

Economic Geography of Japan

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Issues

- Population Decline
- Definition of Urban Area
- Ranking of Prefectural Income
- Industrial Distribution across Prefectures
- Supplement: Regional Revitalization

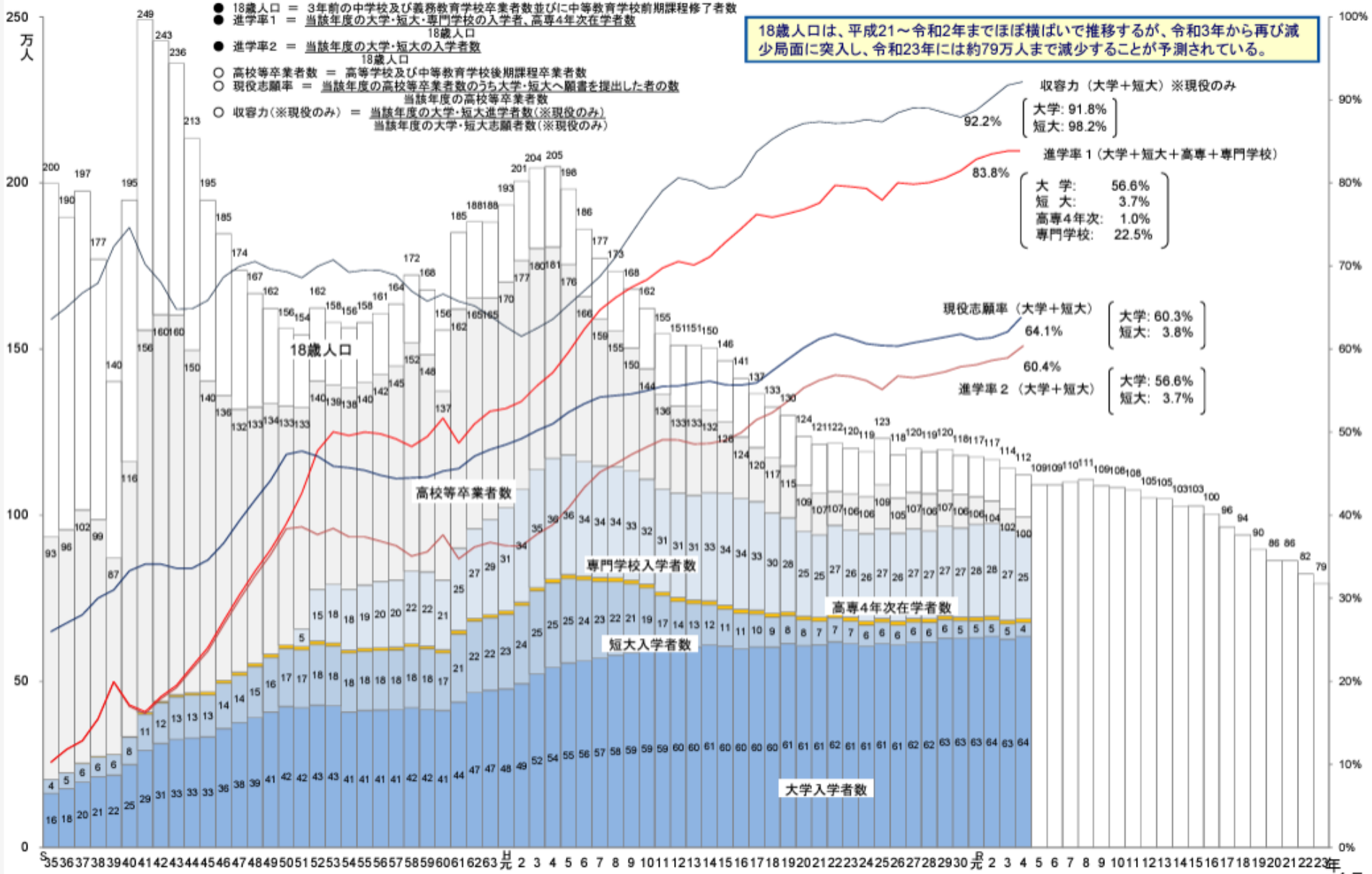
Population Decline

- Japan's population has started to decline in the latest decade, due to the passing away of the elderly and the reduction in birth rates.
- Population decline is driven mainly by the decline in the young generations.
- There were two young population peaks.
 - One is the postwar baby boomers (around 1960), and
 - The other is the sons and daughters of them (around early 1990s)

18歳人口と高等教育機関への進学率等の推移

18歳人口は、平成21～令和2年までほぼ横ばいで推移するが、令和3年から再び減少局面に突入し、令和23年には約79万人まで減少することが予測されている。

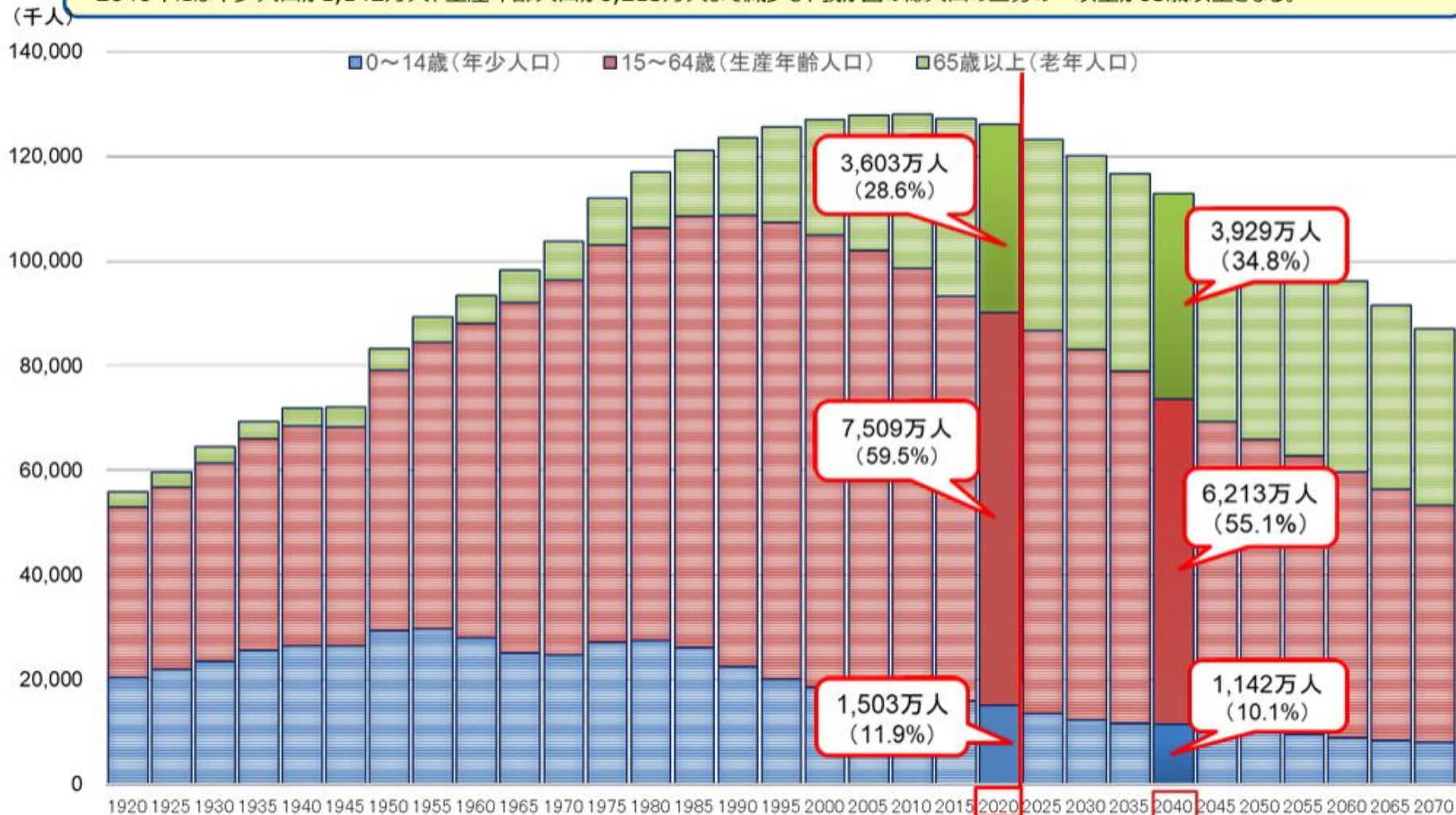
- 18歳人口 = 3年前の中学校及び義務教育学校卒業生数並びに中等教育学校前期課程修了者数
- 進学率1 = 当該年度の大学・短大・専門学校への入学者、高専4年次在学者数 / 18歳人口
- 進学率2 = 当該年度の大学・短大の入学者数 / 18歳人口
- 高校等卒業生数 = 高等学校及び中等教育学校後期課程卒業生数
- 現役志願率 = 当該年度の高校等卒業生数のうち大学・短大へ願書を提出した者の数 / 当該年度の高校等卒業生数
- 収容力(※現役のみ) = 当該年度の大学・短大入学者数(※現役のみ) / 当該年度の大学・短大志願者数(※現役のみ)



出典: 文部科学省「学校基本統計」。令和5～23年については国立社会保障・人口問題研究所「日本の将来推計人口(令和5年推計)(出生中位・死亡中位)」を基に作成。
 ※進学率、現役志願率については、小数点以下第2位を四捨五入しているため、内訳の計と合計が一致しない場合がある。

人口の推移と将来推計

国立社会保障・人口問題研究所の予測では、少子高齢化の進行により、2040年には年少人口が1,142万人、生産年齢人口が6,213万人まで減少し、我が国の総人口の三分の一以上が65歳以上となる。



※推計値は出生中位(死亡中位)推計による。実績値の1950年～1970年には沖縄県を含まない。
 1945年については、1～15歳を年少人口、16～65歳を生産年齢人口、66歳以上を老年人口としている。

(出典)1920年～2020年:「人口推計」(総務省)、2025年～2070年:「日本の将来推計人口(令和5年推計)」(国立社会保障・人口問題研究所)

推計値

Population Decline in Regions

- Population Decline in Regions was alarmed by a governmental committee chaired by a former prefectural governor, Hiroya Masuda, in his bestselling title “Disappearing Regions” (2014).
- According to Masuda, one thousand local communities will disappear by 2040, due to the declining population.



Urban Area

(Ministry of Internal Affairs)

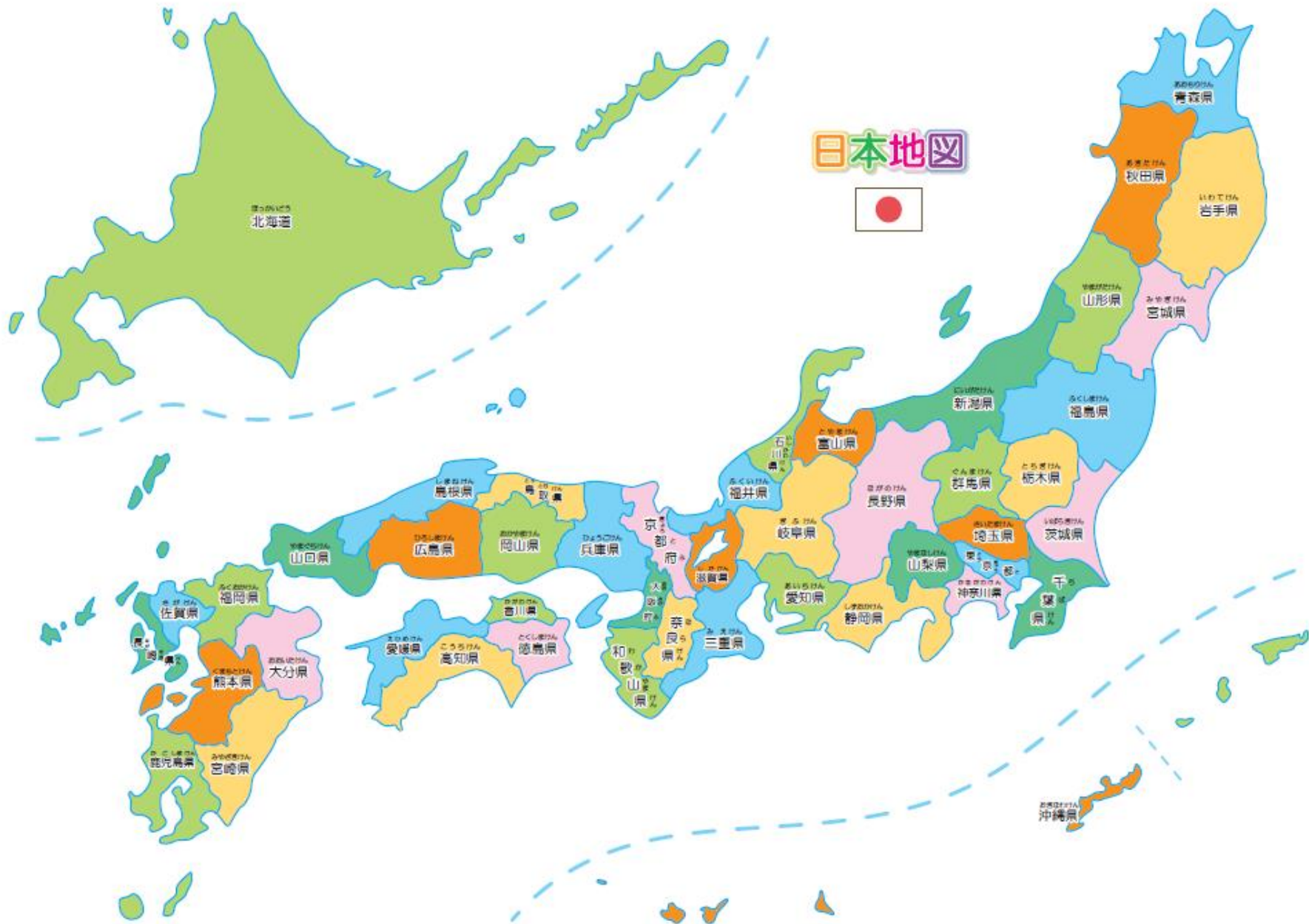
- (Definition) Urban Area is an area connected to a large city, to which more than 1.5% population commute daily.
- There are
 - 10 Large Urban Area: Sapporo, Sendai, Kanto (Tokyo), Niigata, Sizuoka-Hamamatsu, Chukyo (Nagoya), Kinki (Kyoto-Osaka-Kobe), Okayama, Hiroshima, and Kitakyushu-Fukuoka.
 - 4 Urban Area: Utsunomiya, Matsuyama, Kumamoto, Kagoshima.
 - [http://ja.wikipedia.org/wiki/%E9%83%BD%E5%B8%82%E5%9C%8F_\(%E7%B7%8F%E5%8B%99%E7%9C%81\)](http://ja.wikipedia.org/wiki/%E9%83%BD%E5%B8%82%E5%9C%8F_(%E7%B7%8F%E5%8B%99%E7%9C%81))

Population Concentration to the Three Megalopolis

- The Three Megalopolis (2015):
 - Tokyo (+Kanawaga+Chiba+Saitama, or Shutooken) 28%
 - Osaka (+Kyoto+Hyogo, or Kansai) and Nagoya 23%
 - Other 49%
- The population share of Tokyo is expected to rise up to 33% by 2050.
- The Population share of Osaka and Nagoya will remain stable.
 - <http://www.garbagenews.net/archives/1957029.html>

Aging is common to the whole Japan

- The population share of non-urban area is declining partly because the population aging occurs faster there than in urban areas.
- Aging is expected to be more threatening to urban area (Tokyo), because old population will be concentrated there.
 - Output per population is higher in urban area than in rural regions, partly because young people are more productive and live in urban area now.
 - However, they will get older eventually, and their productivity will decline.



(C) 小学生の学習教材【ちびむすドリル】 <http://kotoba.littlistar.jp/syogaku.html>

Ranking Prefectural Output (2020)

- Comparing economic performances between prefectures is a difficult task.
- Prefectures with larger population produce more.
- Tokyo produces more than 20% of Japan's GDP.
 1. Tokyo
 2. Osaka
 3. Aichi
 4. Kanagawa
 5. Saitama
 6. Hyogo
 7. Chiba
 8. Hokkaido
 9. Fukuoka
- Data:
<https://www.pref.ibaraki.jp/kikaku/tokei/fukyu/tokei/betsu/keizai/qe2020-2/index.html>

Prefectural Income per Population

- However, gaps in prefectural income per population is much smaller than gaps in prefectural GDP.
- Prefectural Income per population:
 1. Tokyo
 2. Aichi
 3. Fukui
 4. Tochigi
 5. Toyama
 6. Shizuoka
 7. Ibaraki
 8. Shiga
 9. Tokushima
 10. Chiba
- Osaka is ranked at the 20th.
- Fukuoka is ranked at the 30th.
- The 2020 data show that the region where the service sector is large was much damaged by the Coronavirus Pandemic.

Decomposing Prefectural Output

- We can further explore gaps in output per population by decomposing productivity-improving factors into:
 - Labor quality
 - Capital intensity
 - TFP (Total Factor Productivity)
- Gaps in prefectural output per labor force (labor productivity) shrinks mainly because of the declining gap in capital intensity (or capital per labor).

図3: 1970年における労働生産性地域間格差の原因(対数値)

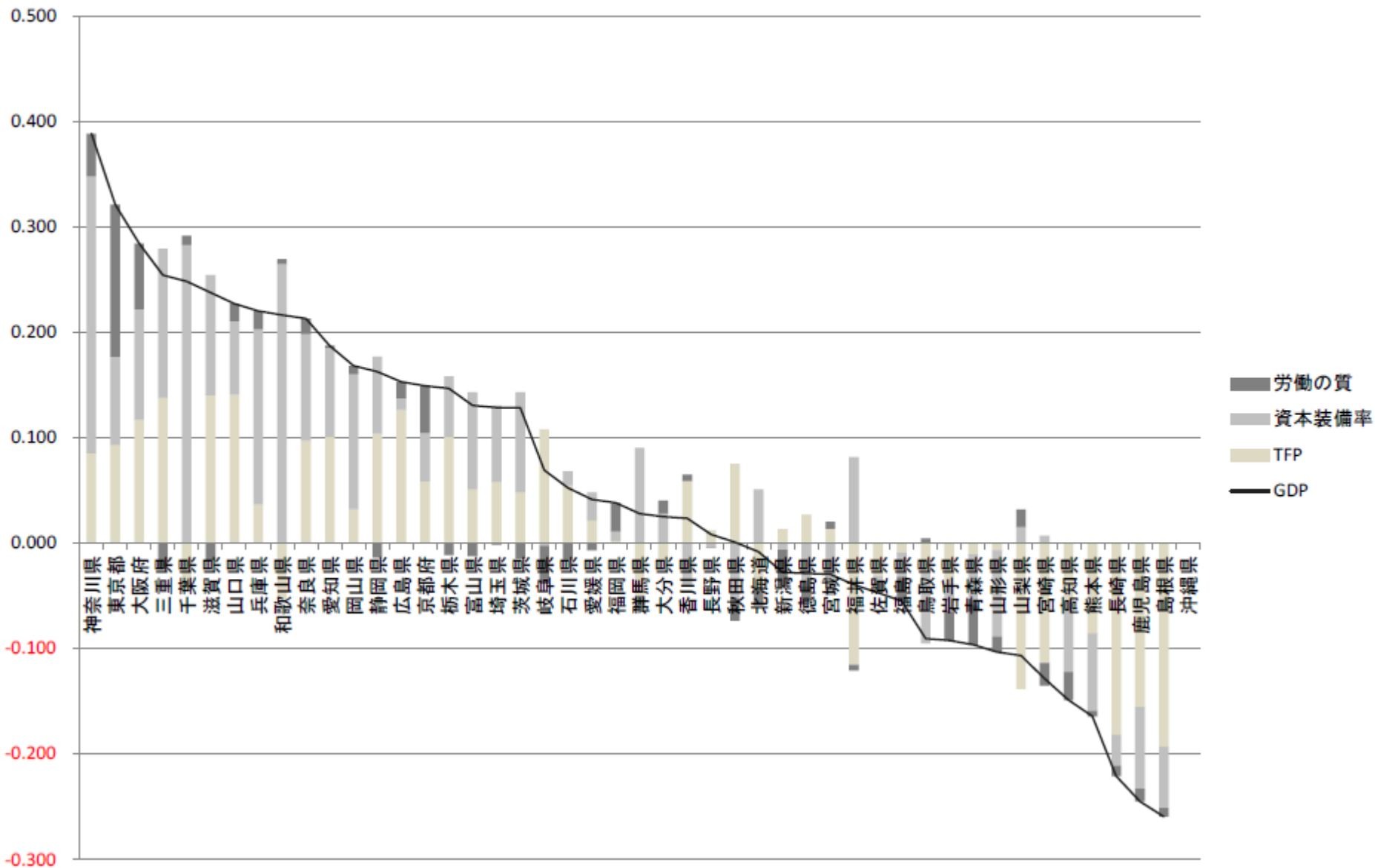
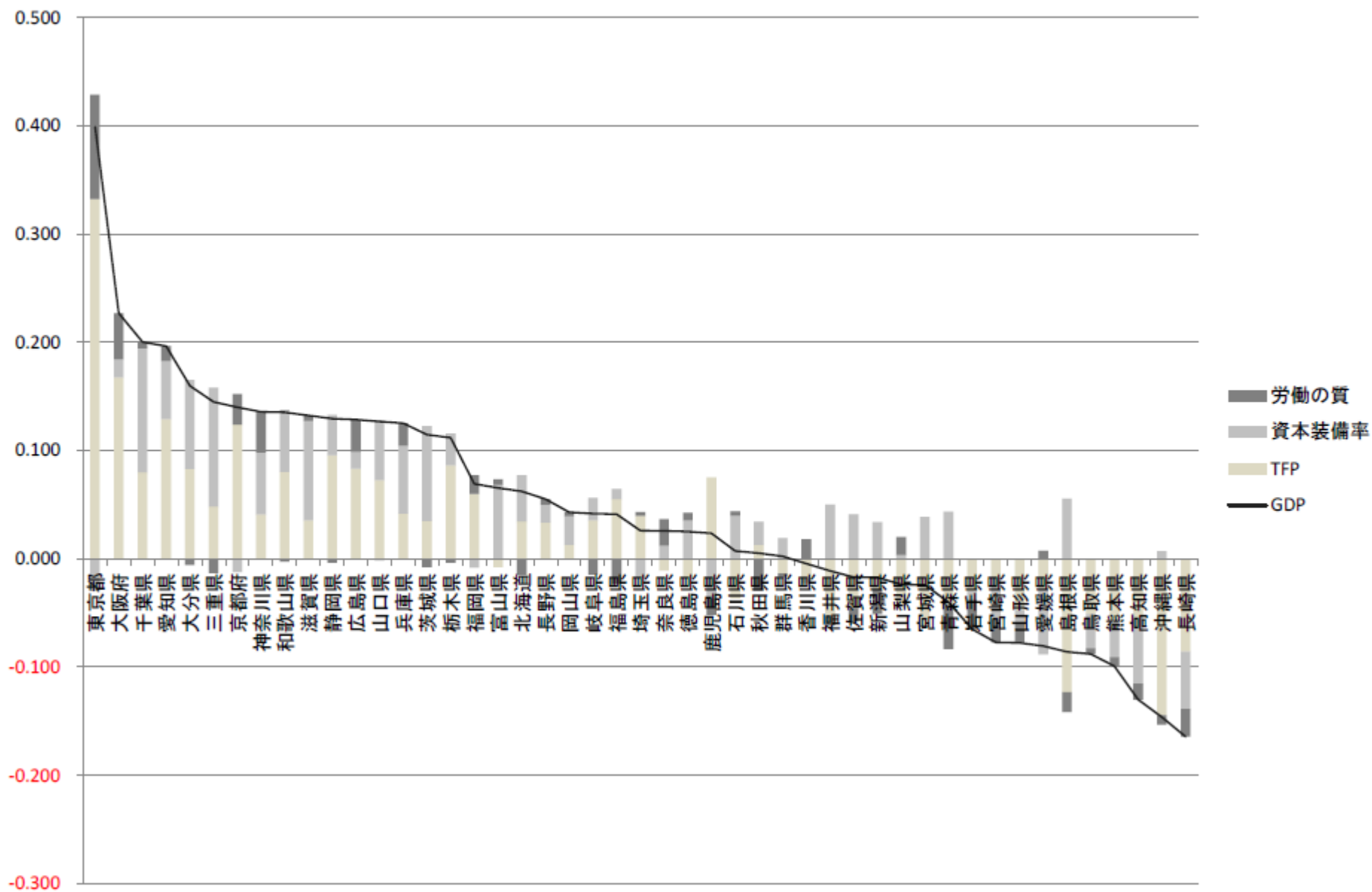
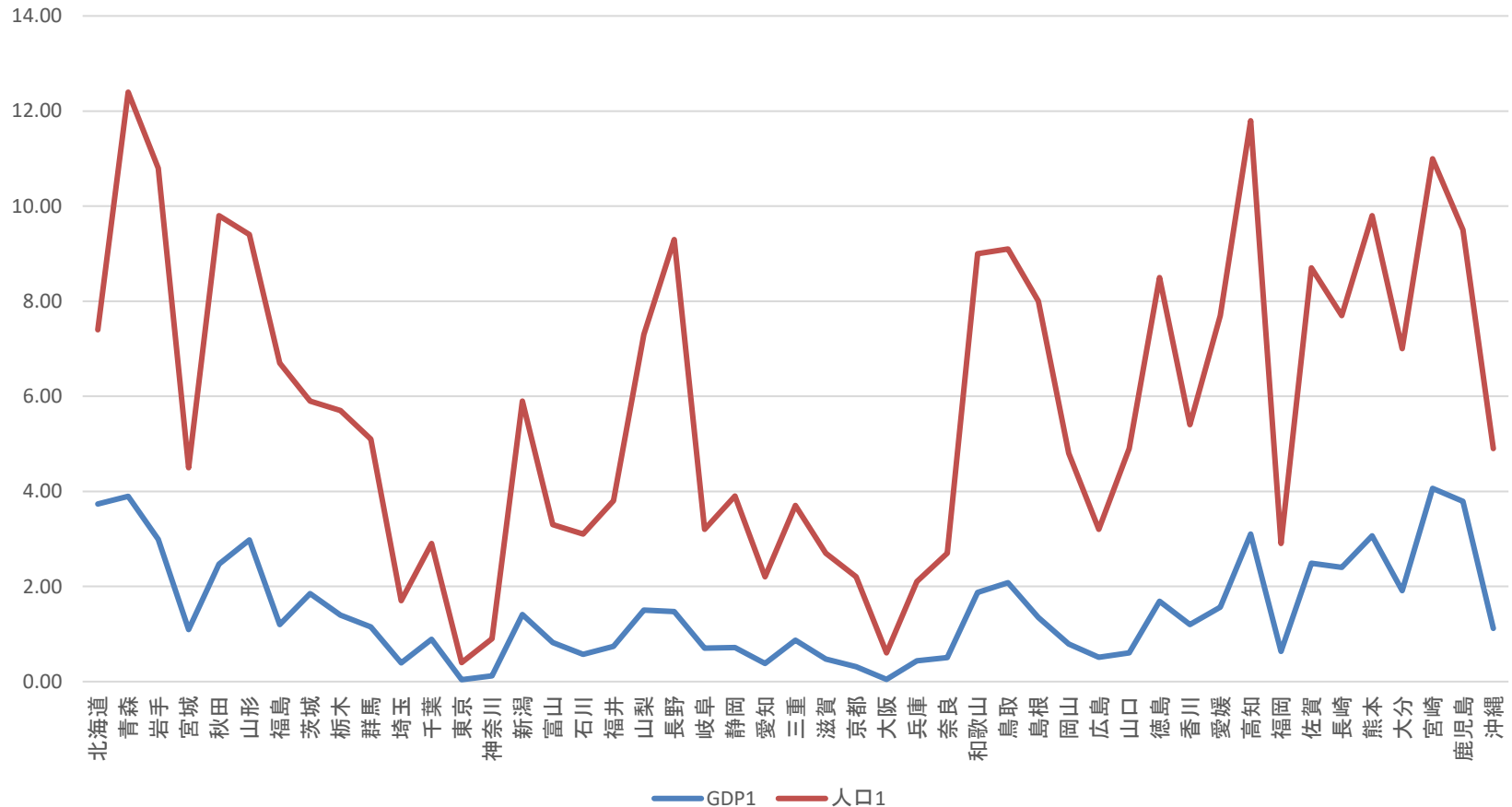


図3: 2008年における労働生産性地域間格差の原因(対数値)

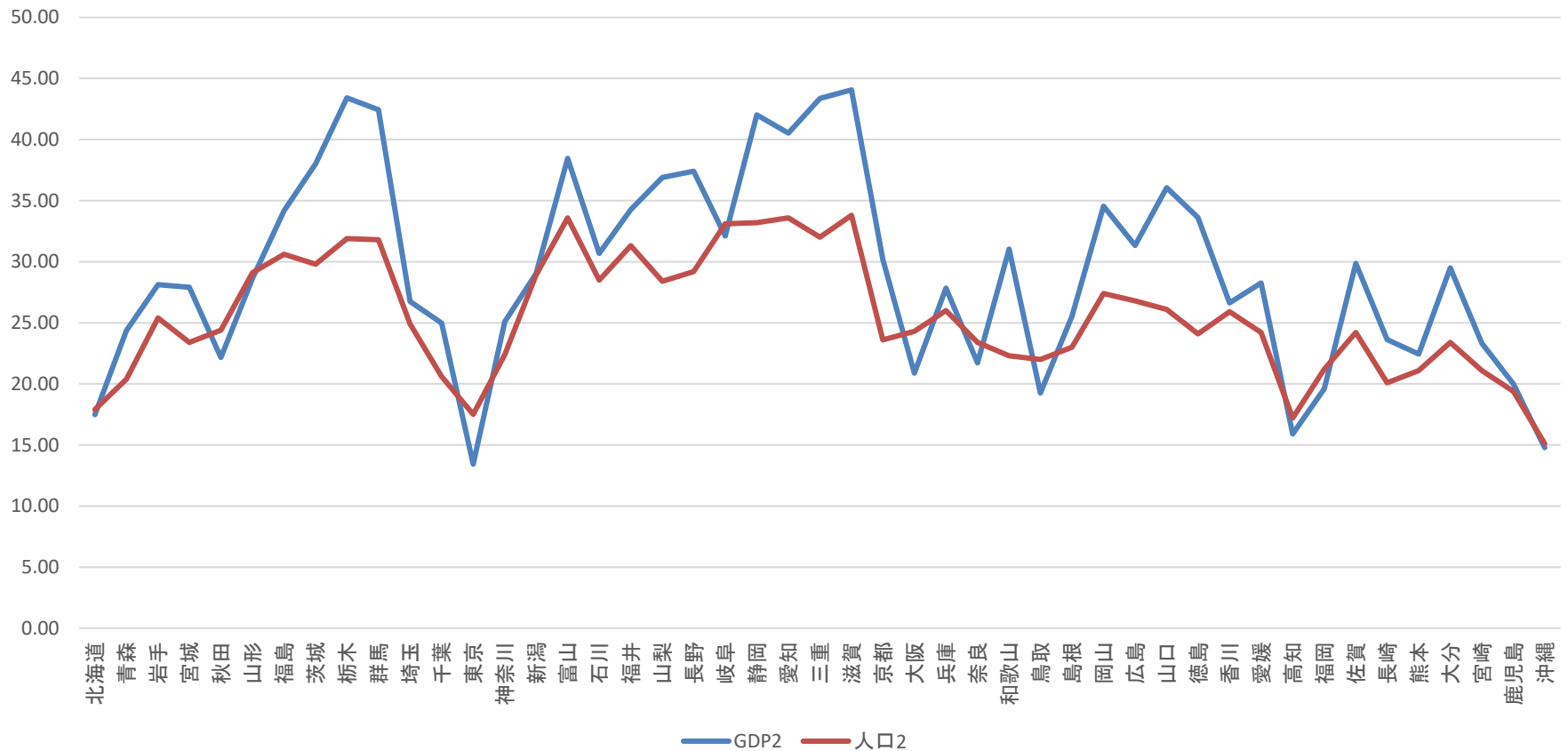


Primary Industry



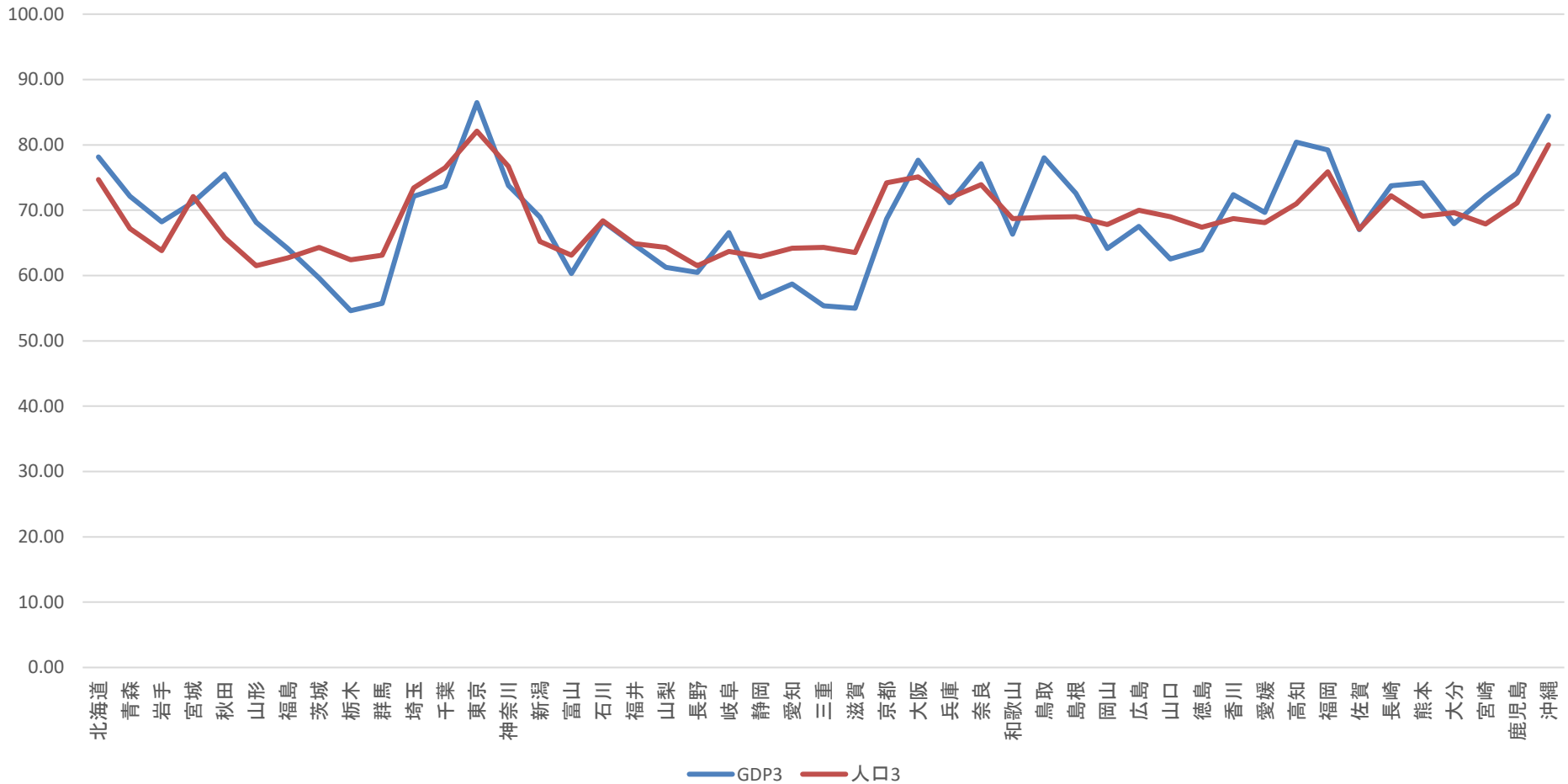
- The primary industries tend to be located in the edge (Hokkaido and Kyushu).
- The share of value added of the primary industry tends to be lower than its share of employment.

Secondary Industry



- The secondary (manufacturing) industries tend to be located in the center of Japan, suggesting the economy of geographical agglomeration.
- The share of value added of the secondary industry tends to be greater than its population share, which makes its labor productivity higher.

Tertiary Industry



- The tertiary industry is relatively evenly located all over Japan.
- Its employment share is stable, while its value added share fluctuates along its location.
- It seems to be difficult to find the region-specific factors to affect the productivity of tertiary industries.

Supplement: Regional Revitalization

- PM Abe created a new minister position in the cabinet, titled “minister of regional vitalization,” and appointed Shigeru ISHIBA, his political rival, to the post.
- Abe might have a strong motive to attract voters living in the rural regions, in order to prepare for the upcoming nationwide local elections in this April and May.

Targets of the Regional Revitalization Policy

- The Minister has a long formal name as “Minister in charge of Overcoming Population Decline and Vitalizing Local Economy in Japan, Minister of State for the National Strategic Special Zones,” which unintentionally summarizes the policy targets:
 1. Overcoming Population Decline
 2. Vitalizing Local Economy
 3. (dealing issues on) National Strategic Special Zones

National Strategic Special Zones ?

- In principle, Japan's central government regulates regional governments by applying uniform rules.
- However, selected regions are exempted from the general rules, in order to promote special policy goals and experiments.
- Fukuoka has been selected to promote employment of foreigners, being exempted from the general rules on foreigners in Japan.