Economics 2
Fall 2024

Emmanuel Saez

LECTURE 1
Introduction to Economics

A Few Introductions

- Professor Emmanuel Saez
  - My research is on inequality and public policy
  - I have taught PUBLIC ECONOMICS upper division class
  - Second year I am teaching INTRO ECONOMICS
- Sections with GSIs start on Tuesday September 2

I. Course Logistics

External Course Website:

https://eml.berkeley.edu/~saez/econ2/econ2.html

For lecture slides and assignments

B-Course Website:

https://bcourses.berkeley.edu/courses/1538268

For lecture recordings

Teaching

- The lectures are essential, count for 8% of grade
- Strict policy: no laptops, earphones, phones (except for quizzes). Only tablets flat on desk. GSIs at the back monitor policy.
- Lectures will be recorded and posted on Bcourse
- Slides will be posted by 3pm on the day of lecture.
- Section is also incredibly valuable
- Office hours and additional tutoring available
- Feel free to ask questions during and after class

Enrollment

- Enrollment is handled through the CalCentral waiting list.
- There is typically space for everybody on the waiting list due to dropouts
- Other questions, go to: https://www.econ.berkeley.edu/undergrad/home/enrollment-procedures

Recommended Readings

- Textbook 1: Frank, Bernanke, Antonovics, and Heffetz, *Principles of Economics*, 8th edition.
  - Cheap paperback, digital rental at amazon
  - Traditional econ textbook
- Textbook 2: CORE-The Economy 2.0
  - Free at www.core-econ.org/the-economy/
  - Political economy broader view
- Journal articles:
  - Available through links on the slides.

Graded Assignments

- Attendance and participation in lectures: (8% of grade): .5 point per lecture, need 16 lectures out of 24 to get the full 8%. No excuses except long-term (3 weeks+) medical absence.
- FOUR Problem Sets: (20% of grade)
- Two Midterms at class time: (42% of grade)

  Wed, October 9, 5:10-6:30pm
  Wed, November 13, 5:10-6:30pm

- Final exam: (30% of grade) **Fr, Dec 20, 3pm-5pm**
- **No alternative times for midterms and final**

Grade Distribution (from last year)

- A+ = top 10%, A = next 12.5%, A- = next 12.5%
- B+ = next 15%, B = next 20%, B- = next 10%
- C+ = next 5%, C = next 5%
- C- = next 5% [below major requirement]
- D, F = bottom 5% [non passing grade] typically happen when exams and psets are missing with no valid excuse

- Avoid bottom 10% to meet major requirement: C or better
- Avoid bottom 5% to get passing grade: C- or better

I-clicker quizzes

- Lectures will have quizzes using iClicker cloud free for students, make sure you register (enrollment then synced with B-course)
- Quizzes are to test your understanding, or poll the class. Participation is part of the attendance grade.
- FIRST QUIZ: Do you want to be (or are you) an econ major?

A. Yes
B. No
C. I don't know yet

II. General Introduction

Asking the Classroom:

What is the most pressing problem that economists should address?

Type in your answer in one or just a few words in i-clicker

Key Economic Features

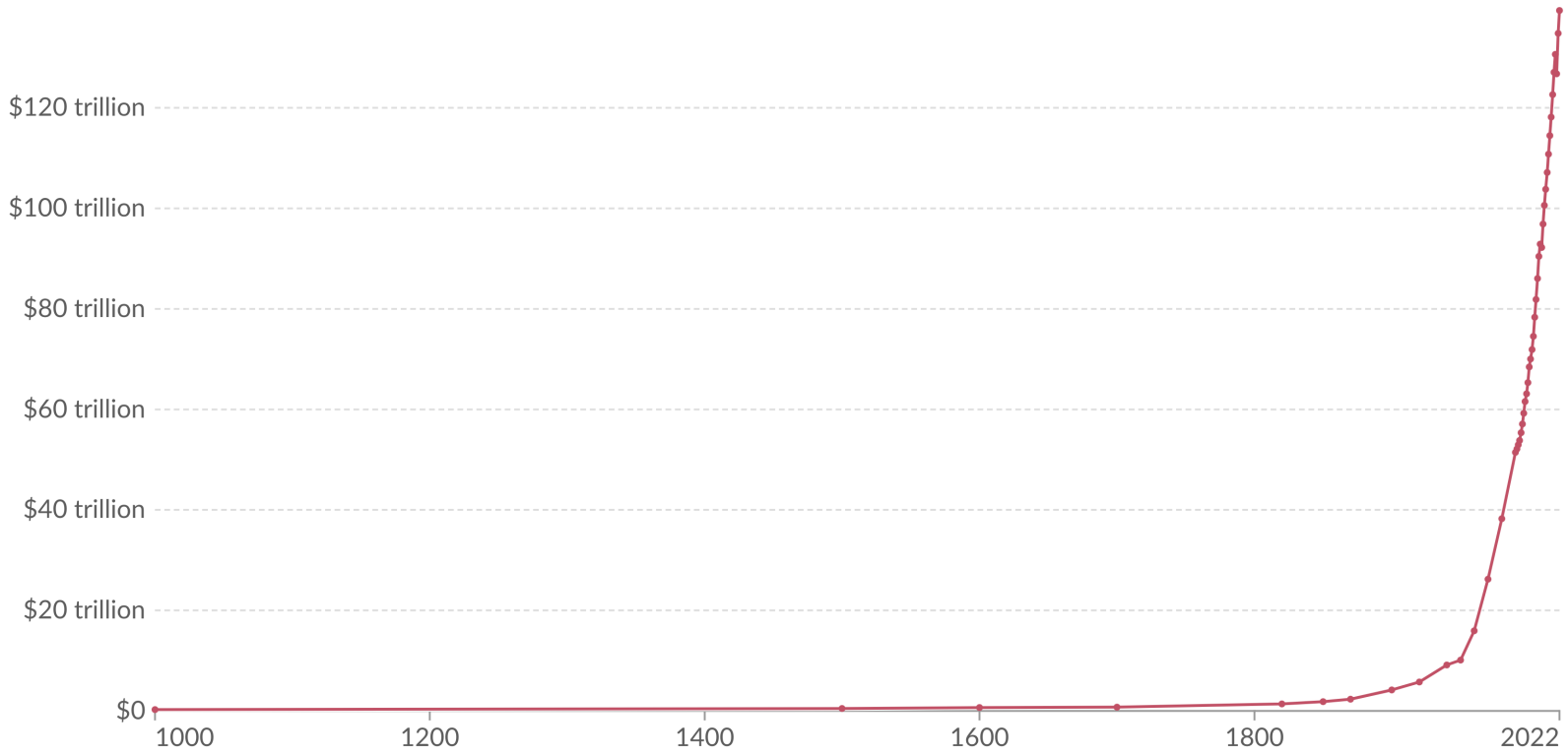
- Humans work in “firms” to produce goods and services that are sold on markets. Workers and firms’ owners share proceeds.
  - National income splits 75% for workers, 25% for owners
- People are both producers and consumers.
- Constant improvement in production processes → secular economic growth but with hiccups
- Enormous inequality both across countries and within countries

Economic Growth

- Economic growth takes off during 19th century Industrialization (first in Britain, then Europe/US, now China, India) and never stops. How?
- A number of countries (mostly in Africa) remain low income. How can they catch-up?
- Economic take-off has created sustainability issues, most important is carbon emissions and climate change. How can this be fixed?
- Even rich countries experience temporary painful recessions. How can this be addressed?

Global GDP over the long run

Total output of the world economy. These historical estimates of GDP are adjusted for inflation. We combine three sources to create this time series: the Maddison Database (before 1820), the Maddison Project Database (1820–1989), and the World Bank (1990 onward).



Data source: World Bank (2023); Bolt and van Zanden - Maddison Project Database 2023; Maddison Database 2010
Note: This data is expressed in international-$[1] at 2017 prices.
OurWorldInData.org/economic-growth | CC BY

1. International dollars: International dollars are a hypothetical currency that is used to make meaningful comparisons of monetary indicators of living standards. Figures expressed in international dollars are adjusted for inflation within countries over time, and for differences in the cost of living between countries. The goal of such adjustments is to provide a unit whose purchasing power is held fixed over time and across countries, such that one international dollar can buy the same quantity and quality of goods and services no matter where or when it is spent. Read more in our article: What are Purchasing Power Parity adjustments and why do we need them?

Global GDP over the long run

Our World in Data

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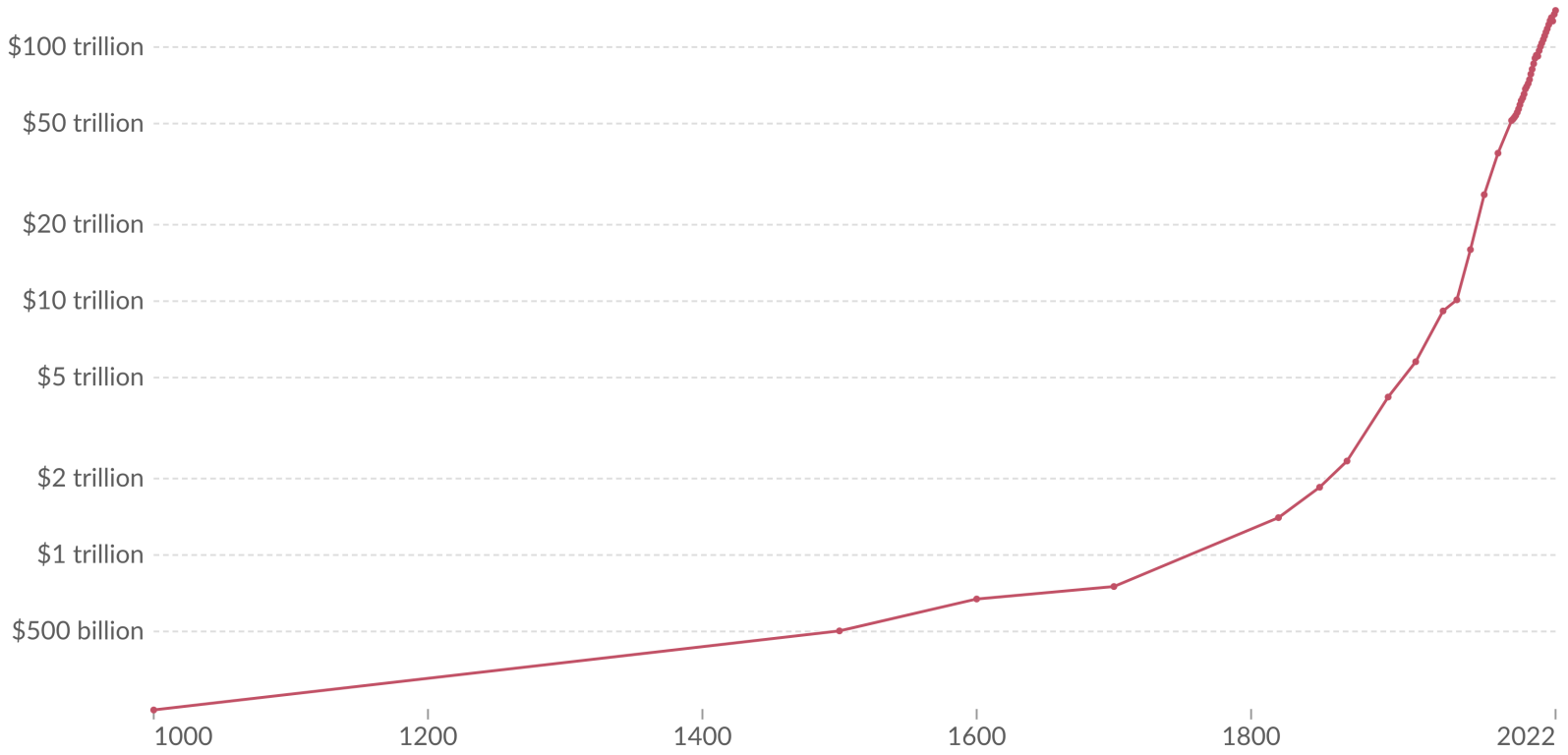

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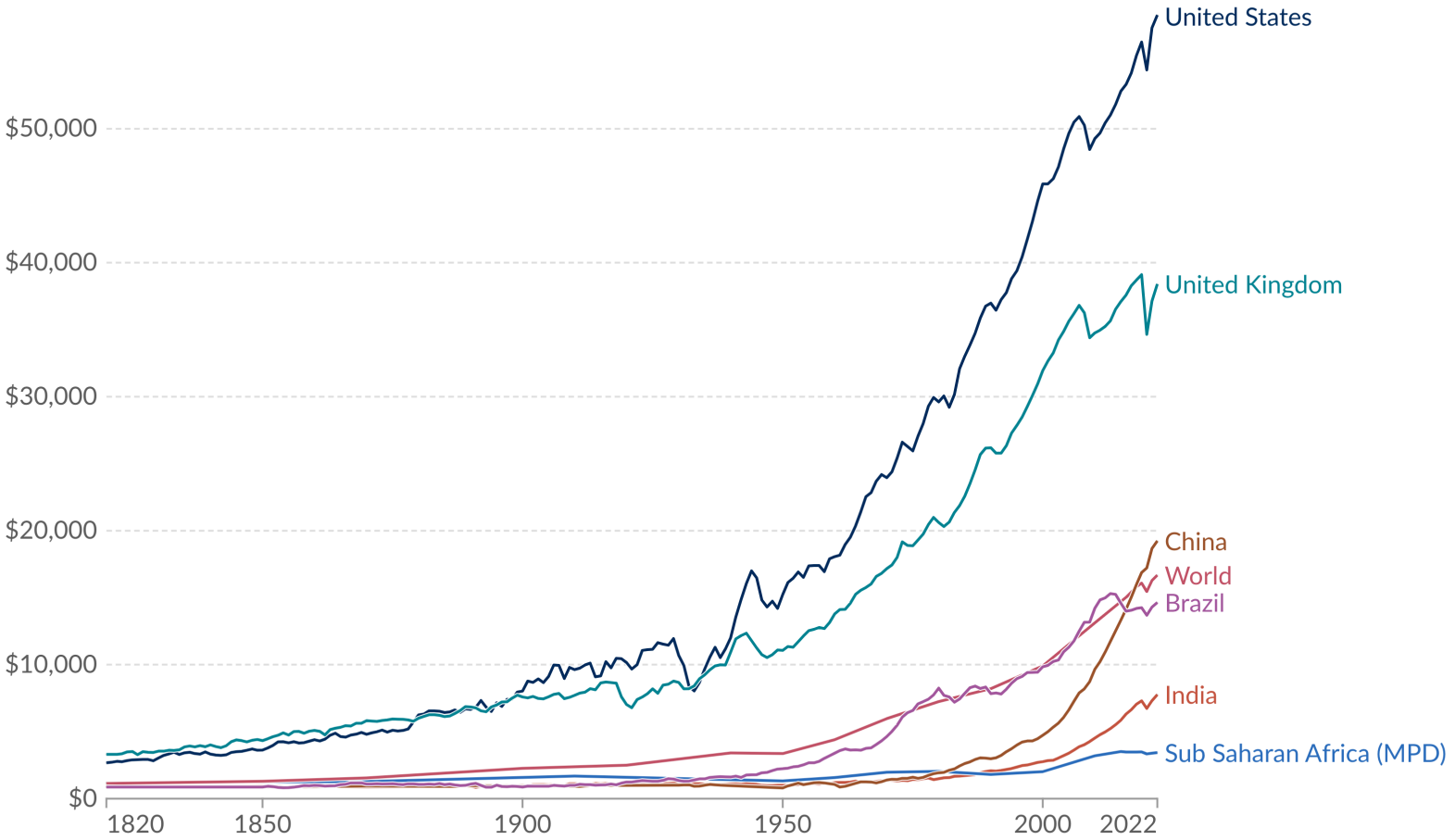
GDP per capita, 1820 to 2022

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

Our World in Data



Data source: Bolt and van Zanden - Maddison Project Database 2023

OurWorldInData.org/economic-growth | CC BY

Note: This data is expressed in international-$[1] at 2011 prices.

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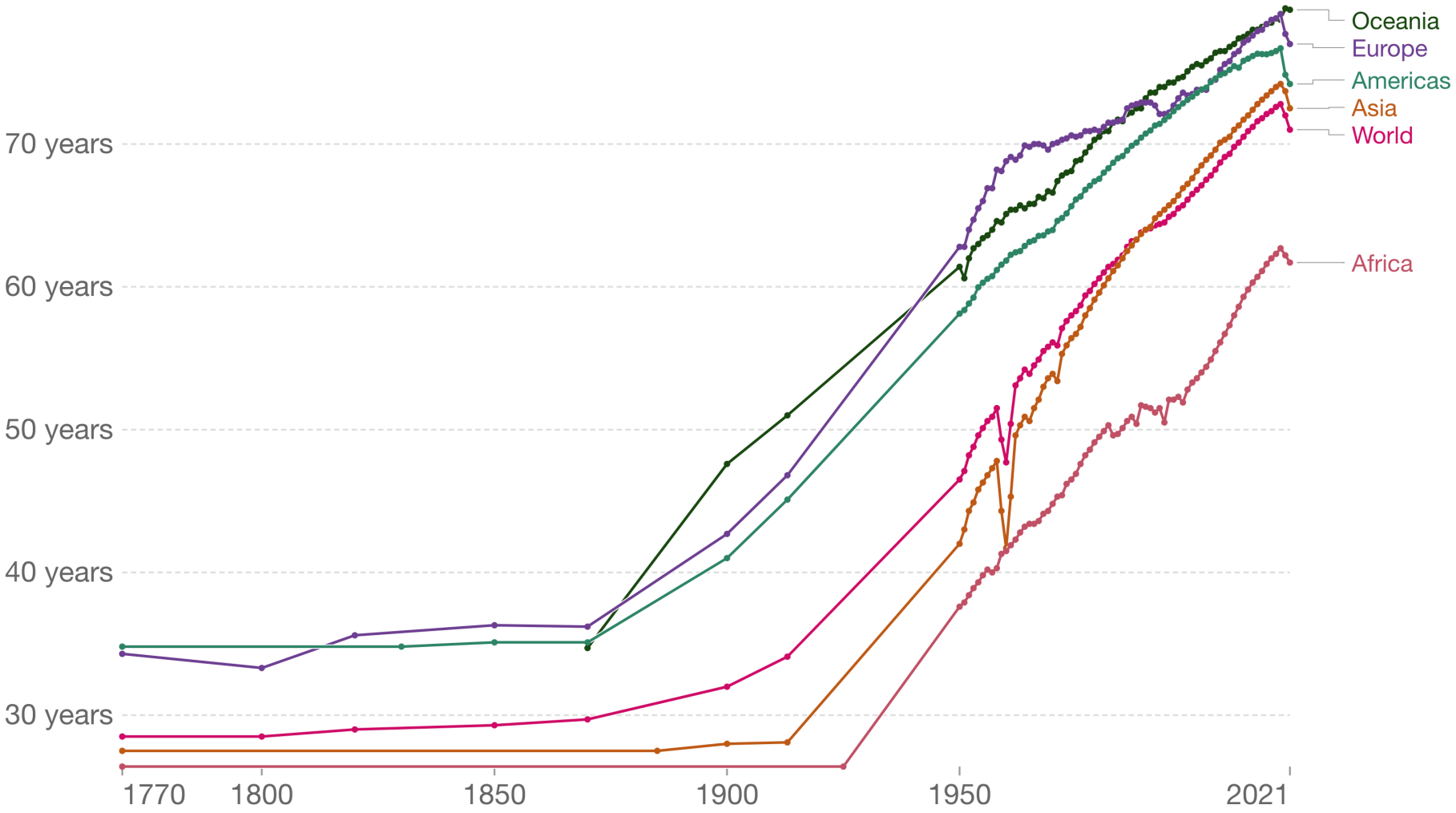
Life expectancy, 1770 to 2021



Source: UN WPP (2022); Zijdeman et al. (2015); Riley (2005)

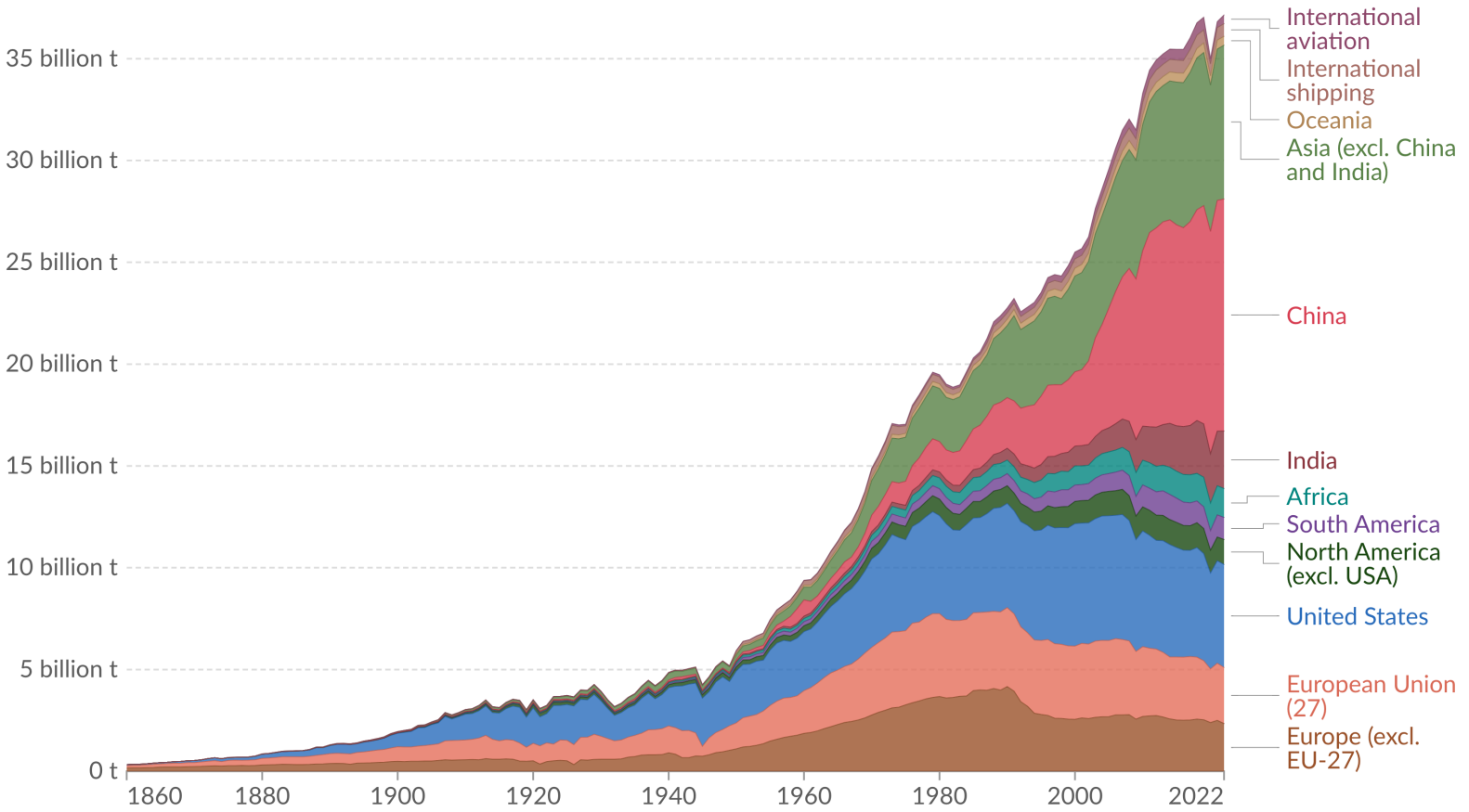
OurWorldInData.org/life-expectancy • CC BY

Note: Shown is the 'period life expectancy'. This is the average number of years a newborn would live if age-specific mortality rates in the current year were to stay the same throughout its life.

Annual CO_2 emissions by world region

Our World in Data

Emissions from fossil fuels and industry[1] are included, but not land-use change emissions. International aviation and shipping are included as separate entities, as they are not included in any country's emissions.



Data source: Global Carbon Budget (2023)

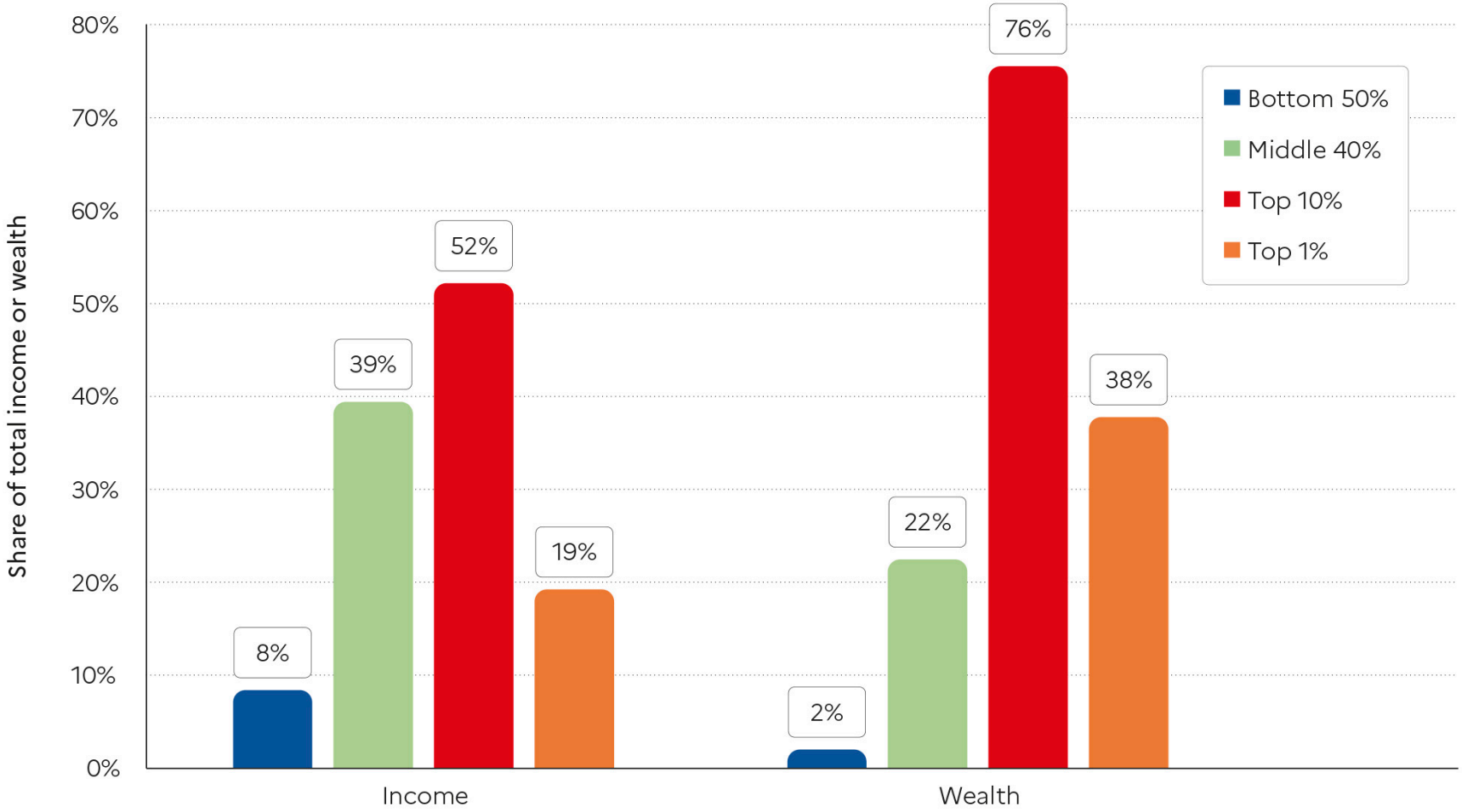
OurWorldInData.org/co2-and-greenhouse-gas-emissions | CC BY

1. Fossil emissions: Fossil emissions measure the quantity of carbon dioxide (CO_2) emitted from the burning of fossil fuels, and directly from industrial processes such as cement and steel production. Fossil CO_2 includes emissions from coal, oil, gas, flaring, cement, steel, and other industrial processes. Fossil emissions do not include land use change, deforestation, soils, or vegetation.

Our Social Nature and Inequality

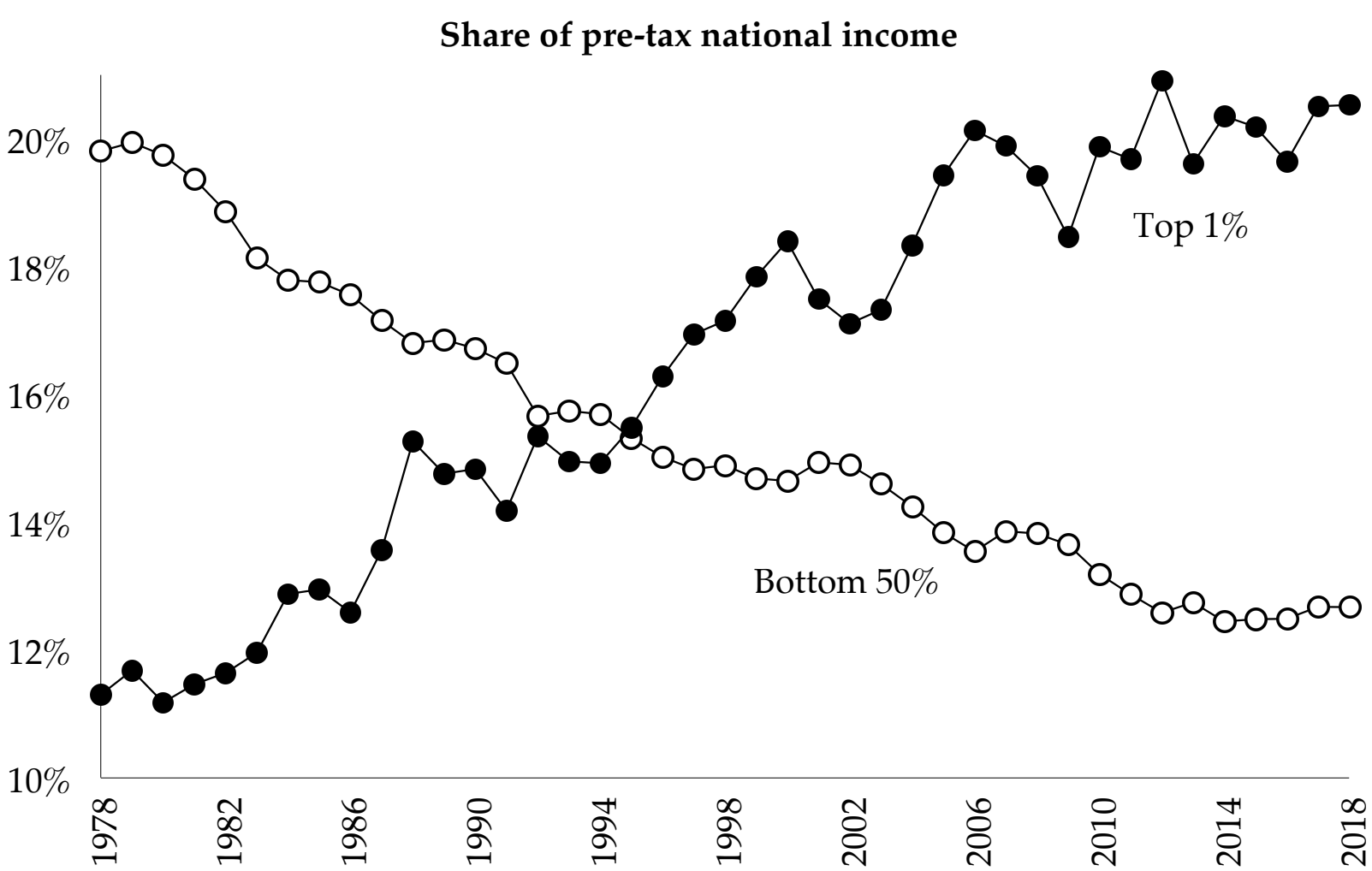
- Humans both selfish and social. Traditional economics models humans as selfish but social aspect matters a lot:
- Why we care about inequality? Joint work and production (since prehistory) creates distribution problem.
- Humans have developed a keen sense of fairness
  - Left view: share equally don't let the powerful take too much
  - Right view: obey the boss, sharing equally rewards the lazy
- In modern economies: we measure inequality looking at **income** (what people earn in 1 year) and **wealth** (the sum value of what a person owns)

Figure 1.1 ***Global income and wealth inequality, 2021***



Interpretation: *The global 50% captures 8% of total income measured at Purchasing Power Parity (PPP). The global bottom 50% owns 2% of wealth (at Purchasing Power Parity). The global top 10% owns 76% of total Household wealth and captures 52% of total income in 2021. Note that top wealth holders are not necessarily top income holders. Income is measured after the operation of pension and unemployment systems and before taxes and transfers.* ***Sources and series:*** *wir2022.wid.world/methodology*

Income Inequality in the US has surged since 1980



Source: Saez and Zucman (2019), Figure 1.1

Quiz:

Question: Is wealth more equally distributed than income among people worldwide?

- A. Wealth is more equally distributed than income
- B. Wealth and income are equally distributed
- C. Wealth is less equally distributed than income
- D. Economists haven’t figured it out yet

II. Capitalism

Capitalism: Private Property, Firms & Markets

Private property = something is private property if the person possessing it has the right to exclude others from it, to benefit from the use of it, and to trade it with others.

Markets = a way that people exchange goods and services by means of directly reciprocated transfers (buying and selling, not gifts), voluntarily entered into for mutual benefit (unlike theft, taxation), that is often impersonal (unlike transfers among friends, family)

Firms = Economic organizations where private owners of capital (buildings, equipment) hire and direct labor to produce goods and services for sale on markets to make a profit.

The Capitalist Revolution

Capitalism led to growth in living standards because of:

- Impact on technology: firms competing in markets had strong incentives to adopt and develop new technologies

- Specialization: the growth of firms and the expansion of markets linking the entire world allowed historically unprecedented specialization in tasks and production

  Developing countries' successful growth generally jumpstarted by cheap mass production of specific goods exported to richer countries.

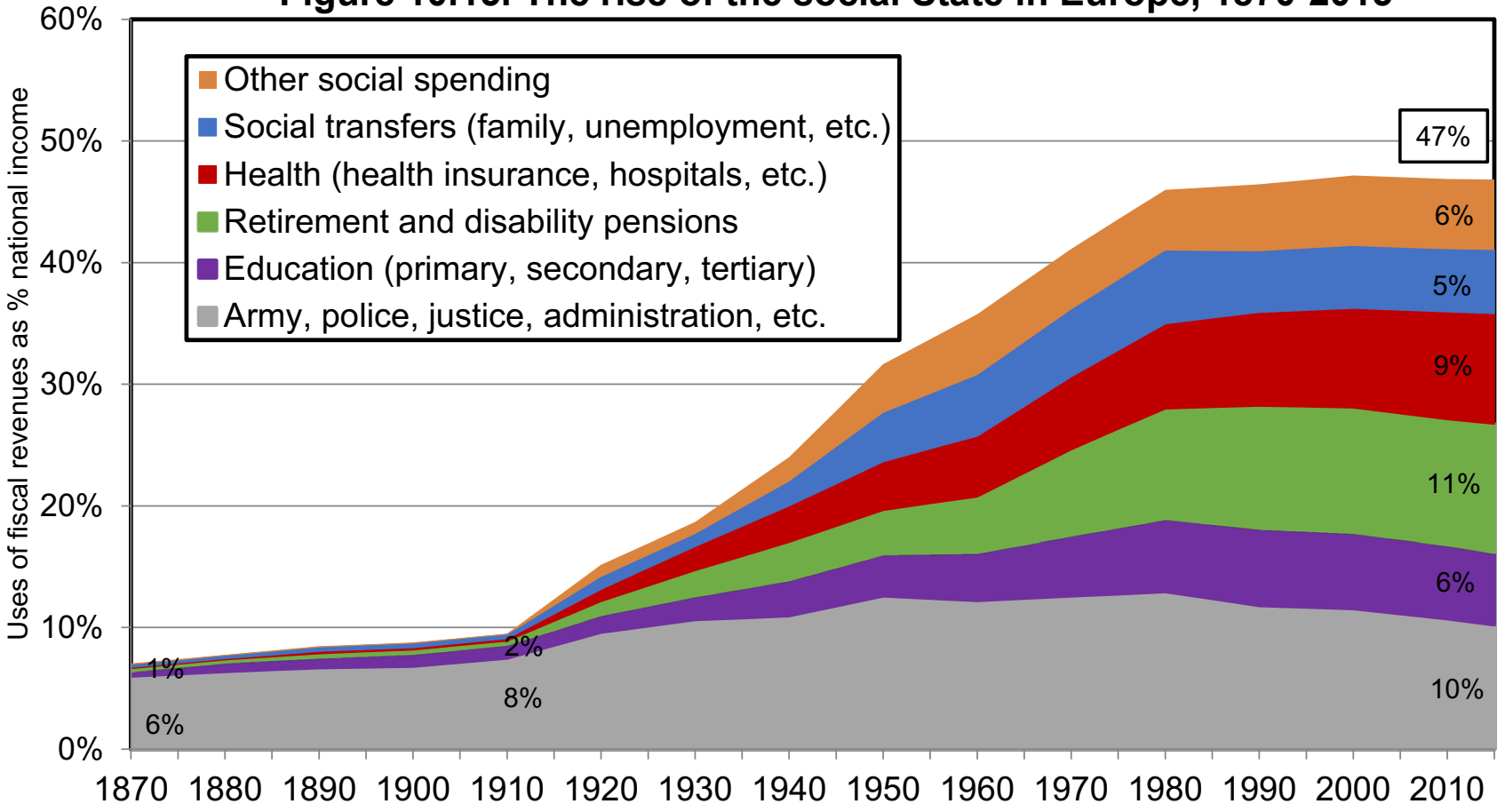
Political systems

- A **political system** determines how governments will be selected, and how those governments will make and implement decisions.

- **Capitalism coexists with various political systems:**
  - Democracies: free elections (1 person=1 vote), free political parties and press, individual rights
  - Authoritarian regimes

- **In advanced economies, mix of capitalism and socialism:**
  - 30-50% of pre-tax incomes are "socialized" through taxes to provide:
  - **public goods** (infrastructure, police, defense, etc.)
  - **social state** (education for kids, health for the sick, pensions for the old, income support for the poor)

Figure 10.15. The rise of the social State in Europe, 1870-2015



Interpretation. In 2015, fiscal revenues represented 47% of national income on average in Western Europe et were used as follows: 10% of national income for regalian expenditure (army, police, justice, general administration, basic infrastructure: roads, etc.); 6% for education; 11% for pensions; 9% for health; 5% for social transfers (other than pensions); 6% for other social spending (housing, etc.). Before 1914, regalian expenditure absorbed almost all fiscal revenues. **Note.** The evolution depicted here is the average of Germany, France, Britain and Sweden (see figure 10.14). **Sources and séries**: see piketty.pse.ens.fr/ideology.

III. Overview of the Course

Microeconomics

- Study of economic behavior at the level of economic “agents”: this is the micro-level
- How individual consumers and producers make decisions; what happens in the market for particular goods
- Microeconomics shows why markets work well under traditional assumptions.
- We will include much discussion of market failures

Macroeconomics

- Study of the behavior of the economy as a whole.
- What determines the behavior of overall employment, total output, and prices?
- Microeconomics does not scale up well at macro level, hence the need for a different approach (Keynes revolution in the 1930s-1940s)
- Government policy has a profound impact on the macroeconomy.

Two Key Features of Economic Analysis

- Theory: Start with assumptions and derive implications. Uses mathematics/diagrams.
- Empirical Evidence: Are the implications and predictions of the theory verified in real-world data? Uses data and statistics.
- In Econ 2 we will discuss both theory and evidence.
- Goal is to show accessible outstanding recent empirical research testing model predictions.

Positive vs. Normative Economic Analysis

- Positive economics: What is? Example: what would happen if you tax the rich more?
- Normative economics: What ought to be? Example: how much should we tax the rich?
- Positive economics is a 1st step to address normative economics.
- But normative economics requires to make value judgements. Example: Is it fair to take from the rich to help the poor?

References

- CORE-The Economy 2.0, micro, Unit 1.
- Ourworldindata, economic growth
- World Inequality Report, 2022
- Piketty, Thomas 2022, A Brief History of Equality. Harvard University Press.
- Saez, Emmanuel and Gabriel Zucman. 2019. The Triumph of Injustice, Norton.