

# Growth and Comparative Development

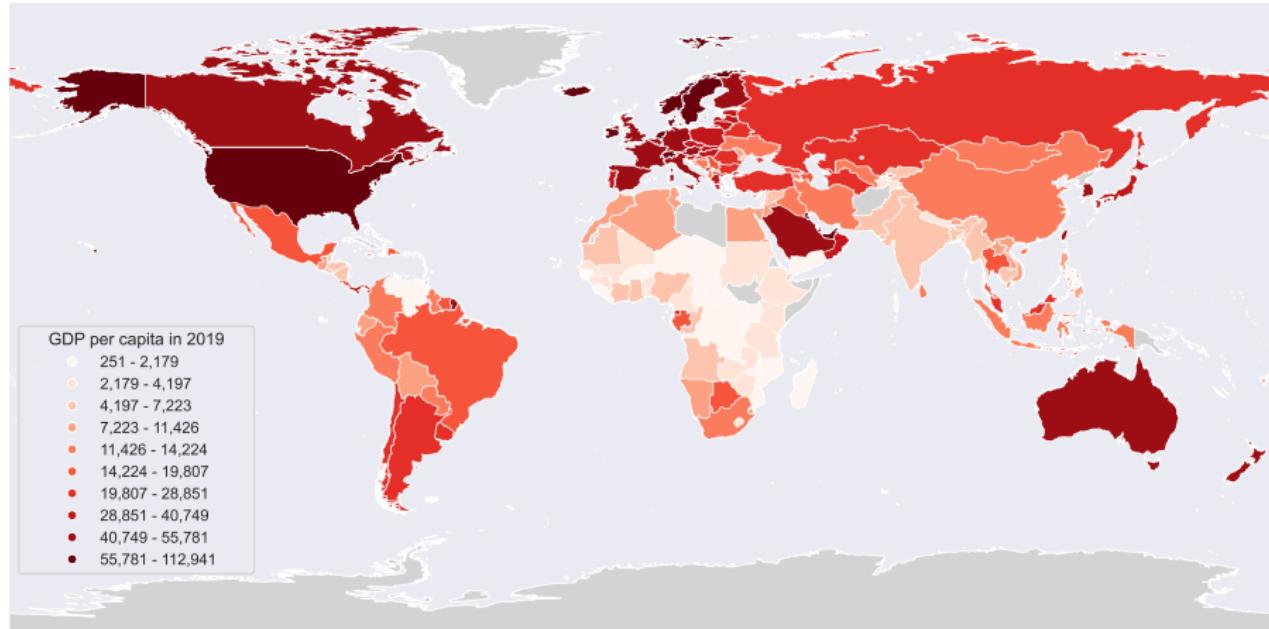
## The Big Picture & Overview

Ömer Özak

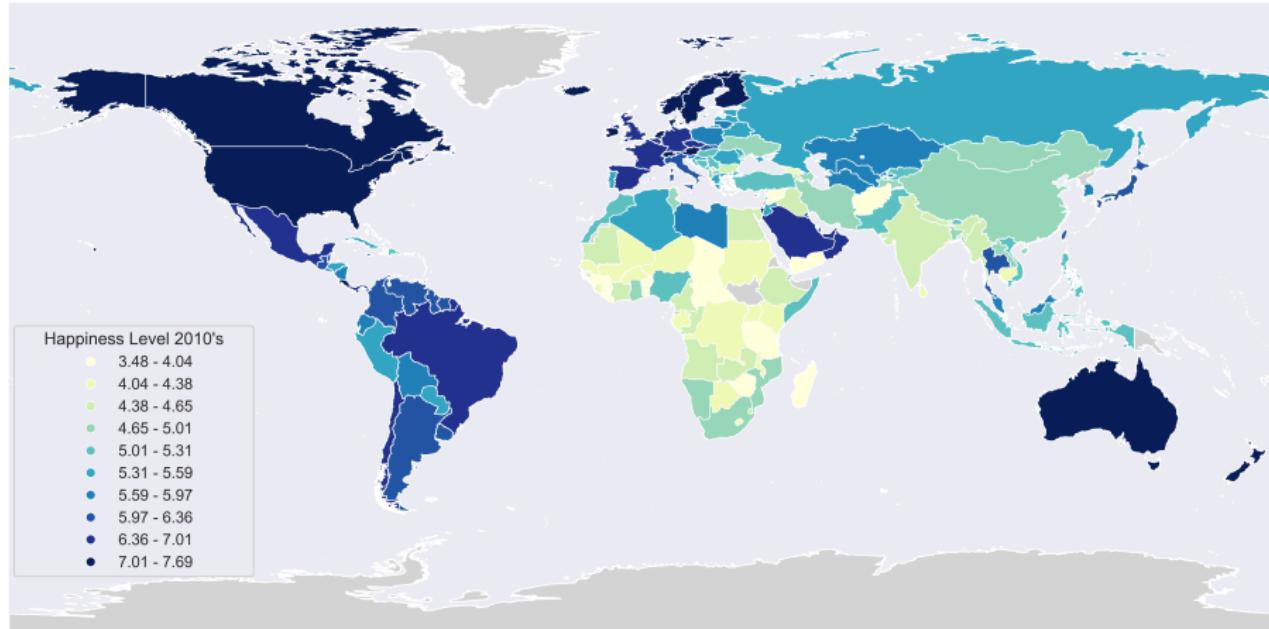
Department of Economics  
Southern Methodist University

Economic Growth and Comparative Development

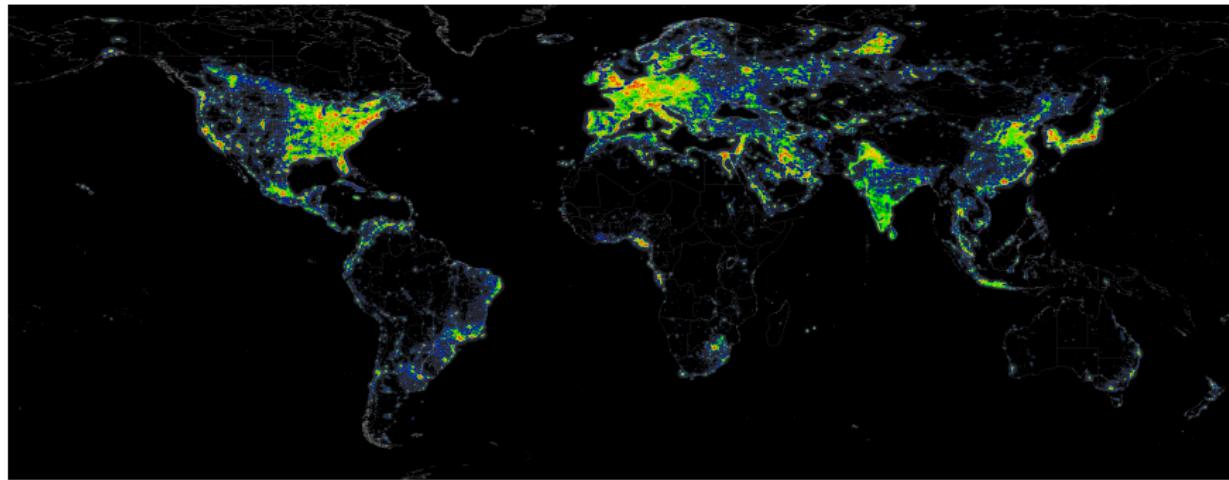
# Income per Capita across the Globe in 2019



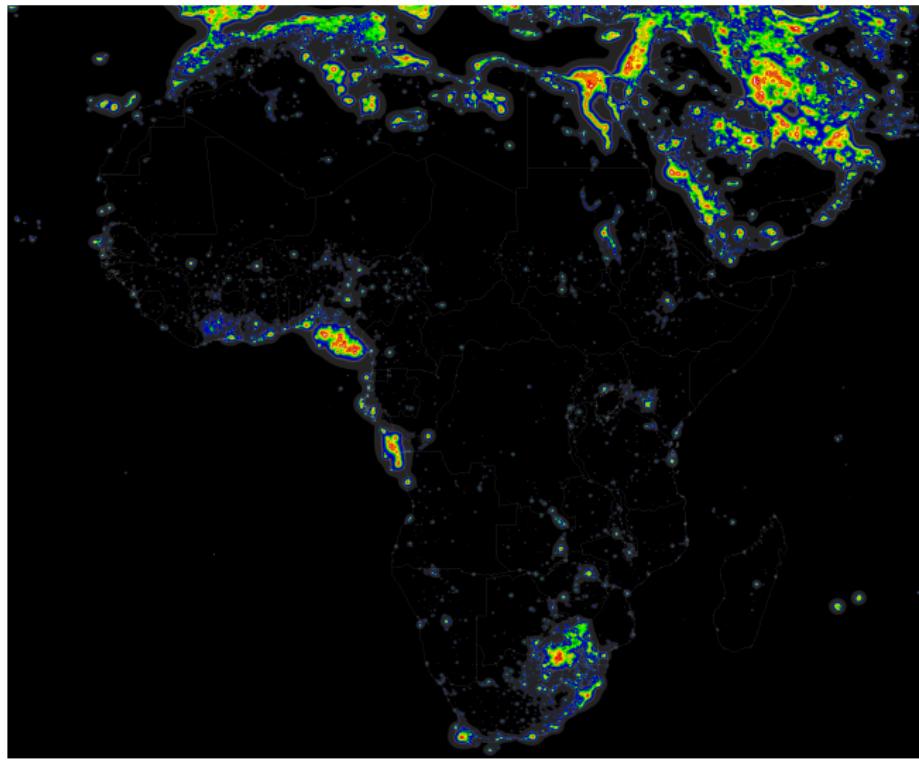
# Happiness across the Globe in 2005-2018



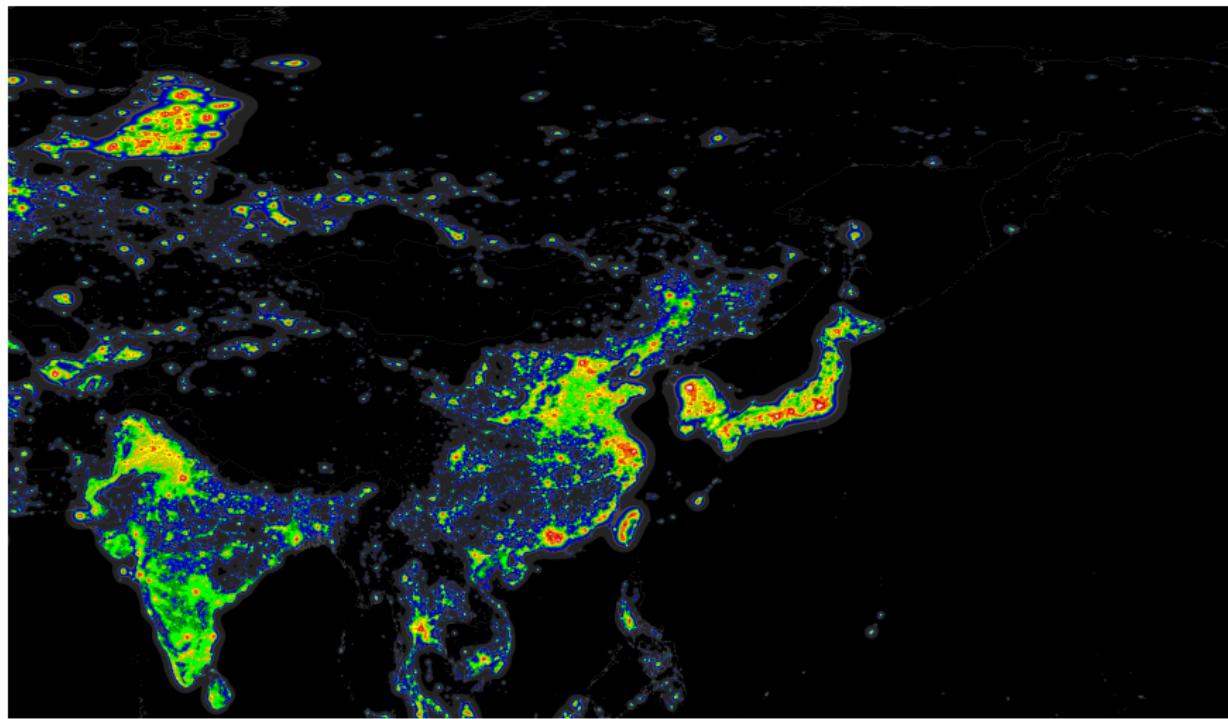
# Night Lights across the Globe in 2016



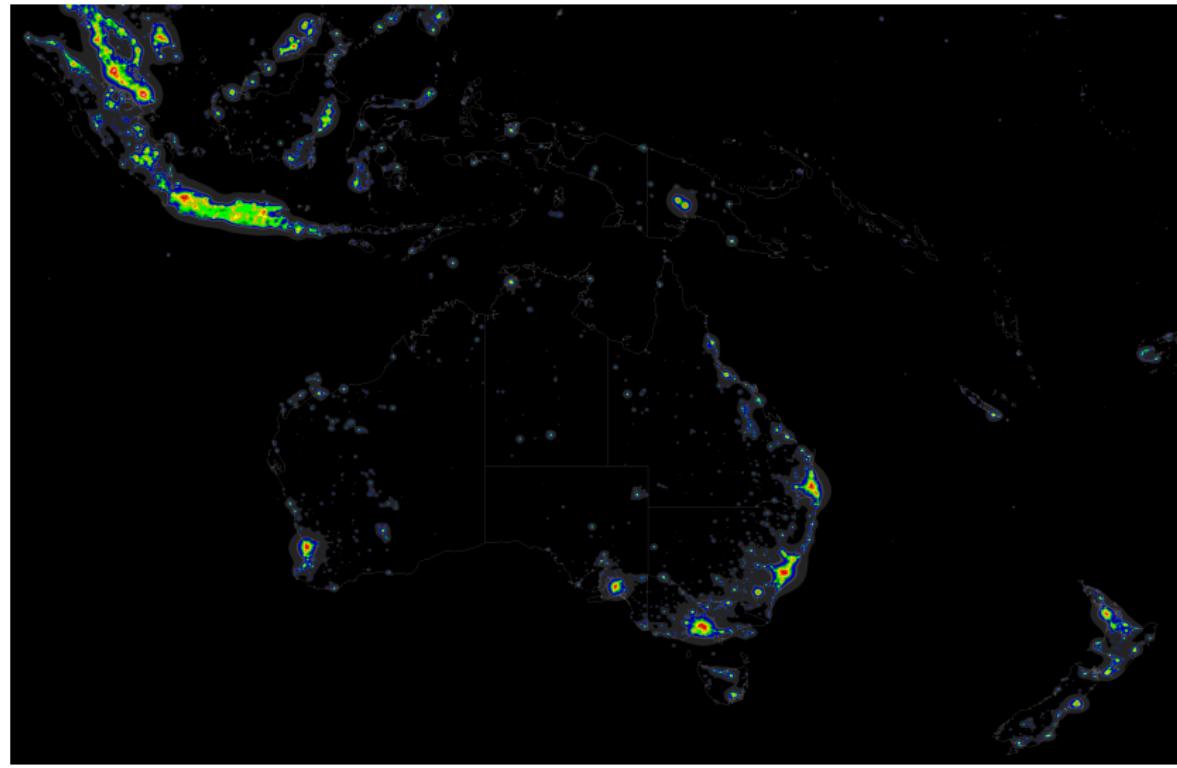
## Night Lights across Regions – Africa



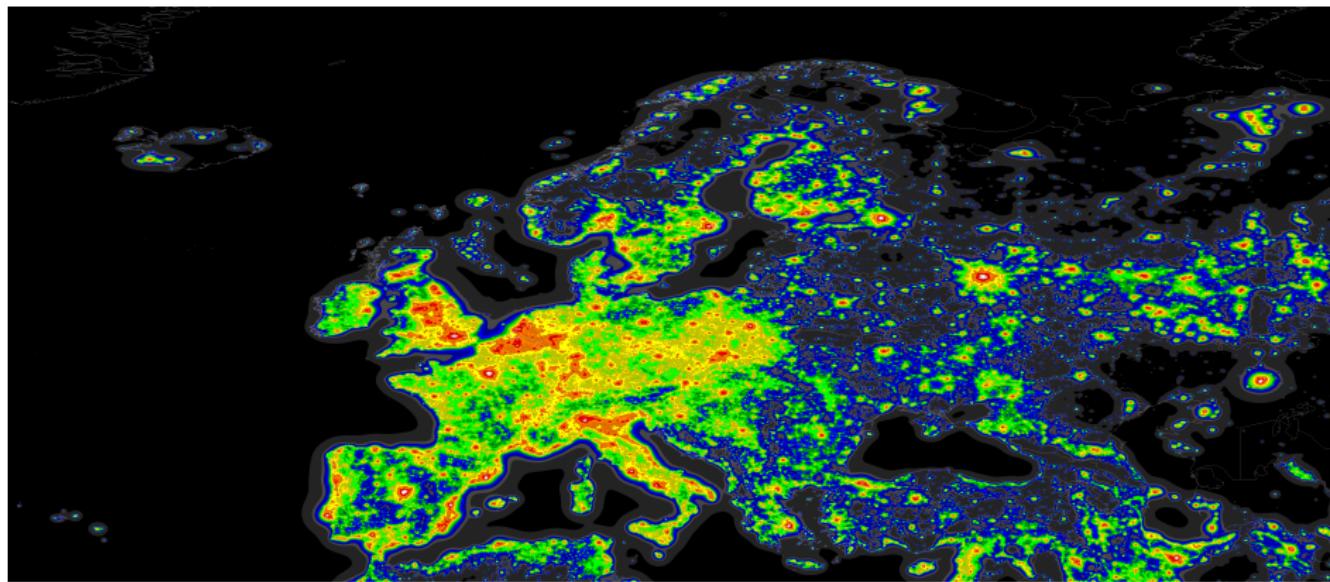
## Night Lights across Regions – Asia



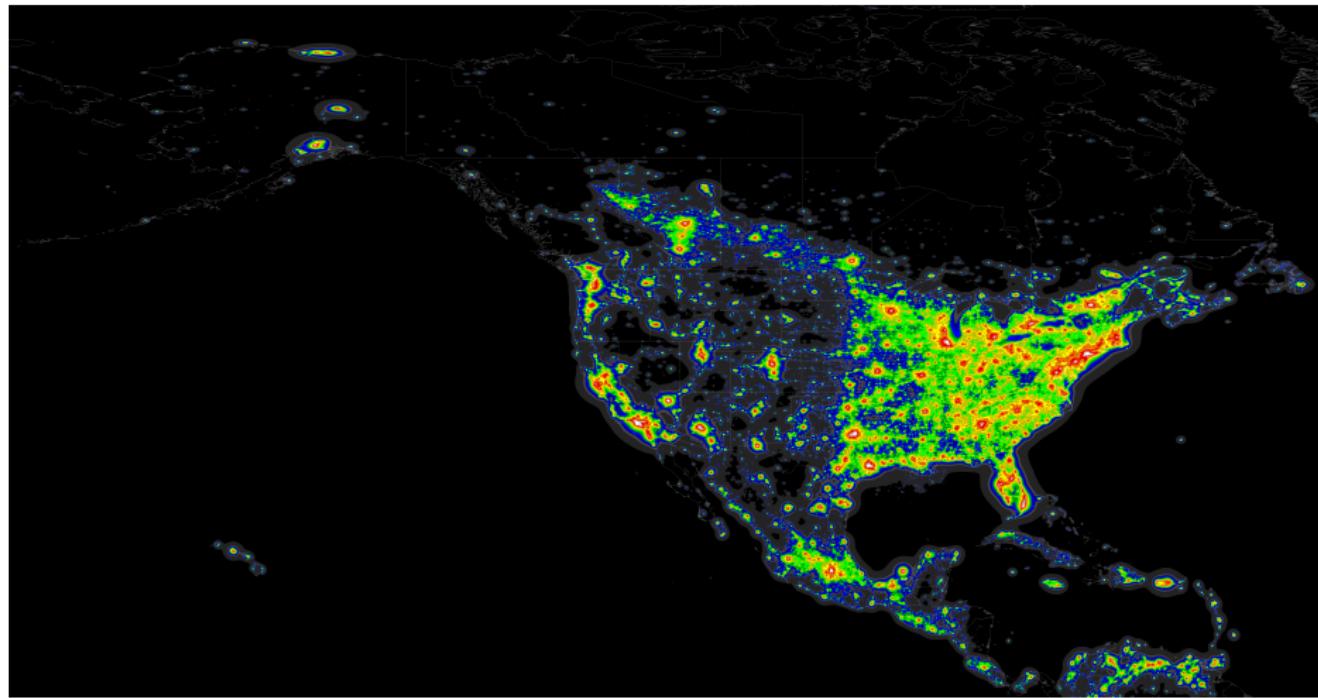
# Night Lights across Regions – Australia



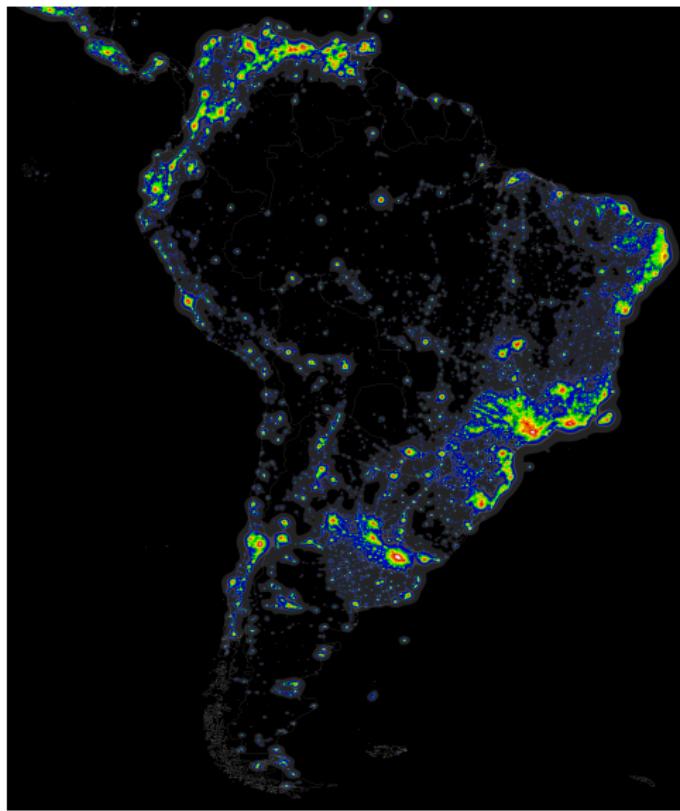
## Night Lights across Regions – Europe



## Night Lights across Regions – North America



## Night Lights across Regions – South America



## Fact 1: Income Differences across Countries/Regions/Societies

**There is enormous variation in per capita income across economies. The poorest countries have per capita incomes that are less than 5 percent of per capita income in the richest countries.**

Several notes:

- Income per capita (or GDP per capita) is not the sole measure of what is good: but it's a useful summary statistic
- Income per capita ignores distribution of income within a country
- Comparing income per capita across countries is not trivial
  - You have to convert between currencies
  - Countries have different relative prices for goods
  - What is the “right” way to value haircuts, apples, or cars across countries?

# Top Countries - Different Measures (2009)

Rank	Highest GDP per Capita		Largest Economies		Most Populous Countries	
	Country	GDP per Capita (\$)	Country	Total GDP (\$ trillions)	Country	Population (millions)
1	Qatar	159,469	United States	12.62	China	1,320
2	Luxembourg	84,525	China	10.08	India	1,160
3	United Arab Emirates	52,946	Japan	3.81	United States	307
4	Bermuda	52,090	India	3.76	Indonesia	240
5	Macao	51,057	Germany	2.66	Brazil	199
6	Norway	49,945	United Kingdom	2.07	Pakistan	181
7	Singapore	47,373	Russia	2.05	Bangladesh	154
8	Kuwait	46,639	France	1.98	Nigeria	149
9	Brunei	46,229	Italy	1.68	Russia	140
10	Australia	41,304	Brazil	1.62	Japan	127
11	United States	41,099	Mexico	1.29	Mexico	111

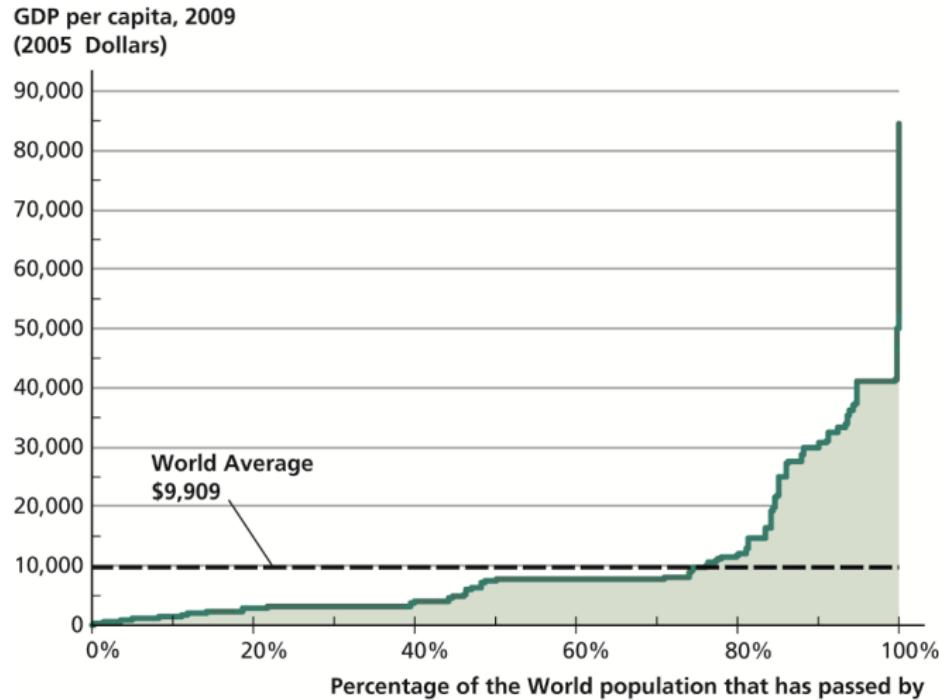
# Rich Countries

Country	GDP per capita 2008	GDP per worker 2008	LF Part. Rate 2008	Avg. Growth 1960-2008	Years to Double
United States	\$43,326	\$84,771	0.51	1.6	43
Japan	33,735	64,778	0.52	3.4	21
France	31,980	69,910	0.46	2.2	30
United Kingdom	35,345	70,008	0.51	1.9	36
Spain	28,958	57,786	0.50	2.7	26

## Poor Countries

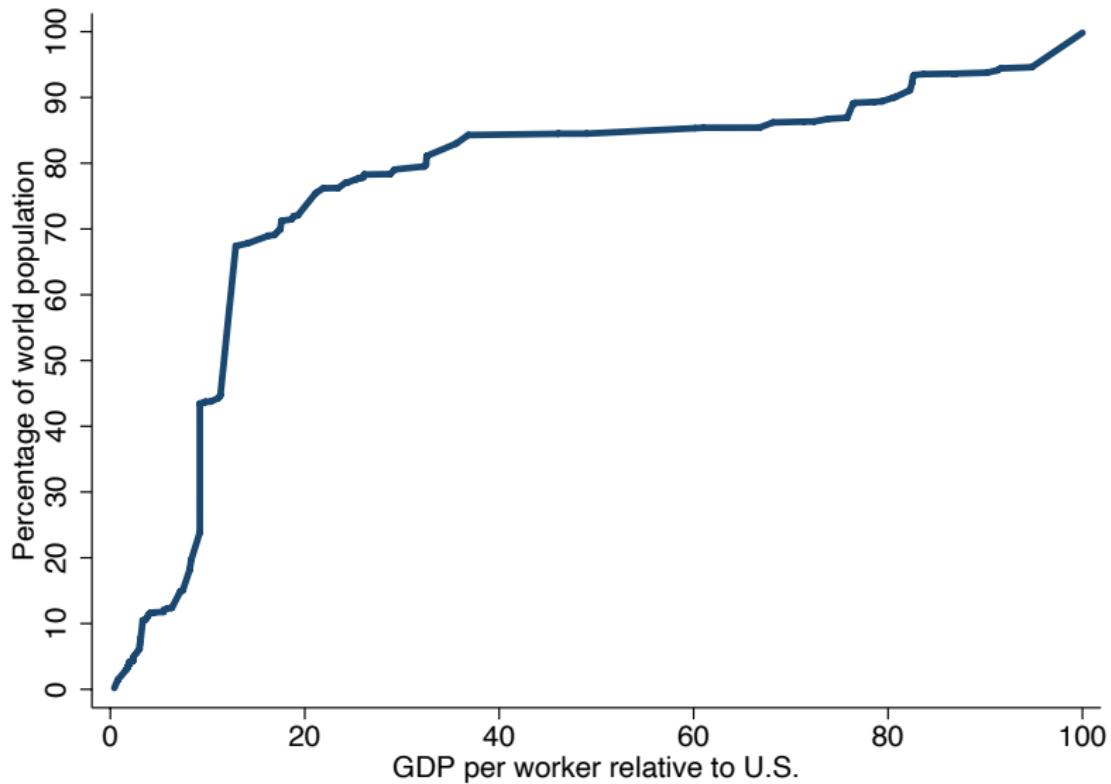
Country	GDP per capita 2008	GDP per worker 2008	LF Part. Rate 2008	Avg. Growth 1960-2008	Years to Double
China	6,415	10,938	0.59	5.6	13
India	3,078	7,801	0.39	3.0	24
Nigeria	1,963	6,106	0.32	0.6	114
Uganda	1,122	2,604	0.43	1.3	52

## Distribution of Population by GDP per Capita, 2009

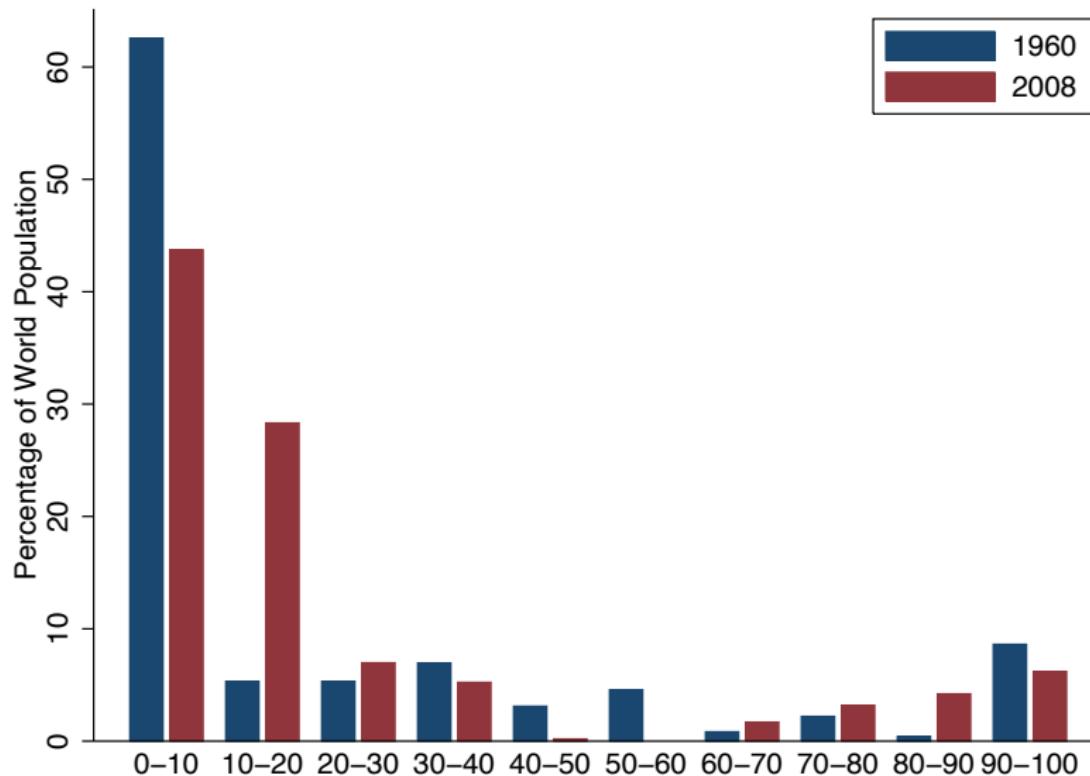


Source: Heston, Summers, and Aten (2011).

## Distribution of Population by GDP per Worker, 2008



## World Population by GDP per Worker, 1960 and 2008



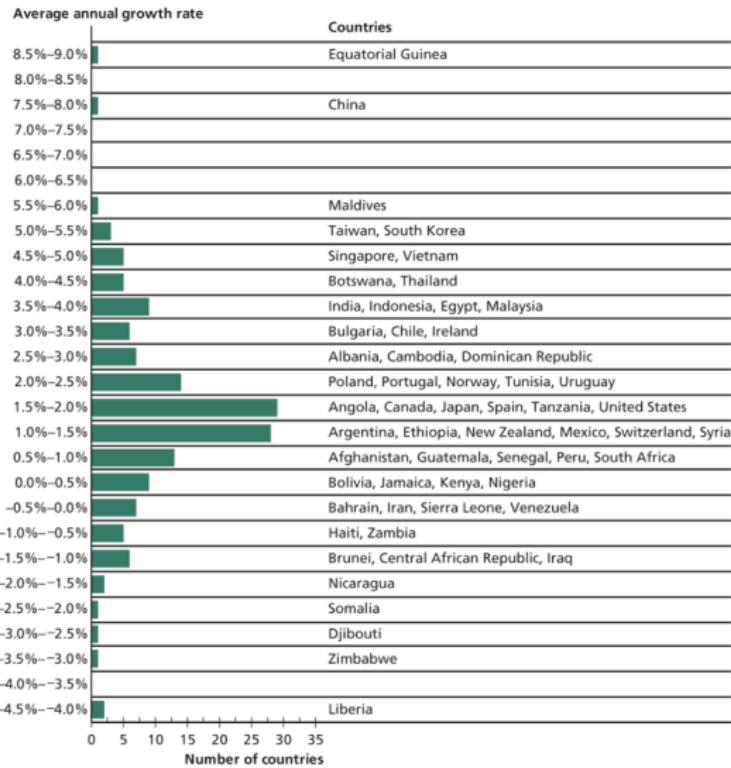
## Fact 2: Growth Rates across Time and Countries

- **Rates of economic growth vary substantially across countries**
  - Important to distinguish permanent from transitional differences
  - If permanent  $\implies$  divergence
  - Economists think most differences are transitional
- **Rates of economic growth vary substantially across time**
  - Growth rates within countries tend to decrease as they become rich

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# Growth Rates 1975-2009



Source: Heston, Summers, and Aten (2011).

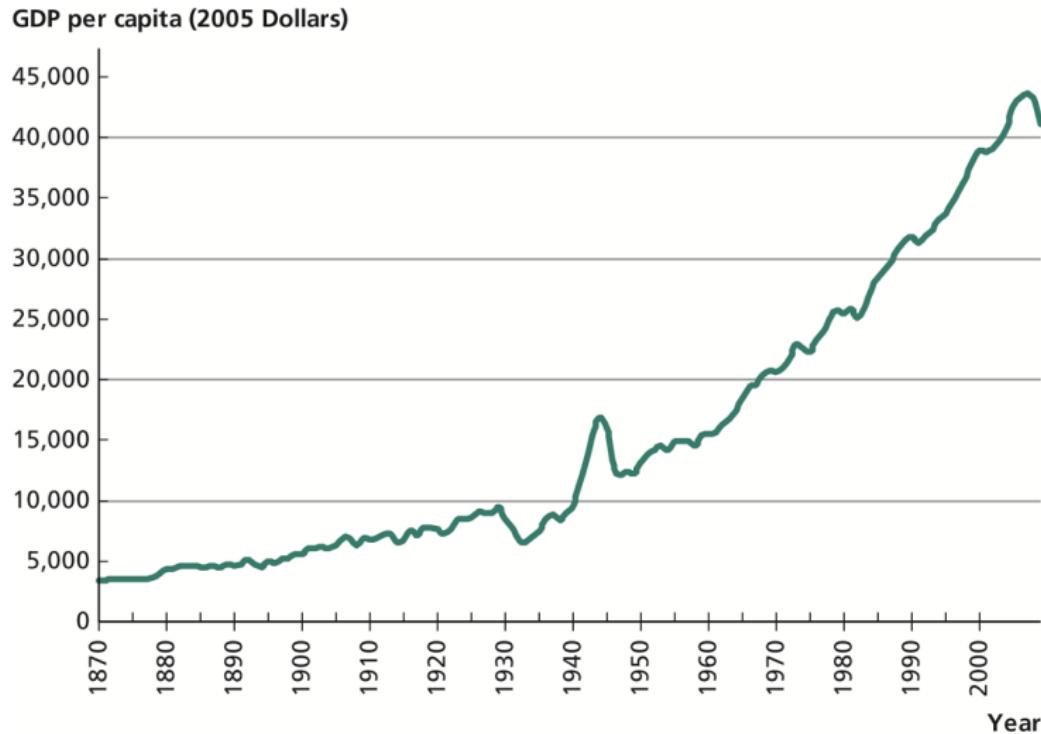
# Growth Miracles

Country	GDP per capita 2008	GDP per worker 2008	LF Part. Rate 2008	Avg. Growth 1960-2008	Years to Double
Hong Kong	37,834	70,940	0.53	4.3	16
Singapore	49,987	92,634	0.54	4.1	17
Taiwan	29,645	62,610	0.47	5.1	14
South Korea	25,539	50,988	0.50	4.5	16

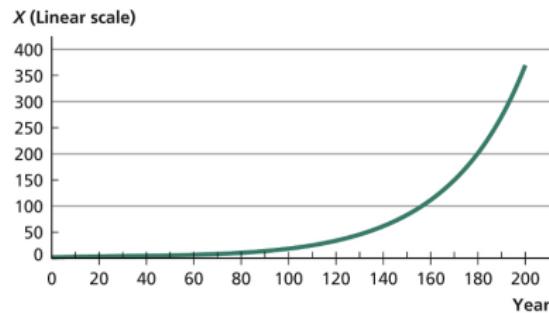
## Growth Disasters

Country	GDP per capita 2008	GDP per worker 2008	LF Part. Rate 2008	Avg. Growth 1960-2008	Years to Double
Venezuela	9,762	21,439	0.46	-0.1	
Haiti	1,403	3,164	0.44	-0.4	
Madagascar	810	1,656	0.49	-0.1	
Zimbabwe	135	343	0.40	-1.5	

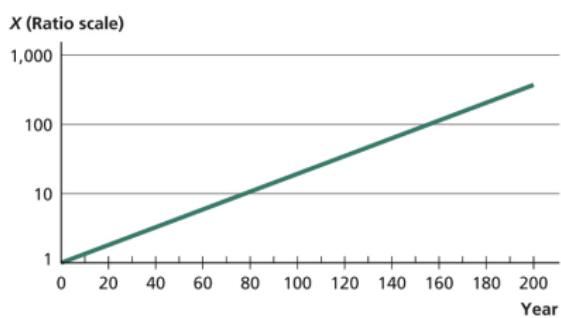
## GDP per capita in U.S. (1870-2009)



## Effect of Using a Ratio/Logarithmic Scale



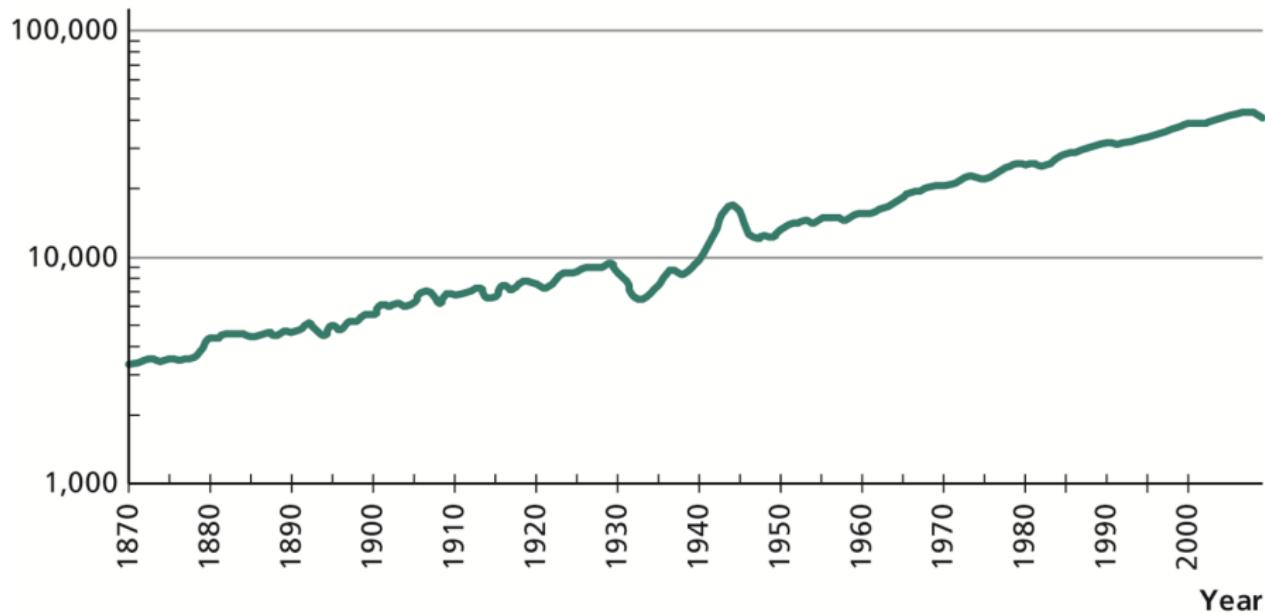
(a)  $X_t = X_0(1 + g)^t$



(b)  $\ln(X_t) = \ln(X_0) + (1 + g) \cdot t$

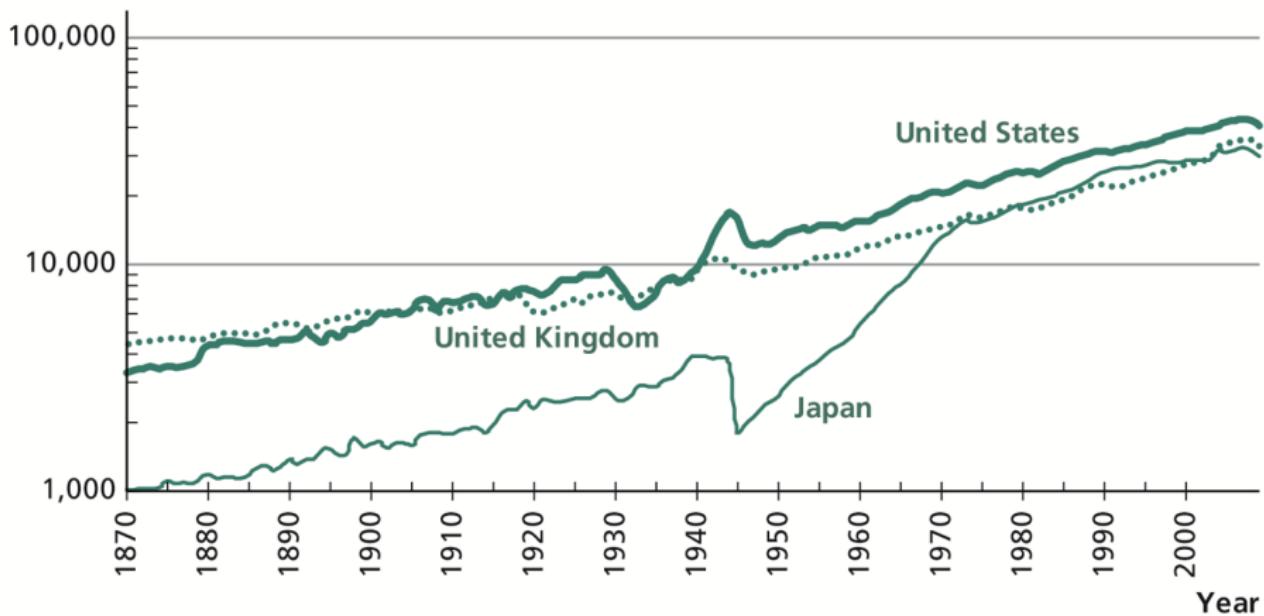
# GDP per capita in U.S. (1870-2009, Ratio Scale)

GDP per capita (2005 Dollars, ratio scale)



## GDP per capita in Japan, U.K., & U.S. (1870-2009, Ratio Scale)

GDP per capita (2005 Dollars, ratio scale)



Sources: Maddison (1995), Heston, Summers, And Aten (2011).

## What does this all suggest?

- Large differences in income per capita
- Smaller differences in growth rates of income per capita
- Constant and positive growth rates in the long-run
- Catch-up of poor to rich countries

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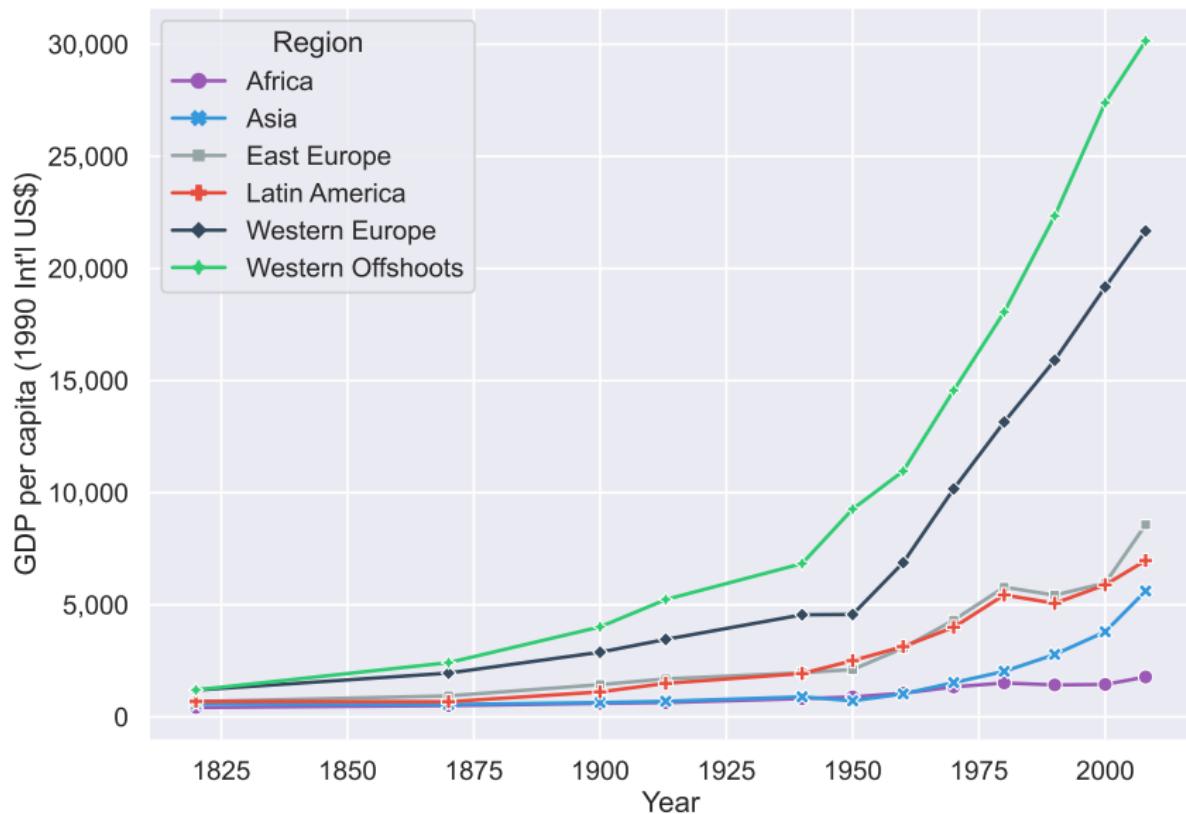
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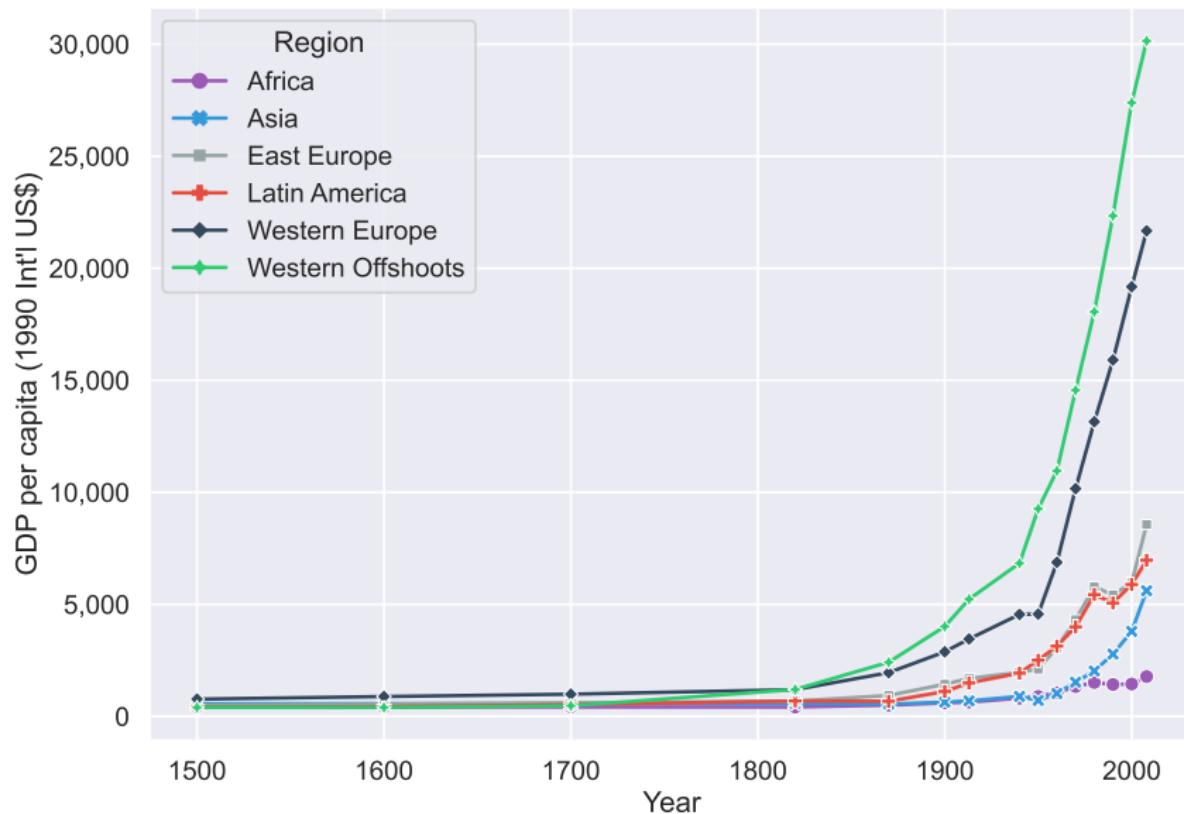
## Fact 3: Last 200 Years are Special

- Income differences were small/non-existent before 1800
- Growth rates were small  $\approx 0$  for most of human history

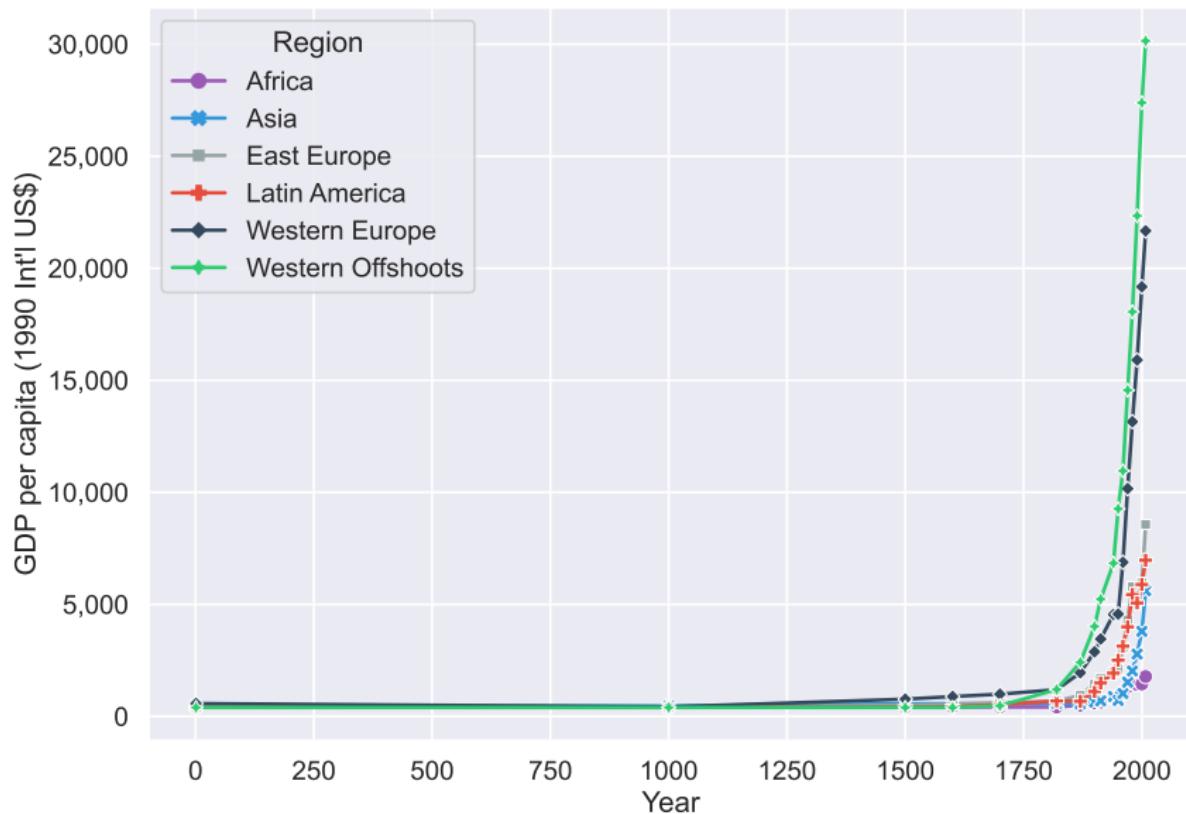
## Divergence across Regions: 1820–2010



## Divergence across Regions: 1500–2010



## Regional Income per Capita: 1–2010

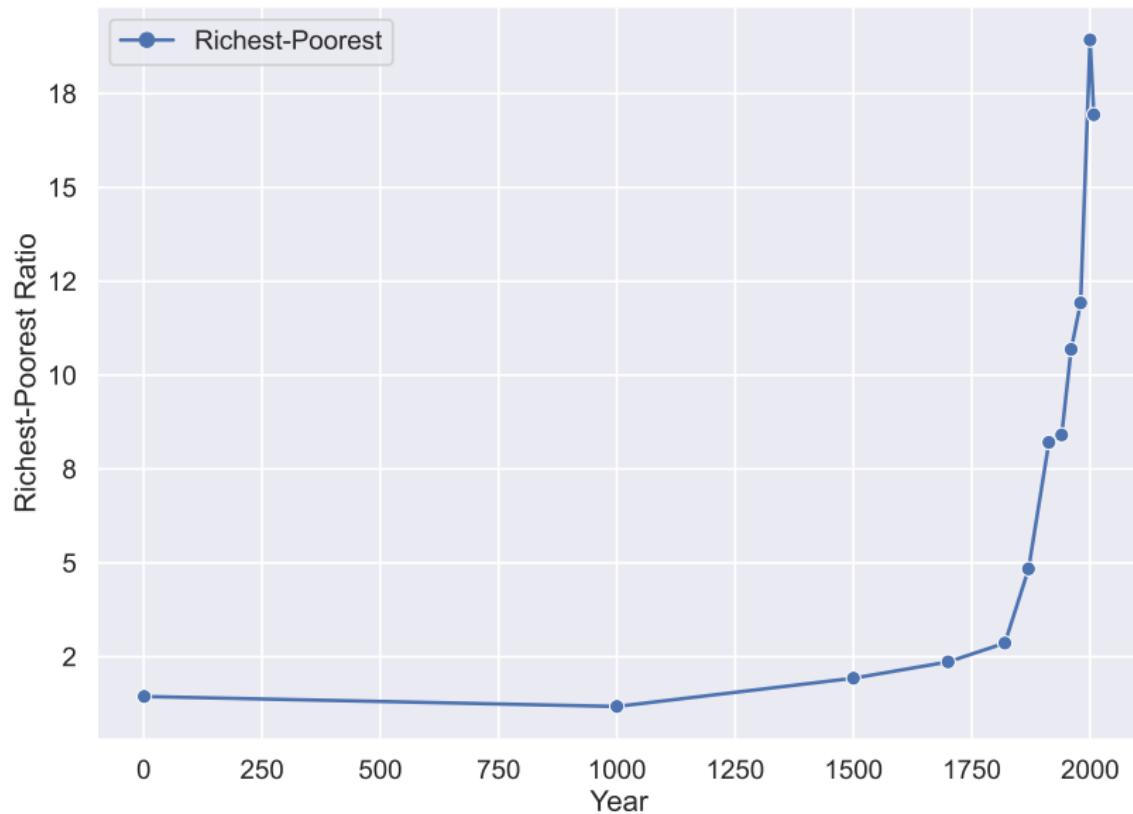


## Evolution of Inequality across Regions: 1–2010

	Income per Capita (1990 Int'l \$)				
	1	1000	1500	1820	2010
Western Offshoots	400	400	400	1,302	29,564
Western Europe	576	427	771	1,455	20,889
Latin America	400	400	416	628	6,767
Asia	456	470	568	591	6,307
Africa	472	425	414	486	2,034
Richest-Poorest Ratio	1.4	1.2	2	3	15

Western Offshoots: USA, Canada, Australia, New Zealand.

## Evolution of Inequality across Regions: 1–2010



## Inferences from Neoclassical/Solow Growth Theory

- Diminishing returns to physical and human capital accumulation
- Diminishing effect of technological progress on productivity

→ Technology is neutral

→ Capital accumulation

→ Human capital

→ Technological progress

→ International trade

→ Policy implications

## Inferences from Neoclassical/Solow Growth Theory

- Diminishing returns to physical and human capital accumulation
- Diminishing effect of technological progress on productivity

⇒ Reduction in inequality

⇒ Convergence

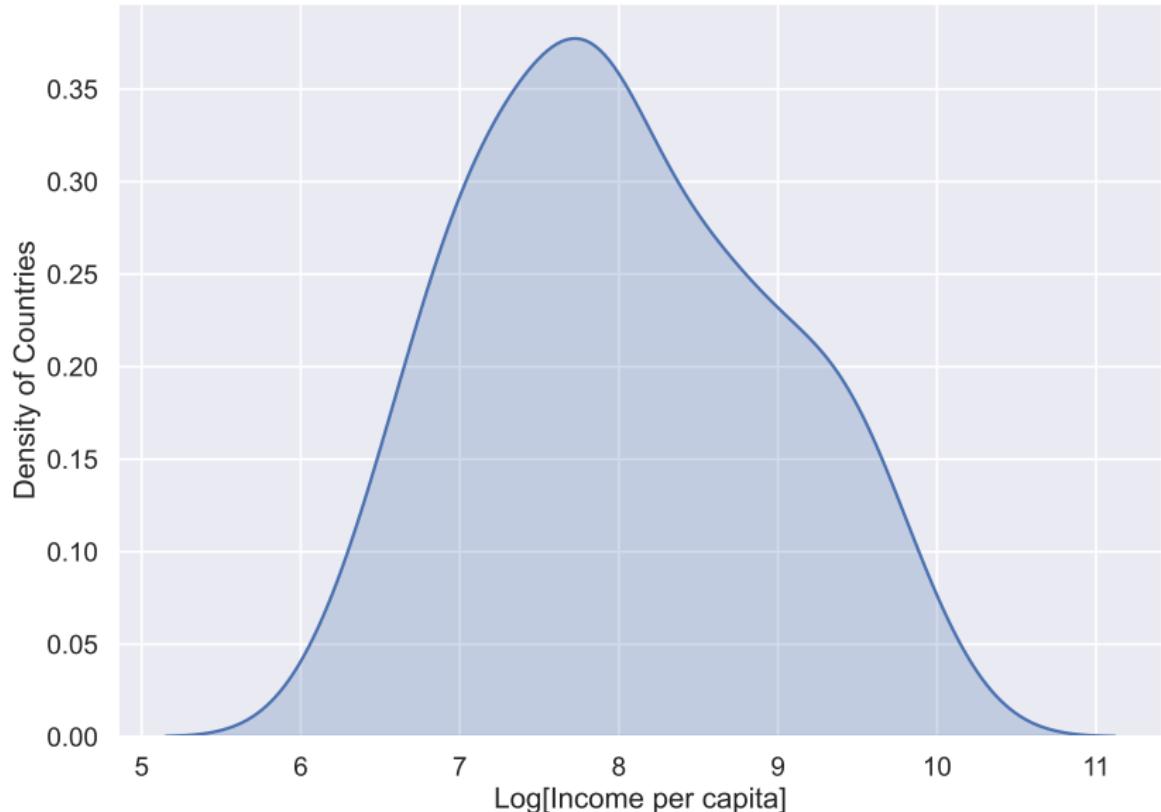
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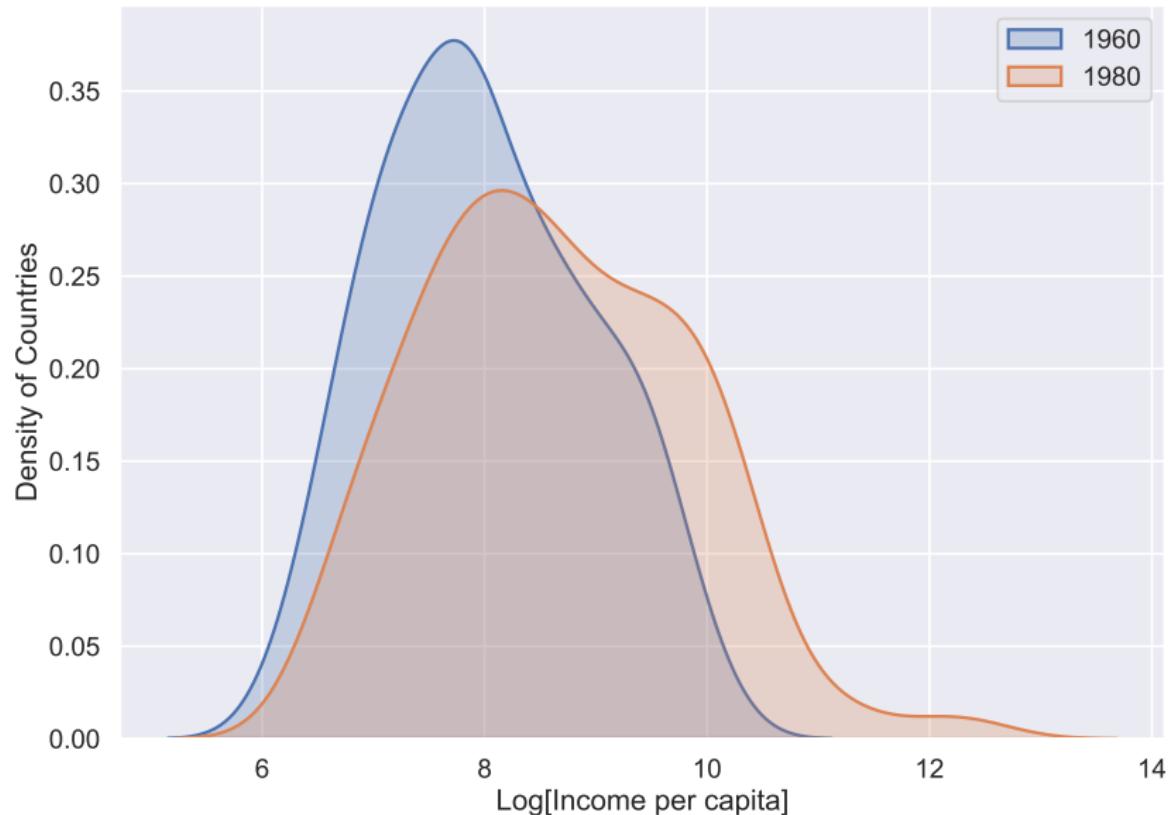
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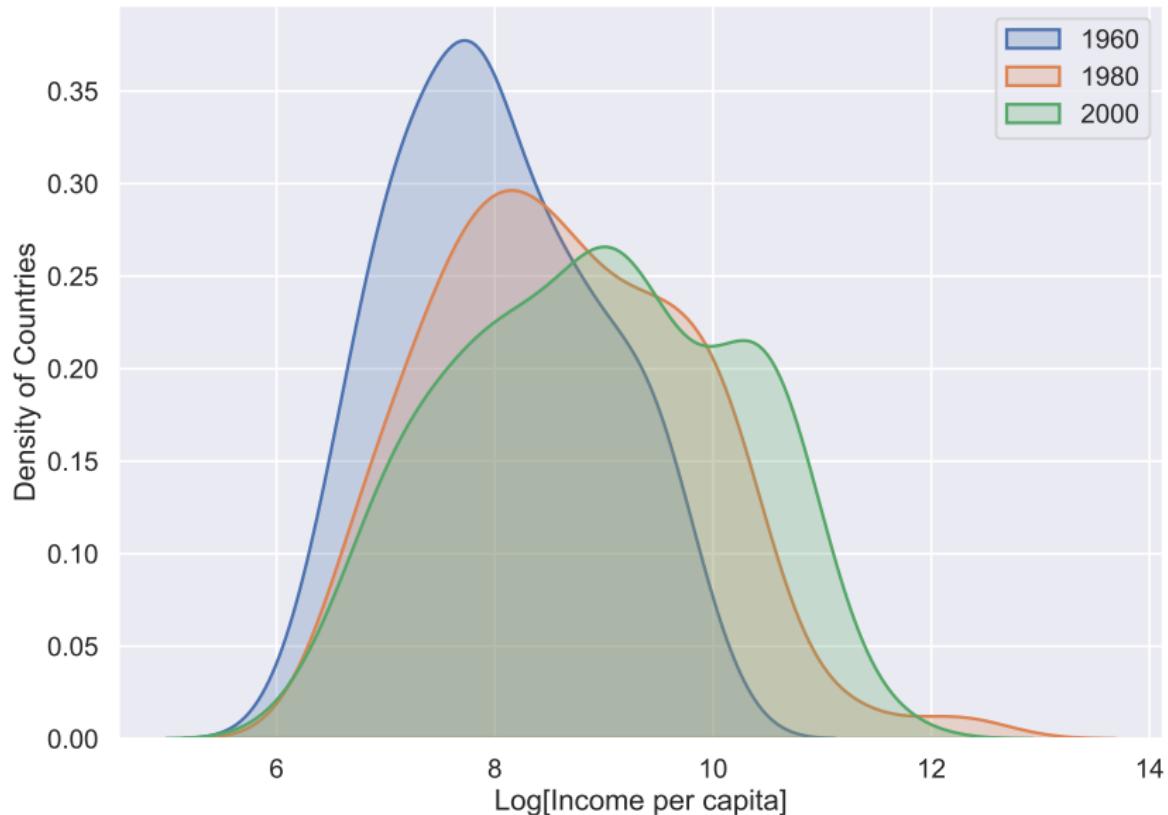
## Income Distribution in 1960



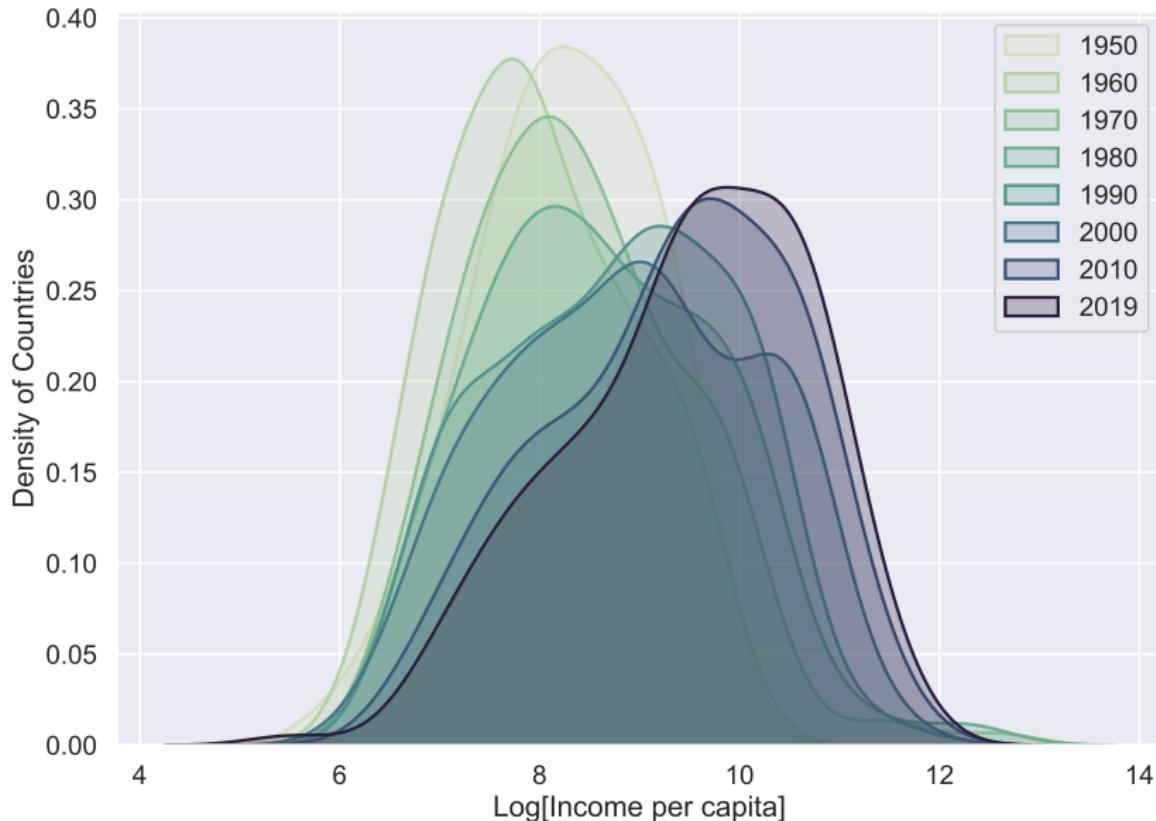
## Lack of Convergence across Nations: 1960–1980



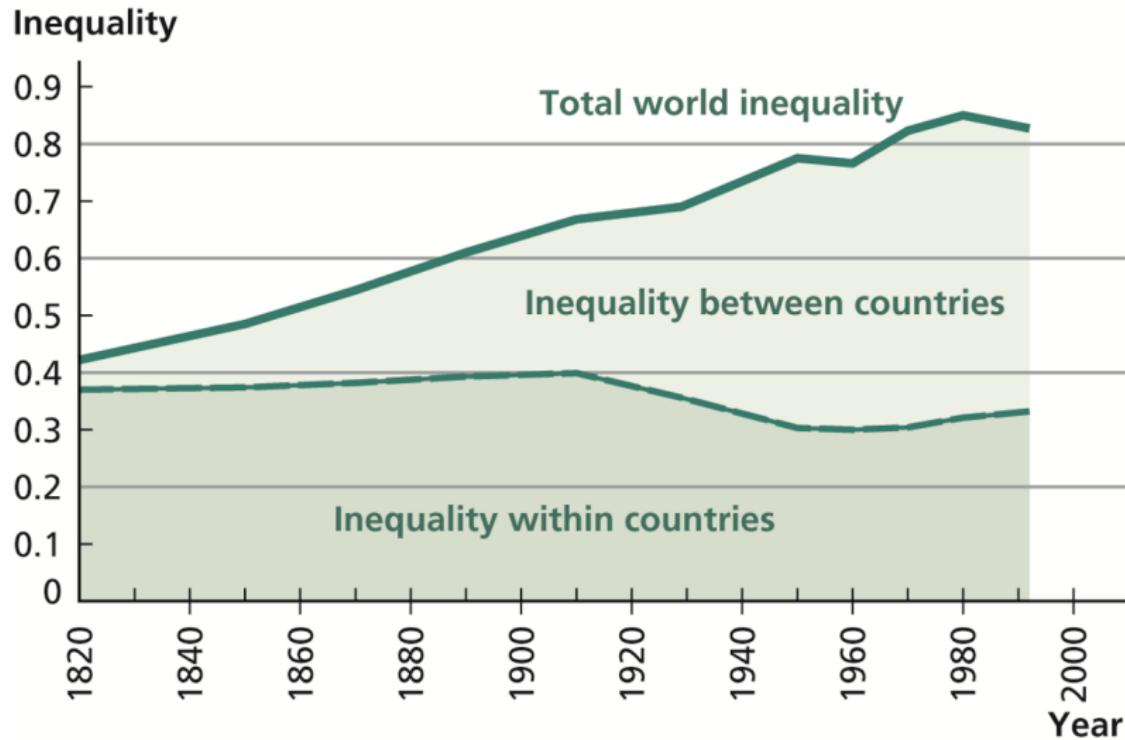
## Lack of Convergence across Nations: 1960–2000



# Lack of Convergence across Nations: 1950–2017

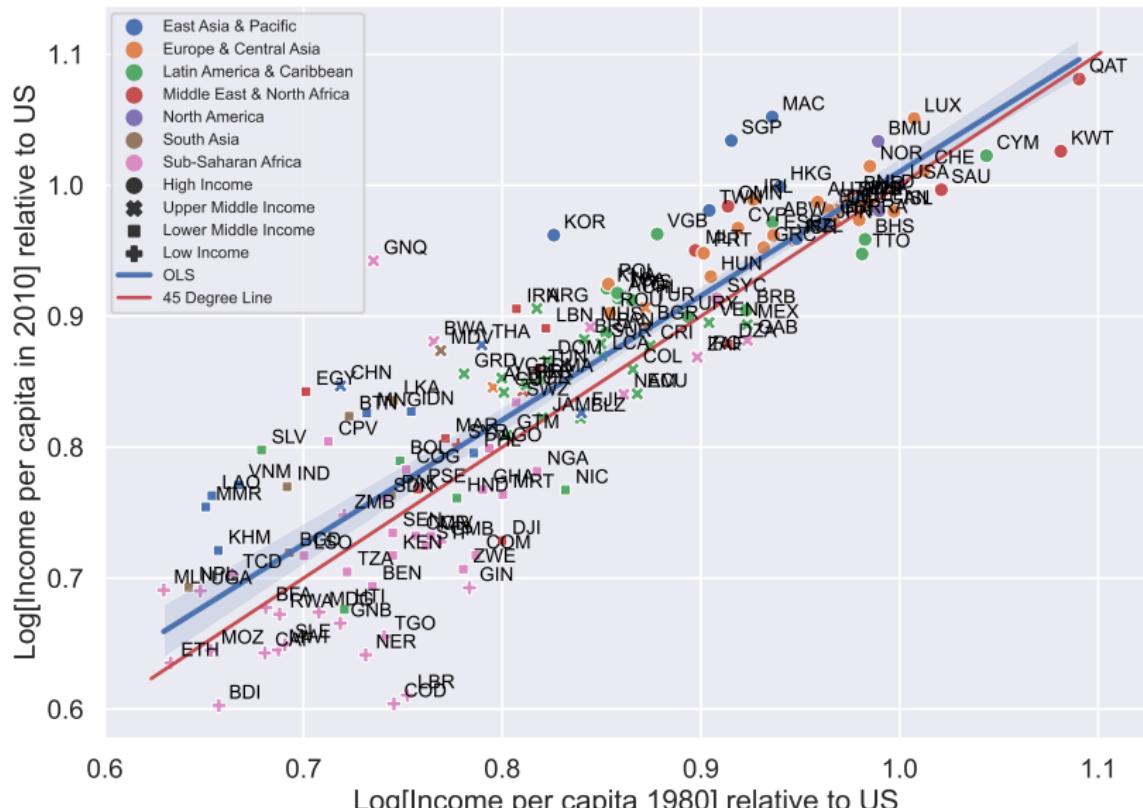


## World Inequality and Its Components



Source: Bourguignon and Morrison (2002).

# Persistent Inequality across Nations: 1980–2010



## Fundamental Research Questions

- What is the origin of the vast inequality in income per capita across countries and regions?
- What accounts for the divergence in per-capita income across countries in the past two centuries?
- What are the factors that inhibited the convergence of poor economies toward richer ones in the past decades?
- What is the role of deep-rooted factors in explaining the observed patterns of comparative development?

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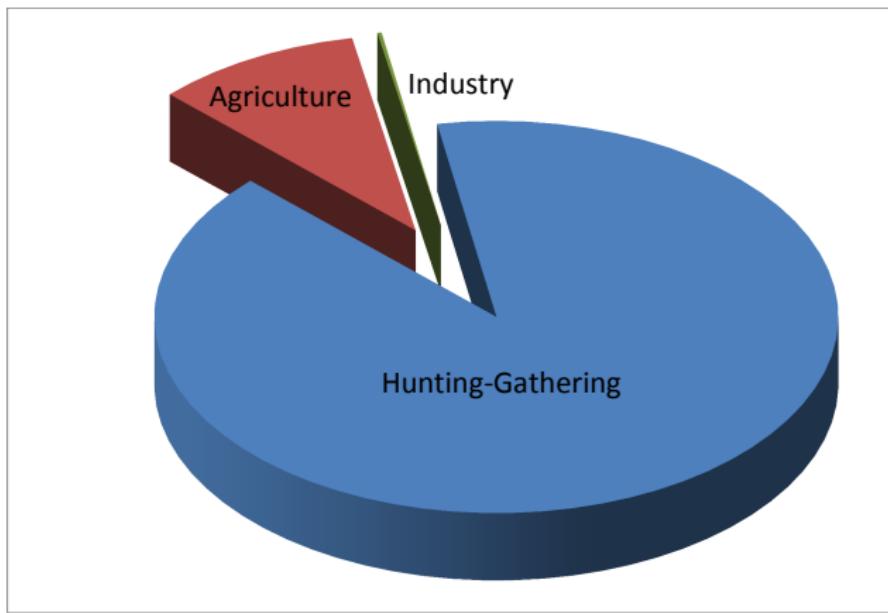
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## Phases of Development: Modes of Production



## Phases of Development: Standard of Living

- The Malthusian Epoch
- The Post-Malthusian Regime
- The Modern Growth Regime

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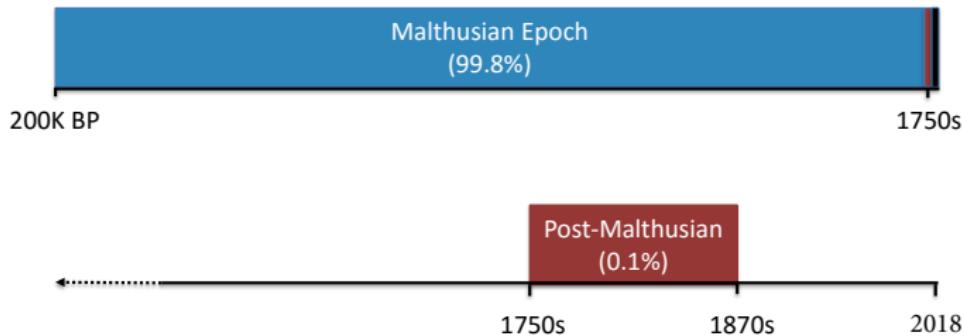
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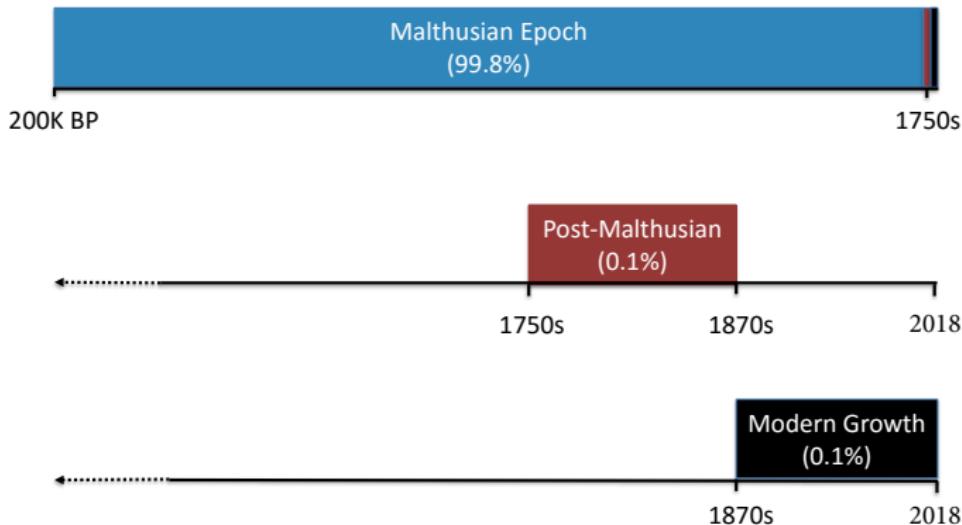
# Phases of Development: Timeline of the Most Developed Economies



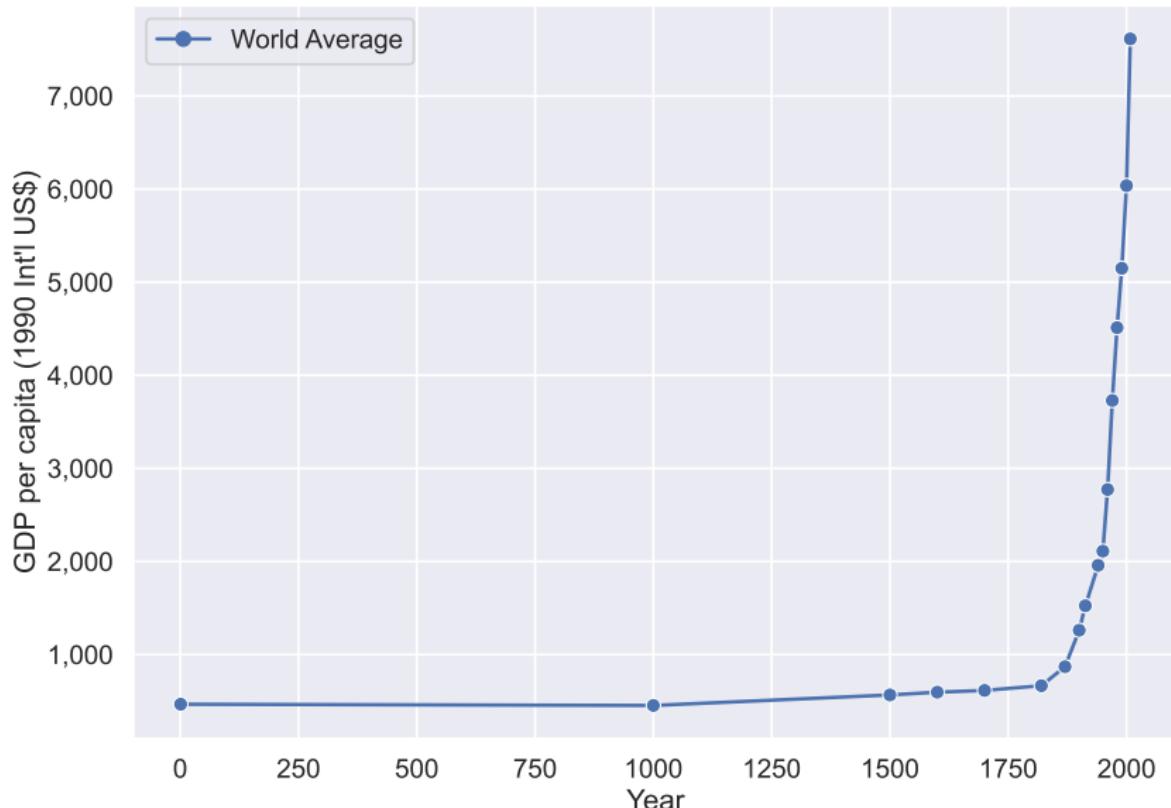
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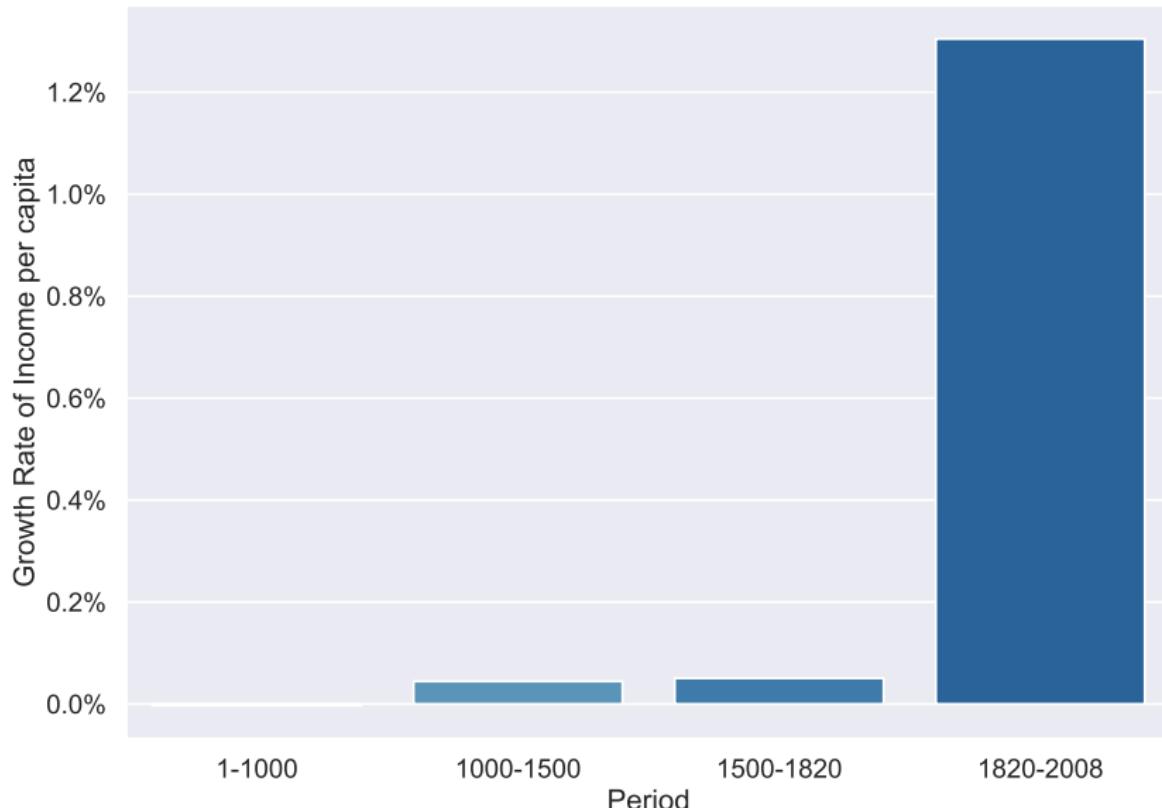
# Phases of Development: Timeline of the Most Developed Economies



## World Income per Capita: 1–2010



## Growth of World Income per Capita: 1–2010



## The Malthusian Epoch

- Characterized by Malthusian dynamics and the absence of economic growth
- Central characteristics of the period:
  - Population growth rate > economic growth rate
  - High birth rates & death rates
  - Limited technological progress
  - Limited economic development
- Technological progress over this period
  - Agricultural improvements (e.g., crop rotation, fertilizers)
  - Industrialization and urbanization
  - Improved transportation and communication
  - Increased agricultural productivity through better land management
- Technologically advanced & land-rich economies:
  - Europe (UK, France, Germany)
  - North America (USA, Canada)
  - Russia
  - Japan

## The Malthusian Epoch

- Characterized by Malthusian dynamics and the absence of economic growth
- Central characteristics of the period:
  - Positive effect of income on population growth
  - Diminishing returns to labor (reflecting the existence of fixed factor)
- Technological progress over this period
  - Increase in the number of people per unit of land
  - Increase in the number of people per unit of labor
  - Increase in the number of people per unit of capital
- Technologically advanced & land-rich economies:

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- Technological progress over this period
  - Agricultural revolution
  - Industrial revolution
  - Technological advances in transportation and communication
- Technologically advanced & land-rich economies:

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Technological progress during the Malthusian epoch was slow and incremental, often limited to improvements in agriculture and basic manufacturing processes. Key technological advancements included:

- Irrigation systems and water management techniques.
- The development of new agricultural tools and methods.
- Improvements in textile production and weaving technologies.
- Advances in metallurgy and mining.

- Technologically advanced & land-rich economies:

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## Malthusian Dynamics - Prominent Examples

- The dynamics of Irish economy (1650 - 1850)
  - Triggered by the cultivation of a new world crop – potato
- The dynamics of the Chinese Economy (1500 - 1800)
  - Triggered by the introduction of the New World crops
- The dynamics of the English economy (1348 - 1700)
  - Triggered by the Black Death

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## Malthusian Dynamics - Ireland (1650 - 1850)

- The Columbian Exchange  $\implies$  massive cultivation of potato post-1650
  - 1650-1840s
  - Potato becomes the staple food of the poor in Ireland
  - Potato crop grows rapidly, feeding a growing population
  - Potato blight destroys crops  $\implies$  Great Famine
  - Potato crop grows rapidly, feeding a growing population

## Malthusian Dynamics - Ireland (1650 - 1850)

- The Columbian Exchange  $\implies$  massive cultivation of potato post-1650
  - 1650-1840s
    - Population increases from 2 to 6 million
    - Income per capita increases only very modestly
  - 1845-1852 Potato blight destroys crops  $\implies$  Great Famine

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## Malthusian Dynamics - China (1500 - 1800)

- Superior agricultural technology

- 1500-1820

China's population grew rapidly during the Ming and early Qing dynasties, reaching approximately 400 million by 1800. This growth was driven by several factors:

- The introduction of new crops like maize and sweet potato, which increased food production.
- Advanced agricultural techniques, including the use of oxen-drawn plows and irrigation systems.
- Government policies that encouraged population growth and land reclamation.
- A stable political environment under the Ming and early Qing emperors.

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    - Population increases from 103 to 381 million
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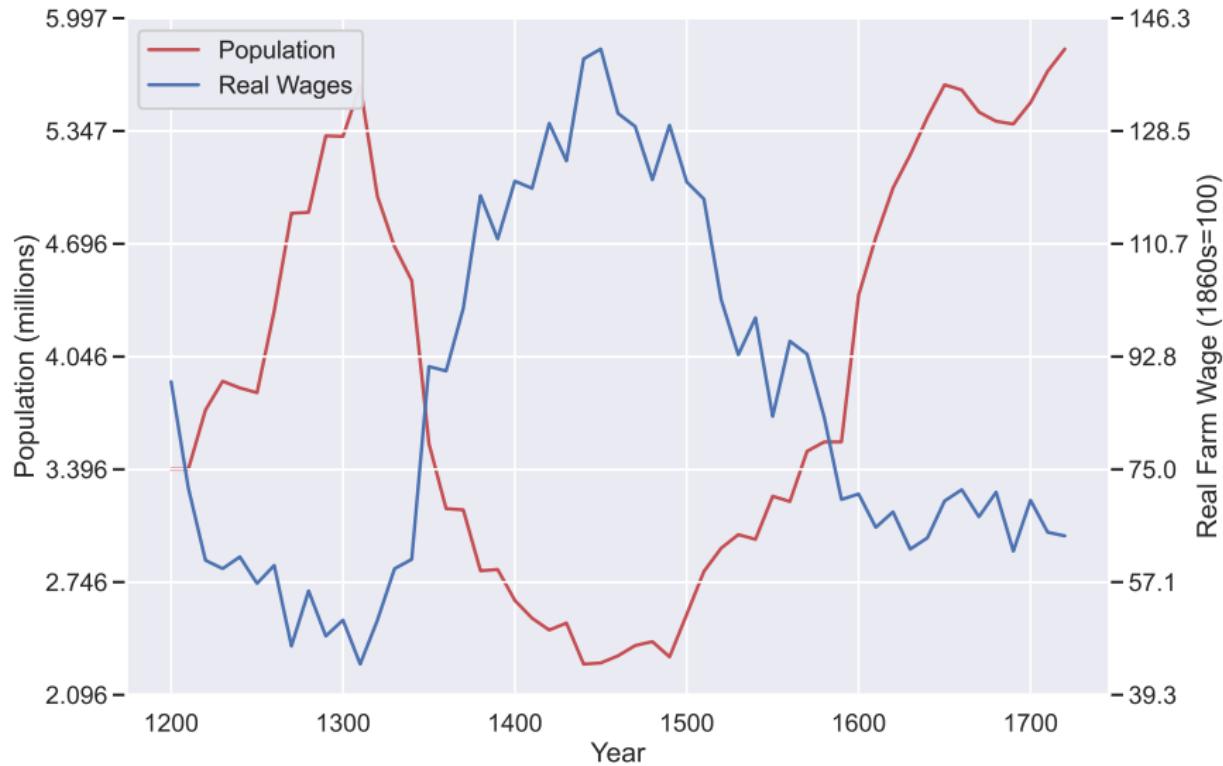
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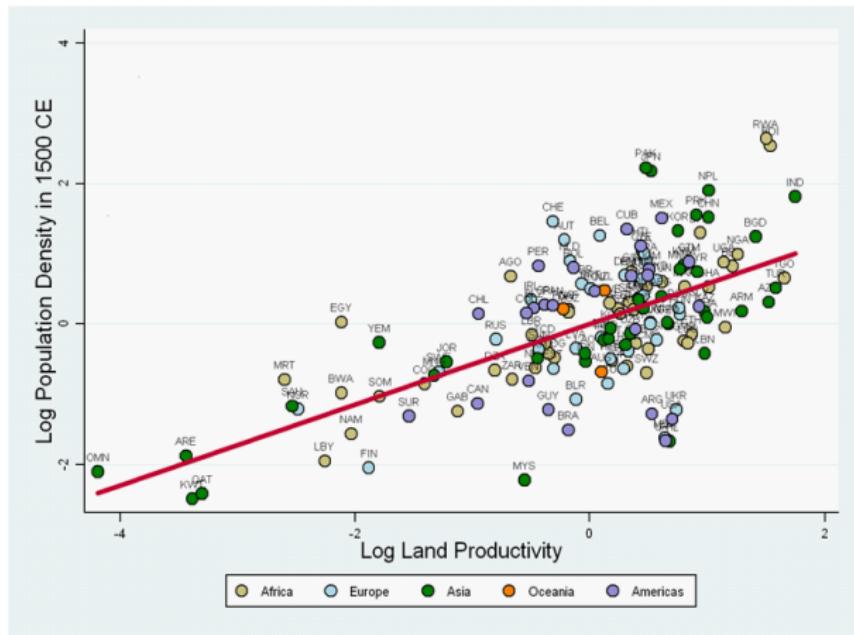
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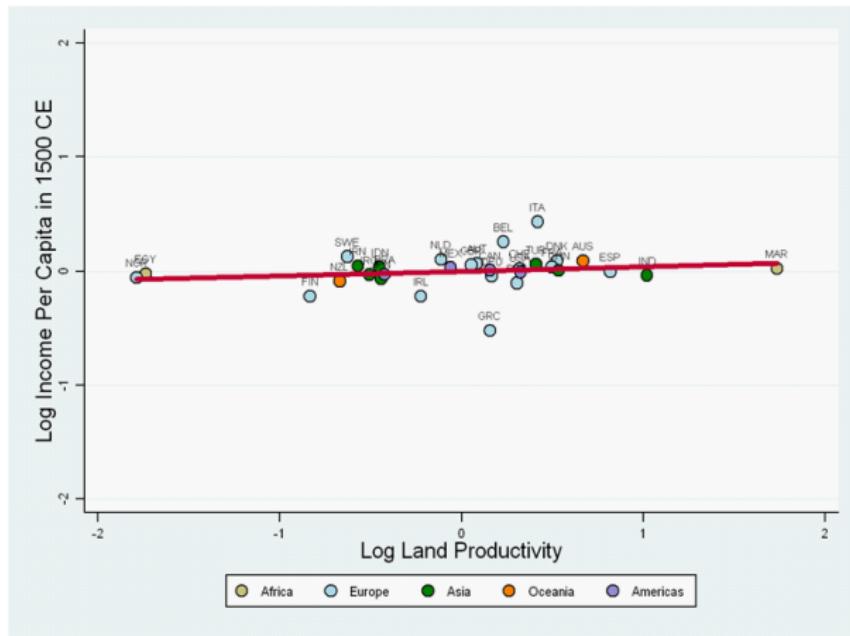
## Malthusian Adjustments to the Black Death: England, 1348–1750



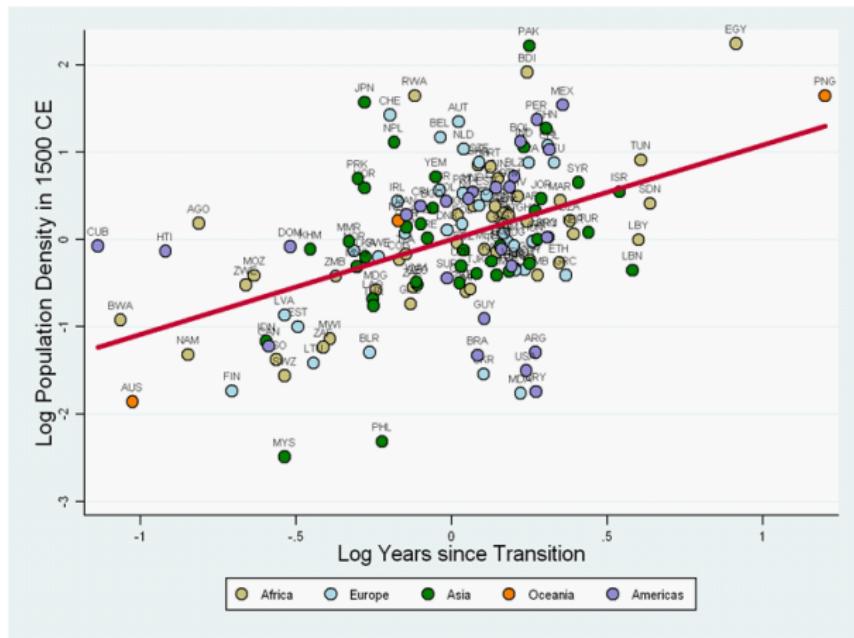
# Land Productivity and Population Density in 1500



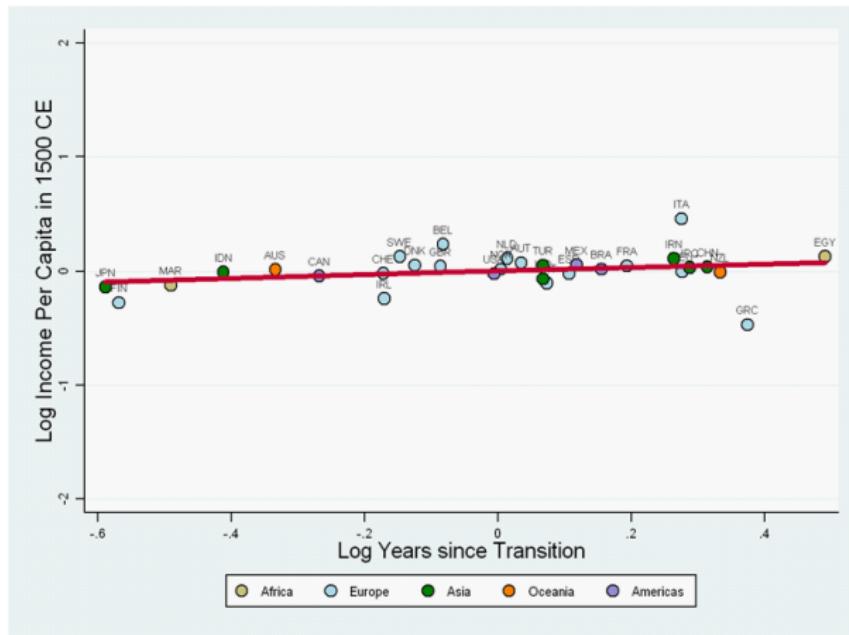
# Land Productivity and Income per Capita in 1500



# Technology and Population Density in 1500



# Technology and Income per Capita in 1500



## The Post-Malthusian Regime

- Characterized by the onset of economic growth:
  - Technological progress accelerates
  - Income per capita still has a positive effect on population growth
  - Technological progress:
    - Technological progress is endogenous and self-reinforcing
    - Technological progress is exogenous and self-reinforcing

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- Characterized by the onset of economic growth:
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  - Income per capita still has a positive effect on population growth
  - Technological progress:
    - Accelerates economic growth
    - Reduces population pressure

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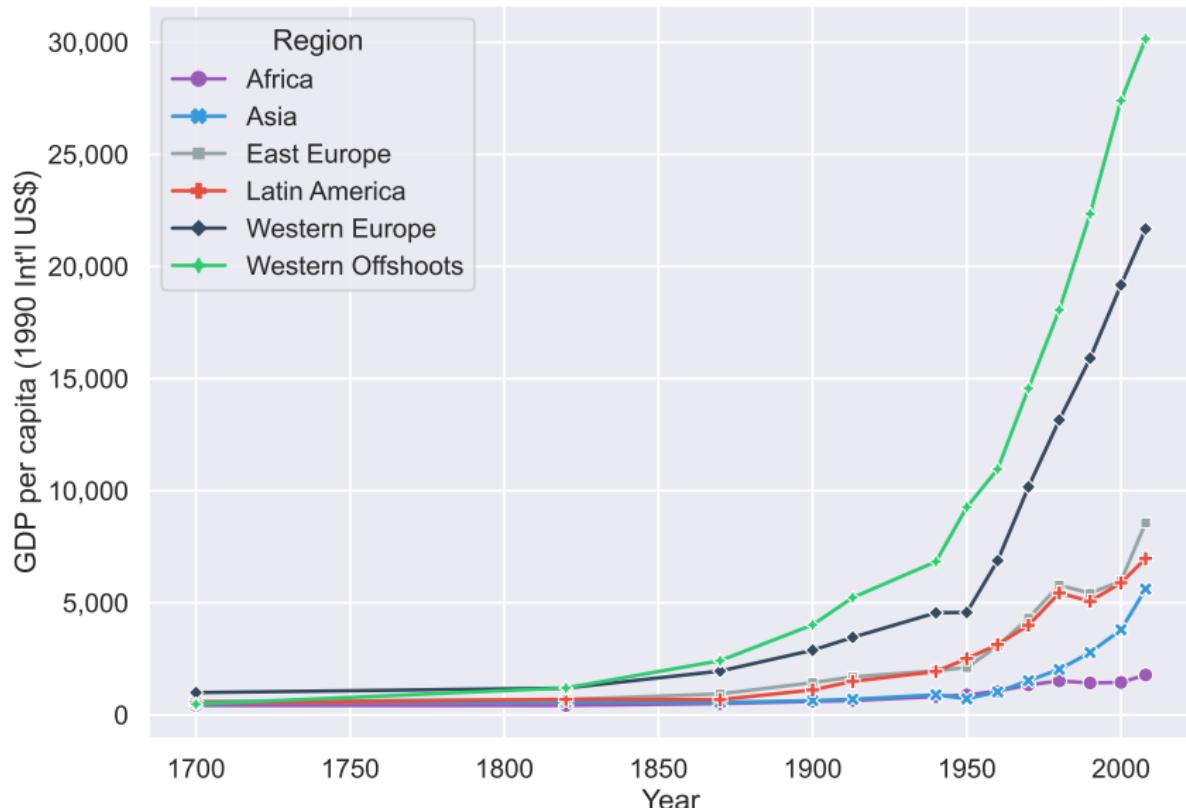
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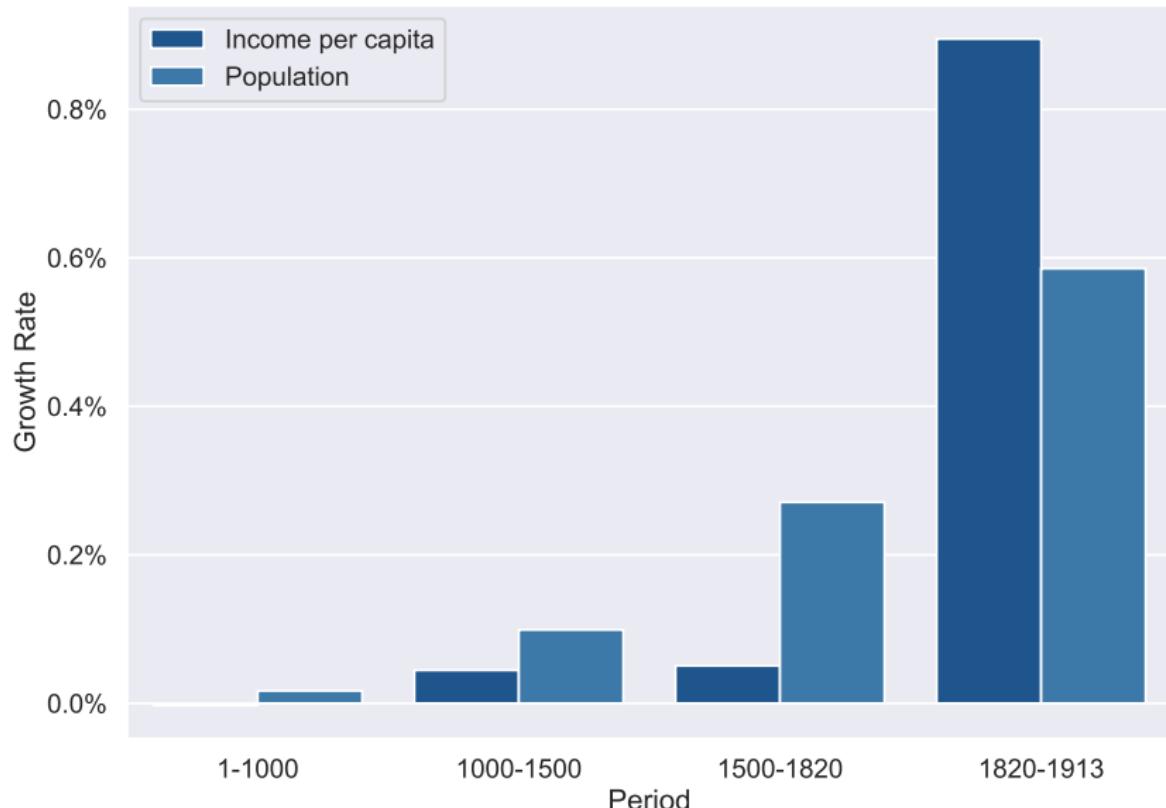
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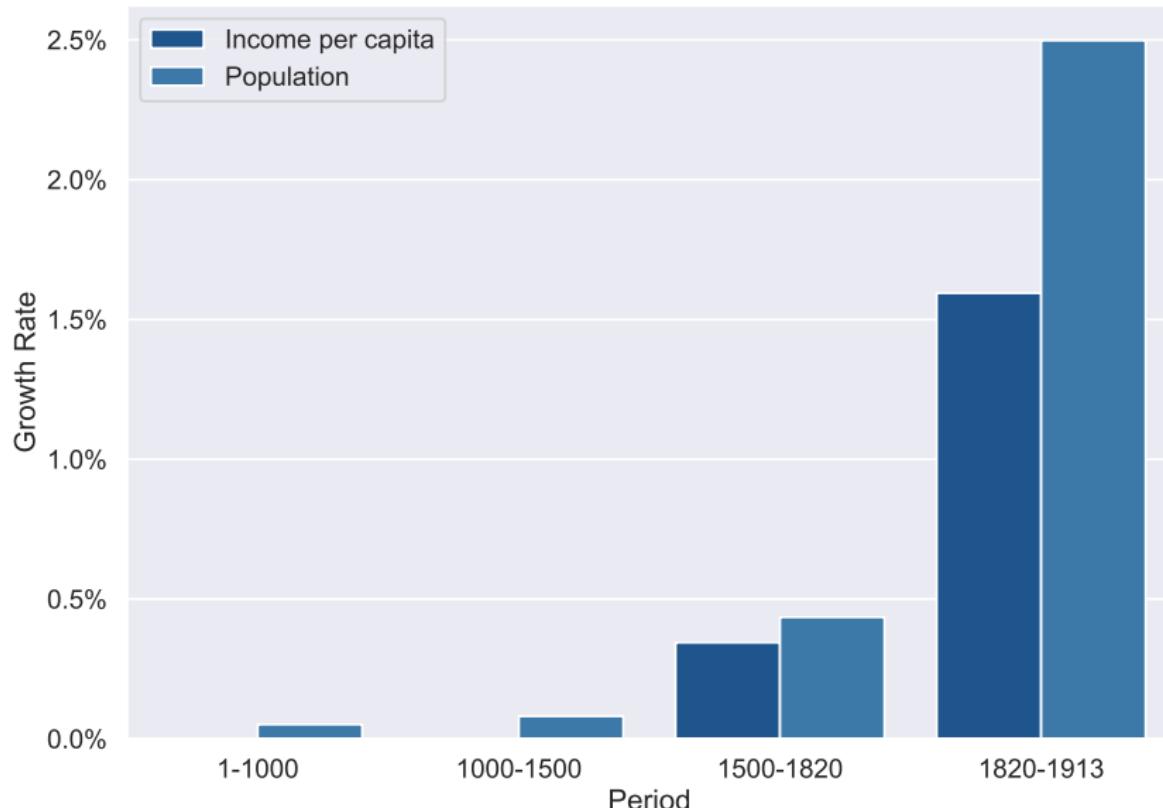
## Regional Variation in the Timing of the Take-off



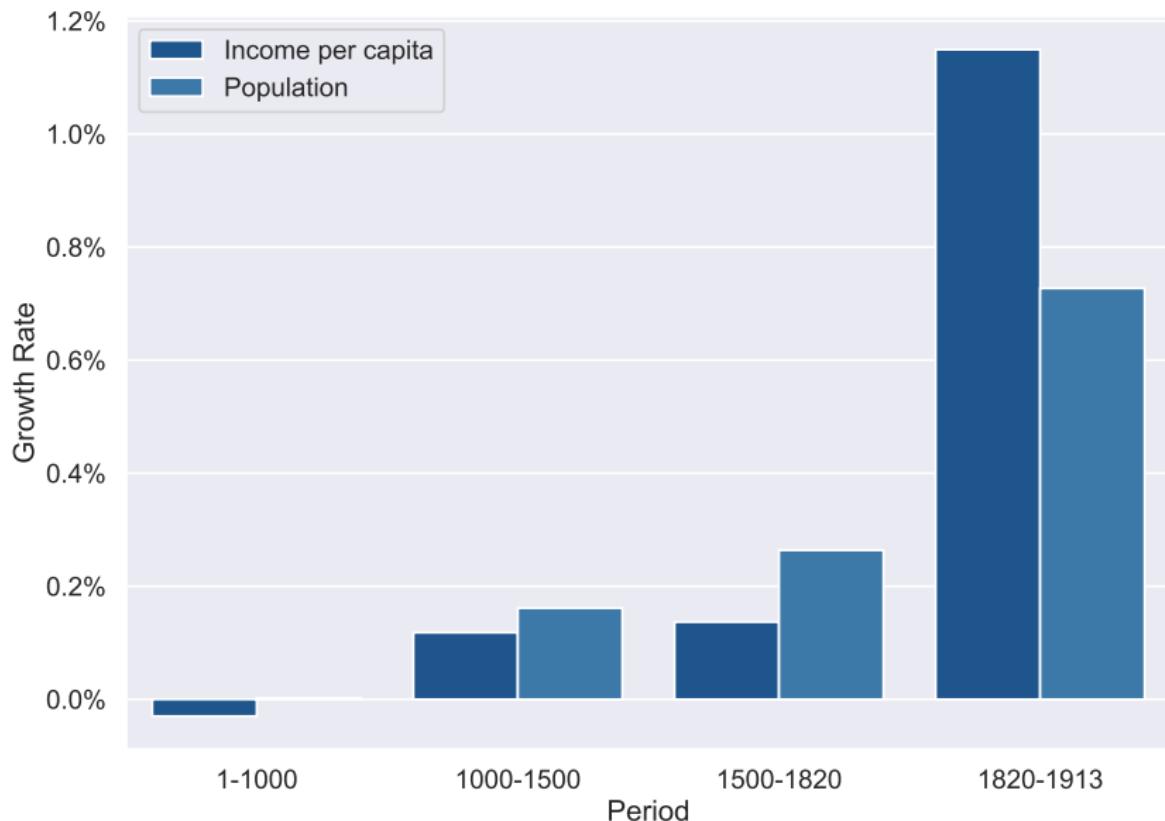
## Take-off: Growth of Population & Income per Capita – World



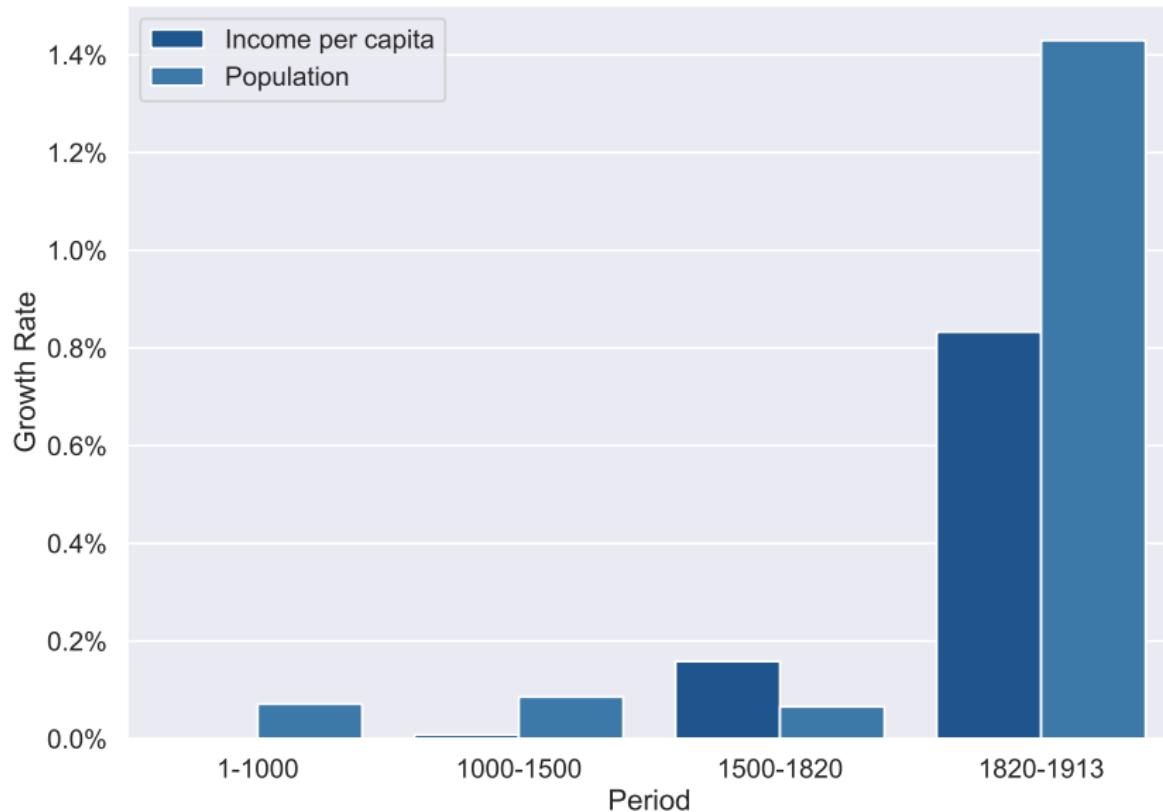
## Take-off: Growth of Population & Income per Capita – Western Offshoots



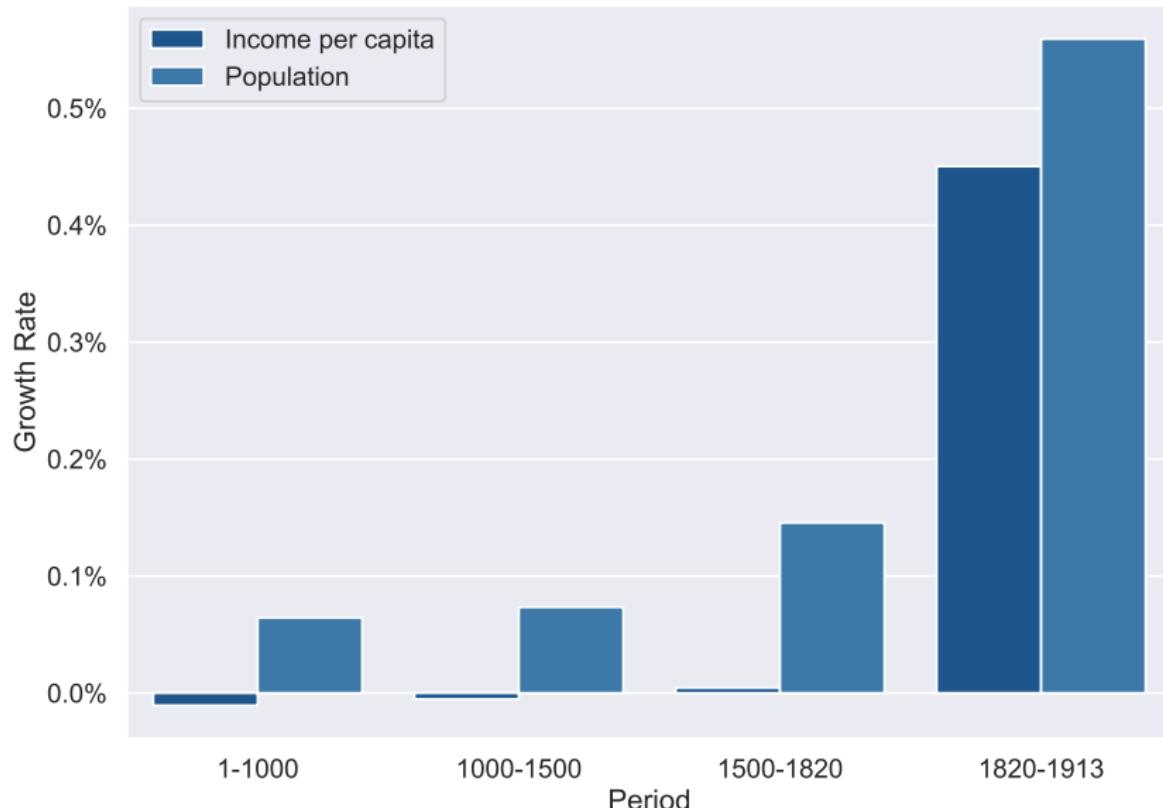
## Take-off: Growth of Population & Income per Capita – Western Europe



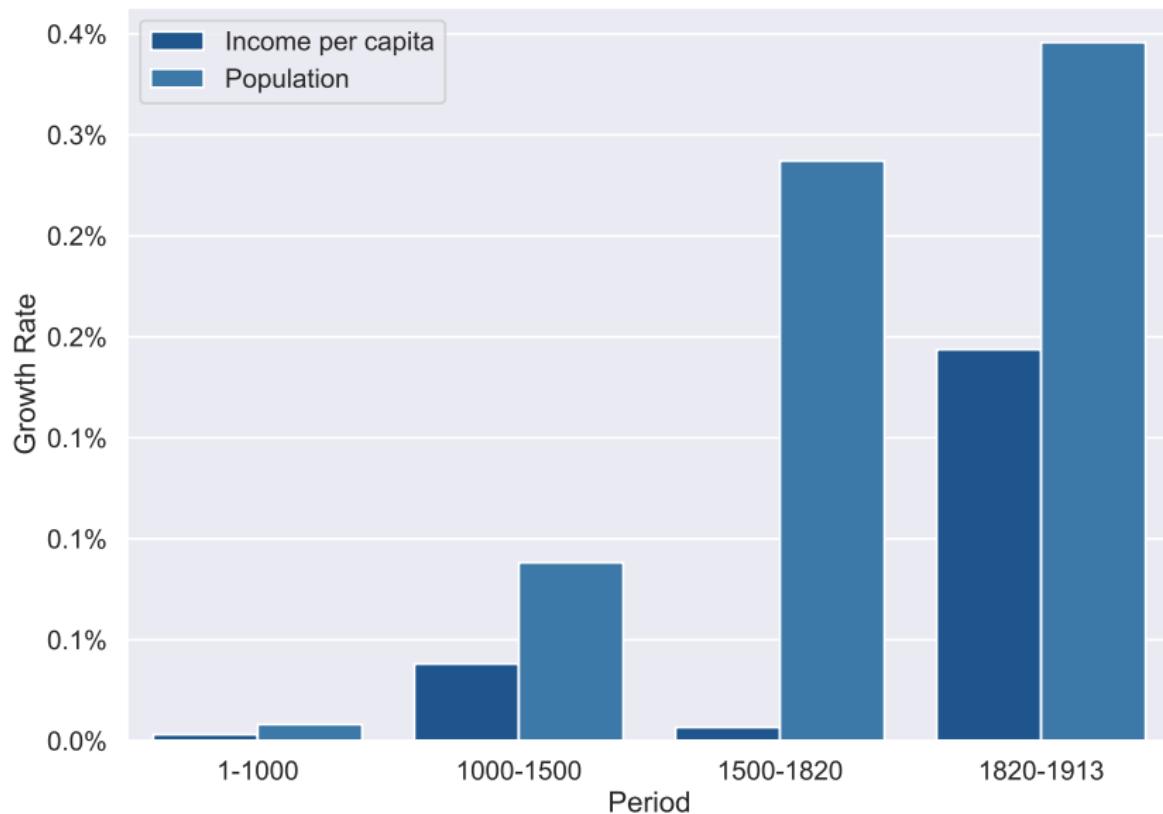
## Take-off: Growth of Population & Income per Capita – Latin America



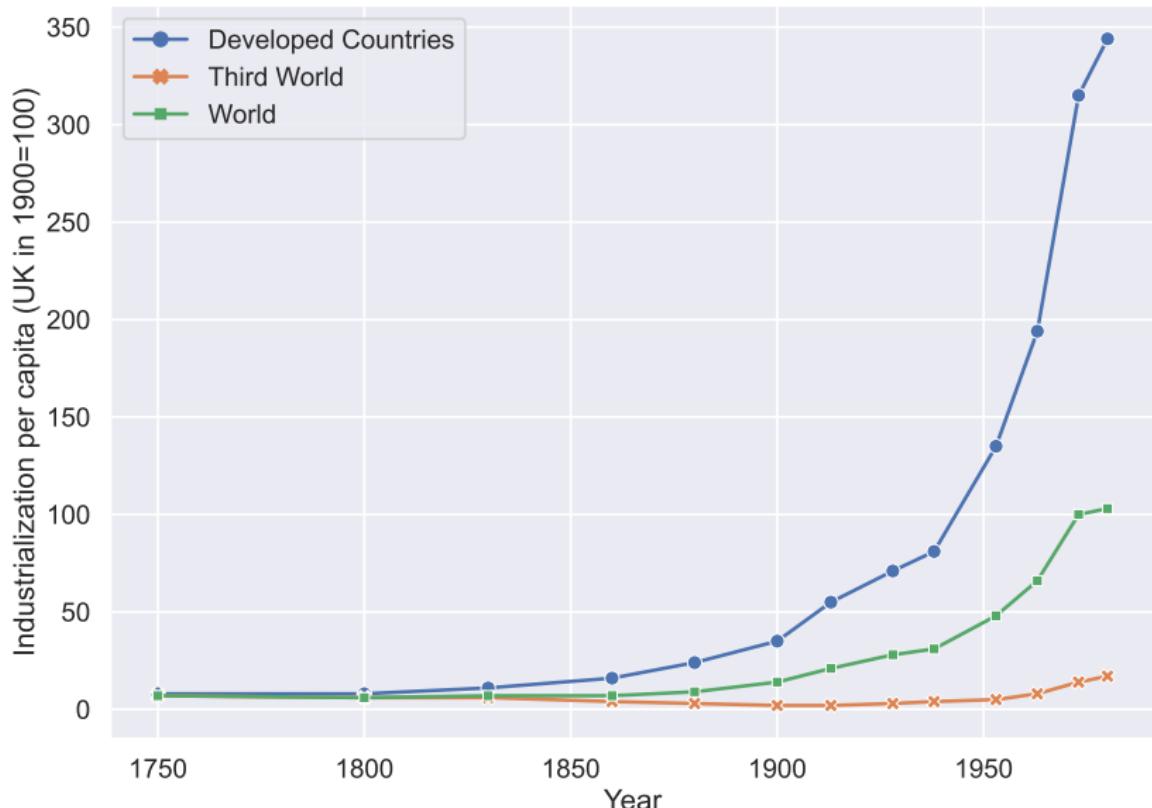
## Take-off: Growth of Population & Income per Capita – Africa



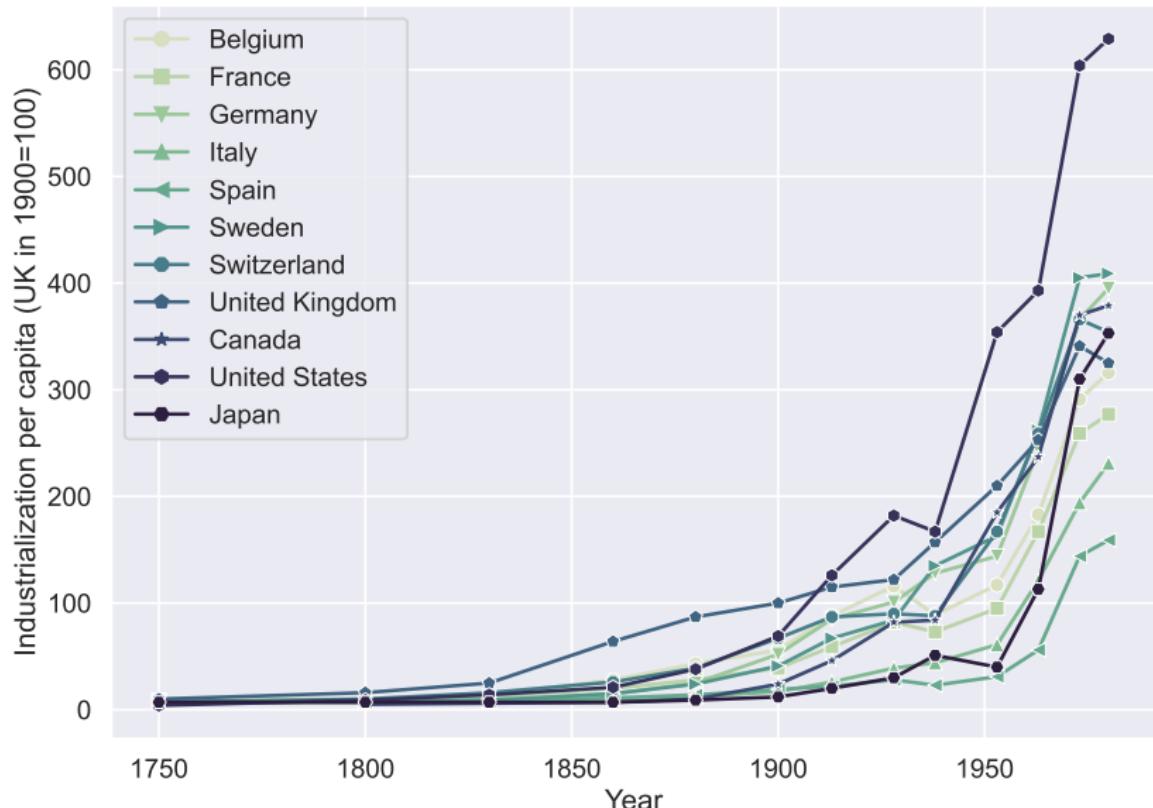
## Take-off: Growth of Population & Income per Capita – Asia



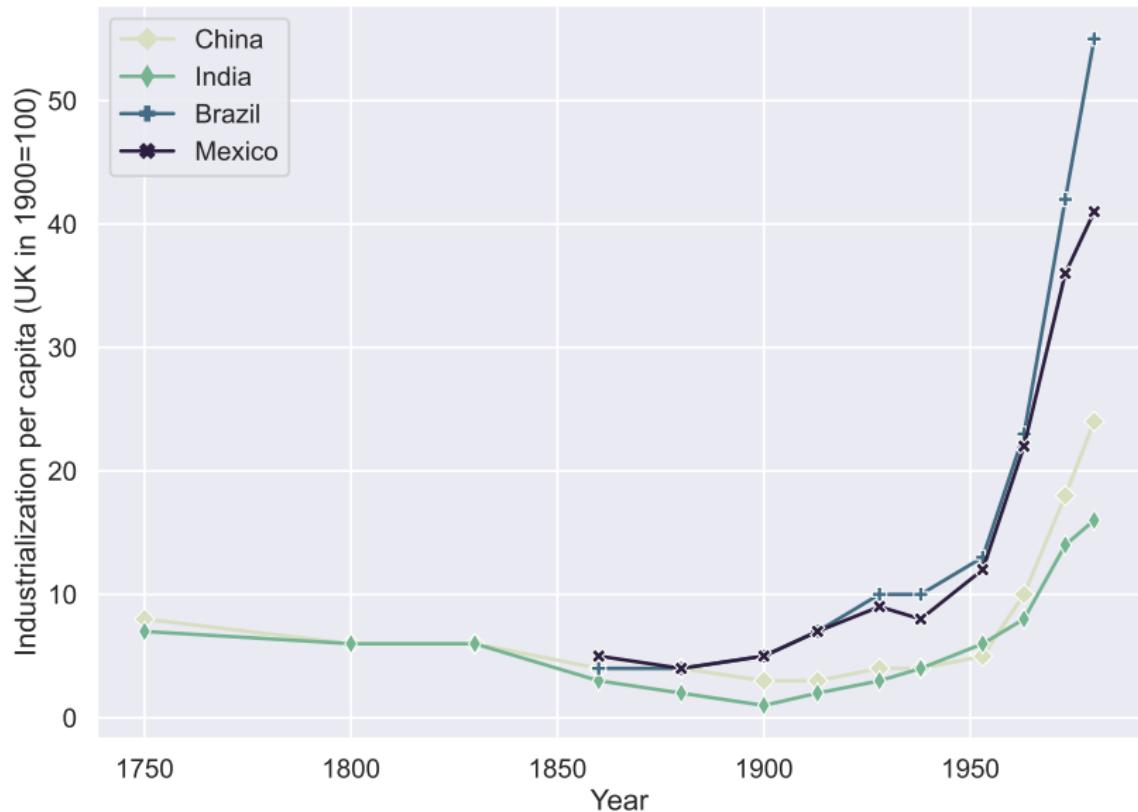
## Take-off & Increased Industrialization per Capita



## Take-off & Increased Industrialization per Capita – Developed Countries



## Take-off in Developed Economies & Decline in Industrialization in LDCs



## The Modern Growth Regime

- Sustained economic growth

- Acceleration in technological progress

→ Technological progress → Capital accumulation → Output growth

- Human capital formation

→ Technological progress → Capital accumulation → Output growth  
→ Education → Health → Productivity

- The decline in population growth

→ Technological progress → Capital accumulation → Output growth  
→ Decline in population growth → Capital accumulation

- Technological progress, human capital formation & decline in population growth

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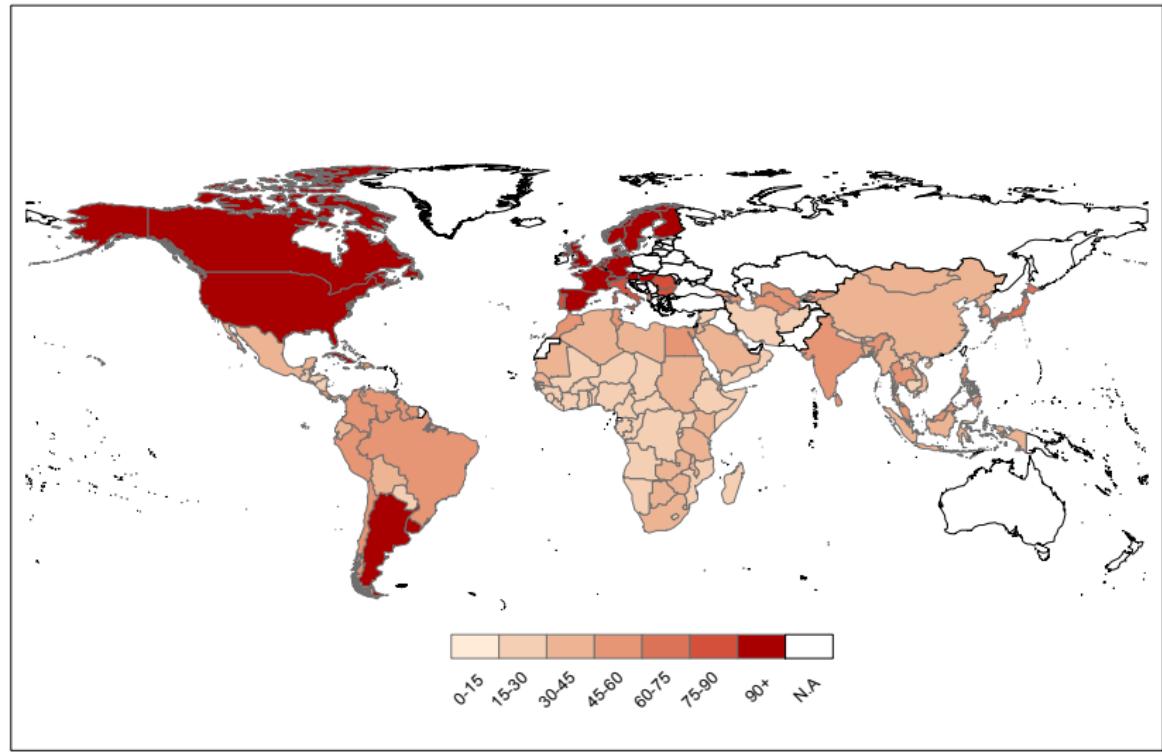
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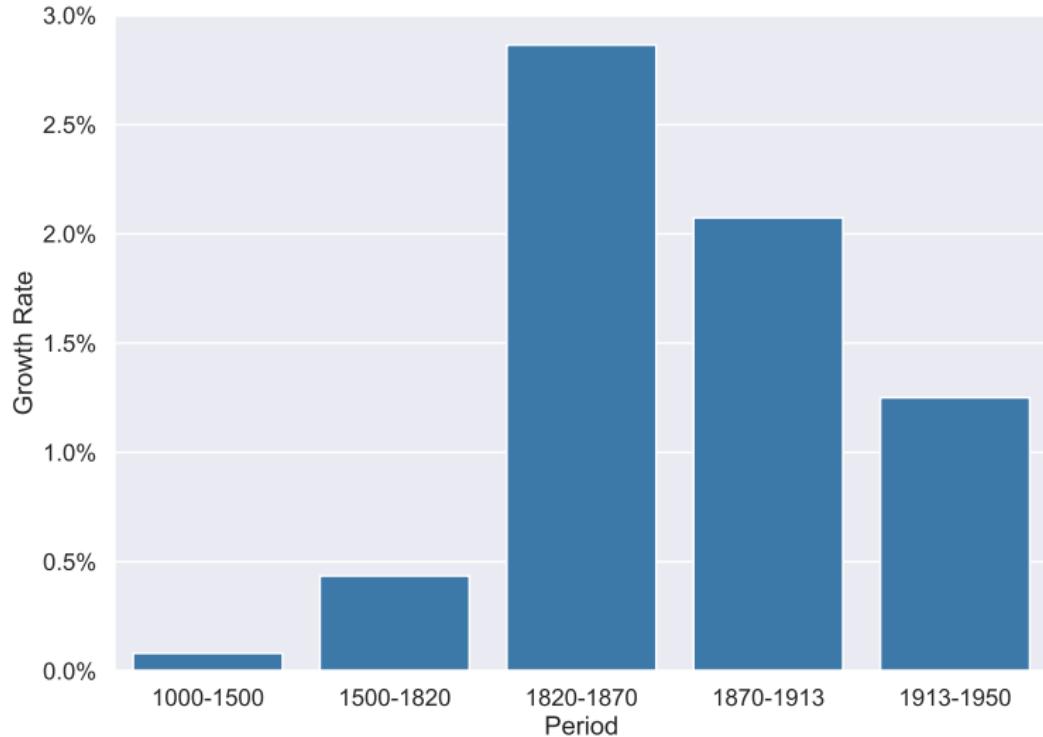
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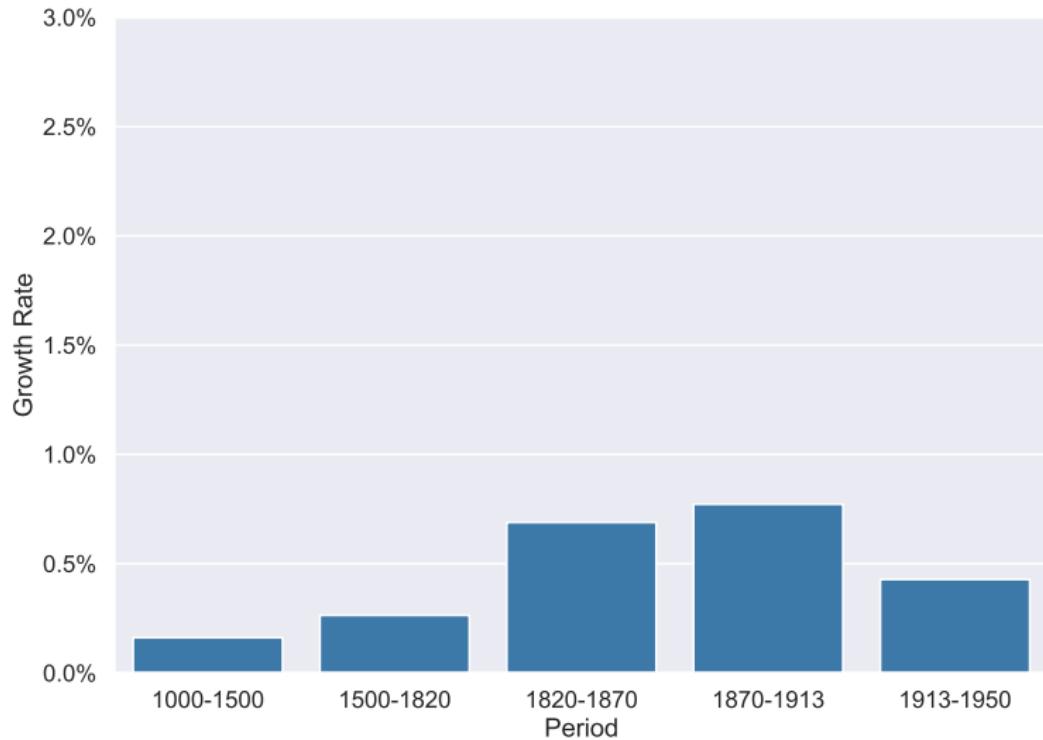
## Variation in Years Elapsed since the Onset of the Fertility Decline



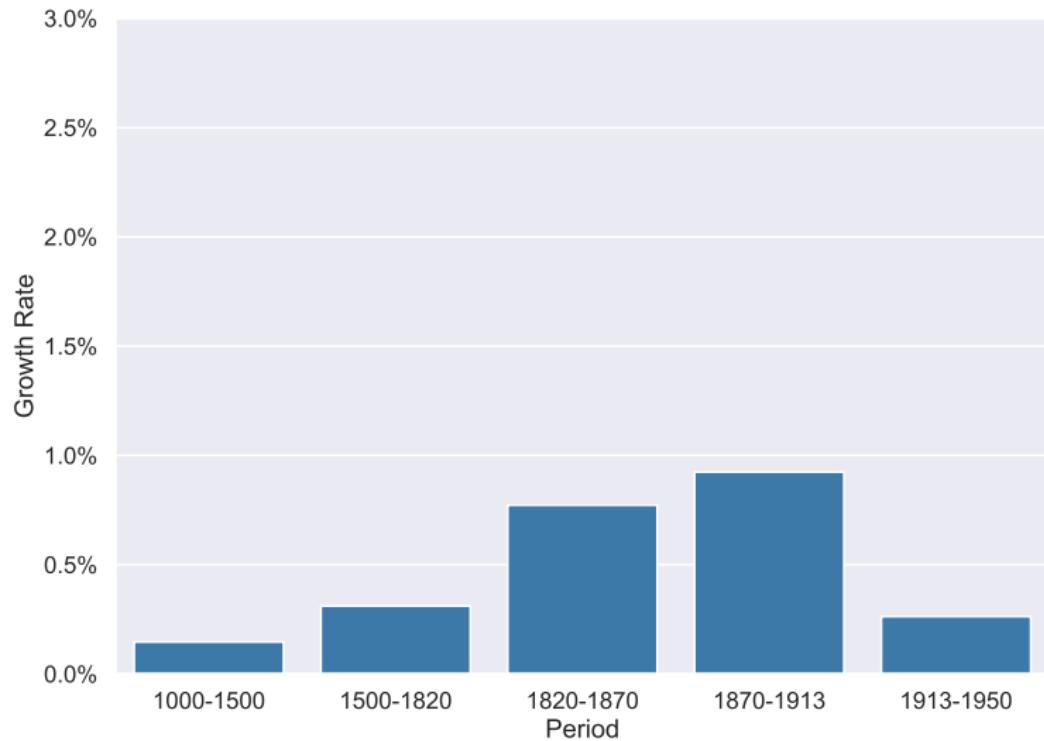
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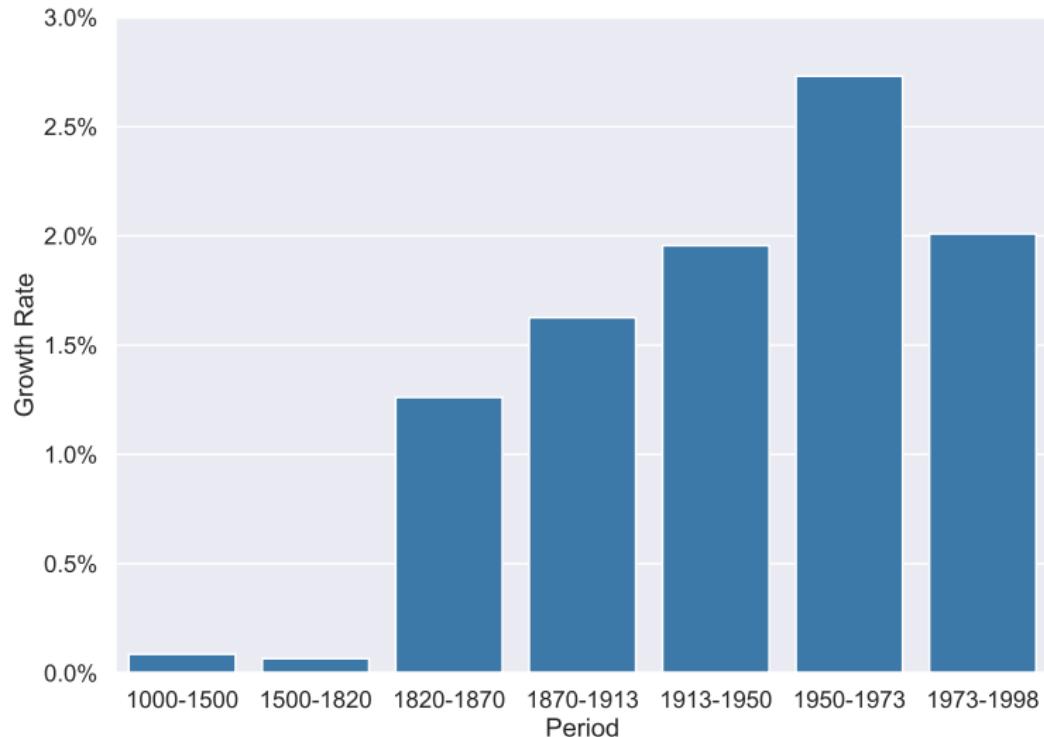
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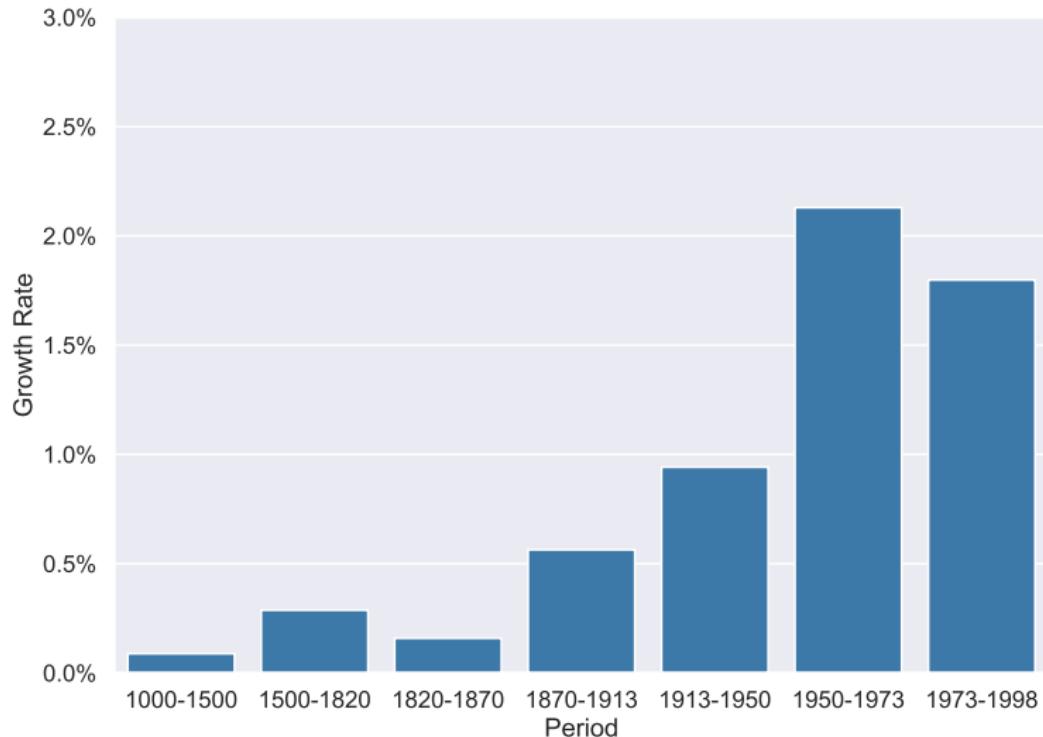
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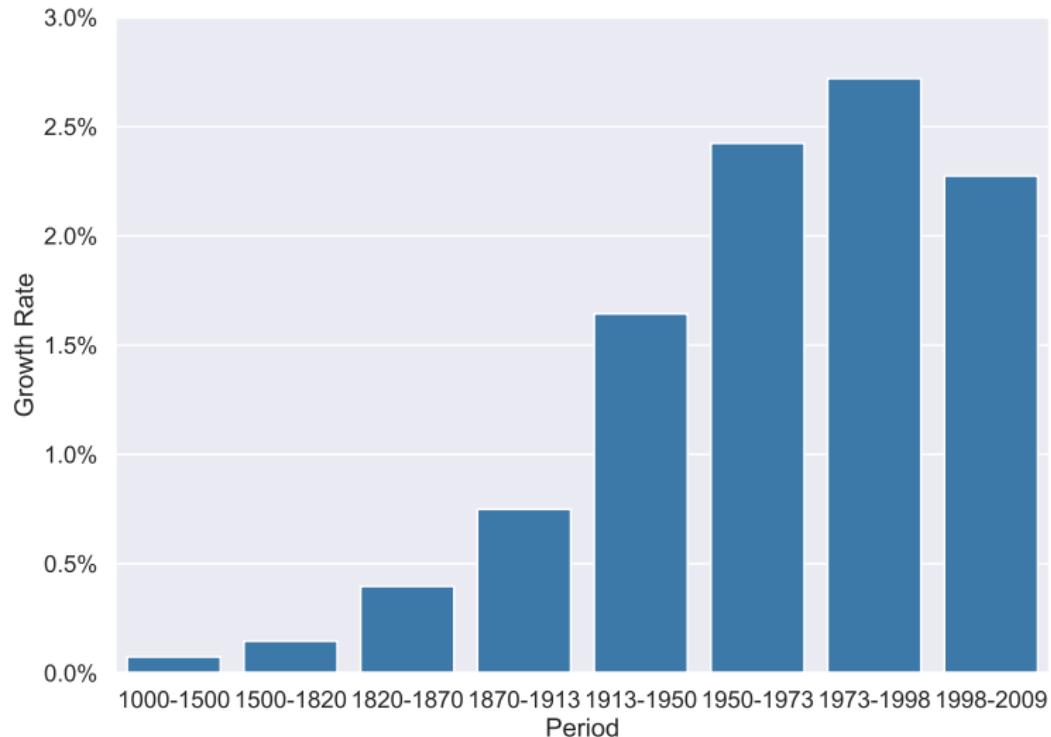
## Late Fertility Decline – Latin America



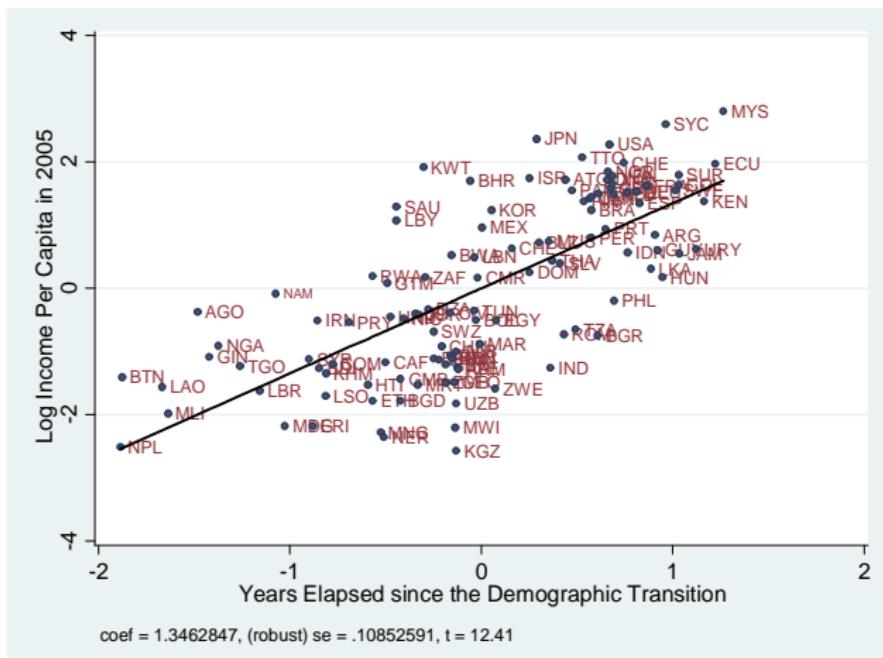
## Late Fertility Decline – Asia



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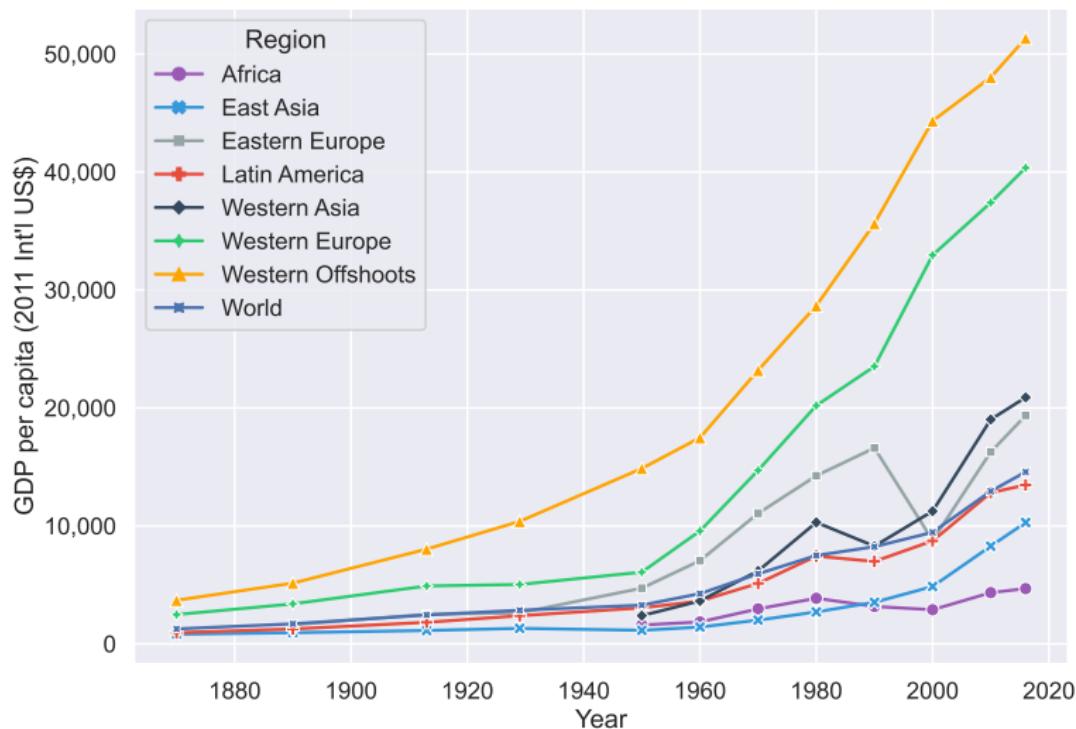


# Timing of the Demographic Transition and Current Income per Capita

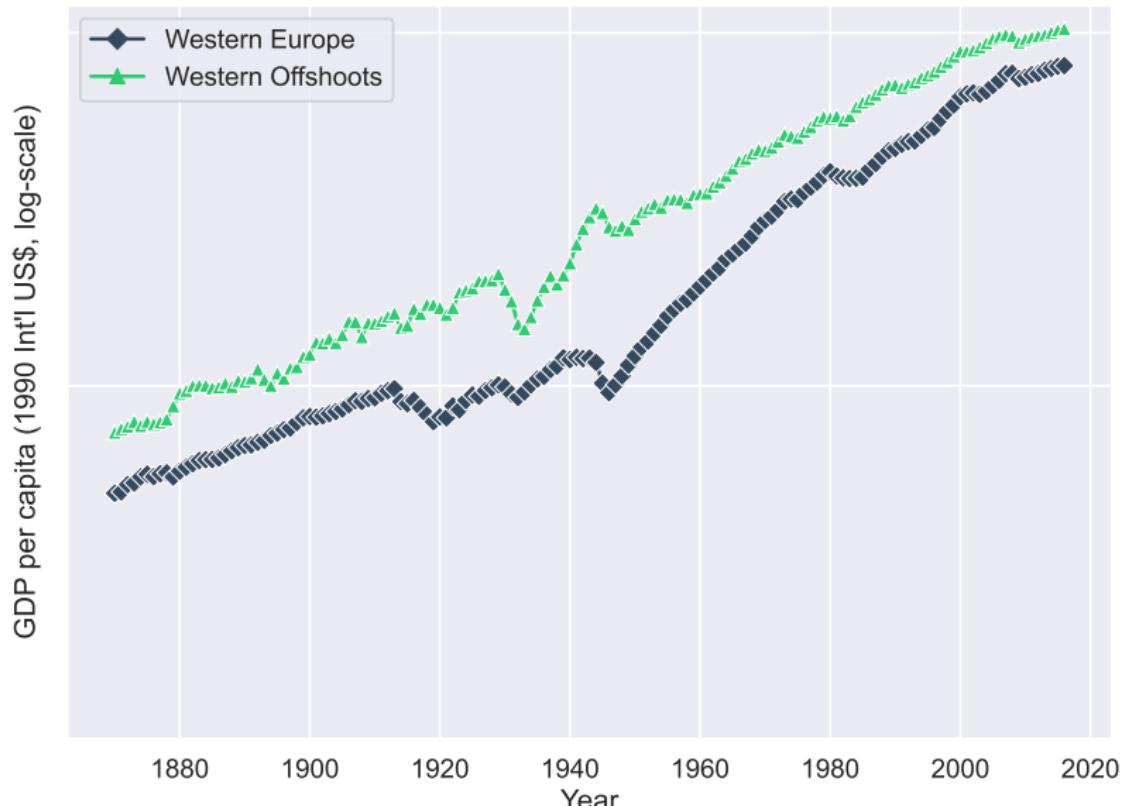


Conditional on absolute latitude.

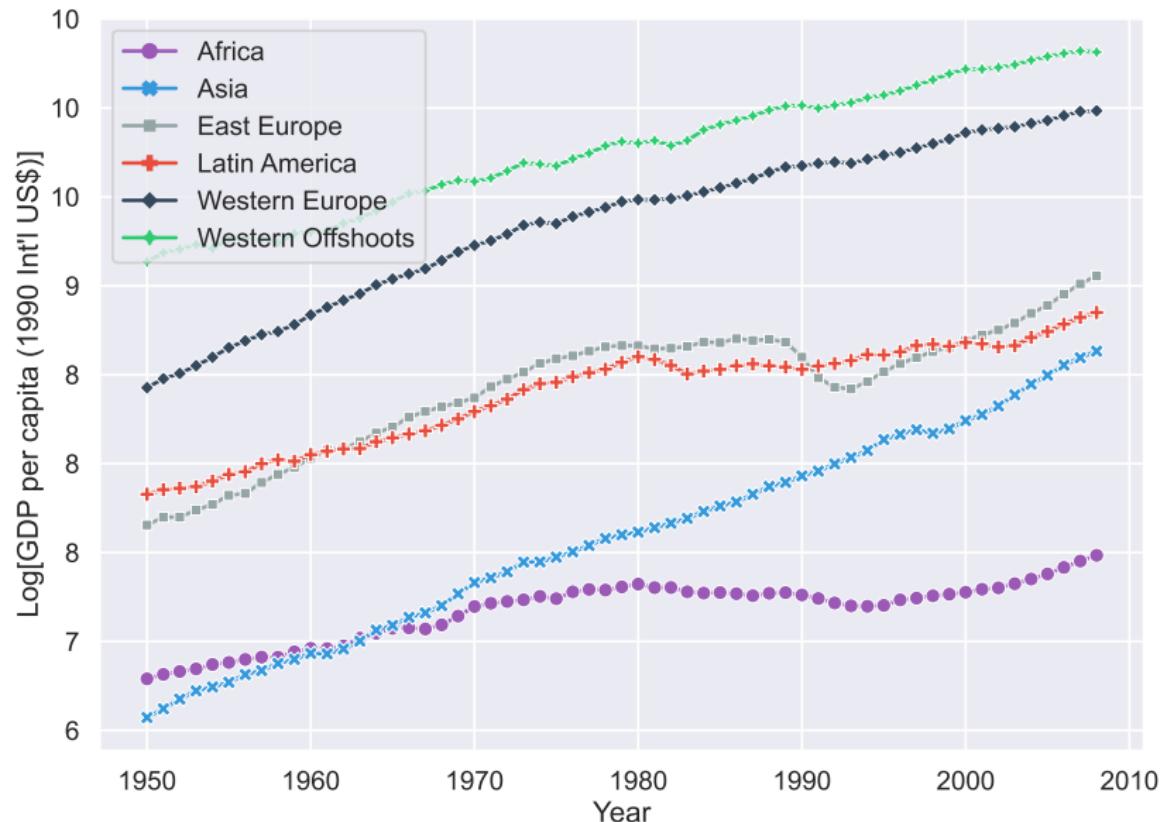
# Timing of the Demographic Transition and Divergence across Regions



## Sustained Economic Growth: 1870–2000



## Regional Variation in Growth of Income per Capita: 1950–2000



## Fundamental Research Questions: The Malthusian Epoch

- What accounts for the epoch of stagnation that characterized most of human history?
  - Why did episodes of technological progress in the pre-industrialization era fail to generate sustained economic growth?
  - Why did increased productivity generated population growth rather than growth in income per capita?

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- What governs the differential timing of the demographic transition across nations?
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## Proximate Causes of Growth

- Factor Accumulation:

- Physical capital accumulation (Solow, QJE 1956)
- Human capital accumulation (Lucas, JME 1988)

- Technological Progress:

Technological progress is often attributed to the accumulation of knowledge and ideas, which can be transmitted through education, research, and innovation.

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## Neoclassical Growth Theory (GT)

- Inconsistent with the development process over most of human history:
  - GT: growth rates decline in the transition to sustained growth
  - GT: technological progress increases steady-state income per capita
  - GT: does not capture the demographic transition (DT)
  - GT: does not capture the take-off from stagnation to growth
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    - Evidence: the industrial revolution and the take-off from stagnation
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  - Evidence: steady-state income per capita converges over time

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## Non-Unified Growth Theory

- Captures the role of factor accumulation and technological progress in the modern growth regime
- Not designed to shed light on:
  - The mechanism through which economic development leads to political development.
  - The mechanism through which economic development leads to social development.
  - The mechanism through which economic development leads to environmental development.

## Non-Unified Growth Theory

- Captures the role of factor accumulation and technological progress in the modern growth regime
- Not designed to shed light on:
  - The historical origins of vast and persistent inequality across countries
  - The forces that triggered the transition of DCs from stagnation to growth
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# Unified Growth Theory



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## Major Challenge

- Policy based on insights from growth theory encourage
  - Investment in education and health
  - Openness to international capital markets
  - Technological diffusion
- failed to generate convergence
- Why do some societies fail to:
  - Implement policies that promote economic development
  - Create favorable conditions for growth

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- Why do some societies fail to:
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  - Overcoming initial conditions

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## Barriers to Accumulation and Innovation

### ● Inequality

- Suboptimal accumulation of human and physical capital

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  - Excessive regulation (Barro-Nelson, 1994)
  - Poor institutions (Acemoglu-Angrist-Pischke, 2001)
- Ethnic fractionalization
  - Ethnic conflict (Acemoglu-Angrist-Pischke, 2001)
  - Ethnic discrimination (Acemoglu-Angrist-Pischke, 2001)
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## Colonialism and the Persistent Effects of Institutions and Human Capital

- Persistent effect of institutions implemented by colonial powers
  - Reversal of fortune (Engerman-Sokoloff, 1997; Acemoglu et al., AER 2001, QJE 2002)
  - Slavery (Nunn, QJE 2008)
- Persistent effect of the human capital and diversity brought by the colonists
  - Slave trade and colonialism increased the number of slaves and their descendants in the Americas, leading to a higher share of black population in the US and Brazil.
- Persistent effect of the legal system of colonial powers
  - Slave codes and other laws established during colonial times have had a lasting impact on the legal systems of many countries.
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## Origin and Persistence of Cultural Factors

- Geographical origins and persistence of:
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  - Female labor force participation (Alesina et al., QJE 2013)
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- Religious origins of:
  - Capital accumulation (Acemoglu and Angrist, 2011; Acemoglu and Angrist, 2012)
  - Economic development (Acemoglu and Angrist, 2011; Acemoglu and Angrist, 2012)
  - Economic growth (Acemoglu and Angrist, 2011; Acemoglu and Angrist, 2012)
- Intergenerational transmission of:
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- Geographical origins and persistence of:
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- Religious origins of:
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## Persistent Effects of Geographical Factors

- Biogeographical conditions that triggered the Neolithic Revolution

- Technological head-start: (Diamond, 1997; Olsson-Hibbs, EER, 2005)

Geographical factors like climate, soil quality, and availability of domesticable plants and animals provided a technological head-start to certain regions.

These factors influenced early agricultural practices, which in turn led to more stable food supplies and population growth.

- Persistent effect on life expectancy (Galor-Moav, 2009; Franck-Galor-Özak, 2019)

- Disease environment

Geographical factors like climate and proximity to disease reservoirs have influenced the spread of diseases and their impact on populations.

Regions with more stable environments and better access to medical knowledge have generally experienced lower rates of mortality.

- Geographical isolation

Geographical isolation can lead to cultural and technological stagnation, as there is less interaction with other societies.

However, it can also provide a degree of protection from external threats and allow for the development of unique cultures.

## Persistent Effects of Geographical Factors

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- Disease environment

↳ Disease environment → more infectious diseases → higher mortality rates → lower population density → less technological progress → lower income per capita

- Geographical isolation

↳ Geographical isolation → less technological progress → less economic development

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### ● Disease environment

↳ Disease environment is a key factor in determining the level of economic development. Diseases can have both positive and negative effects on economic growth.

### ● Geographical isolation

↳ Geographical isolation can both facilitate and hinder economic development. It can provide a degree of protection from external influences but also limit access to markets and resources.

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- Disease environment

Geographical factors have been shown to have a significant impact on disease environments, particularly in terms of the prevalence of certain diseases like malaria and cholera.

- Geographical isolation

Geographical isolation has been shown to have a significant impact on economic development, particularly in terms of trade and access to markets.

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- Disease environment
  - Persistent effect on labor productivity & investment in human capital (Gallup-Sachs, 2001; Andersen-Dalgaard-Selmay, REStud 2012; Alsan AER 2015)
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## Persistent Effects of Geographical Factors

- Land suitable for large plantations

- Inequality:

- Inequality in land distribution leads to inefficient allocation of land resources.

- Concentration of landownership:

- Concentration of land ownership leads to inefficient allocation of land resources.

- Inequality in land distribution leads to inefficient allocation of land resources.

- Soil quality conducive for agriculture

- Specialization in agricultural output.

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- Specialization in one-farmed crops

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    - Concentration of landownership:
  - Soil quality conducive for agriculture
    - Specialization in one particular crop

## Persistent Effects of Geographical Factors

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  - Inequality:
    - Extractive institutions (Engerman-Sokoloff, 1997)
    - Concentration of landownership:
      - Suboptimal investment in public education (Galor-Moav-Vollrath, RES 2009)
  - Soil quality conducive for agriculture
    - Long-term effects of climate and soil characteristics (Acemoglu et al., 2012)

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  - Concentration of landownership:
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- Soil quality conducive for agriculture
  - Fertile soil → more food → more population → more labor → more output

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  - Specialization in unskilled-intensive goods

Source: Acemoglu and Angrist (2012) "How Much Does Education Raise Income?" NBER Working Paper No. 18295, March 2012.

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# Persistent Effects of Geographical Factors

- Range of soil quality

- Emergence of geographical specific human capital  $\implies$  reduced mobility  $\implies$  ethnic fractionalization (Michalopoulos, AER 2012)

Geographical factors have been shown to have a significant effect on economic development through their influence on human capital accumulation and ethnic fractionalization.

- Ecological diversity & storables crops

Ecological diversity has been shown to have a positive effect on economic development through its influence on the availability of food and the potential for storing crops.

- Geographical determinants of body size

Geographical determinants of body size have been shown to have a significant effect on economic development through their influence on labor productivity and technological innovation.

## Persistent Effects of Geographical Factors

- Range of soil quality
  - Emergence of geographical specific human capital  $\implies$  reduced mobility  $\implies$  ethnic fractionalization (Michalopoulos, AER 2012)
    - Persistent effect of ethnic fractionalization (Easterly-Levine, QJE 1997)
- Ecological diversity & storables crops
  - Higher ecological diversity  $\implies$  more storable crops  $\implies$  higher agricultural output per capita  $\implies$  higher income per capita
- Geographical determinants of body size
  - Larger body size  $\implies$  more muscle mass  $\implies$  more physical strength  $\implies$  more food production per capita  $\implies$  higher income per capita

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- Ecological diversity & storables crops

Ecological diversity  $\implies$  more food storage options  $\implies$  more stable food supply  $\implies$  more stable population growth

- Geographical determinants of body size

Geographical determinants of body size  $\implies$  more energy available for work  $\implies$  higher output per capita

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  - Emergence & persistence of state capacity (Fenske, JEEA 2014; Mayshar-Moav-Neeman, 2013)
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## Persistent Effects of Intergenerationally Transmitted Traits

- Natural selection of traits that are complementary to the growth process:

- Preference for education (Galor-Moav, QJE 2002; Galor-Klemp, 2018)
- Entrepreneurial spirit (Galor-Michalopoulos, JET 2012)
- Time Preference (Galor-Özak, AER 2016)

- Cultural distance between societies reduces:

- Distance from the Equator (Acemoglu-Darling, 2012)
- Distance from the coast (Acemoglu-Darling, 2012)

- Cultural diversity within a society:

- Fraction of ethnic minorities (Acemoglu-Darling, 2012)
- Fraction of religious minorities (Acemoglu-Darling, 2012)

- Fraction of immigrants (Acemoglu-Darling, 2012)
- Fraction of foreign workers (Acemoglu-Darling, 2012)

- Fraction of non-native speakers (Acemoglu-Darling, 2012)
- Fraction of bilinguals (Acemoglu-Darling, 2012)

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  - Distance from Europe
  - Distance from the Mediterranean
- Cultural diversity within a society:
  - Fraction of ethnic minorities

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  - Distance from the Americas
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  - Distance from the Mediterranean
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- Cultural diversity within a society:
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  - Religious fractionalization

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  - Diffusion from the technological frontier (Spolaore-Wacziarg, QJE 2009)
  - Conflict (Spolaore-Wacziarg, REStat 2016; Depetris-Özak, 2019)
- Cultural diversity within a society:
  - Technological progress (Acemoglu, Angrist, Pischke, 2019)

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    - Generates a wider range of complementary traits conducive for specialization & innovations (Ashraf-Galor, AER 2013; Depetris-Özak, 2015, 2016)

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  - Reduces cohesiveness:
    - Higher cultural fragmentation (Ashraf-Galor, AER-PP 2013)
    - Increased mistrust & prevalence of civil conflict (Arbatli-Ashraf-Galor, 2018)
  - Generates a wider range of complementary traits conducive for specialization & innovations (Ashraf-Galor, AER 2013; Depetris-Özak, 2015, 2016)

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## Persistent Effects of Intergenerationally Transmitted Traits

- Natural selection of traits that are complementary to the growth process:
  - Preference for education (Galor-Moav, QJE 2002; Galor-Klemp, 2018)
  - Entrepreneurial spirit (Galor-Michalopoulos, JET 2012)
  - Time Preference (Galor-Özak, AER 2016)
- Cultural distance between societies reduces:
  - Diffusion from the technological frontier (Spolaore-Wacziarg, QJE 2009)
  - Conflict (Spolaore-Wacziarg, REStat 2016; Depetris-Özak, 2019)
- Cultural diversity within a society:
  - Reduces cohesiveness:
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# Growth and Comparative Development

## The Big Picture & Overview

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