

Demographic Changes and Economic Growth

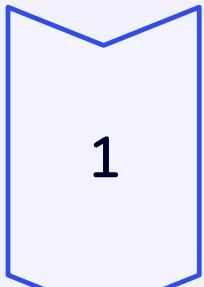
ECON 3006 Asia-Pacific Economies



Last Time

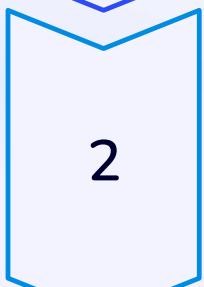
- 1 What are the two driving factors to economic growth?
- 2 What is the main driving factor to Asia-Pacific economies?
- 3 How can capital be accumulated?
- 4 High saving and investment rates in Asia-Pacific economies. Why?

Changes in Labor



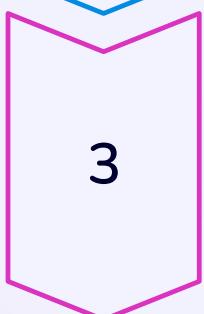
1

Demographic changes and economic growth in Asia-Pacific Areas



2

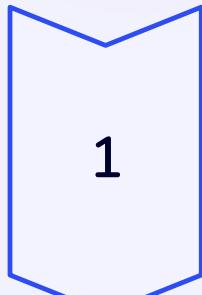
Doing business in response to demographic changes: Experiences of 7-Eleven



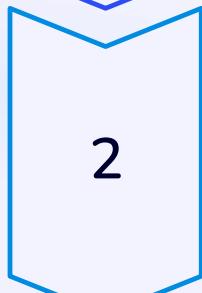
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Case: Policy Responses for Low Birth Rates in the Asia-Pacific region

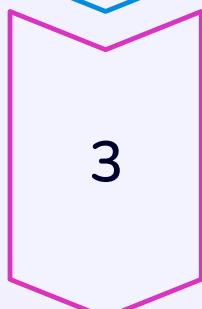
Population Distribution



Children



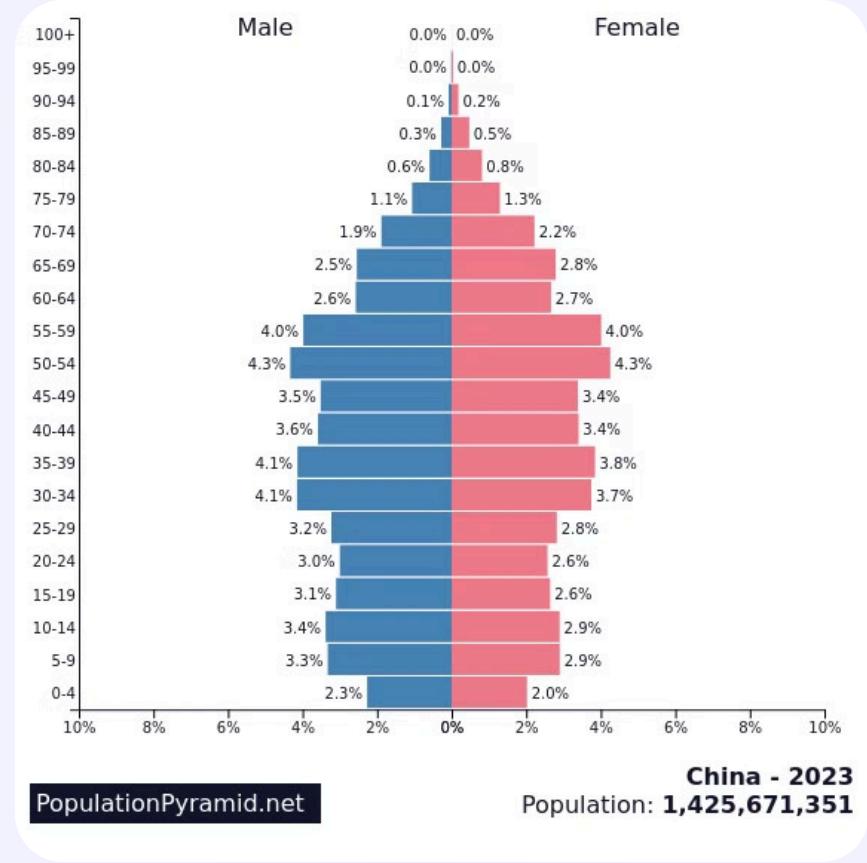
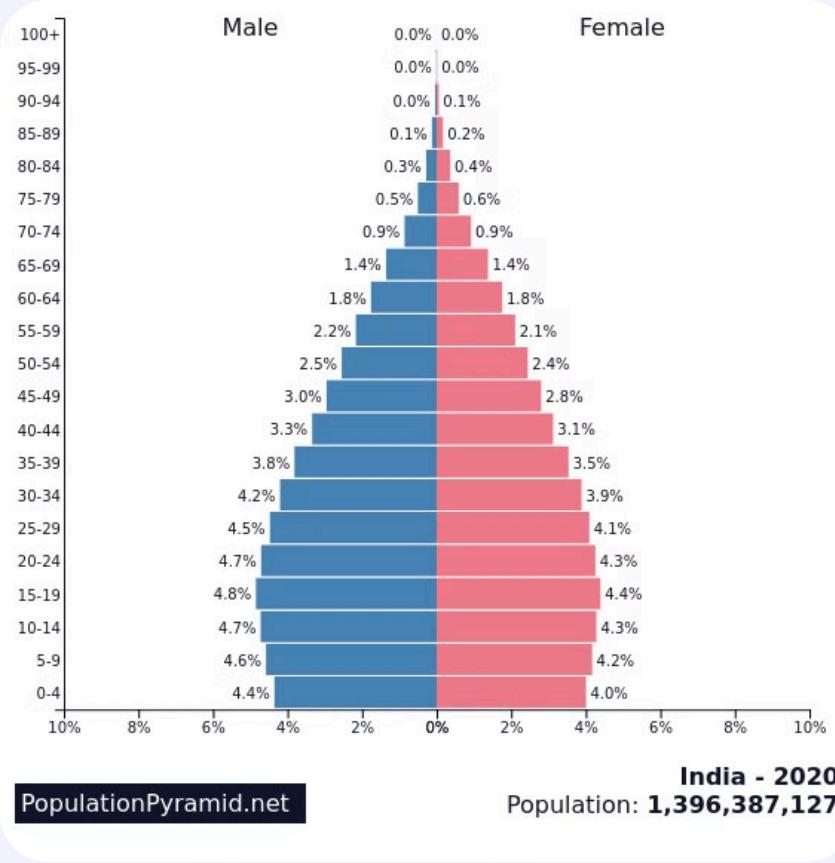
Working-aged



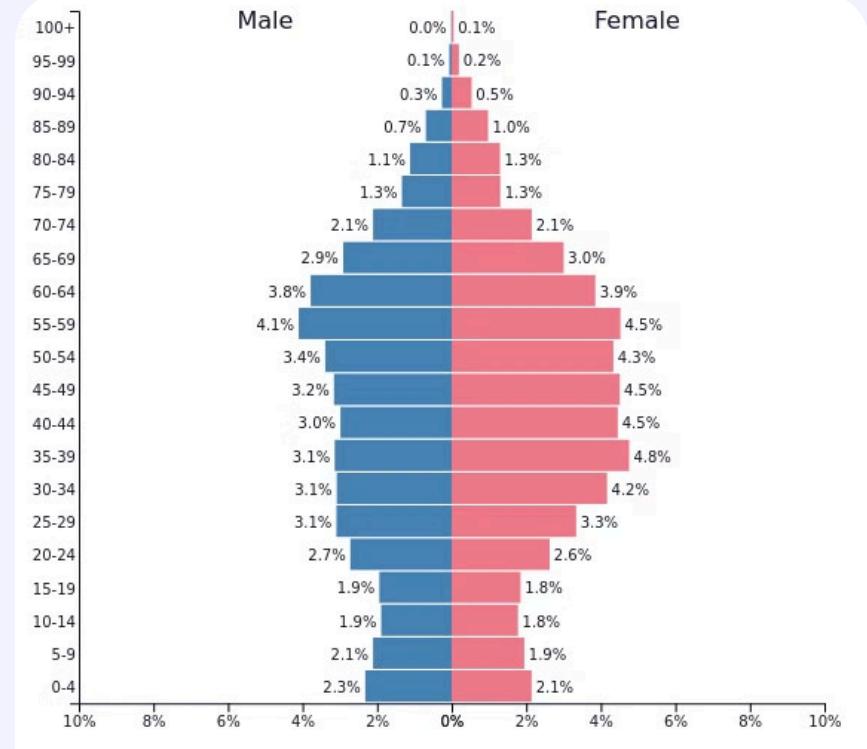
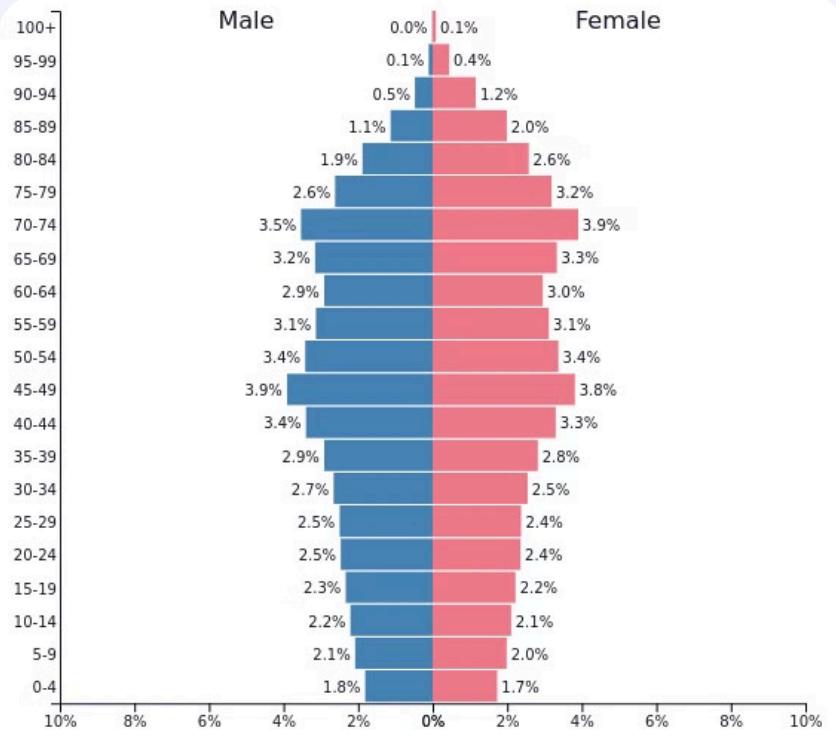
Elderly

What is the ideal population distribution for economic growth? Which part should be the largest?

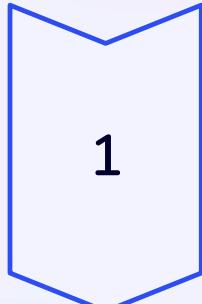
Which Demographic Pyramid is More Likely to Promote Economic Growth?



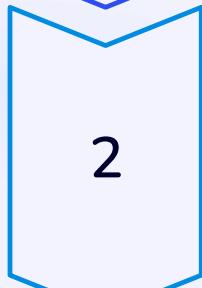
More Extreme Cases



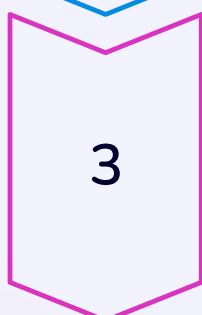
Population Distribution



Children



Working-aged



Elderly

What is the ideal population distribution for economic growth? Which part should be the largest?

How could we achieve the ideal population distribution?

Fertility Rate Changes in Asia-Pacific

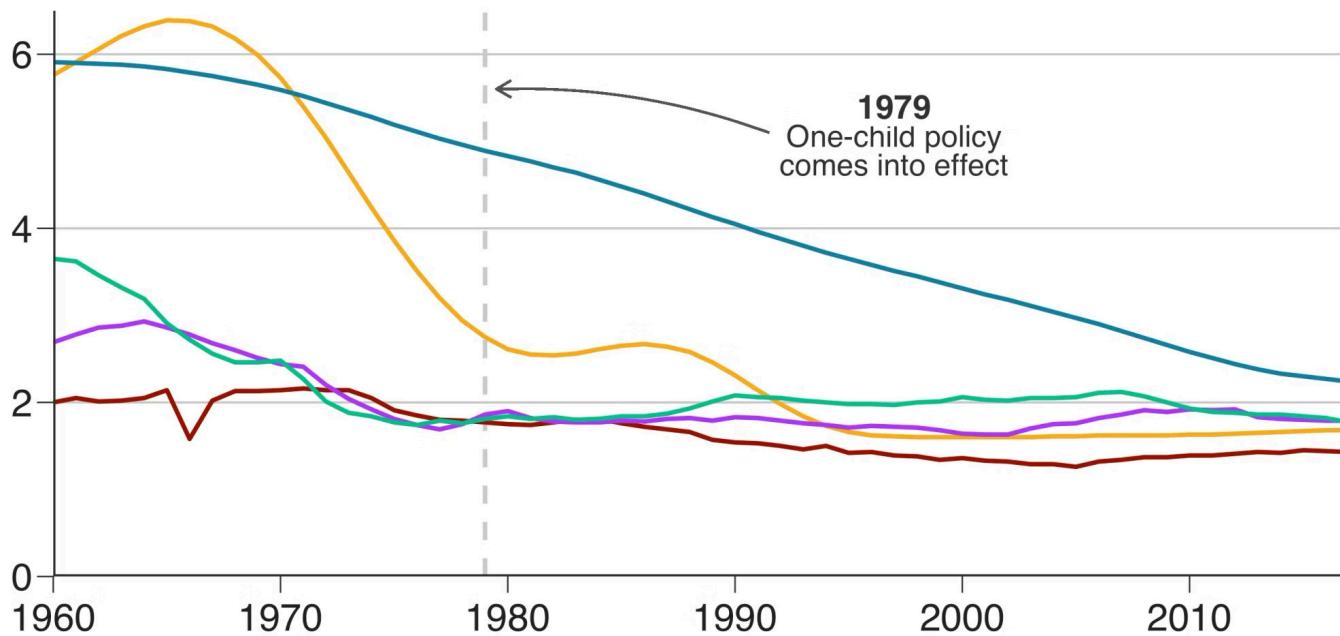


Fertility Rate Changes in Asia-Pacific

How China's fertility rate compares

Total number of births per woman (1960-2017)

China India Japan UK US



Source: The World Bank

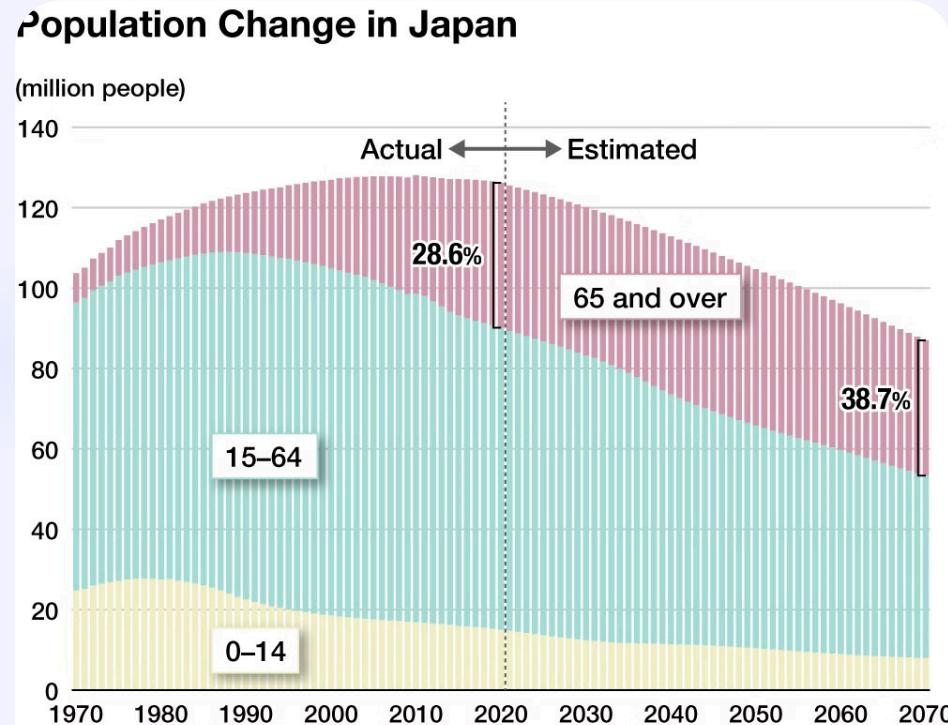
BBC

Fertility Rate Changes in Asia-Pacific

Viet Nam



Consequences of Declining Fertility Rate



Two consequences

Created by Nippon.com based on data from the National Institute of Population and Social Security Research.

nippon.com

Demographic Dividend

1

Definition

The economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is **larger** than the non-working-age share of the population (14 and younger, and 65 and older)

2

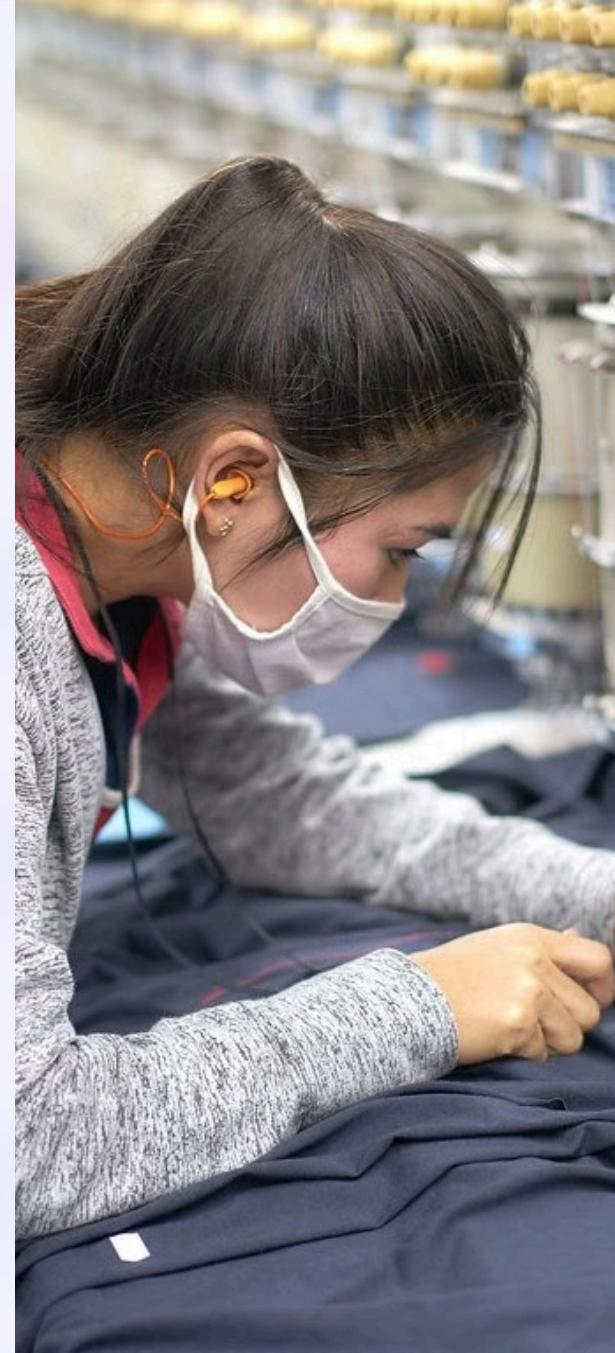
Duration

It is a transitional phase that typically lasts for a few decades, presenting a unique window of opportunity and potential economic gains

3

How it works?

Increase labor share → Economic growth (Why?)



Demographic Dividend and the Asian Miracle: Story I

Problem

- One month before the first iPhone's release in 2007
- Steve Jobs: plastic screen→glass screen
- Requirements:
 - Empty glass-cutting factory
 - Glass to experiment on
 - Mid-level engineers

Solution

- Glass-cutting factory in Shenzhen
- Engineers housed in dormitories, available 24/7
- Thousands of workers assembling iPhones
- 9 months in U.S.; 15 days in China



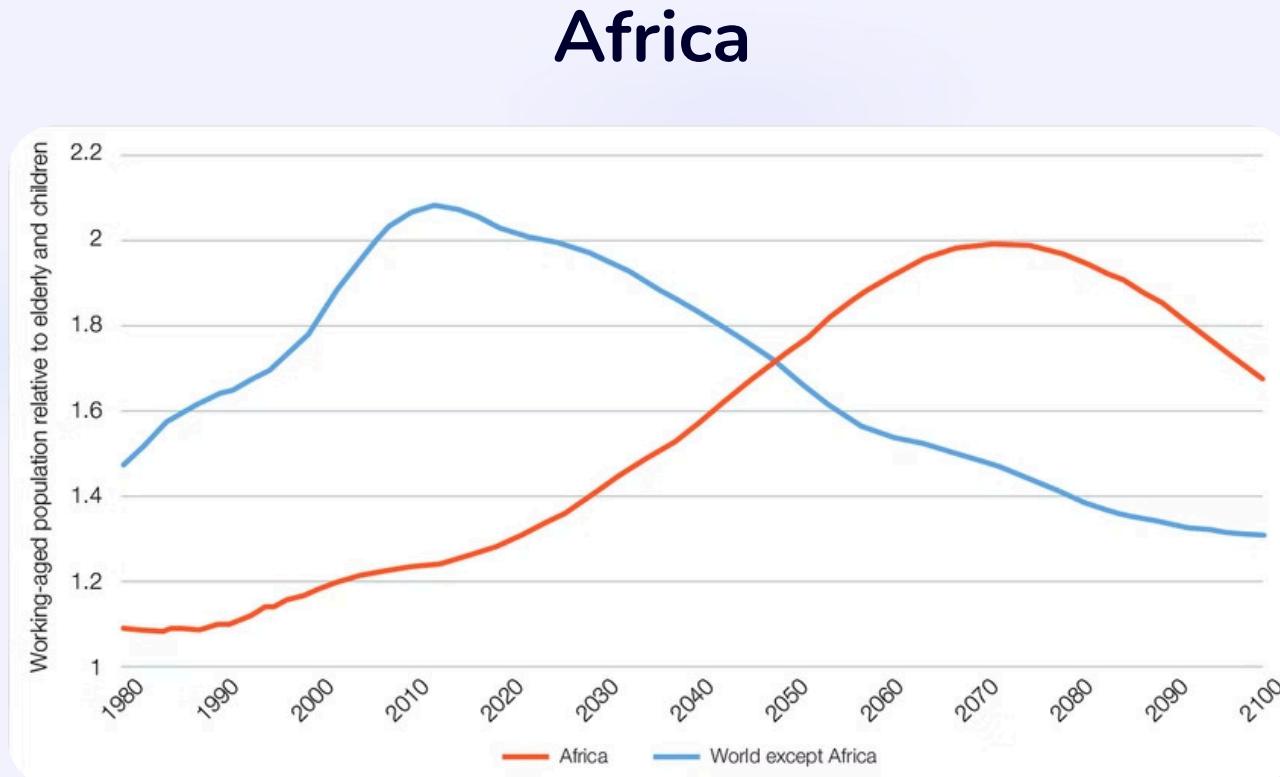
Demographic Dividend and the Asian Miracle: Story II

Why is TSMC successful in Taiwan?

- Good, well-trained technicians
- Well-trained operators
- Low turnover of employees
- Accumulated manufacturing experience



Do Demographic Changes Automatically Lead to Economic Growth?

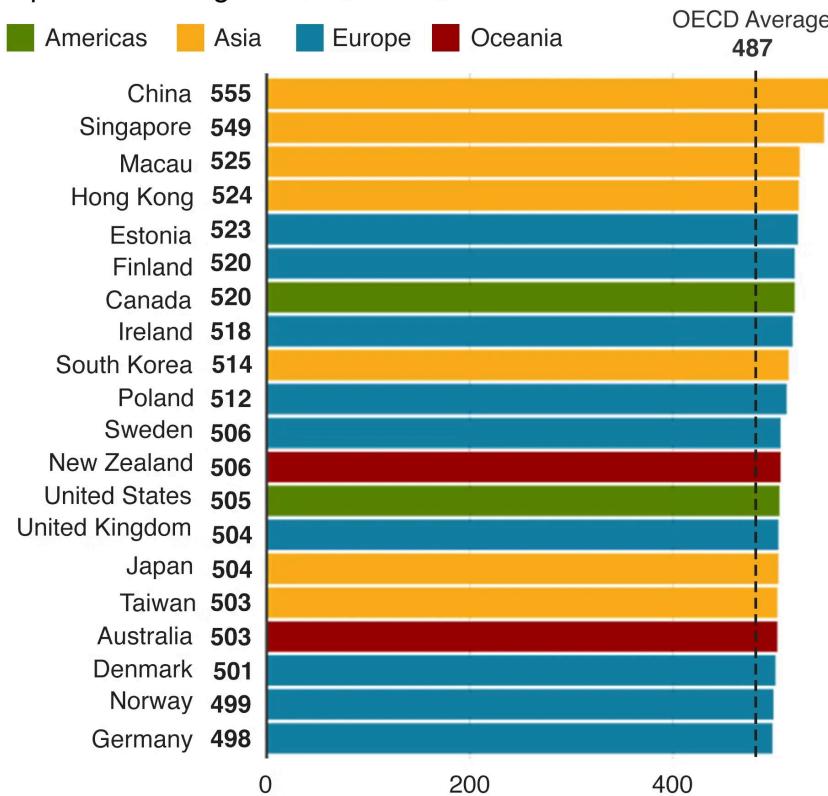


- Why demographic changes in Africa not lead to economic growth?
- What's missing in Africa?
- What have been achieved in Asia-Pacific?

Education

UK rises into top 20 for reading

Top 20 in reading on 2018 Pisa tests

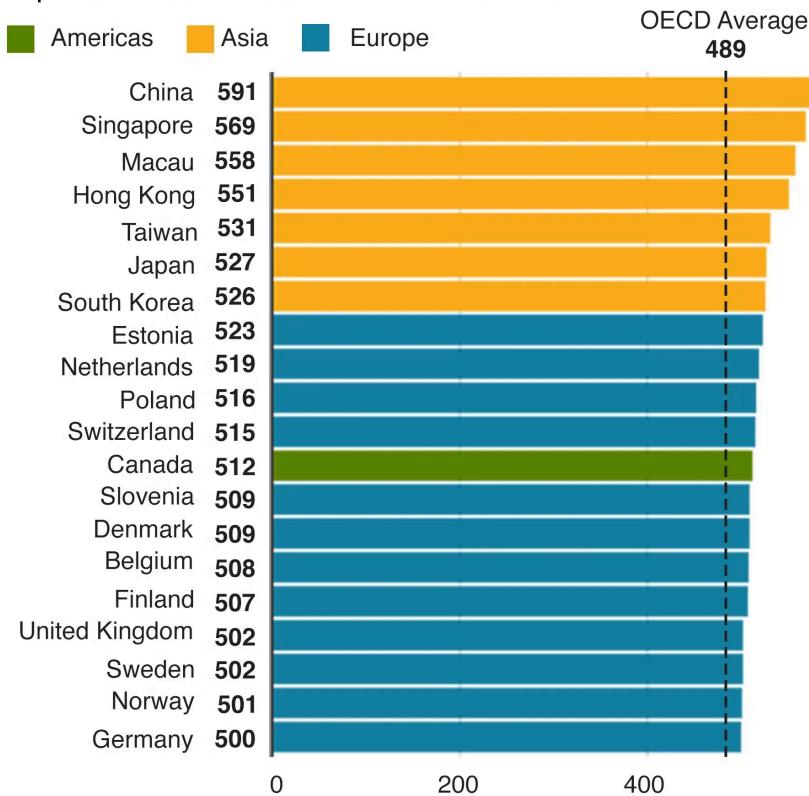


Source: OECD

BBC

Asian education systems lead maths rankings

Top 20 in mathematics on 2018 Pisa tests



Source: OECD

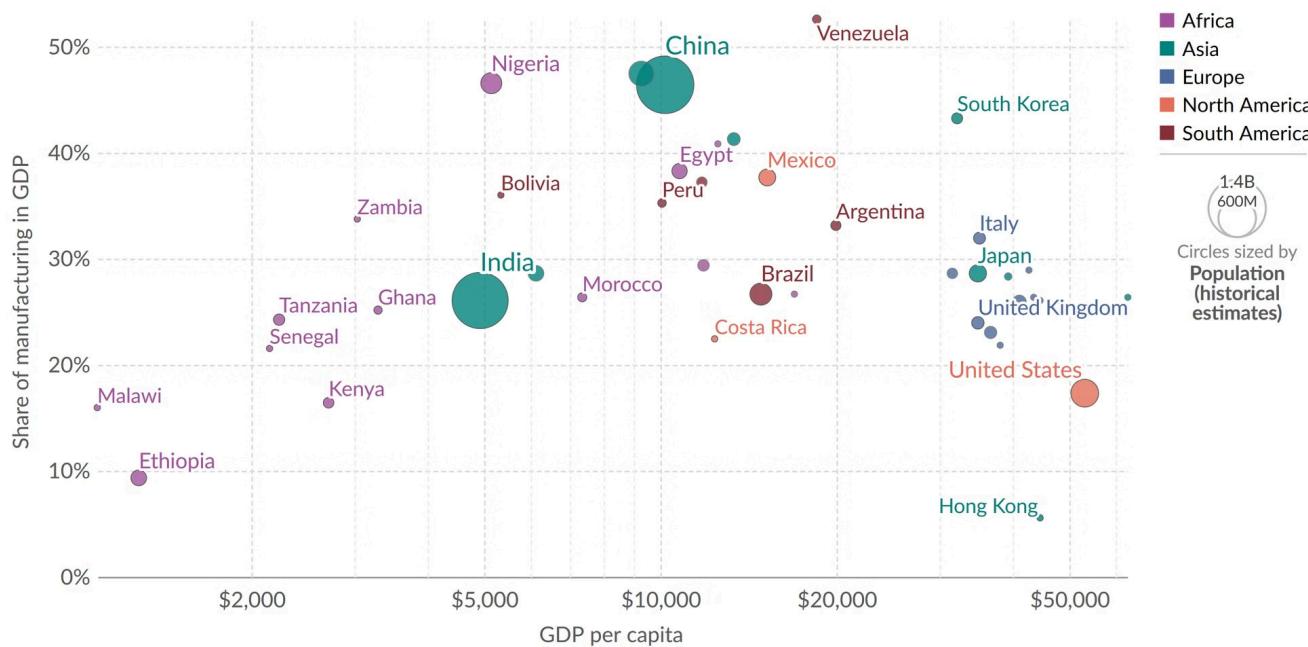
BBC

Industrialization

GDP per head vs. share of industry in GDP, 2016

Our World
in Data

The vertical axis shows historical estimates of the share of industry in GDP (estimated at current prices). The horizontal axis shows GDP per head after adjusting for inflation and price differences across countries (figures are in 2011 international-\$).



Data source: OWID based on Herrendorf et al. (2014) and GGDC-10 (2015); Maddison Project Database 2020 (Bolt and van Zanden, 2020)

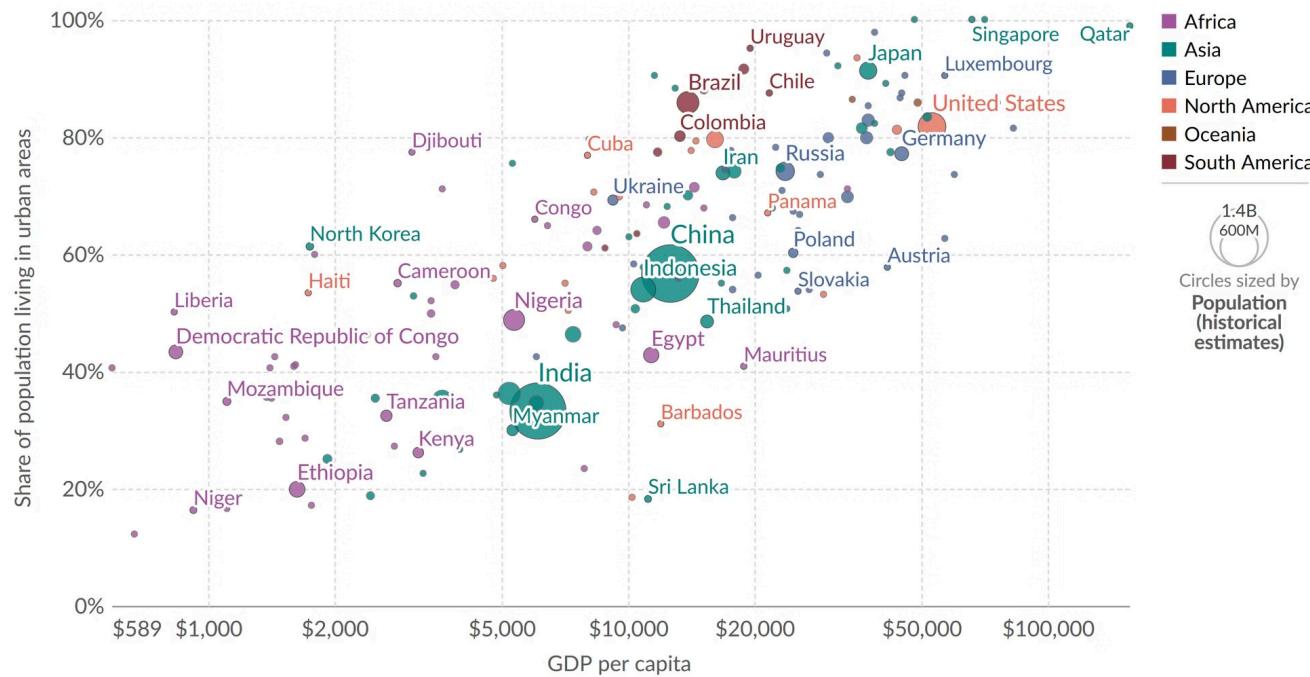
OurWorldInData.org/growth-and-structural-transformation-are-emerging-economies-industrializing-too-quickly | CC BY

Urbanization

Urban population vs. GDP per capita, 2016

Share of the total population living in urban areas versus gross domestic product (GDP) per capita, measured in 2011 international-\$.

Our World
in Data



Data source: OWID based on UN World Urbanization Prospects (2018), Maddison Project Database 2020 (Bolt and van Zanden (2020))

OurWorldInData.org/urbanization | CC BY

The Story of 7-11 Japan

- 1 Birth of 7-11 Japan
- 2 Hypermarket vs. Convenience Store
- 3 Demographic changes in Japan
- 4 7-11 and Gen Z
- 5 7-11 in the aging Japan



Birth of 7-11 Japan

1

Toshifumi Suzuki joined Ito-Yokado in 1963

2

He brought the 7-11 franchise to Japan in 1974

3

1st store in Japan: Toyosu, Kōtō, Tokyo

4

1st 24-hour operation in Japan: 1974 Kōriyama, Fukushima

5

In 1991 rescue the parent company originating the brand

6

78,029 stores in 19 countries as of November 2021



照片来源: blog.goo

Hypermarket vs. Convenience Chain Stores



Demographic Changes in Japan (from 1980)

- 1 Family size ↓
- 2 Female laborforce participation ↑
- 3 Dual-income family ↑
- 4 Aging

Convenience chain stores
outperform hypermarkets
—Why?



What did 7-11 do in response to demographic changes?

- The value of convenience ↑ : e.g. collecting public fees; ATM
- Focus on Japanese bento: home-made taste → not easily home-made dishes
- Package size ↓ Quality ↑
- Ultra-high density in key areas
- Seven Meal: delivery

Gen Z and 7-11

- 1 Gen Zers are more likely to visit c-store
- 2 They are highly influenced by ads and social media
- 3 The health conscious generation

Gen Z and 7-11

- 
- 1** Gen Zers are more likely to visit c-store
 - 2** They are highly influenced by ads and social media
 - 3** The health conscious generation
-
- 1** Test new concepts with Gen Z
 - 2** Fan-generated content on its social channels
 - 3** Rebrand and redesign the store to stress the healthy image

7-11 in the Aging Japan

- 1 Serve as hubs of communities
- 2 Healthy food
- 3 Home food delivery
- 4 Seating areas for social activities
- 5 Mobile convenience store in elderly housing complex



Summary

- 1 Demographic dividend is important to Asia-Pacific economic growth
- 2 Demographic changes do not automatically transform into economic growth; other factors matter
- 3 Lower fertility rate and aging are major challenges for Asia-Pacific economies
- 4 Firms have to be responsive to demographic changes in target market