Economic Growth
Chances and Limitations
Winter Semester 2025/26

MEPS

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1.1 Motivation

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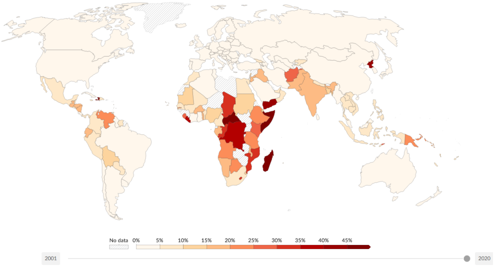

Figure: https://ourworldindata.org/hunger-and-undernourishment

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  In 1930, the English economist John Maynard Keynes
  . . . indulged in a bit of futurology.

  > *In an essay entitled "Economic Possibilities for Our Grandchildren", he speculated that by the year 2030 capital investment and technological progress would have raised living standards as much as eightfold, creating a society so rich that people would work as little as fifteen hours a week, devoting the rest of their time to leisure and other "non-economic purposes."*
  >
  > *https://www.newyorker.com/magazine/2020/02/10/can-we-have-prosperity-without-growth*

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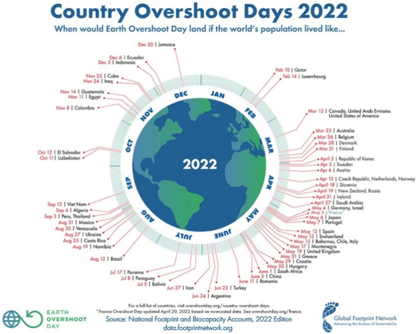

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  Many activities to mitigate pollution and environmental damage add to economic growth.
  Many activities which improve well being are included in GDP.

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- A lot of activities which improve well being are not included in GDP.
- A lot of (negative) external effects of economic activities are not included in GDP.
- We need some (better) fundamental concepts and definitions to capture economic growth.
  (See e.g. "From gross domestic product to well-being and sustainability: means and measures", UN Economic and Social Council 2022)
- We need time series of economic data to understand economic growth.
- Do we need advanced mathematics to describe and analyze economic growth?

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By Reuters October 13, 2025 11:57 AM GMT+2Updated

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By Reuters October 13, 2025 11:57 AM GMT+2Updated STOCKHOLM, Oct 13 (Reuters) - Joel Mokyr, Philippe Aghion and Peter Howitt won the 2025 Nobel economics prize for "having explained innovation-driven economic growth", the Royal Swedish Academy of Sciences said on Monday.

1.2 Goals and Methods

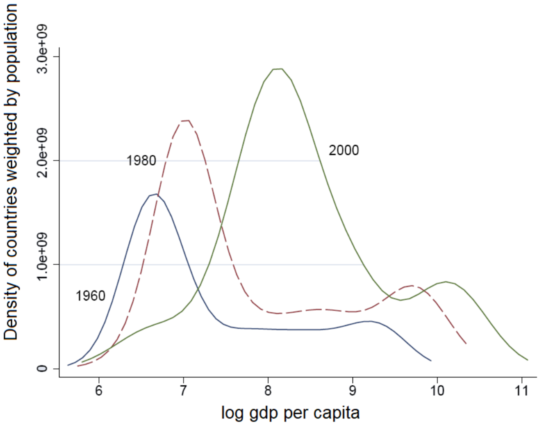

Figure: Estimates of the population-weighted distribution of countries according to log GDP per capita (PPP-adjusted) in 1960, 1980 and 2000; source: Acemoglu 2008.

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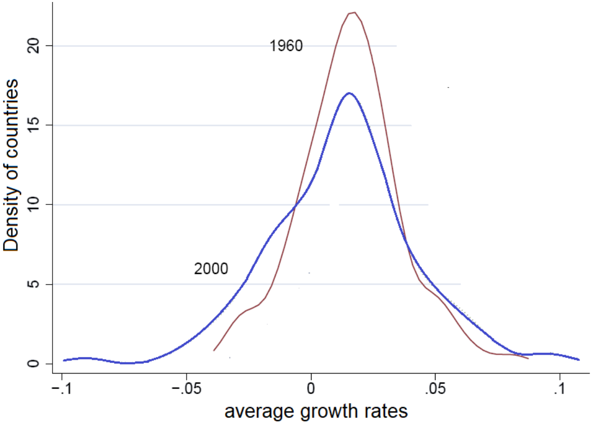

Figure: Estimates of the distribution of countries according to the growth rate of GDP per worker (PPP-adjusted) in 1960, 1980 and 2000; source: Acemoglu 2008.

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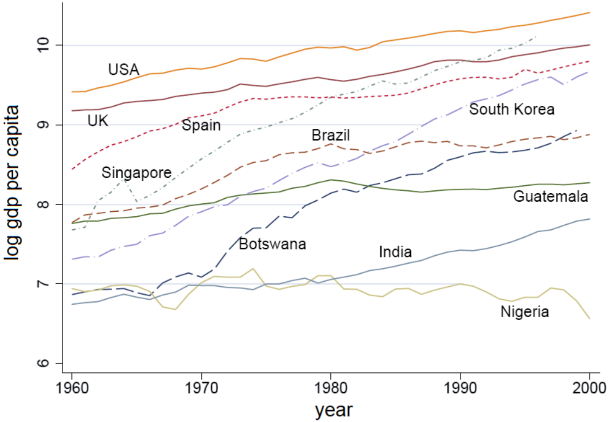

Figure: The evolution of income per capita in the United States, United Kingdom, Spain, Singapore, Brazil, Guatemala, South Korea, Botswana, Nigeria and India, 1960-2000; source: Acemoglu 2008.

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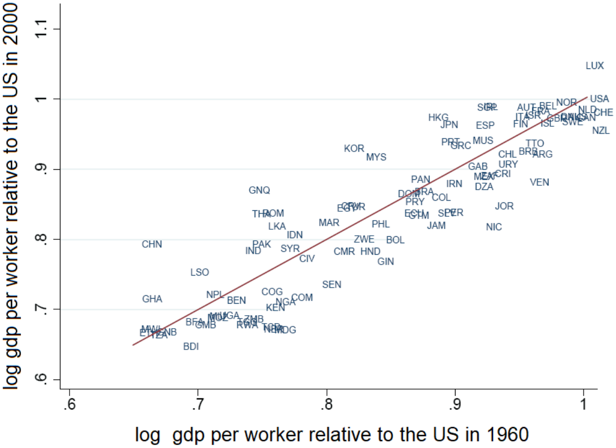

Figure: Log GDP per worker in 2000 versus log GDP per worker in 1960 together with the 45° line; source: Acemoglu 2008.

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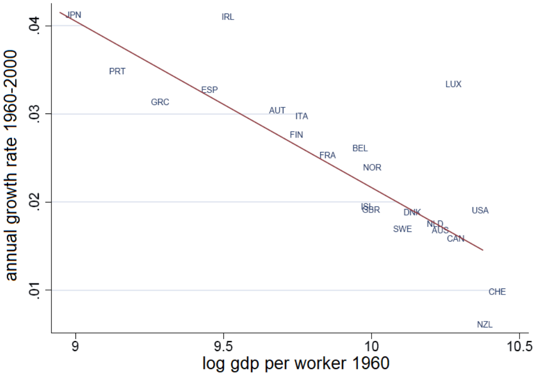

Figure: Annual growth rate of GDP per worker between 1960 and 2000 versus log GDP per worker in 1960 for core OECD countries; source: Acemoglu 2008.

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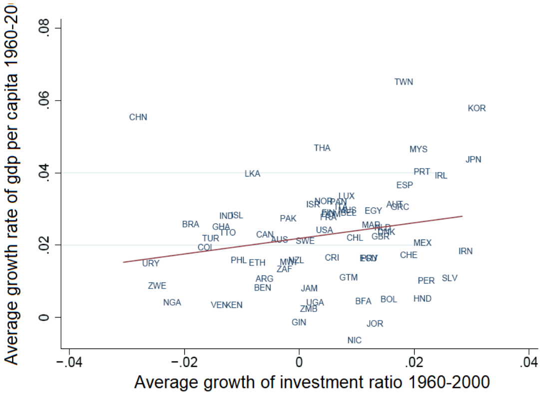

Figure: The relationship between average growth of GDP per capita and average growth of investments to GDP ratio, 1960-2000; source: Acemoglu 2008.

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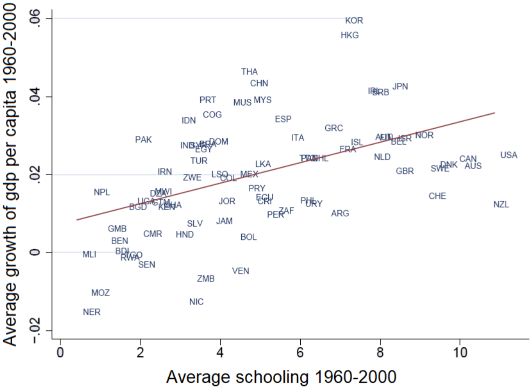

Figure: The relationship between average growth of GDP per capita and average years of schooling, 1960-2000; source: Acemoglu 2008.