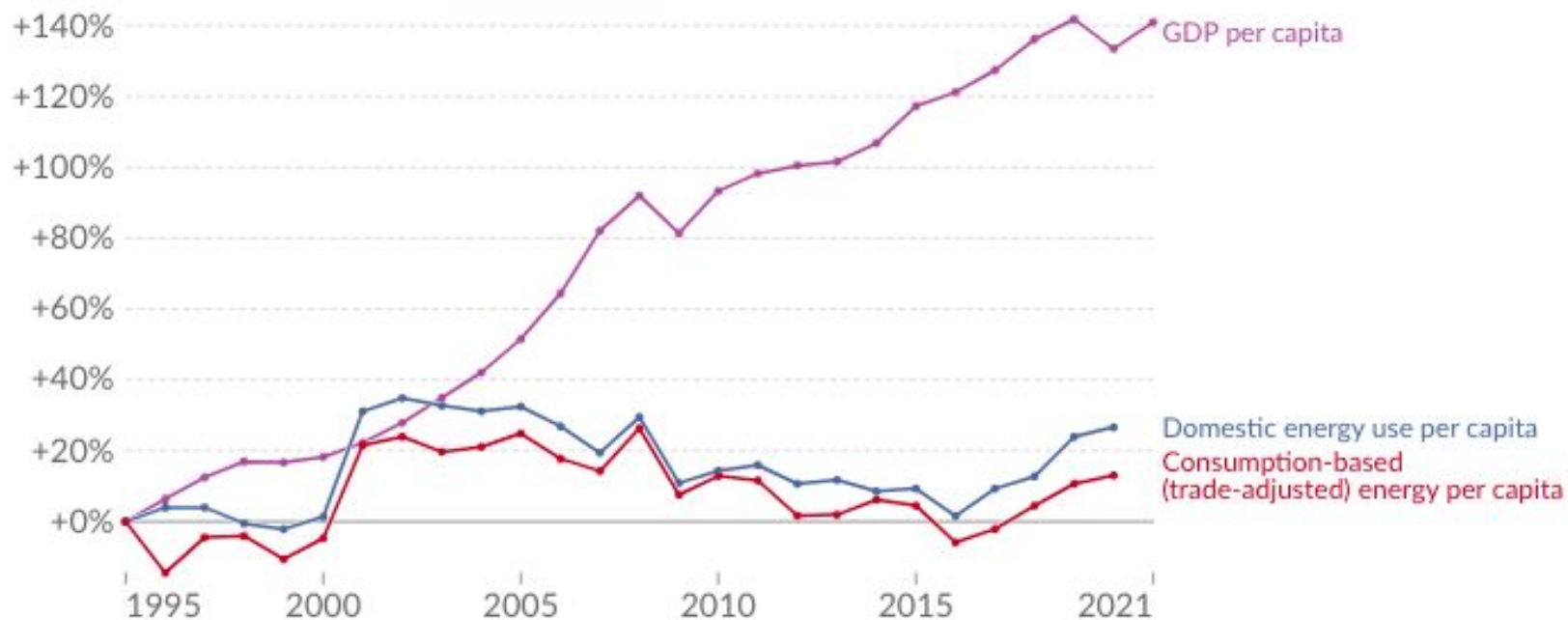
Note: Energy refers to primary energy, the energy input before the transformation to forms of energy for end-use (such as electricity or petrol for transport).

Changes in energy use vs. changes in GDP per capita, Slovakia

Consumption-based (trade-adjusted) energy use measures domestic energy use minus energy used to produce exported goods, plus energy used to produce imported goods.

↔ Change country or region

All together ▾



Source: Our World in Data based on BP; Shift Energy; UN Population & The World Bank

Note: Energy refers to primary energy, the energy input before the transformation to forms of energy for end-use (such as electricity or petrol for transport).

OurWorldInData.org/energy • CC BY

Changes in energy use vs. changes in GDP per capita, Poland

Consumption-based (trade-adjusted) energy use measures domestic energy use minus energy used to produce exported goods, plus energy used to produce imported goods.

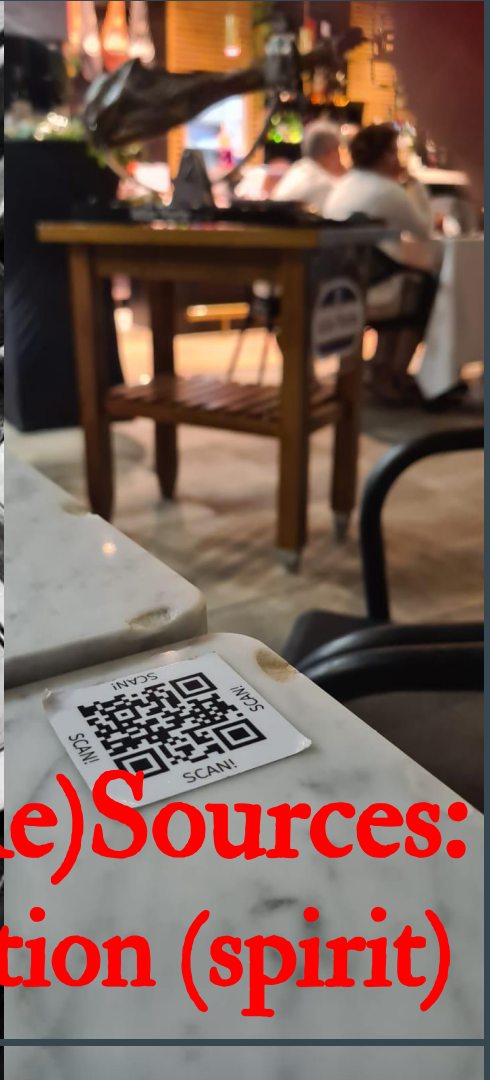
↔ Change country



Source: Our World in Data based on BP; Shift Energy; UN Population & The World Bank

OurWorldInData.org/energy • CC BY

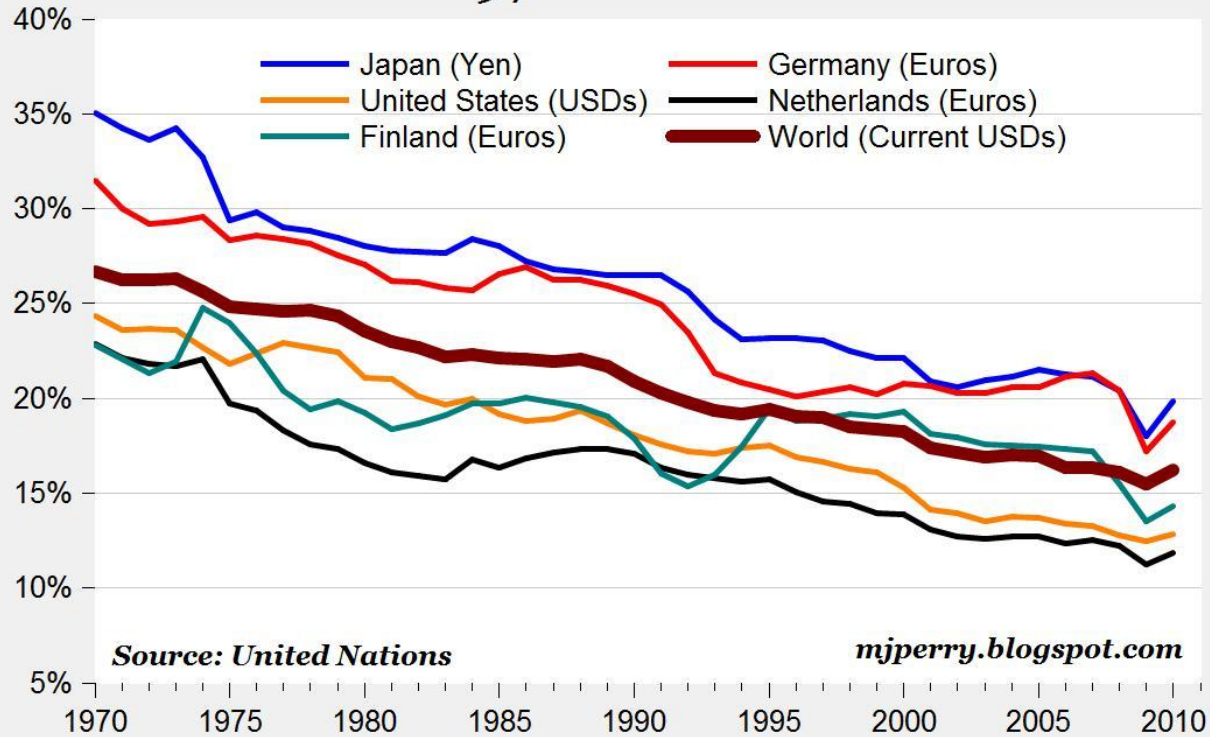
Note: Energy refers to primary energy, the energy input before the transformation to forms of energy for end-use (such as electricity or petrol for transport).



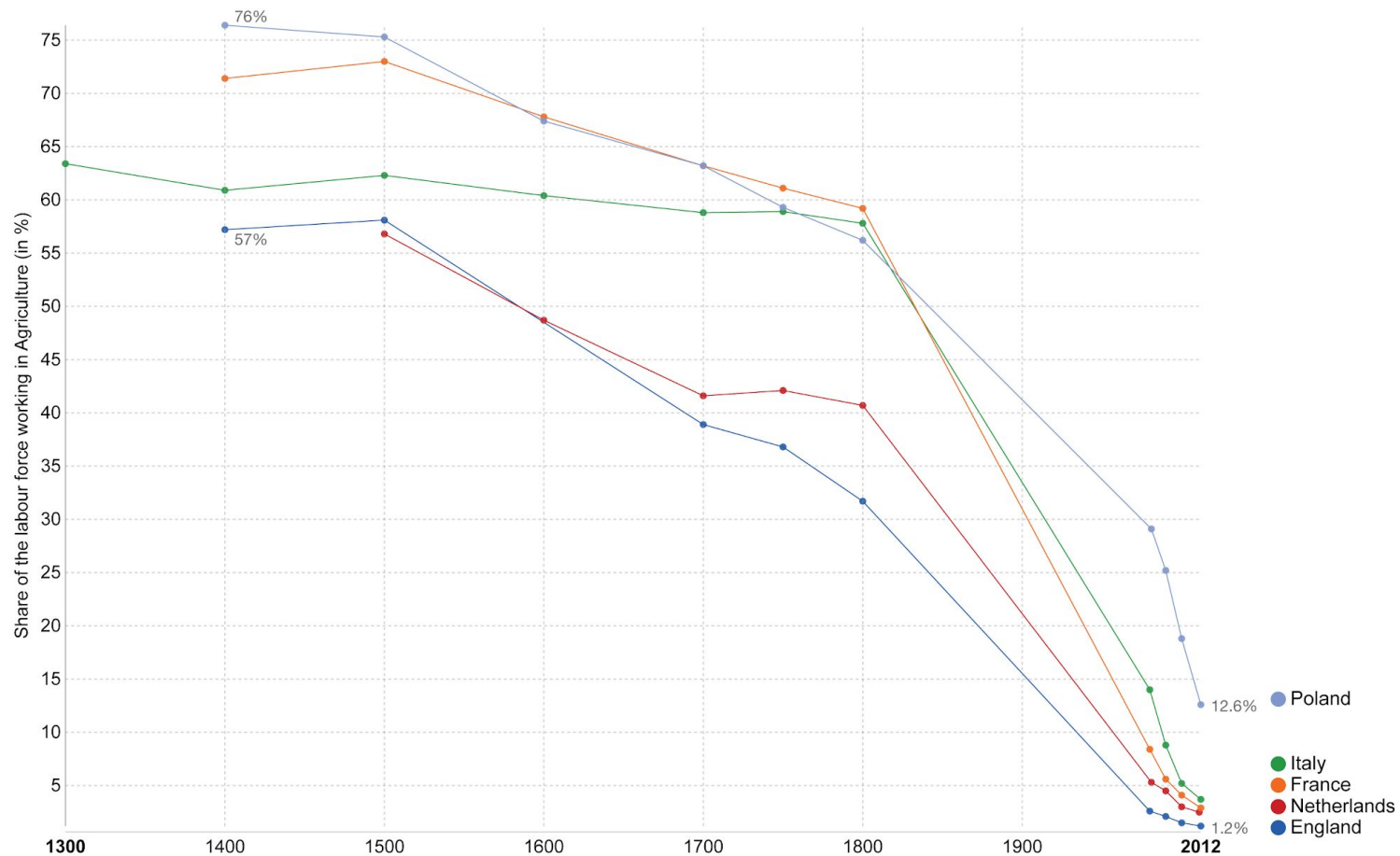
**Human (Re)Sources:
Muscle (body) - Mind (soul) - Creation (spirit)**



Manufacturing Share of GDP Current National Currency Units 1970 to 2010



Share of the labor force working in agriculture, since 1300 – By Max Roser

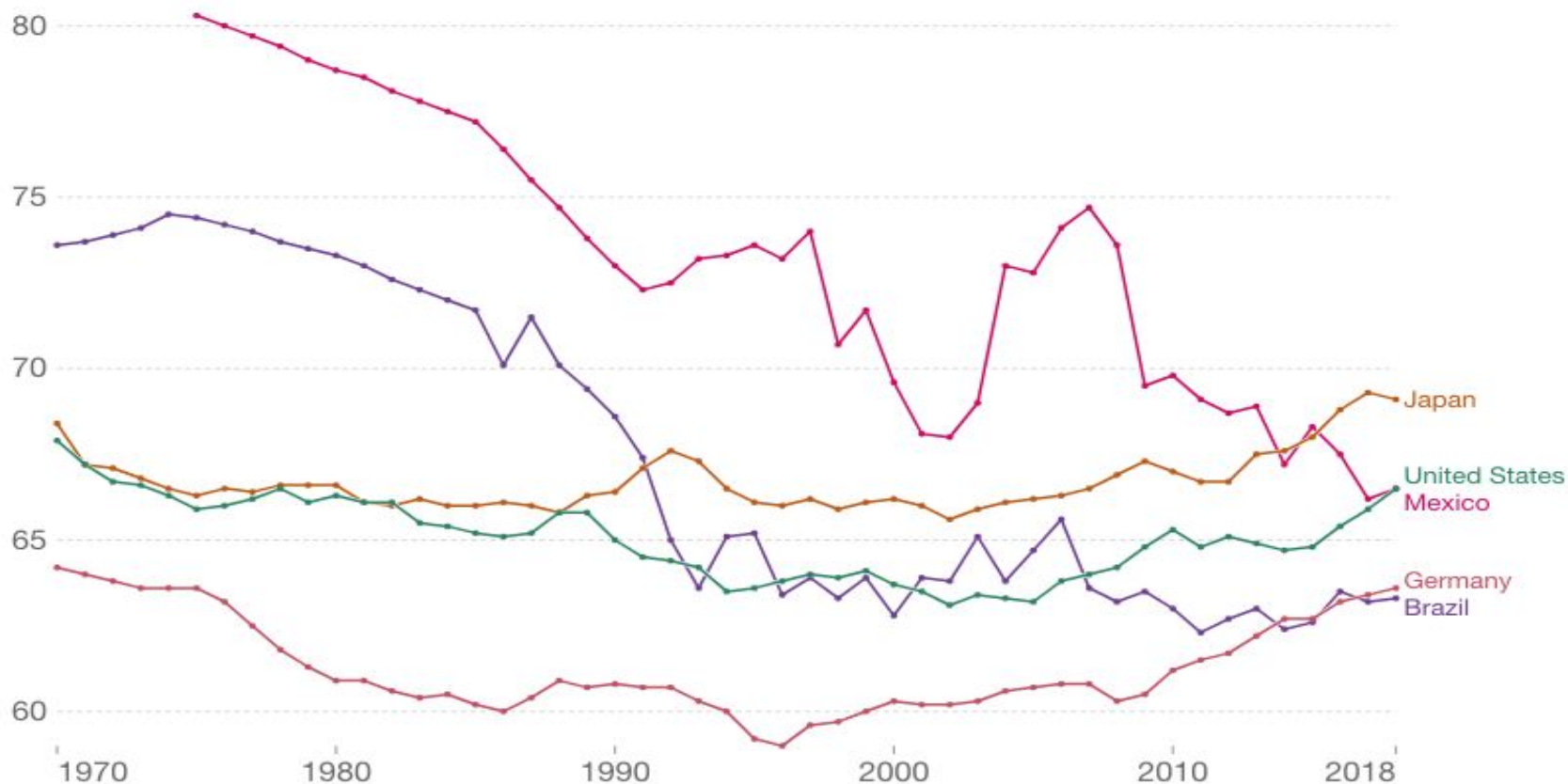


Data source: Pre 1800 is from Allen (2000), "Economic Structure and Agricultural Productivity in Europe, 1300-1800". Newer data from the World Bank.
The interactive data visualization is available at [OurWorldinData.org](https://ourworldindata.org). There you find the raw data and more visualizations on this topic.

Licensed under [CC-BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) by the author Max Roser.

Average effective age of retirement for women, 1970 to 2018

Estimates are based on a weighted average of changes in labour force participation rates by age, for workers 40+



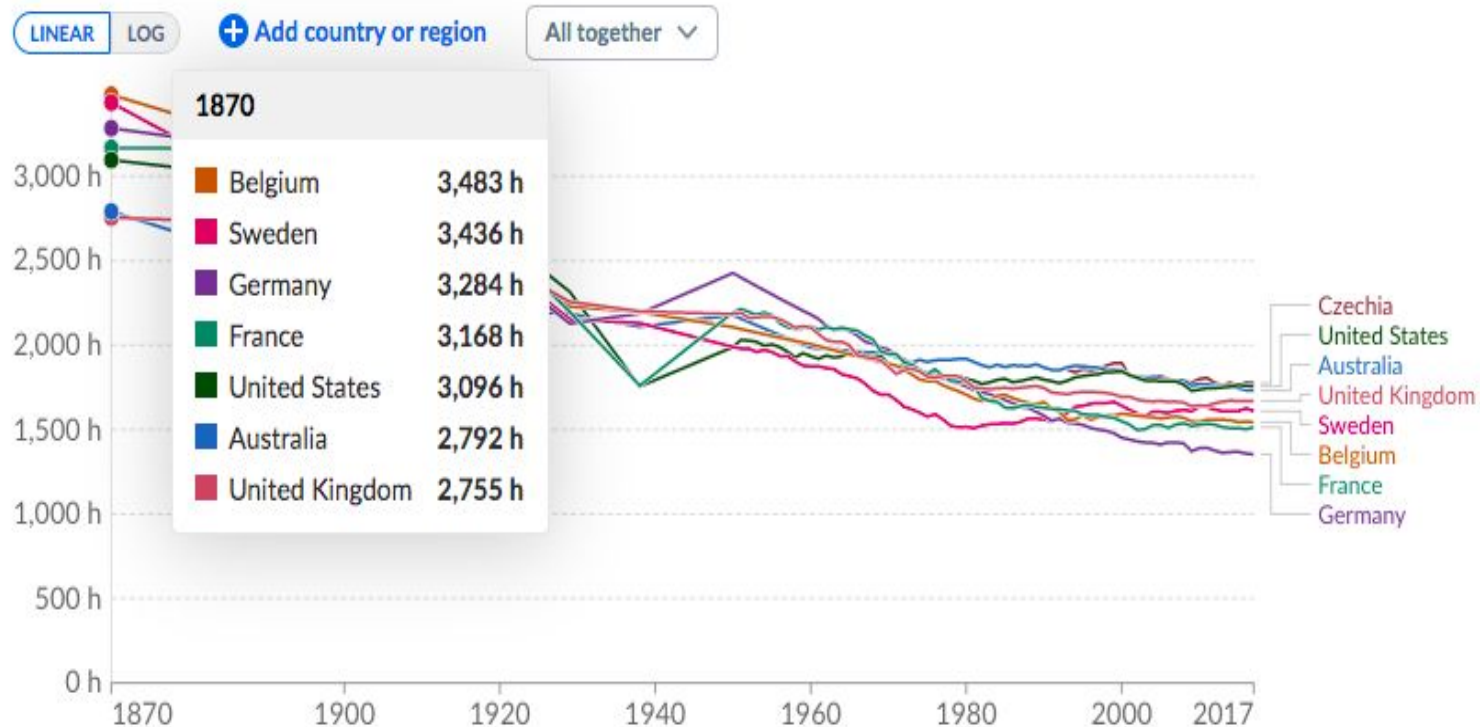
Source: OECD (2018) - Database on Average Effective Retirement Age

OurWorldInData.org/working-hours • CC BY

Note: The estimate for each year corresponds to the 5-year interval leading up to that year (e.g. 1970 corresponds to period 1965-70)

Annual working hours per worker

Average working hours per worker over an entire year. Before 1950 the data corresponds only to full-time production workers (non-agricultural activities). Starting in 1950 estimates cover total hours worked in the economy as measured primarily from National Accounts data.



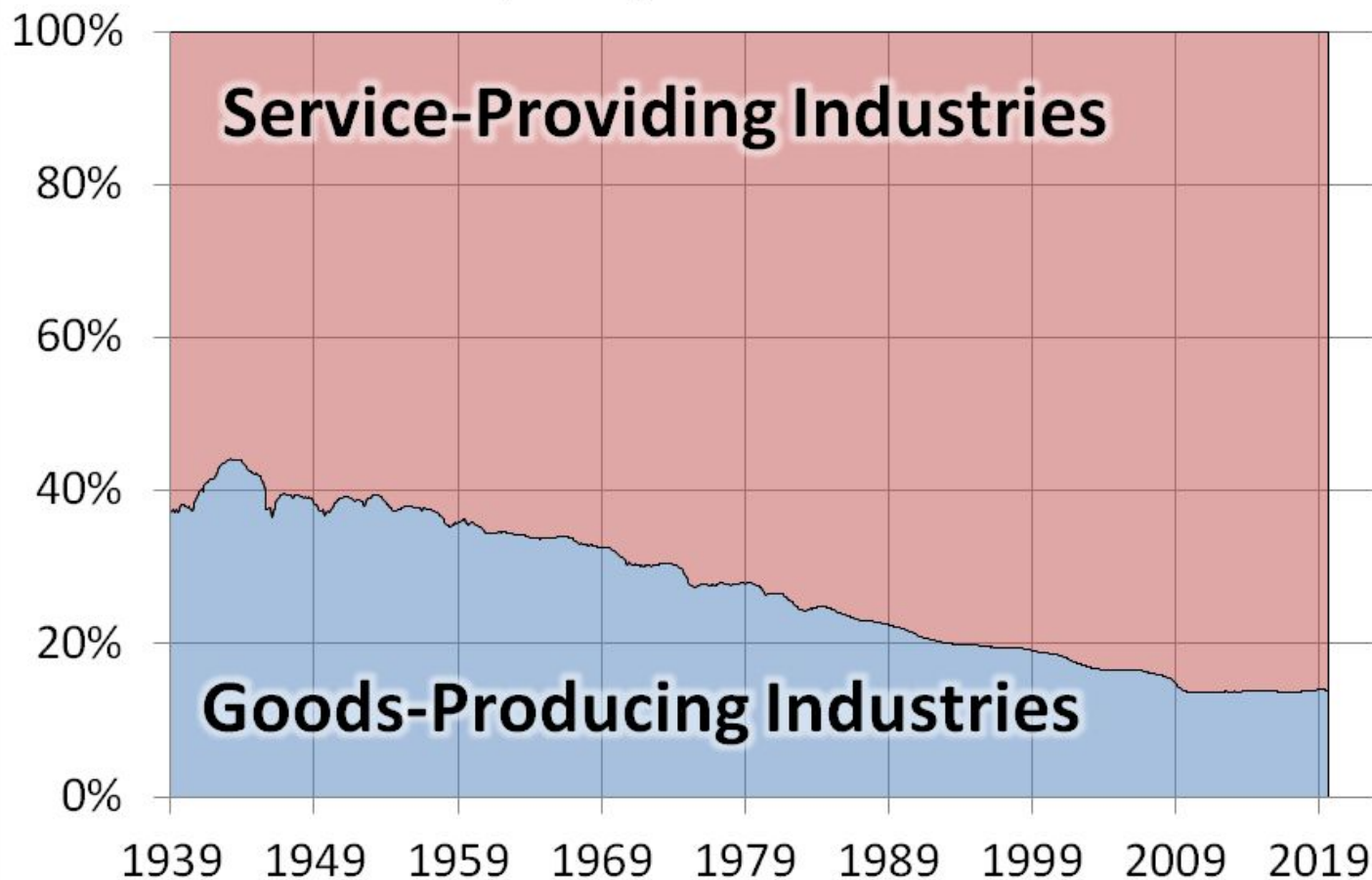
Source: Huberman & Minns (2007) and PWT 9.1 (2019)

OurWorldInData.org/working-hours • CC BY

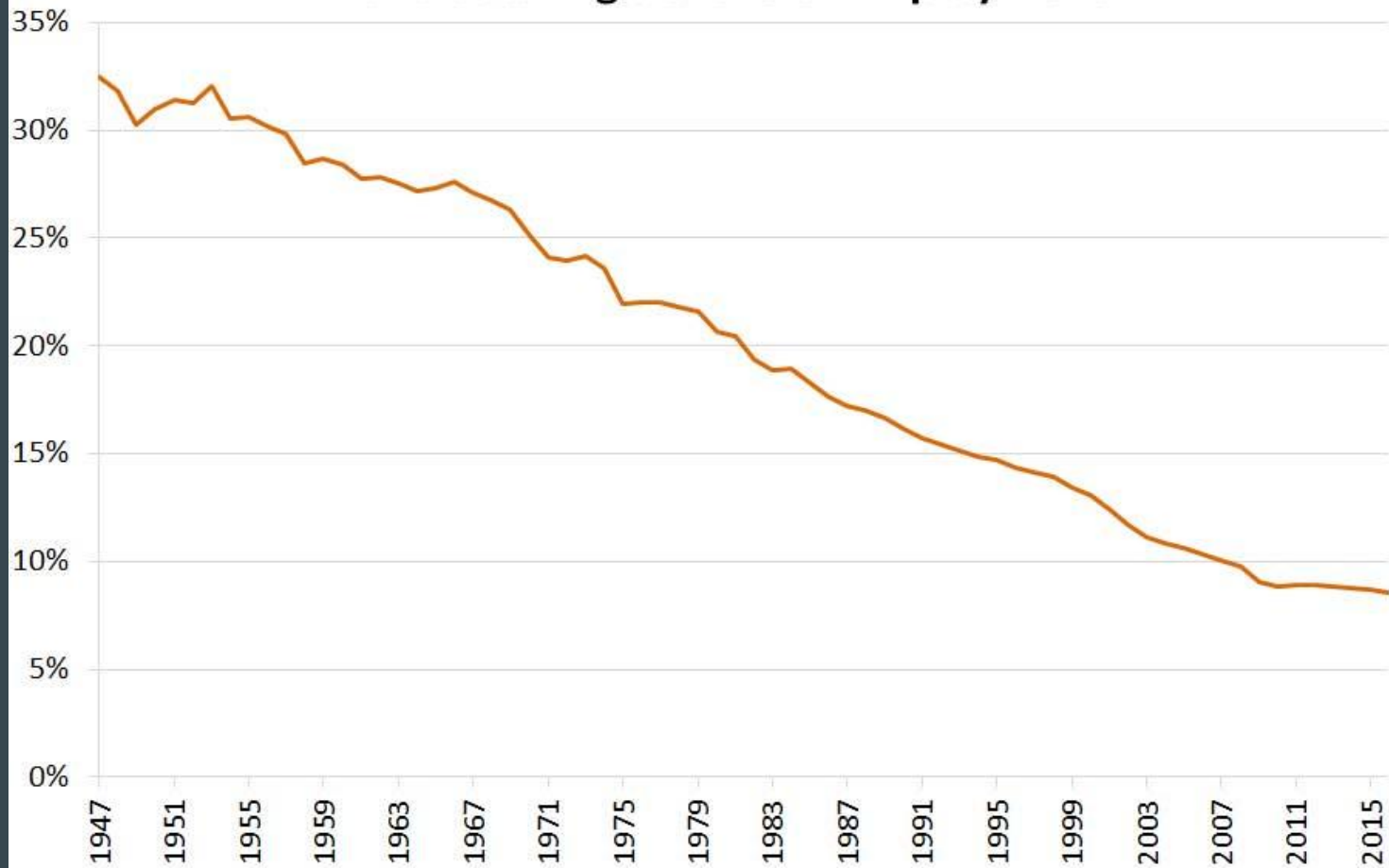
Note: We plot the data from Huberman & Minns (2007) and extend coverage using an updated vintage of PWT, which uses the same underlying source.

Comparisons between countries are limited due to differences in measurement.

Employment Ratio

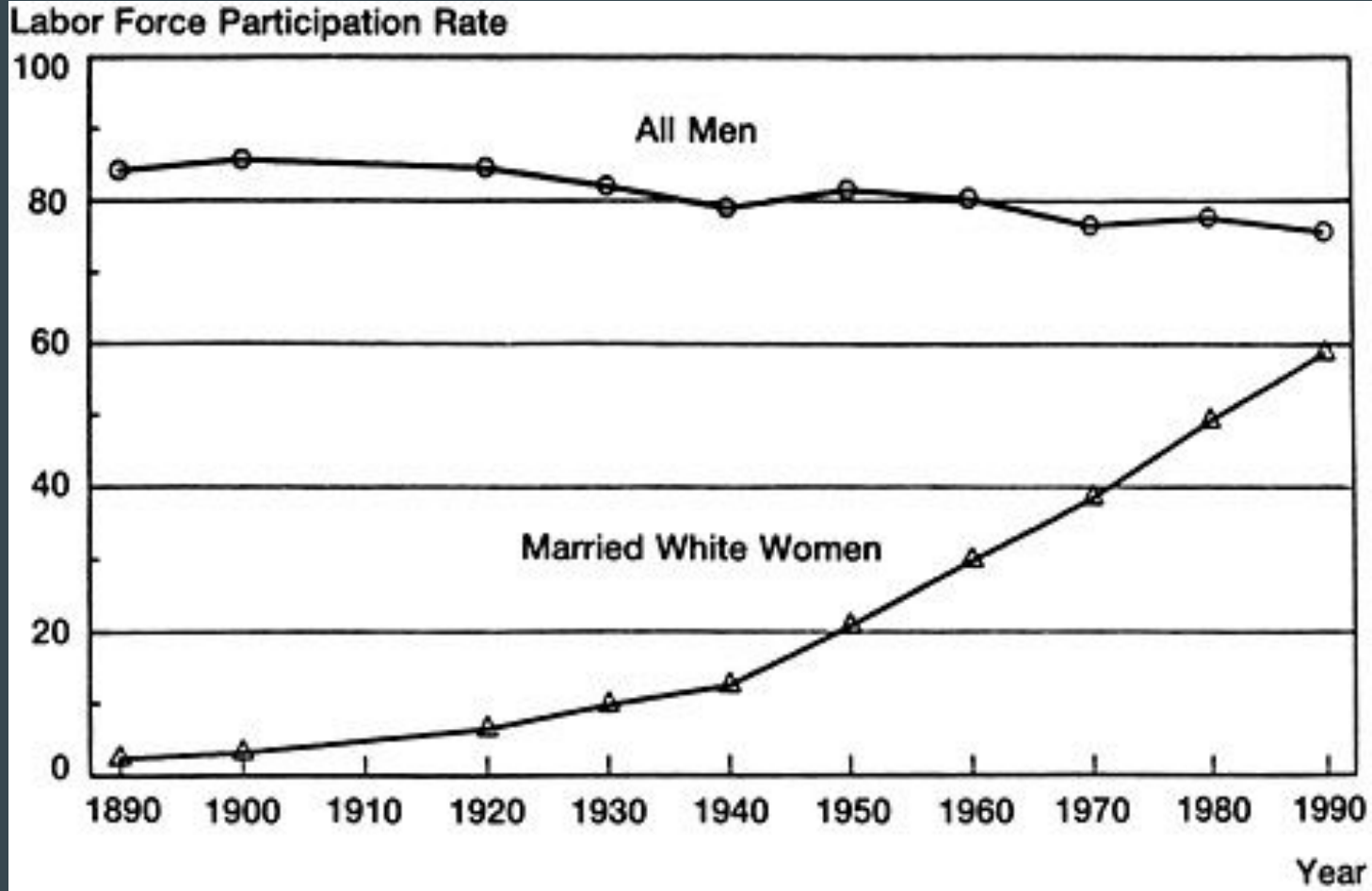


Manufacturing's Share of Employment



SOURCE: Bureau of Labor Statistics.

Female Soul Economy Claudia Goldin, Nobel Price 2023

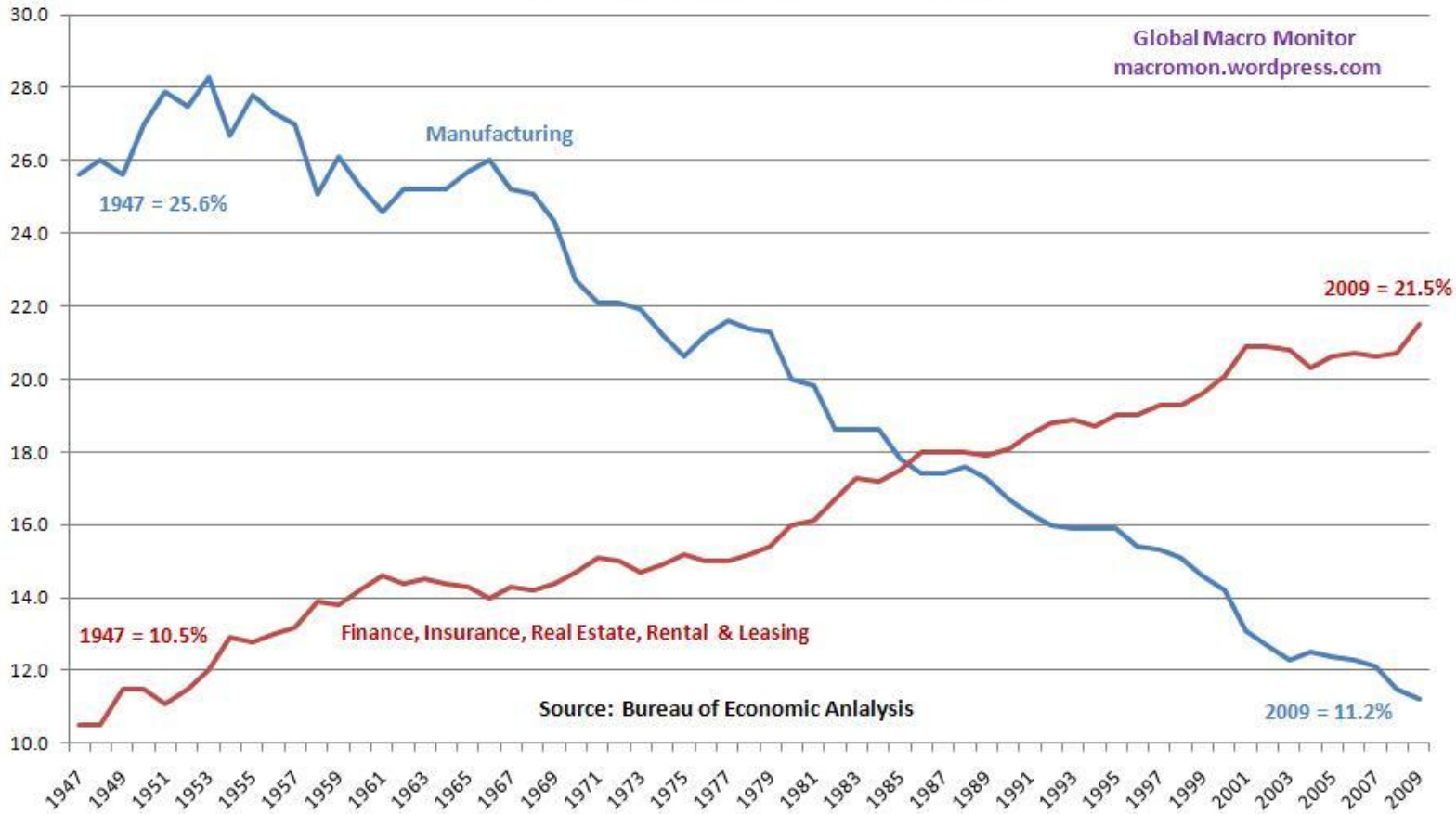


America's FIRE Economy

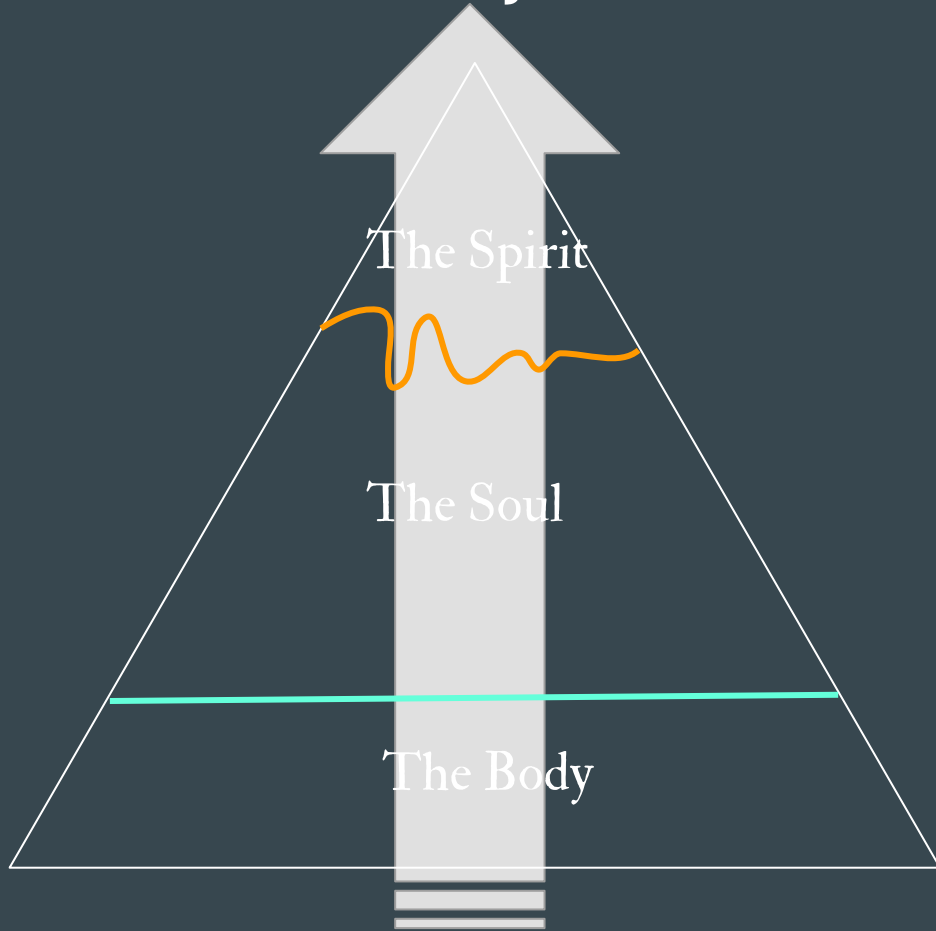
Finance, Insurance, & Real Estate vs Manufacturing

(Value Added By Sector % of GDP)

Sector Size % GDP



Today: do we still work?



The Creation

The Society

The Economy

The Company

The Individual

Linguistics

Keynes - the End of the Labour Curse

“From the earliest times of which we have record-back, say, to two thousand years before Christ-down to the beginning of the eighteenth century, there was no very great change in the standard of life of the average man living in the civilised centres of the earth. Ups and downs certainly. Visitations of plague, famine, and war. Golden intervals. But no progressive, violent change. Some periods perhaps So per cent better than others at the utmost 100 per cent better-in the four thousand years which ended (say) in A. D. 1700.

All this means in the long run that mankind is solving its economic problem.

I look forward, therefore, in days not so very remote, to the greatest change which has ever occurred in the material environment of life for human beings in the aggregate

... cultivate into a fuller perfection, the art of life itself and do not sell themselves for the means of life.

For many ages to come the old Adam will be so strong in us that everybody.. .Three-hour shifts or a fifteen-hour week may put off the problem for a great while. For three hours a day is quite enough to satisfy the old Adam in most of us!

Growth of Riches of the Spirit (?)

- Morals measure of goodness?
 - Growth of Body 👍
 - Growth of Soul 👍
 - Growth of Spirit ?
- Chamurapy code (1750 BC, "to prevent the strong from oppressing the weak", "eye for an eye") to Old testament to Universal Declaration of human rights (1948)
- Spirit of Europe
 - Make love not war - - > make trade not war
 - Love your enemies (Germany was a founding country)
 - Love your opposition (Job, Christ) - - > release the spirit of others
 - Christianity has the most absurd goodness
- **Moral exoskeleton** is better : pension system, general healthcare, mandatory schooling
 - Freedom of religion, freedom of information, freedom of travel, political freedom, freedom of speech,
 - Spiritualization of money
 - From gold to paper, from paper (matter) to 0-1 magnetic symbols

Mythical world: trickster, divine fool,

Egyptians believed in "ka," a life force that leaves the body upon death. Chinese spoke of "qi" or "chi," the vital force that flows through living beings. Hebrew, Greek, Chinese, Kalavala, Enuma Elish

Greek "anima mundi" or world soul, to individual "daimons" or guiding spirits. Spiritual leaders above muscle man.

Judaism: The Hebrew Bible refers to the "ruach" (meaning "breath" or "spirit") as the life force from God.

Islam: The term "rooh" refers to the soul or spirit, seen as God's divine breath

Hinduism: The "atman" is the individual soul or spirit, while "Brahman" is the universal spirit or world soul.

Buddhism: Rather than a fixed soul, there's the concept of "anatita" (no-self) which emphasizes impermanence and interconnectedness

Christianity: The Holy Spirit is one of the three persons of the Holy Trinity. Additionally, the New Testament often speaks of the human spirit as that which connects with God.

German Idealism: Philosophers like Hegel spoke of the "Geist" (German for spirit/mind) evolving through history.

Aristoteles: metaphysics

Augustine, Aquinas : spirit is the most noble part of the soul.

Modern Interpretations:

Psychology: Carl Jung spoke of the 'collective unconscious' and saw certain recurring symbols and motifs (archetypes) as evidence of a shared spiritual heritage.

Quantum Physics: Some interpretations of quantum mechanics, though controversial, suggest that consciousness or spirit plays a role in shaping reality.

Economy: Keynes anima spirits

Jeremy Riffkin: Empathic Civilization

Rogger Penrose

Nobel Prize 2020

1 chance in $10^{10^{123}}$



A **googolplex** is the number 10^{googol} , or equivalently, $10^{10^{100}}$ or $10^{10,000}$. Written out in ordinary **decimal notation**, it is 1 followed by 10^{100} zeroes; that is, a 1 followed by a **googol** of zeroes.

History [[edit](#)]

In 1920, **Edward Kasner's** nine-year-old nephew, Milton Sirotta, coined the term **googol**, which is 10^{100} , and then proposed the further term **googolplex** to be "one, followed by writing zeroes until you get tired".^[1] Kasner decided to adopt a more formal definition because "different people get tired at different times and it would never do to have **Camera** [be] a better mathematician than **Dr. Einstein**, simply because he had more endurance and could write for longer".^[2] It thus became standardized to $10^{(10^{100})} = 10^{10^{100}}$, due to the **right-associativity of exponentiation**.^[3]

Size [[edit](#)]

A typical book can be printed with 10^6 zeros (around 400 pages with 50 lines per page and 50 zeros per line). Therefore, it requires 10^{94} such books to print all the zeros of a googolplex (that is, printing a googol zeros). If each book had a mass of 100 grams, all of them would have a total mass of 10^{93} kilograms. In comparison, **Earth's** mass is 5.972×10^{24} kilograms, the mass of the **Milky Way** galaxy is estimated at 2.5×10^{42} kilograms, and the total mass of all the stars in the **observable universe** is estimated at 2×10^{52} kg.^[4]

To put this in perspective, the mass of all such books required to write out a googolplex would be vastly greater than the masses of the Milky Way and the Andromeda galaxies combined (by a factor of roughly 2.0×10^{50}), and greater than the mass of the observable universe by a factor of roughly 7×10^{39} .

In pure mathematics [[edit](#)]

In **pure mathematics**, there are several notational methods for representing **large numbers** by which the **magnitude** of a googolplex could be represented, such as **tetration**, **hyperoperation**, **Knuth's up-arrow notation**, **Steinhaus–Moser notation**, or **Conway chained arrow notation**.

In the physical universe [[edit](#)]

In the **PBS** science program **Cosmos: A Personal Voyage**, **Episode 9: "The Lives of the Stars"**, astronomer and television personality **Carl Sagan** estimated that writing a googolplex in full decimal form (i.e., "10,000,000,000...") would be physically impossible, since doing so would require more space than is available in the known universe. Sagan gave an example that if the entire volume of the **observable universe** is filled with fine **dust particles** roughly 1.5 micrometers in size (0.0015 millimeters), then the number of different **combinations** in which the particles could be arranged and numbered would be about one googolplex.^{[5][6]}

Writing the number would ultimately lead to the **heat death of the universe**: if a person can write two digits per second, then writing a googolplex would take about 1.58×10^{92} years, which is about 1.1×10^{82} times the accepted **age of the universe**, and each digit written would result in an increase of **entropy** by the **second law of thermodynamics**.^{[7][*failed verification*]}



Spirit

Soul

Body

P
A
Y
/
P
R
E
S
t
i
G
E



Employ Spirit



Employ Soul



Employ Body

W
O
R
K
/
L
A
B
O
U
R





Essential Skills of the Manager

Communication

Realize that the most important aspect of communicating is listening

Finance

Learn the language of numbers



Critical Thinking

Understand where and how your projects fit into the bigger picture

Project Management

Ensure timely completion and proper control of initiatives



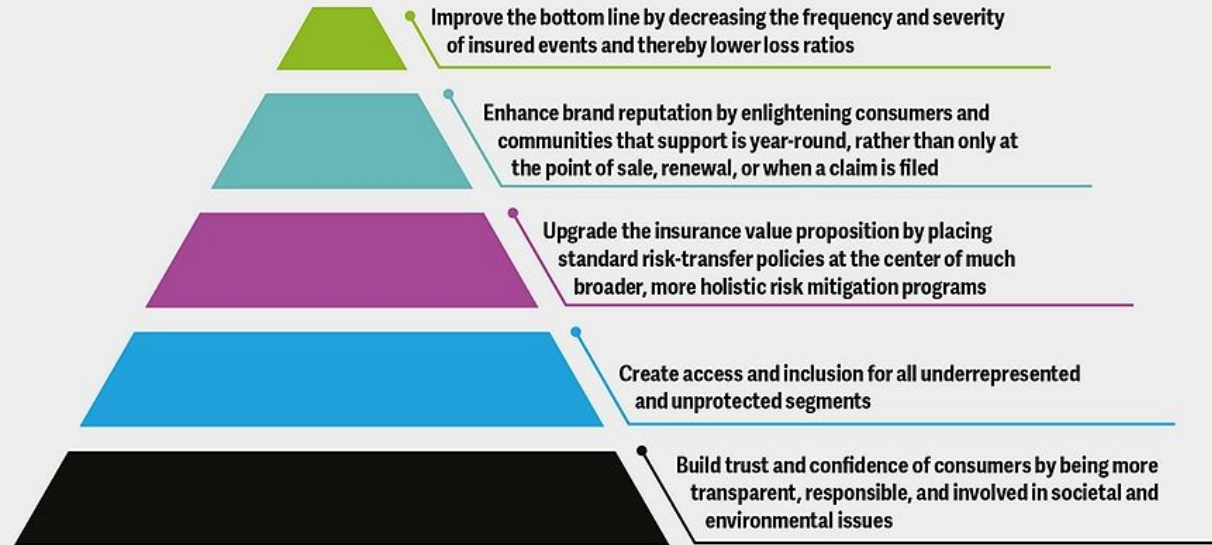


Spiritual values: the name of the new game

- Like other areas of The world, Insurance sector is becoming more and more involved in planetary ethical issues.
- From Soul (software) to Spirit (purpose): “shift away from a transactional role to adopt a broader, more holistic, relationship-based approach to consumer interactions.” Deloitte
- “Carriers may need to exhibit not only how they are embracing cutting-edge technology, but the benefits of building a career in an industry whose purpose is not only profitability, but also to make a positive impact on society, helping the world thrive by standing behind...”

Figure 1

Insurers need to evolve to better serve industry, society, and the planet



Source: Deloitte analysis.

"With company culture as the center of gravity, providing a unique employee experience must focus on career development, purpose, flexibility, well-being, social, and environmental goals. The importance of human interaction has increased post pandemic, and we aim to harness smart working in a hybrid setup, enabled through team agreements that support individual and team needs. Going forward, how we leverage the technology advancements to innovate and further elevate the experiences and outcomes for our people and customers will be the key."

—Taeko Kawano, chief human resources officer, AXA Holdings Japan Insurance, during an interview with Deloitte Center for Financial Services conducted on August 3, 2023.

Spirit

Freedom:

Needs advanced soul (Capitalism and large democracy)..
Soul needs advanced Body.

democracies

Goodness

Conscience of self in context of outer parts of me
(exoskeleton)

Silence

Mediation

Non-institutionalized relationship

No work, only pleasurable work

Art

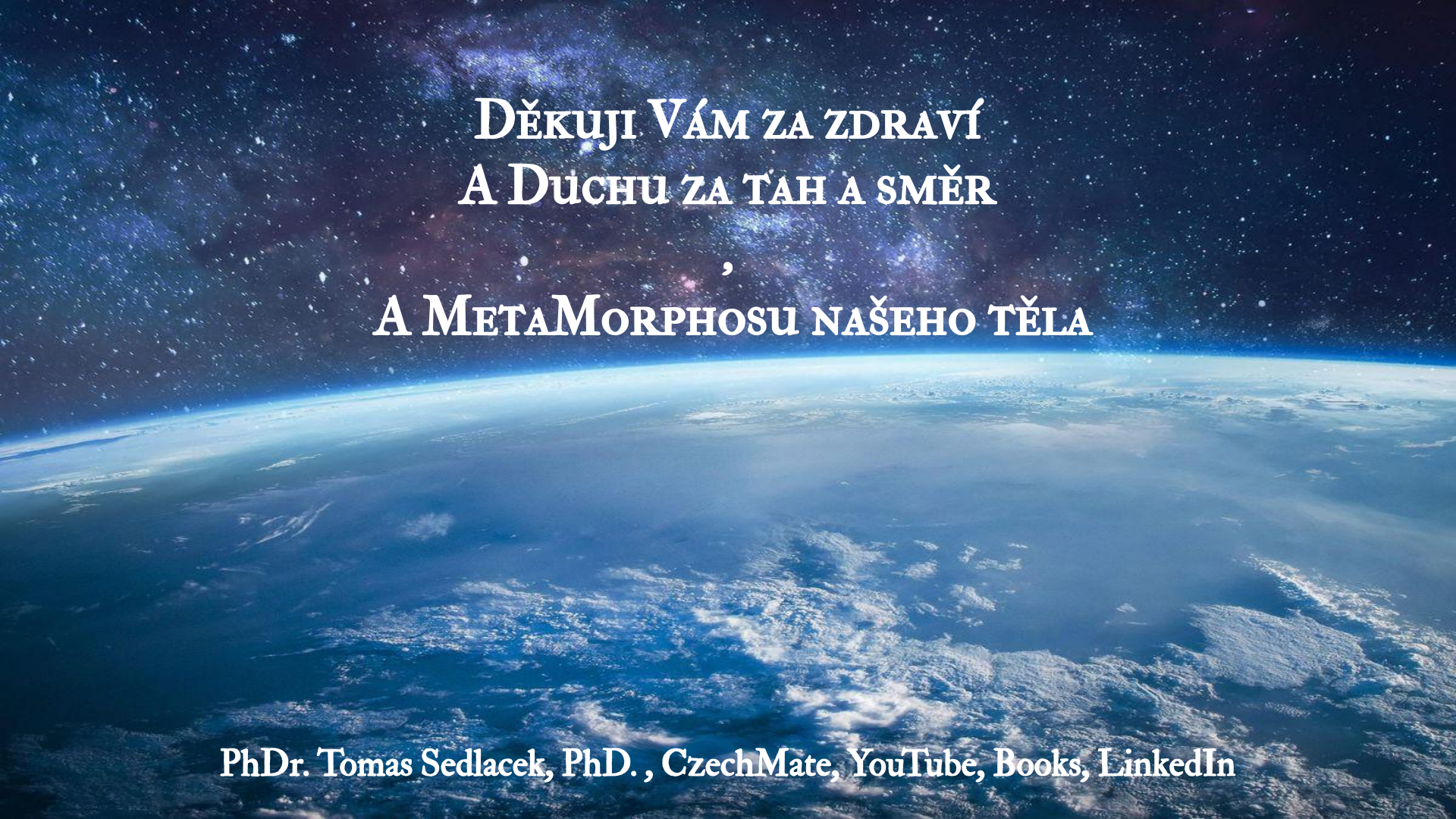
Franz Kafka: Touha stati se Indiánem

Kdyby tak člověk byl Indiánem, vždy pohotový, a předkloněn ve vzduchu na pádícím koni, stále znovu by se zachvíval krátkými otřesy země, až by nechal ostruhy ostruhami, neboť ostruh nebylo, až by odhodil uzdu, neboť uzdy nebylo, a sotva před sebou spatřil zemi jak hladce vysečenou step, už i bez koňské šíje a hlavy.

Duch

jde durch





DĚKUJI VÁM ZA ZDRAVÍ
A DŮCHU ZA TAH A SMĚR
,
A METAMORPHOSU NAŠEHO TĚLA

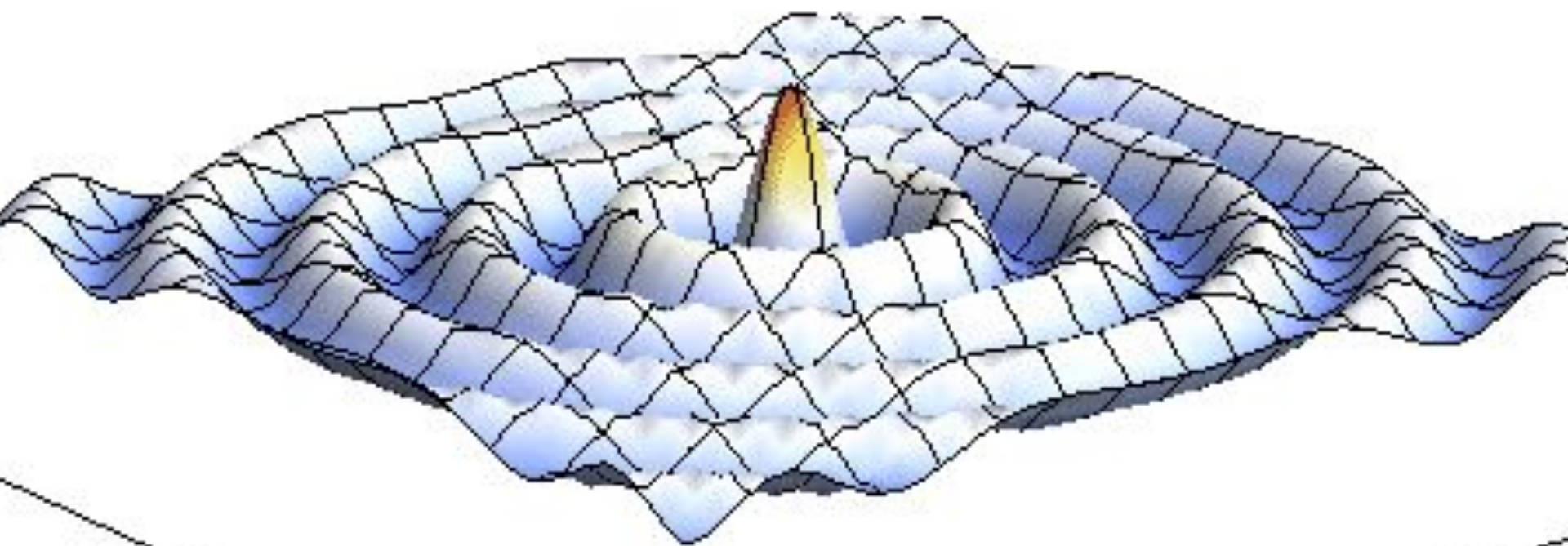
PhDr. Tomas Sedlacek, PhD. , CzechMate, YouTube, Books, LinkedIn

Expand



- Planetization - Cosmopolitanism -
Larger interconnected body, same soul but free roaming of the Spirit
(over larger and larger firm enough body-soul territory)

Expansion of body and soul



The Extension of Soul: Economy of Scale

- The world expands
 - Capitalism & Democracy (Fukuyama was right), European Union: soul unification
 - Our ability to coordinate (cooperation is *conditio sine qua non* of competition) extended (from village to planetary neural network)
 - Universe itself expands
 - Just like when you were a child: the world grew bigger and bigger
- Adam Smith: The Wealth of Nations consists in: Specialization within the same larger than me system/animal. (same soul, different spirits)

Globalization over 5 centuries (1500-2011)

Shown is the sum of world exports and imports as a share of world GDP (%)

The individual series are labeled with the source of the data



- Type 0.1: Fluid groups of hominids living in Africa. Technology consists of primitive stone tools. Intra-group conflicts are resolved through dominance hierarchy, and between-group violence is common.
- Type 0.2: Bands of roaming hunter-gatherers that form kinship groups, with a mostly horizontal political system and egalitarian economy.
- Type 0.3: Tribes of individuals linked through kinship but with a more settled and agrarian lifestyle. The beginnings of a political hierarchy and a primitive economic division of labor.
- Type 0.4: Chiefdoms consisting of a coalition of tribes into a single hierarchical political unit with a dominant leader at the top, and with the beginnings of significant economic inequalities and a division of labor in which lower-class members produce food and other products consumed by non-producing upper-class members.
- Type 0.5: The state as a political coalition with jurisdiction over a well-defined geographical territory and its corresponding inhabitants, with a mercantile economy that seeks a favorable balance of trade in a win-lose game against other state. Type 0.6: Empires extend their control over peoples who are not culturally, ethnically or geographically within their normal jurisdiction, with a goal of economic dominance over rival empires.
- Type 0.7: Democracies that divide power over several institutions, which are run by elected officials voted for by some citizens. The beginnings of a market economy.
- Type 0.8: Liberal democracies that give the vote to all citizens. Markets that begin to embrace a nonzero, win-win economic game through free trade with other states.
- Type 0.9: Democratic capitalism, the blending of liberal democracy and free markets, now spreading across the globe through democratic movements in developing nations and broad trading blocs such as the European Union.
- Type 1.0: Globalism that includes worldwide wireless Internet access, with all knowledge digitized and available to everyone. A completely global economy with free markets in which anyone can trade with anyone else without interference from states or governments. A planet where all states are democracies in which everyone has the franchise.

According to data from the IEA (International Energy Agency), in 2018 the total energy supply of the entire world was 1,4281,889 kTOE (energy kilo ton oil equivalent), or approximately 1.90×10^{15} W. From this actual human civilization power production estimate a to be 0.728.

Currency of the future: from body to soul to spirit

Fiat money, Nixon



Bretton Woods in the United States. Here, an international monetary agreement was made to fix currencies to the US Dollar. In turn, the US government held and guaranteed to exchange 35 US Dollars for an ounce gold

By 1973 the rate was again changed to 42 US Dollars to the ounce. From then on, the US Dollar and all other currencies were valued against other currencies alone. The international currency market then became a truly fiat system without any vestige of a gold standard. 31.1034768 grams

King's Second Body

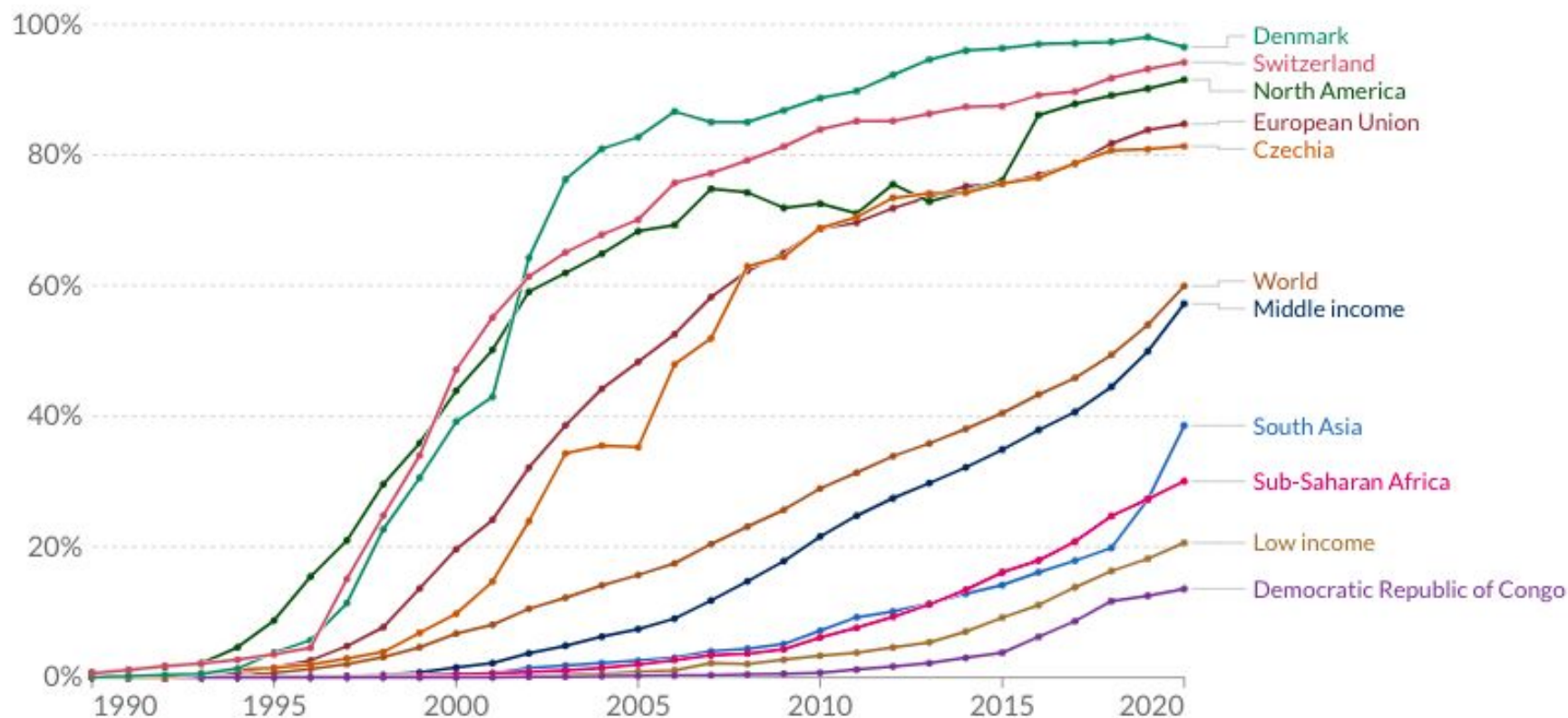
- From civilization 0,1
 - Small units of people: tribes, villages, agriculture, fire, basic tools
- Civilization 0,5
 - Adam Smith, specialization
 - Technological revolution
 - Spirit of Capitalism
- To civilization 0,73
 - Supranational entities (EU)
 - Planetary institutions, planetary neural network (internet)



Share of the population using the Internet

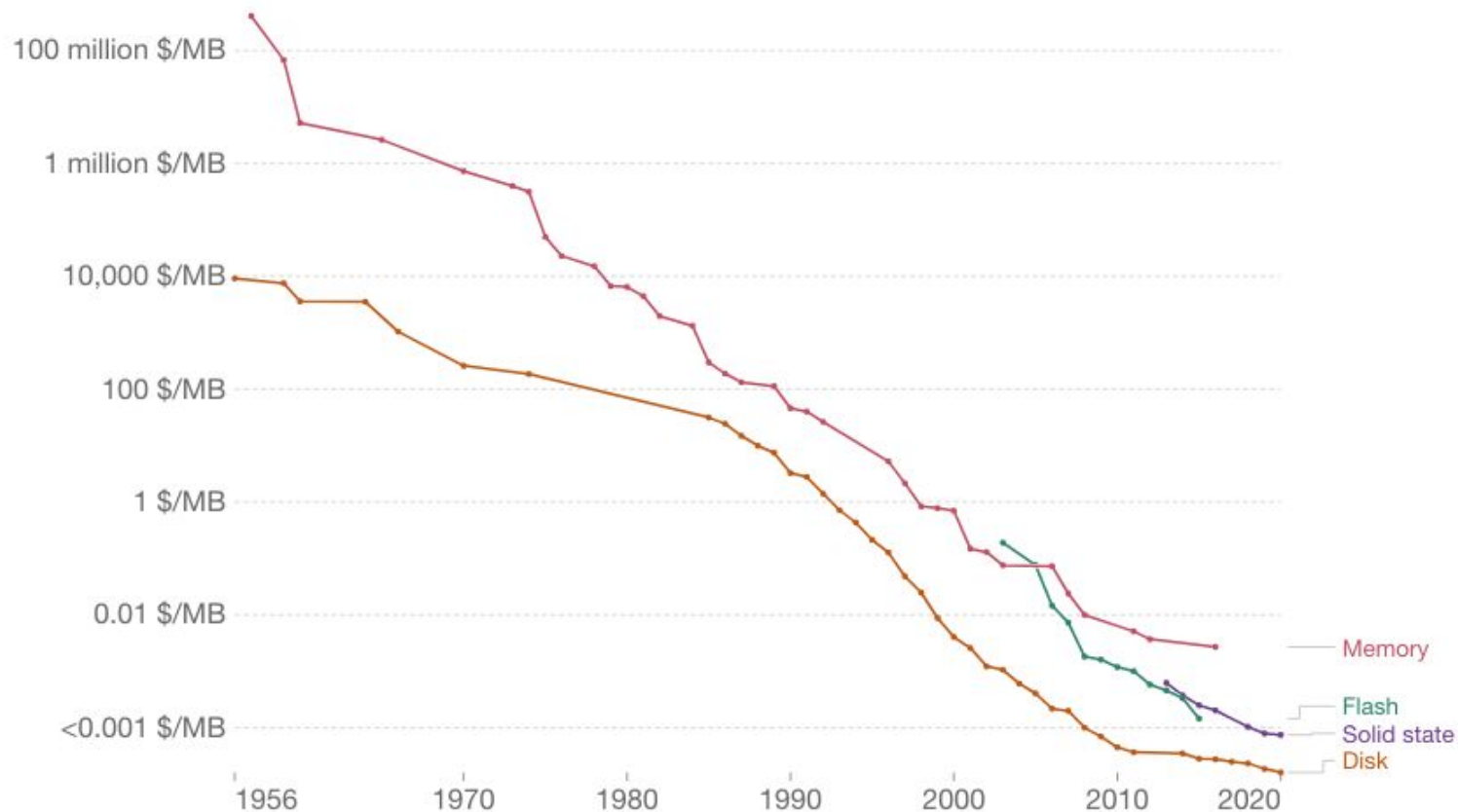
Internet users are those who have used the Internet from any location in the last three months.

[+ Add country](#)



Historical cost of computer memory and storage

Measured in US dollars per megabyte.



Source: John C. McCallum (2022)

OurWorldInData.org/technological-change • CC BY

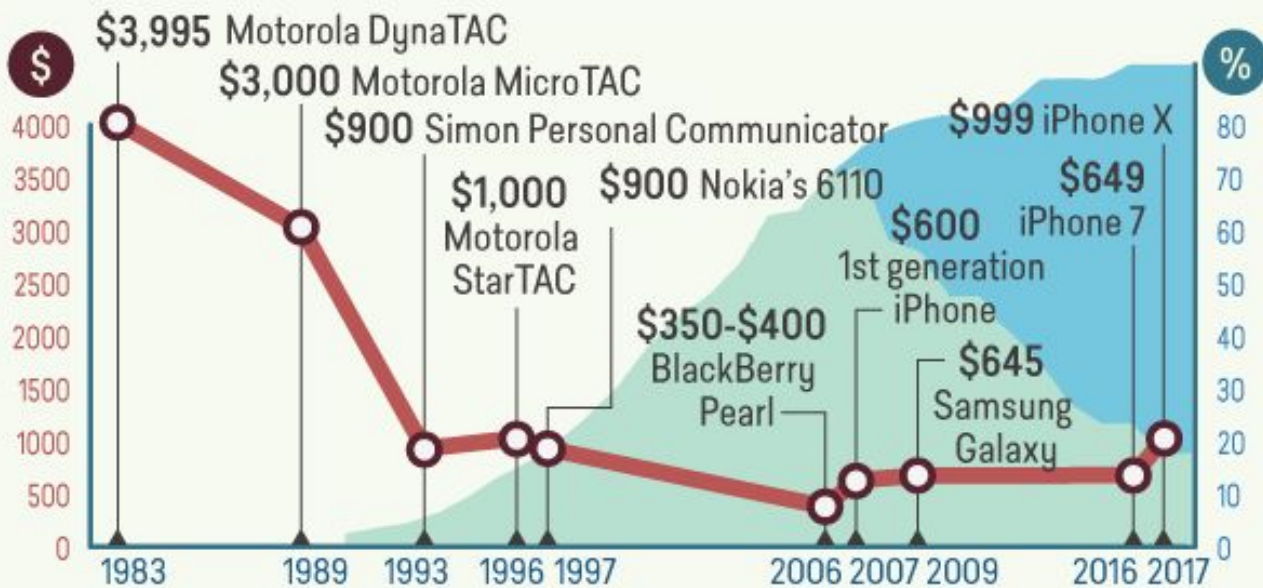
Note: For each year the time series shows the cheapest historical price recorded until that year.



iPhone 15 Pro

From \$999
128GB

Percent of Americans With:
— Cell Phone Retail Cost ■ Smartphones ■ "Dumb Phones"



<https://www.ooma.com/blog/home-phone/cell-phone-cost-comparison/>



CAN GO INTO SECOND PART:

Master - Slave (Spirit - Soul). KINGS SECOND BODY. Leviathan

Subject-Object reversal (when soul outgrows the spirit)

- Kundera, Kafka, Golem, Matrix, Being John Malkovich, Ring of Power in LOTR (it frees you, it enslaves you)
- Genesis (God creates human beings, something goes wrong, Creation kills Creator)
- The debt economy: we take more debt upon the economy so that we can be even more free, something goes wrong, we became slaves of the debt.
- Capitalism? Nuclear power? Ecology? Civilizational filter.
- Sin: you do it because you are in control and want to be even more in control, then something goes wrong... And you become the slave of sin (officer)
- AI.



Future

Banking of the future: Digital Buttler

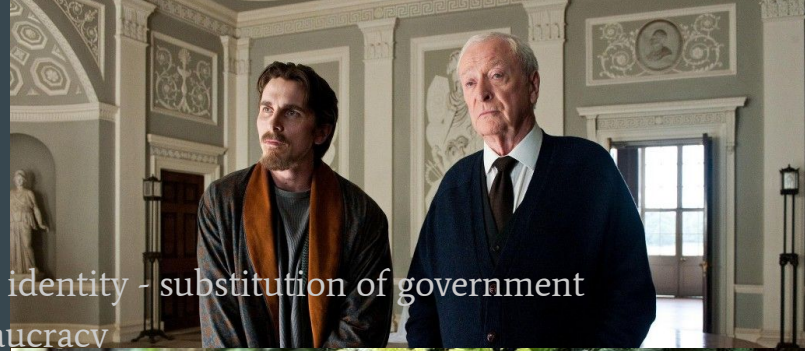
Withering of the state. Up (into supranational planetary institutions) and Down (localized democratic decisions).

Merger with general multipurpose A.I. Bank as a family doctor, Saturnin, a “personal civil servant“ dealing with complete bureaucracy (taxes, procurement, advice on education, wellness etc.)

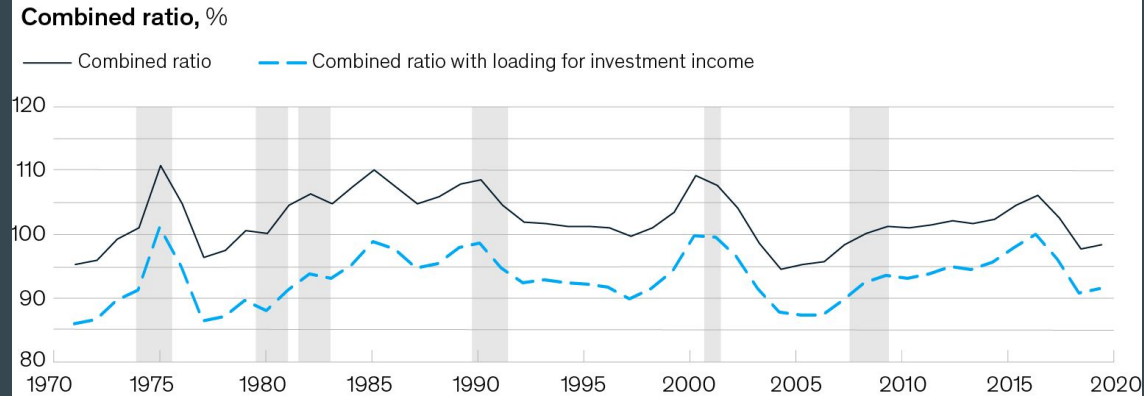
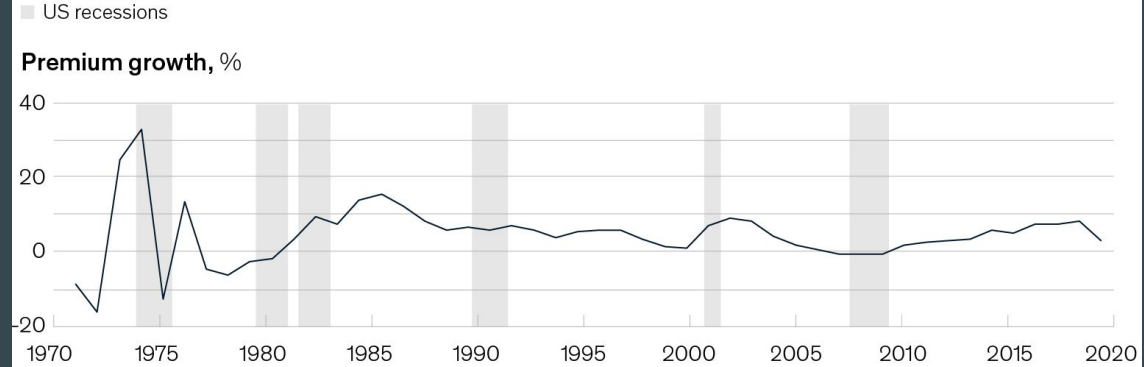
Banks take care of all the boring parts of life. Same soul (software, institutions, laws, bureaucracy, language, symbols...) allowing freely following the spirit by individuals (creativity, democracy, free enterprise)..

Sectoral planetary fiscal policy. Banks having their own reserve fund. Business cycles rather follow sectors than states. Interconnected world (political state borders irrelevant). Better tackling of crises.

Bank identity - substitution of government bureaucracy



Over the past 50 years, the US personal auto insurance market has not generally correlated to the economy.



Source: AM Best; Conning

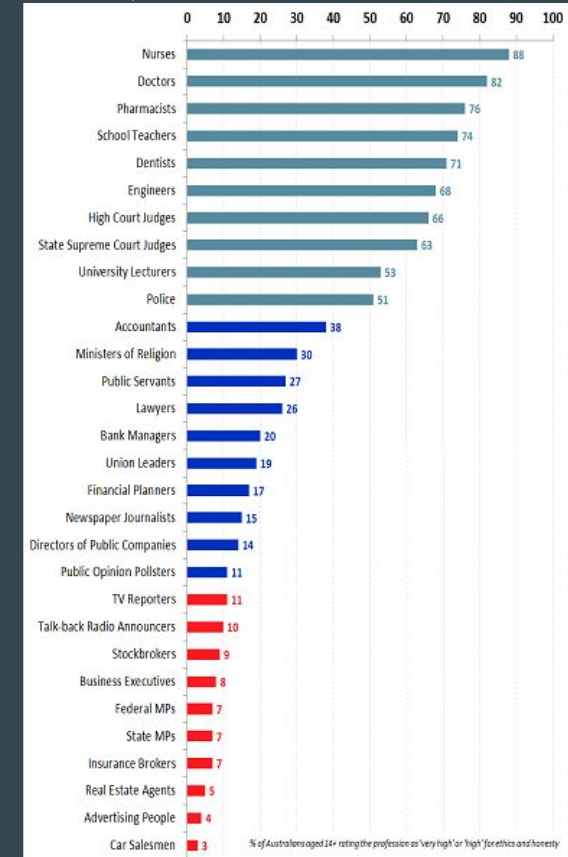
Trust

Banking crises 2009: You can fall once, but not twice.

Not only regain the old

Hope: Cryptocurrencies did not replace banks, even though it was their original intention.

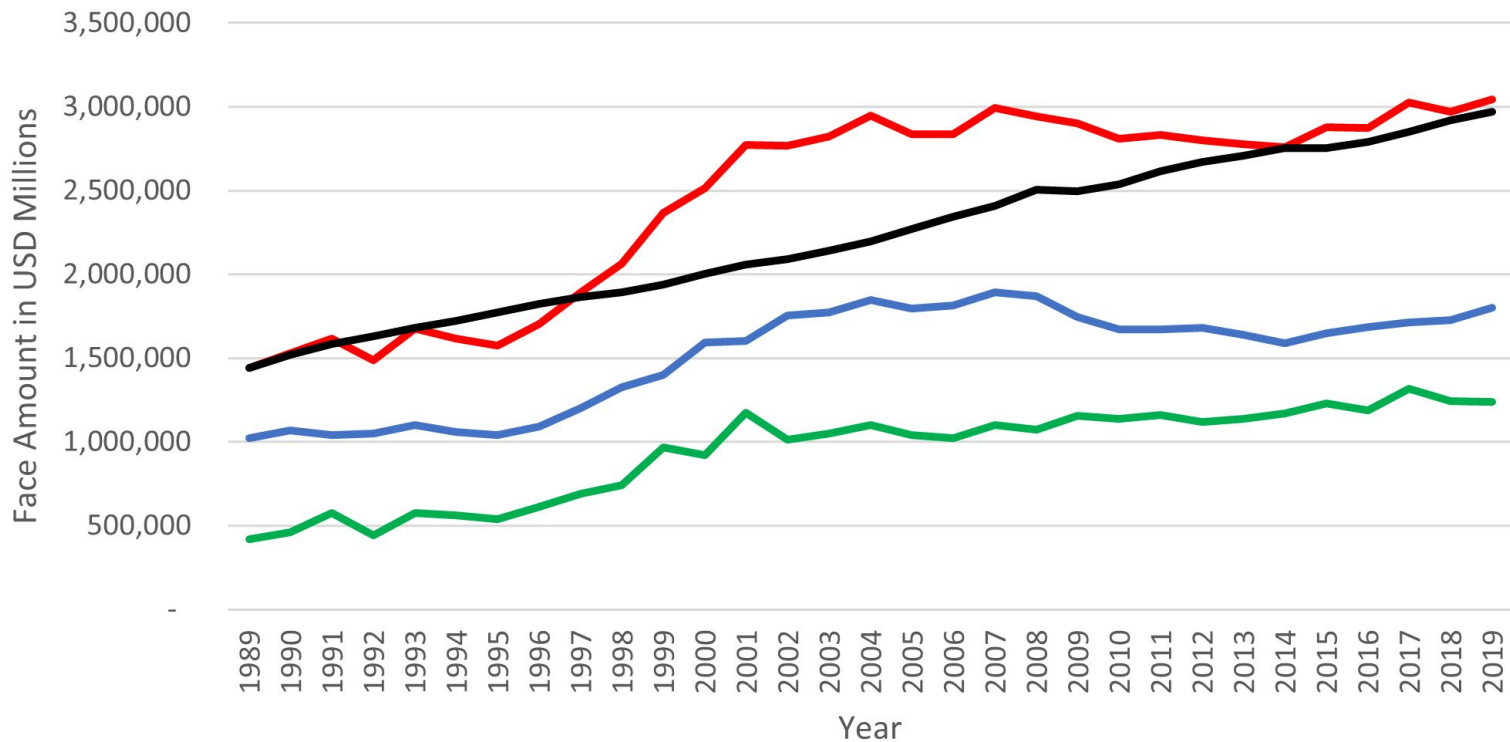
Image of Professions 2021: % of Australians aged 14+ rating the profession as 'very high' or 'high' for ethics and honesty



Source: These are the main findings of a Roy Morgan online survey conducted from April 13-22, 2021, with 1,207 Australian men and women aged 14 and over.

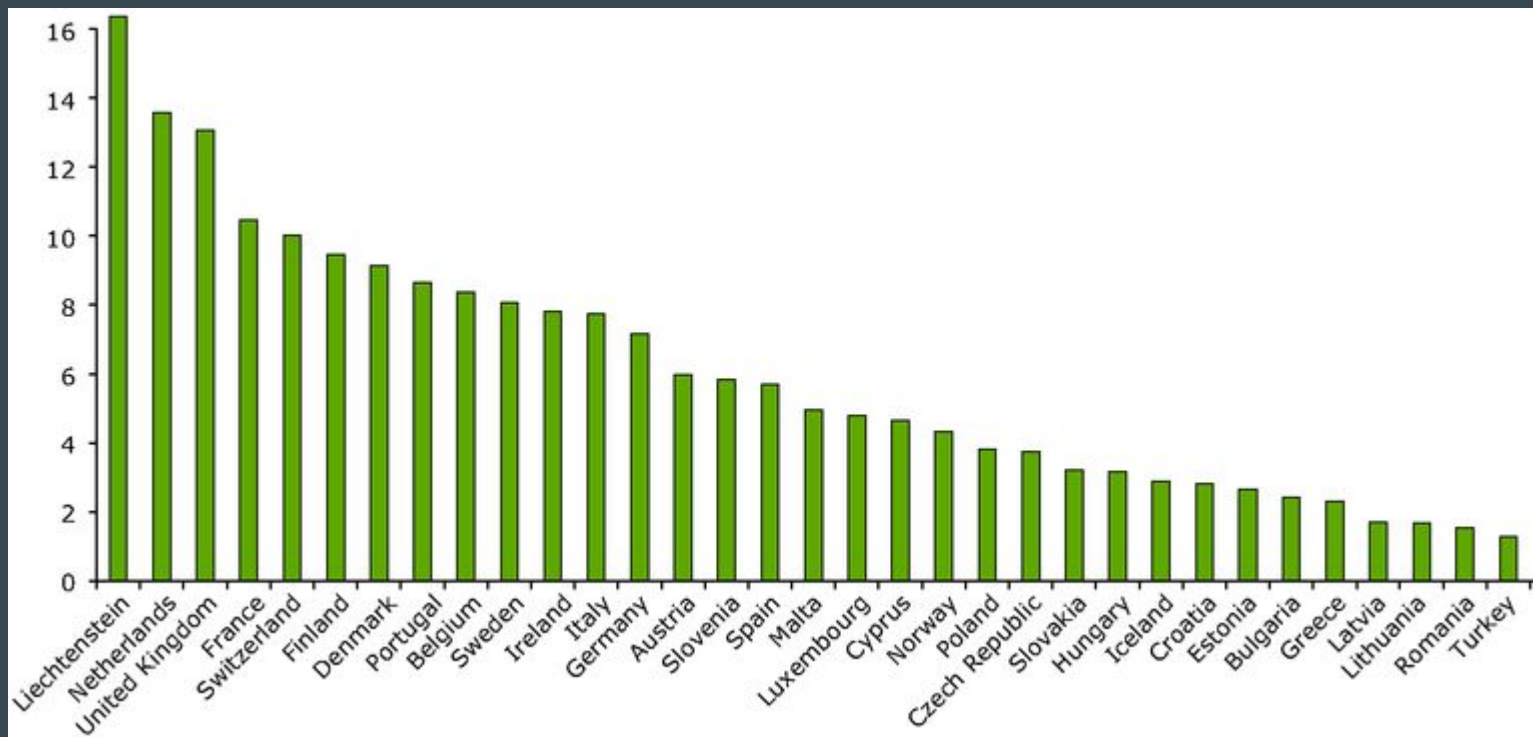
Respondents were asked: "As I say different occupations, could you please say - from what you know or have heard - which rating best describes how you, you self, would rate or score people in various occupations for honesty and ethical standards (Very High, High, Average, Low, Very Low)?"

US New Life Insurance Sales by Year (USD Millions)



Individual Face (mil) Group Face (mil) Total Face (mil) Inflation adjusted Total Face

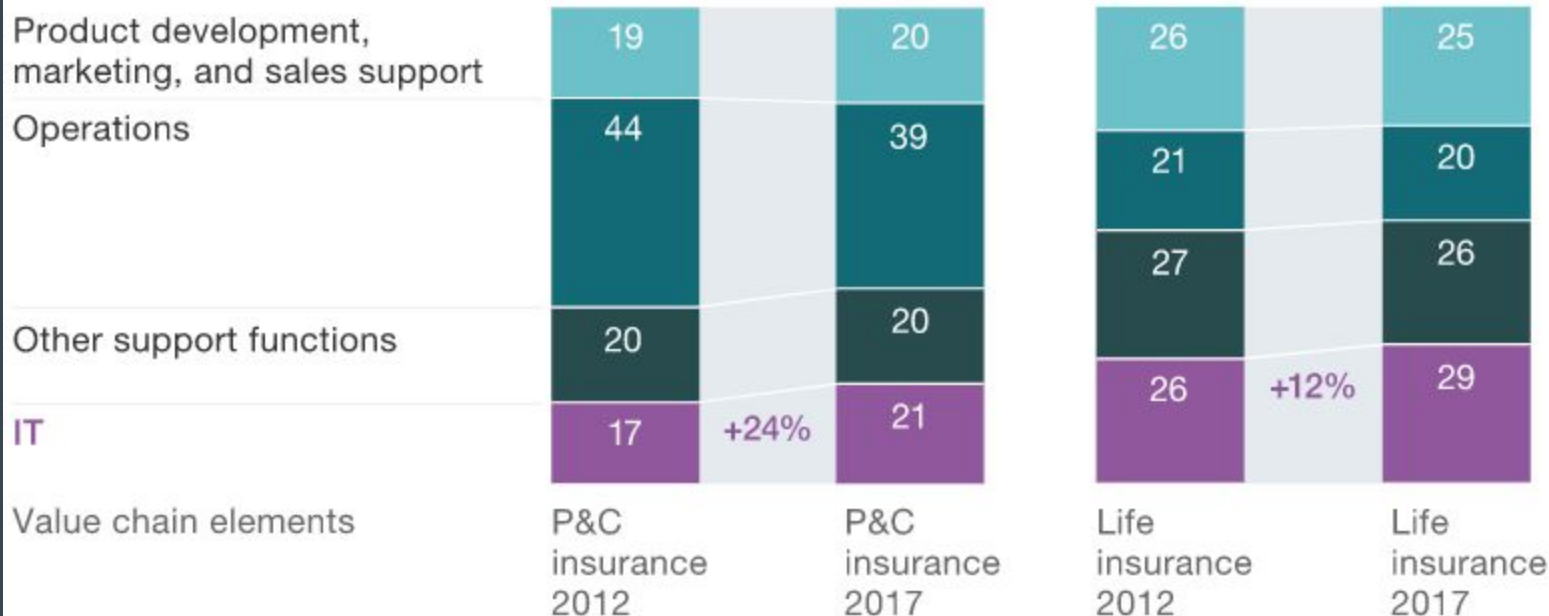
Insurance penetration as proportion of GDP



<https://www.eea.europa.eu/data-and-maps/figures/insurance-penetration-as-proportion-of-gdp>

IT's share of total operating costs has increased by 12 to 24 percent over the past five years.

%



Average operating-cost breakdown

Insurance of the future

Insurance is private communitarianism, commercial socialism, voluntary sharing of risks with a community of insured entities.

Dematerializing Insurance: body → soul → spirit

Private insurance companies substitute government insurance on

- Planetary level. Economies of scale. Better efficiency. New (global) democratic control mechanisms.
- Health insurance - common good, moral good. Bodily good / Bodily capital. End of hunger by cca 2036.
- Basic education - common good, moral good, intellectual good.
- Crypto insurance & backup. Crypto wars. Banks will have access to safeguarding our digital presence
- Insured businesses:

Keynes: ethics will become cheap

Riffkin: emphatic civilization. Civilization type 1: global empathy. End of the Trickster period. Humanity will become conscious of its identity (now at the level of State (no more cities /tribes) or EU.

Finishing Civilization 1 Moral Exoskeleton: From family - tribe - kingdom - state - supranational states (EU) - civilizational (East vs West) - planetary.

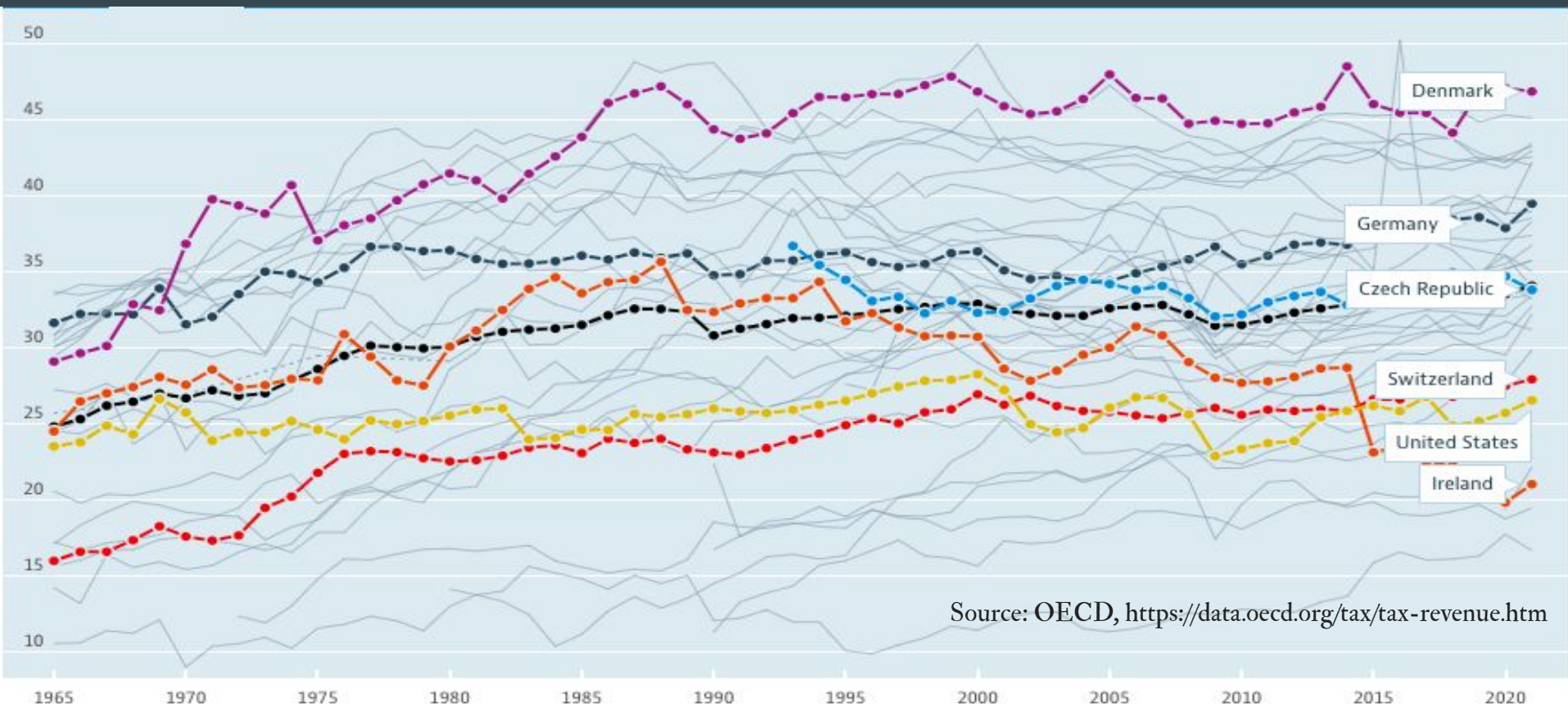
Joseph Schumpeter: Can Capitalism Survive? Yes in a socialistic compromise: commonly owned shares.

sustainability ambassador

megaThreads:

- World War III
- Planetary: Global Warming (enlarge risk models to include risks to whole society, not just to company). Sustainability ambassador. Purpose-driven investment (not just profit driven)
- NonTangible: CyberCrime
- concern over vast uninsured and underinsured populations
- help consumers across all segments prevent or mitigate risks before they occur, rather than merely paying to rebuild and recover after the fact (Deloitte)

Tax wedge: A $\frac{1}{3}$ compromise? 34% centralised, 66% individual



Government spending, 1880 to 2011

Total government spending, including interest government expenditures, as share of national GDP

