

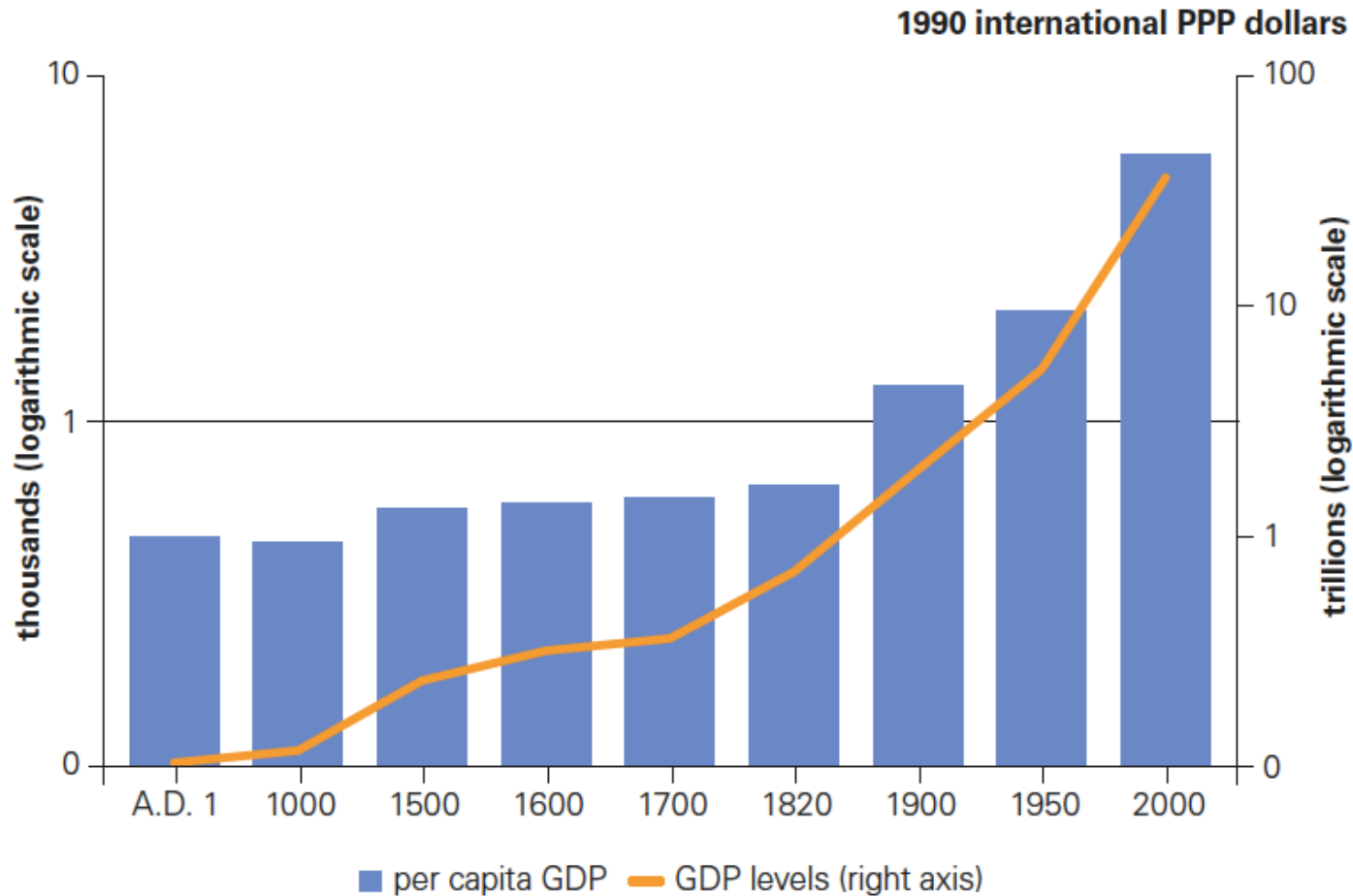


# Economic Development

EE551&561

Chayanee Chawanote

# Evolution of global and per capita GDP in the last 2,000 years



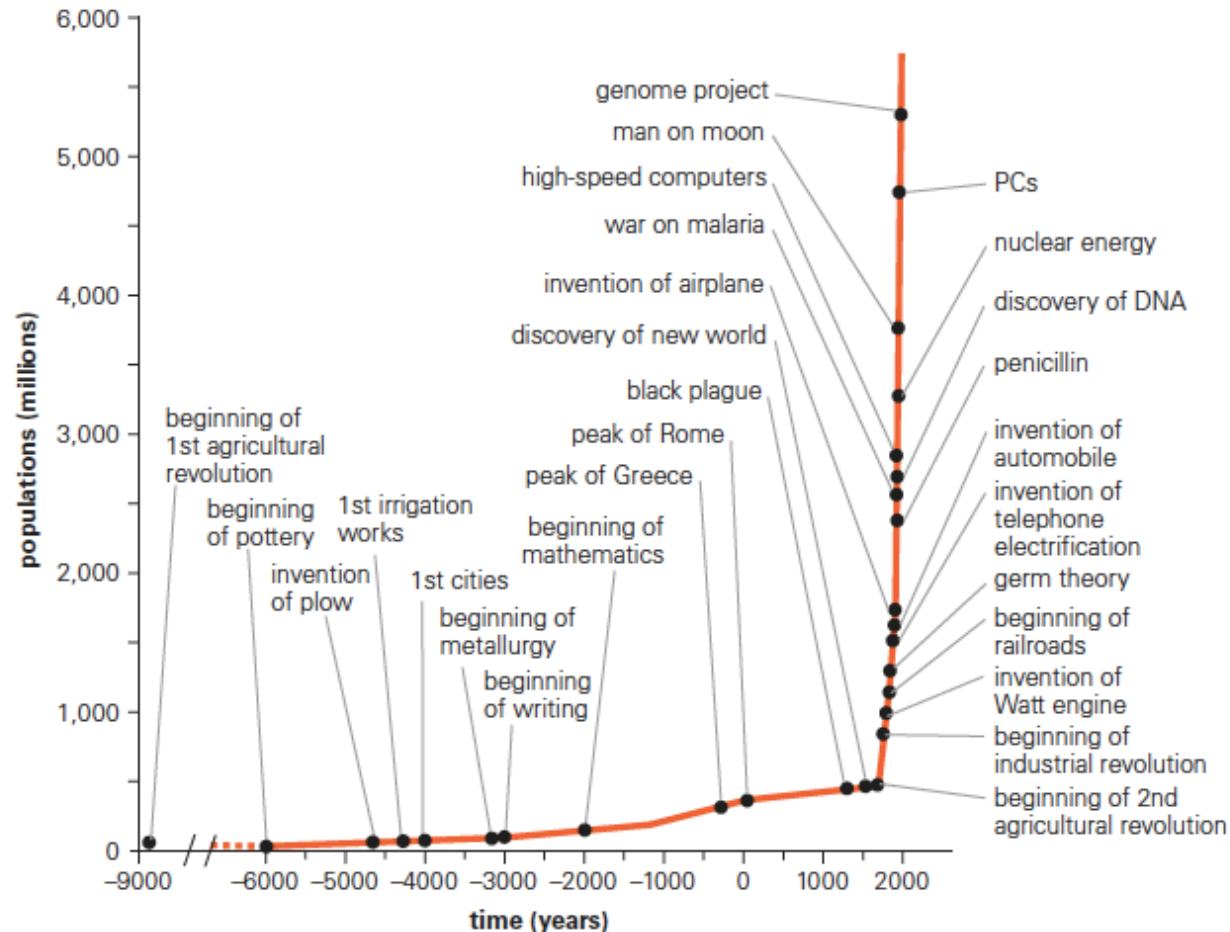
Source: Maddison, Angus. 2007. *Contours of the World Economy, 1–2030 AD*. Oxford, UK: Oxford University Press.

Note: PPP = purchasing power parity.

Source: the Commission on Growth and Development, WB 2008

# Population growth and major events in the history of technology

Growth in incomes was accompanied by unprecedented increases in population and exponential increases in the rate of scientific discoveries.

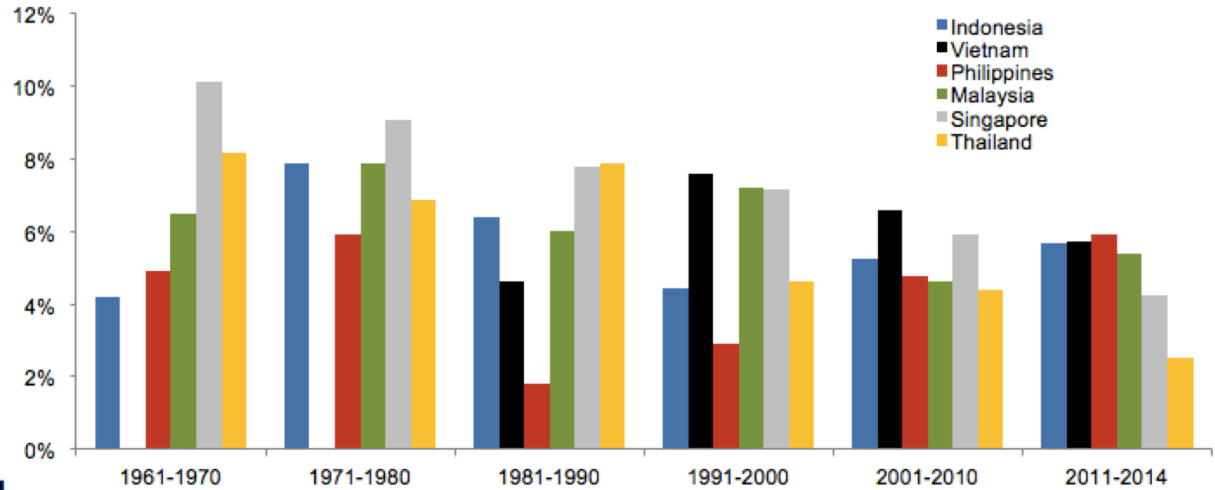


Source: Fogel, Robert. 1999. "Catching Up with the Economy." *American Economic Review* 89(1) (March): 1-21.

Note: There is usually a lag between the invention of a process or a machine and its general application to production. "Beginning" means the earliest stage of this diffusion process.

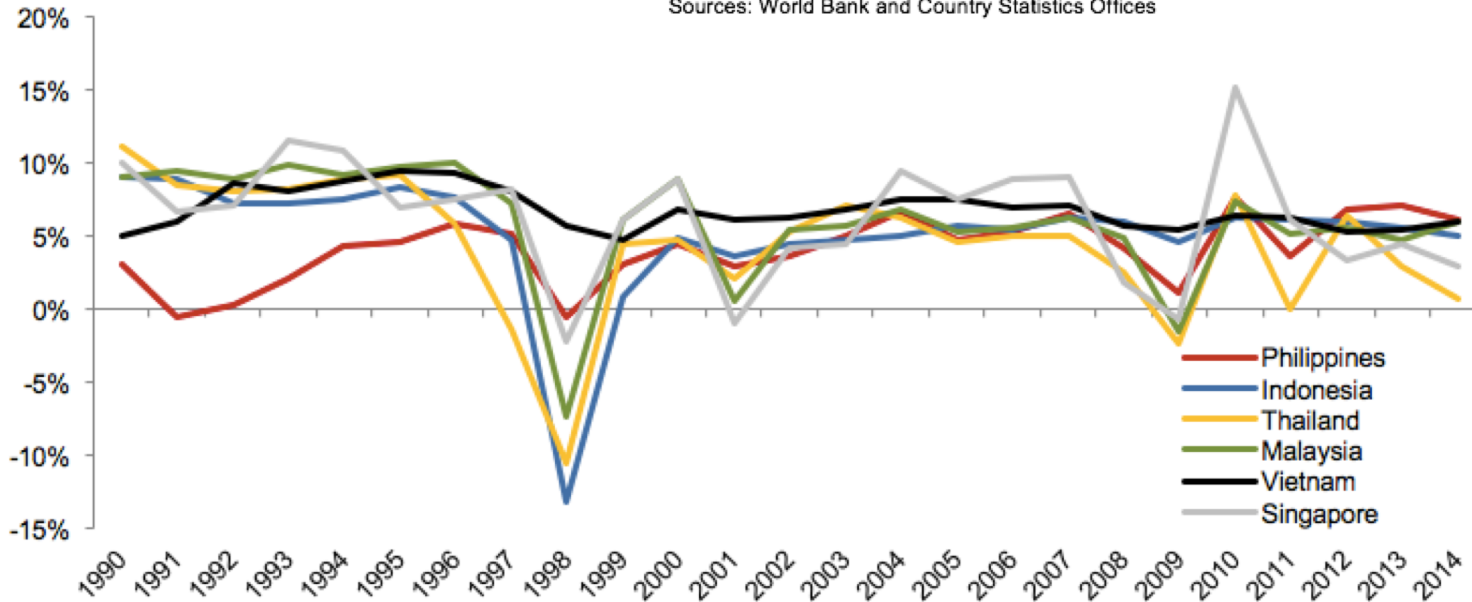
# Economic growth in SEA

Average real GDP growth rates, ASEAN-6, 1961-2014



Real GDP growth rates, ASEAN-6, 1990-2014

Sources: World Bank and Country Statistics Offices



Source: World Bank and Country Statistics Offices

Figure: <http://www.investphilippines.info/arangkada/growth/the-philippine-economic-landscape-in-2010-faster-growth-is-essential/>

# The Asian Miracle

- 1960s – 1990s: Thailand, South Korea, Hong Kong, Singapore, Taiwan, Malaysia, Indonesia
  - Maintained very high growth rates (8-12%)
  - Main reasons:
    - High interest rates to attract foreign investments
    - Rapid industrialization
    - Industrial policies supporting exports
    - High exports – driving rapid economic growth
- Krugman's view: East Asia's economic growth had been the result of increasing capital investment. However, **total factor productivity** had increased only marginally or not at all. Only growth in total factor productivity, not capital investment (lead to bubble), could lead to long-term prosperity.

## Side note: Total Factor Productivity (TFP)

- TFP = the portion of output not explained by the amount of inputs used in production
- Its level is determined by how efficiently and intensely the inputs are utilized in production
- Residuals from the production function estimation

# New Miracle ?

- China (later talk in class after the field trip)
- Vietnam
  - <https://youtu.be/sHheWtXGLk4>
  - <https://www.weforum.org/agenda/2018/09/how-vietnam-became-an-economic-miracle/>
  - 3 factors:
    - Embracing trade liberalization
    - Complementing external liberalization with domestic reforms through deregulation and lowering the cost of doing business
    - Investing heavily in human and physical capital

# Economic development

- What are the policy ingredients of sustained growth?
- Is (high) growth the end goal?
- Does everyone benefit from GDP growth?
- What is inclusive growth?
  - [https://youtu.be/puw7T\\_dt9I](https://youtu.be/puw7T_dt9I)
- Measurements of economic development
  - GDP growth
  - Income per capita: [WB's country classification](#) >> low, lower-middle, upper-middle, and high
  - HDI (Human Development Index by UNDP): life expectancy, education, income per capita
  - Inclusive Development Index ([by Weforum](#))

# HDI vs. IDI

## Human Development Index (HDI)

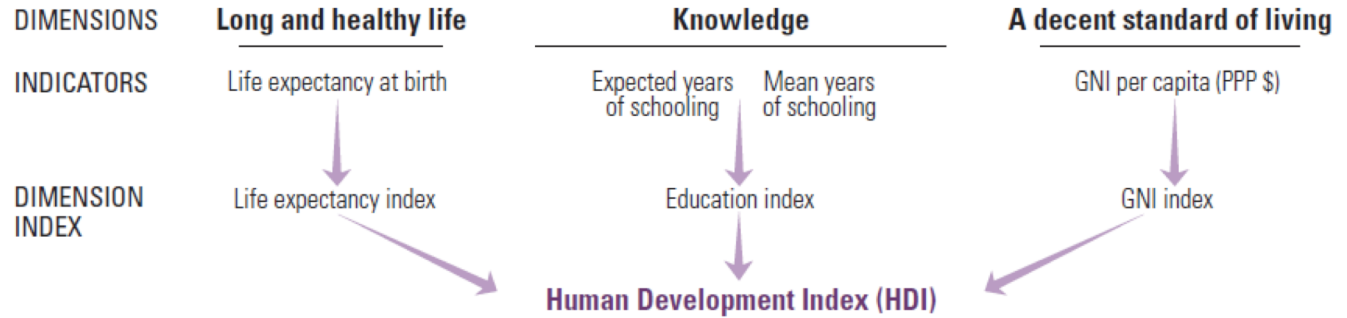
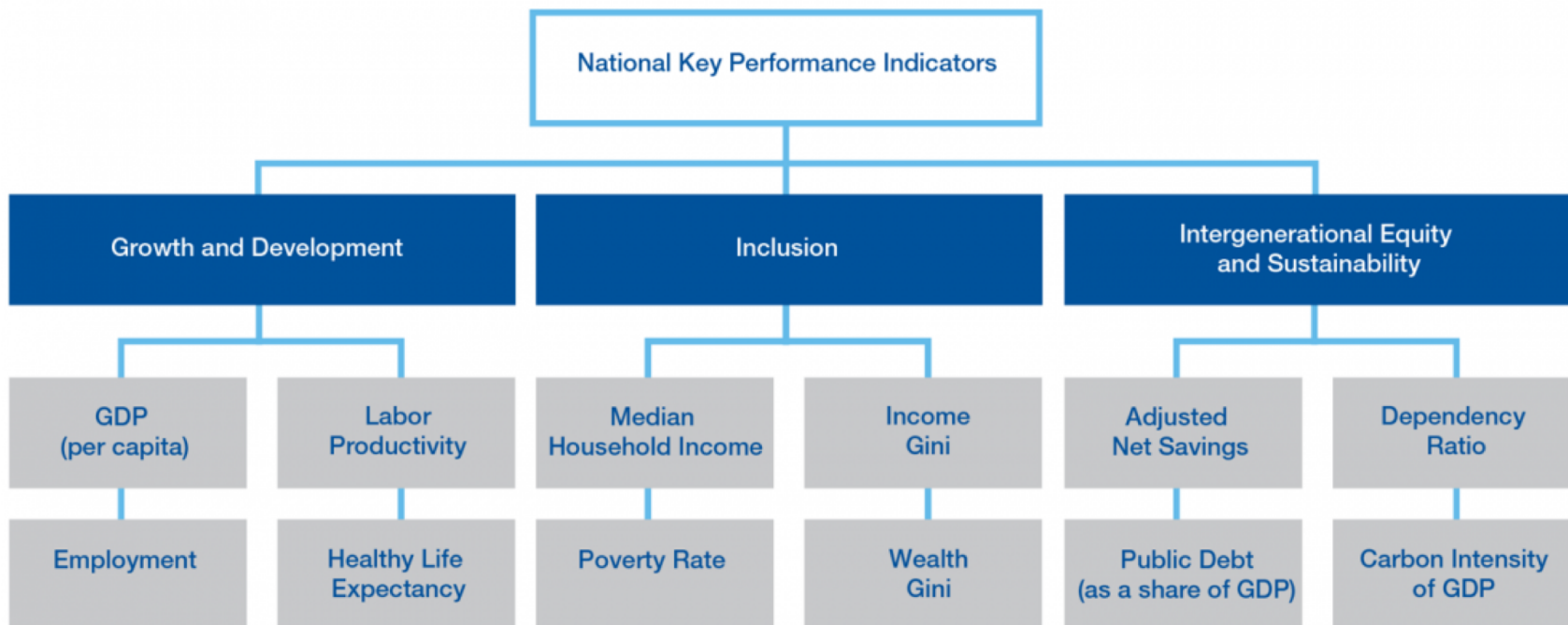


Figure 1: Inclusive Growth and Development Key Performance Indicators



# Development thinking path

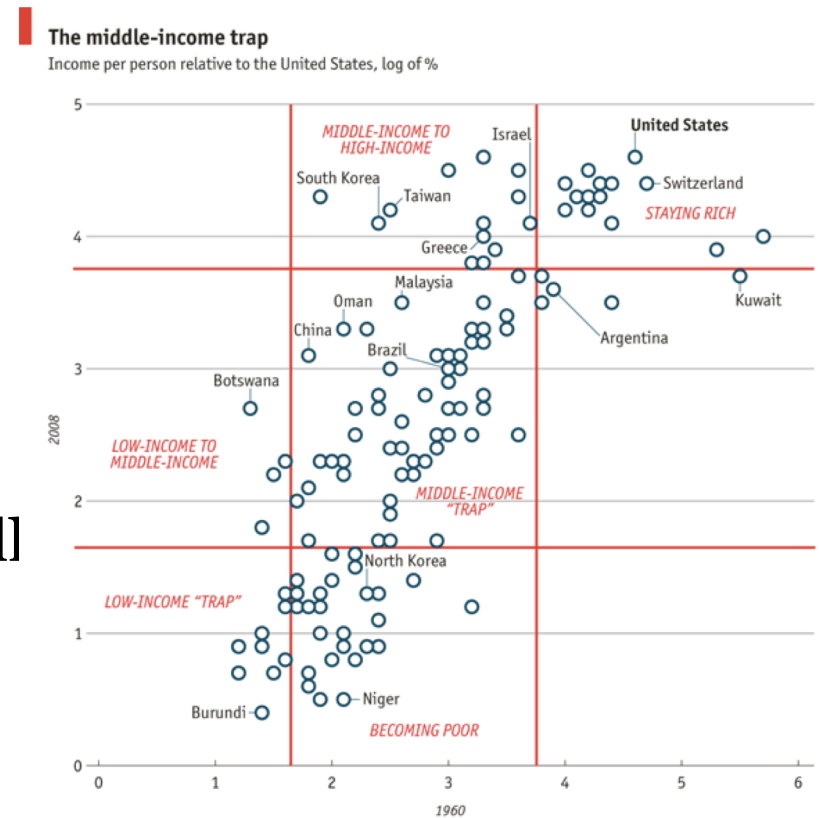
- The first wave of development thinking was structuralism, which emphasized market failures and proposed to build up modern industries similar to those in high-income countries by direct government interventions through import substitution
- The second wave of development thinking was neoliberalism, which emphasized government failures and proposed to build up well-functioning market institutions like those in high-income countries through the shock therapy encapsulated in Washington Consensus. Also, the supporting of free trade (market driven) by WTO leads to export-oriented industrialization

## Development thinking path

- Under the guidance of previous two development thinkings, the development performance in developing countries was disappointing. Between 1950-2008
  - Only 2 economies, Korea and Taiwan, moved up from low-income to middle-income and then to high-income status. China is likely to be the third one by 2020.
  - Only 13 economies, including Japan, four East Asian dragons, and 8 other European economies surrounding high-income Western Europe, moved from middle-income to high-income status.
  - Most other developing economies have been trapped either in low-income or middle-income status

# Middle-income trap?

- Not enough high economic growth to move from middle income country to high income country
- Unable to compete with low-income, low-wage economies in manufactured exports and with advanced economies in high-skill innovations
- Such countries cannot make a timely transition from resource-driven growth, with low-cost labor and capital, to productivity-driven growth.



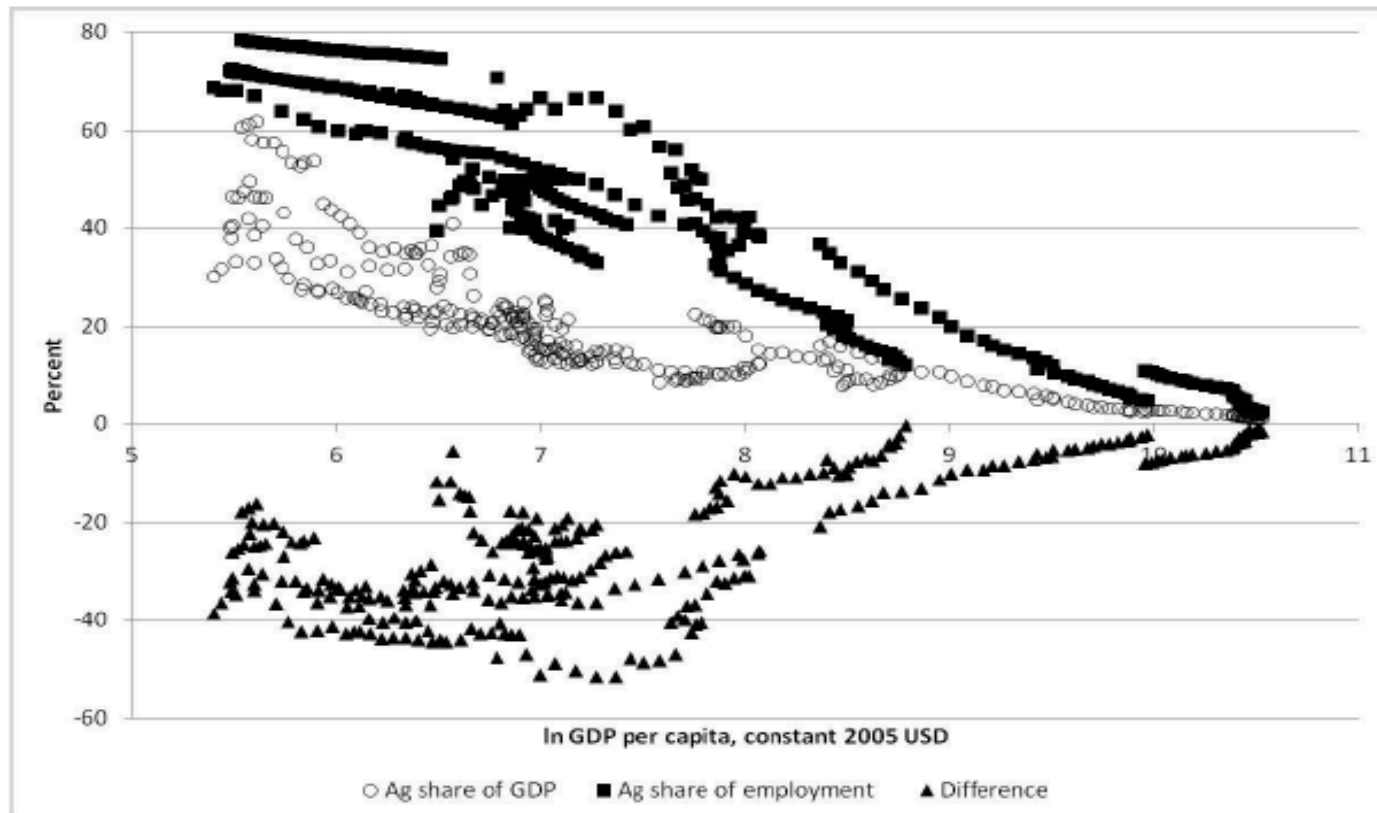
Source: The Economist

# Common characteristics of the sustained high growth cases

- Fully engaged and exploited the opportunities that the global economy offers
- Mustered high rates of saving and investment
- Maintained macroeconomic stability
- Let markets allocate resources
- Had committed, credible and capable governments and institutions

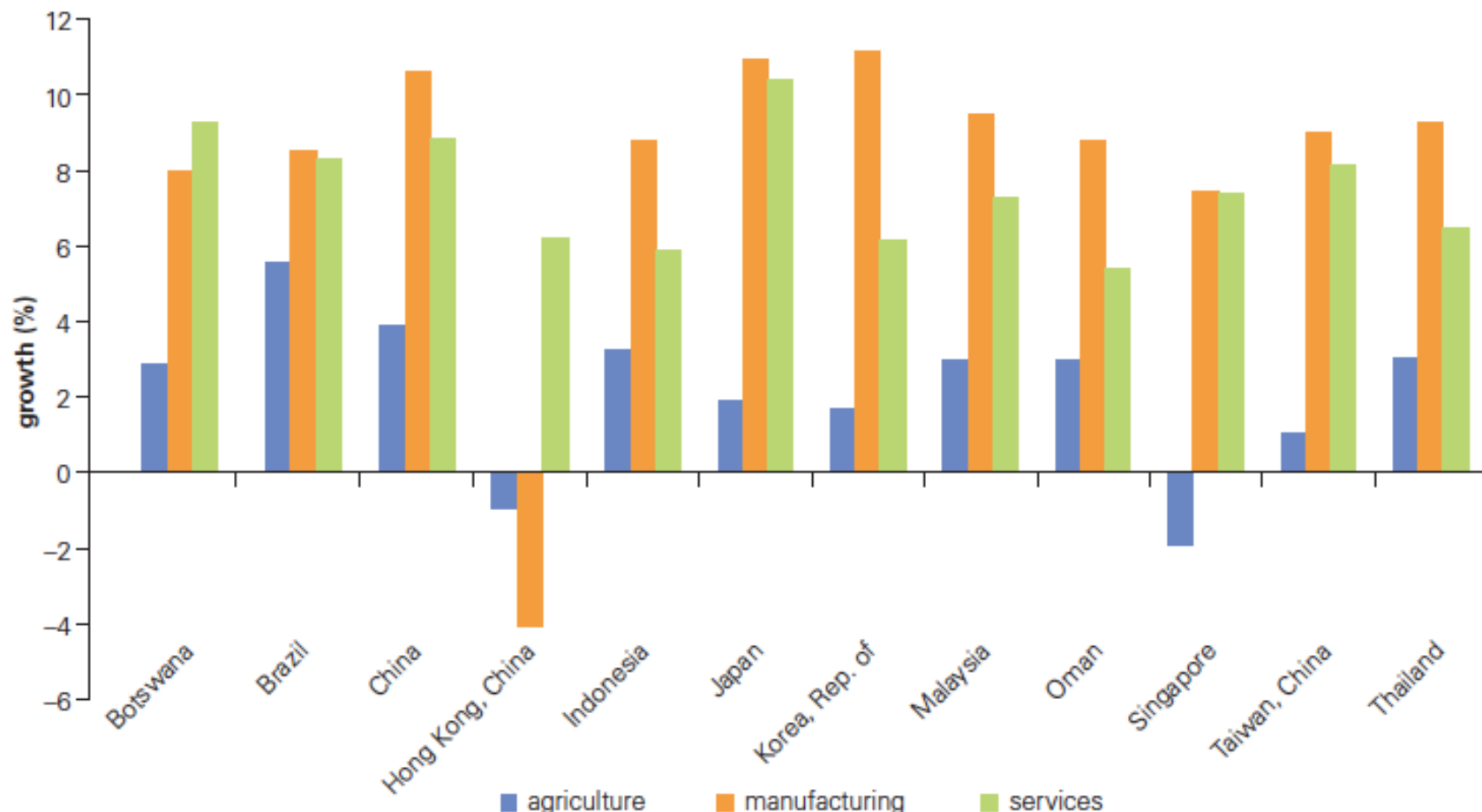


# Economic development process: structural change



*Note:* Countries included are China, Cambodia, Indonesia, Japan, Korea, Lao PDR, Malaysia, Mongolia, Philippines, Thailand and Viet Nam.

# To sustain high growth, manufacturing and services sectors are the key



Sources: World Bank, World Development Indicators 2007; for Brazil: World Bank calculation using data from World Tables 1976, World Bank, and Institute of Applied Economic Research (IAER), Brazil (<http://www.ipeadata.gov.br>); for Japan: World Bank calculation using data from World Tables 1976, World Bank, and Maddison, Angus, 2001: *The World Economy: A Millennial Perspective*. Paris: OECD.

Note: The calculations apply for different periods indicated in parentheses because of different degrees of consistent data availability: Botswana (1965–2006); Brazil (1955–73); China (1965–2006); Hong Kong, China (2000–06); Indonesia (1960–2005); Japan (1955–73); Korea, Rep. of (1970–2006); Malaysia (1970–2006); Oman (1988–2004); Singapore (1975–2006); Taiwan, China (1965–2006); and Thailand (1960–2006).

# What we observed in the process of industrialization?

According to Aj. Peera's lecture, to be in the 5<sup>th</sup> stage, the government need to be a facilitating state to help rapid technological innovation, industrial upgrading, and economic diversification in a market economy.

- The sad fact is that almost all governments in the world attempted to use industrial policies to play the facilitating role, but most failed.

Why failed? The main reason is that their governments targeted industries that went against their comparative advantages.

- The firms in the industrial policy's targeted sectors were non-viable in the competitive market.
- To support its initial investment and to ensure the firms' continuous operation, governments supported the non-viable firms through all kinds of subsidies and protections.
- Those measures led to misallocation of resources, a lack of competition, rent-seeking, and political capture.
- As a result, the attempts to pick winners ended up picking losers.

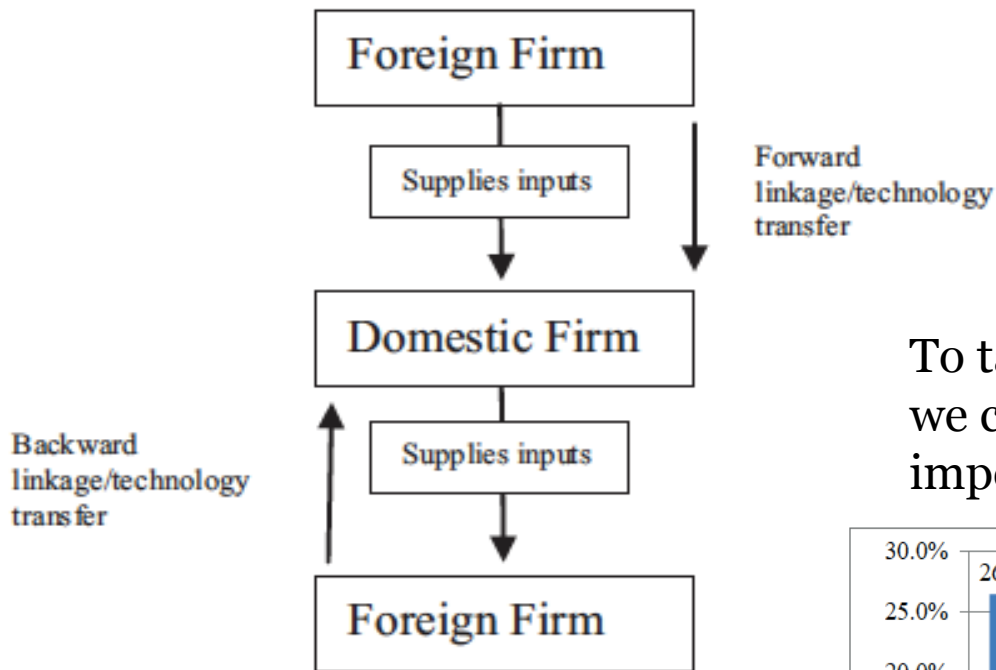
# Latent Comparative Advantage and Picking Winners

- Industrial upgrading is based on changes in comparative advantages due to changes in endowment structure.
- A dynamically-growing country's industries should be consistent with the country's comparative advantages. Some of its industries will lose comparative advantage as the country grows and its endowment structure upgrades. Those “sunset” industries will become the latent comparative advantage of the latecomers.
- For countries with a similar endowment structure, the forerunners' successful and dynamic industrial development provides a blueprint for the latecomers' industrial policies.

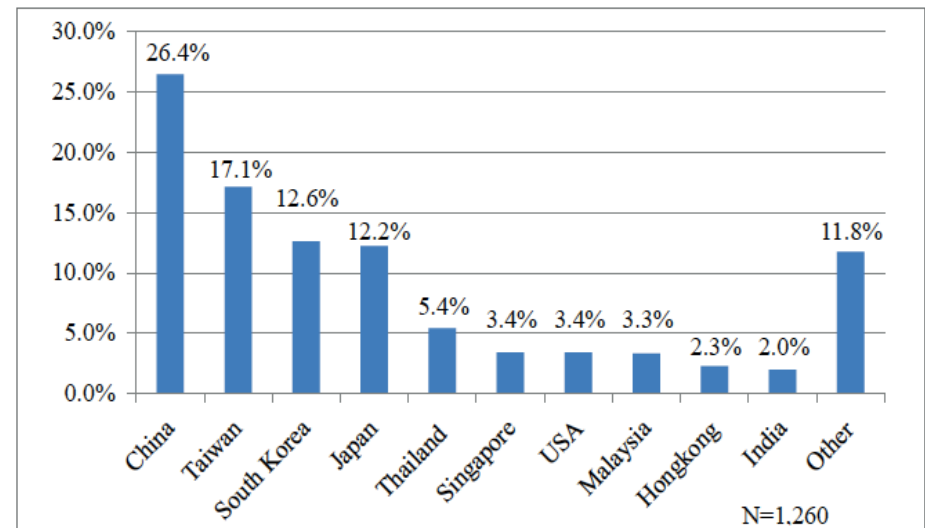
# Roles of FDI in industrialization

- For latecomers, we can adopt already existing mature technologies if the government facilitates correctly.
  - >> FDI is one of the tools
- However, in countries with poor infrastructure and bad business environments, special economic zones or industrial parks may be used to overcome barriers to firm entry, attract FDI, and encourage industrial clusters.
- Technology spillovers from FDI
  - Intra-industry (horizontal) spillovers: demonstration-imitation effect, competition effect, labor mobility effect
  - **Backward linkages:** increased demand for intermediate products due to MNE entry (e.g. food industry > upstream raw material suppliers)
  - **Forward linkages:**
    - Investments in outsourcing brand name related activities
    - Investments in maintenance and repairing services

# Roles of FDI in industrialization



To take a look at backward linkage, we can see from the ratio of imported inputs or materials



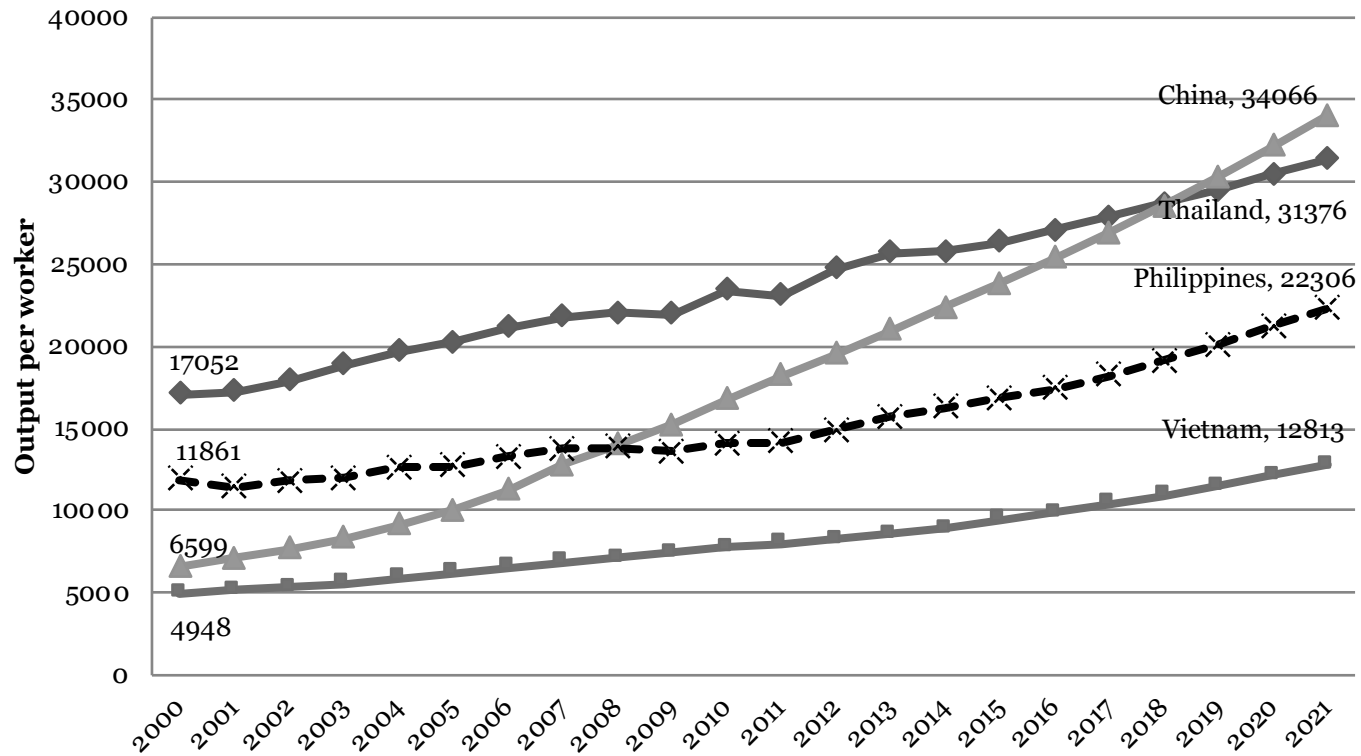
Source: CIEM (Central Institute for Economic Management), 2013

# Productivity and Competitiveness

- **Productivity** = ratio of output to input
  - How efficiently and effectively a business or an economy uses inputs, such as labor and capital, to produce output
- **Labor productivity** measures the value added per worker
- An increase in productivity means that more good and services are produced with the same amount of labor and capital
- Why productivity is important?

# Productivity and Competitiveness

Output per worker (GDP constant 2011 international \$PPP)

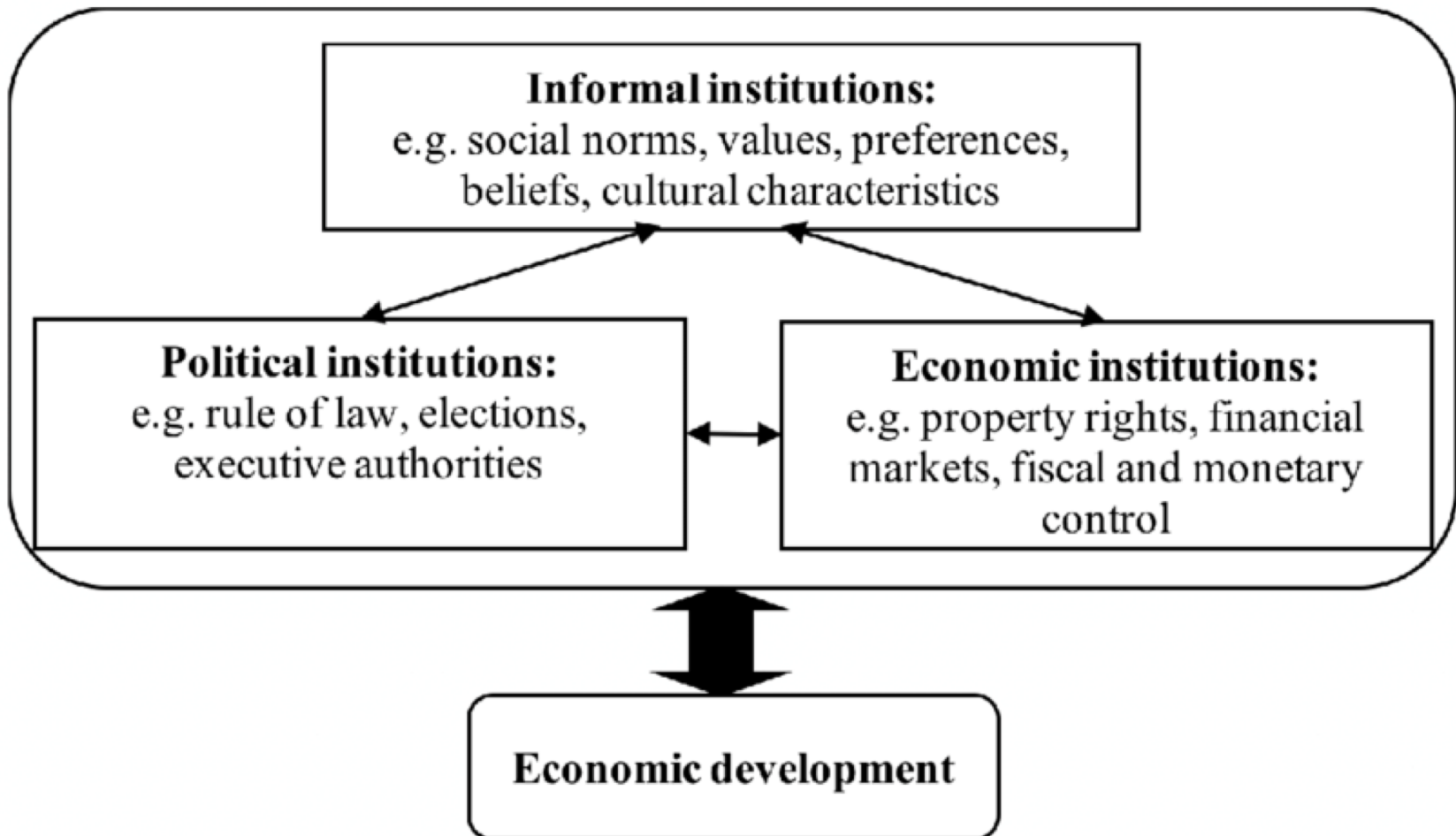


Source: ILO database

# Productivity and Competitiveness

- **Competitiveness:**
- “Ability of a firm or a nation to offer products and services that meet the quality standards of the local and world markets at prices that are competitive and provide adequate returns on the resources employed or consumed in producing them.”
  - <http://www.businessdictionary.com/definition/competitiveness.html>
- “The set of institutions, policies and factors that determine the level of productivity of a country”
  - <https://www.weforum.org/agenda/2016/09/what-is-competitiveness/>
- Competitiveness → productivity → growth → income level → well-being

# Economic Development and Institutions



# Interesting indices link institutions and development

- Economic Freedom Index
- Doing Business Index
- Global Competitiveness Index
- Politic Stability Index
- Corruption Perception Index
- Rule of Law Index

# More data information

- World Bank: <http://data.worldbank.org/>
- World Development Indicator (WDI): <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>
- UNESCO: <http://data.uis.unesco.org/Index.aspx>
- IMF: <http://www.imf.org/en/Data>
- ADB: <https://www.adb.org/data/statistics>
- Penn World Tables (PWT): <http://cid.econ.ucdavis.edu/pwt.html>
- Study the definition of such indicator before analyzing/using !