The Causes and Consequences of Depopulation in Japan (revised Version)

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17:30-17:50

1. Background and Purpose of Study

This study focuses on Japan as a precursor case of the worldwide depopulations expected in the near future, looking for causes and consequences of demographic transition I and II in a long term perspective.

* Depopulation in Japan since 2008

- The total population of Japan (including non-Japanese residents) reached a peak of 128.08 million in 2008. Then, it began to undergo a long period of population decline.（Figure 1）
- According to the 2020 Population Census, it recorded 126.23 million, 0.87（2020 : million fewer than the number of the previous Census. Demographically it means that Japan loses one megacity with over a million people every 5 years.
- Above all, the working age population between 15-64 is rapidly decreasing, by almost 15 million from 87.16 million at the 1995 Census to 72.92 million at the 2020 Population Census（IPSS 2022).
- People in Japan are already feeling the impacts of rapid depopulation on their daily life.

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2. Japan As a Precursor Case of Depopulation

- The United Nations projected that the world's population is expected to grow from 7.9 billion in 2022 to 10.3billion in 2100 (a 30% increase) (United Nations 2022a).（Figure1）
- However, if we take a closer look at this growth, most of the increase (about 95%) is expected in Sub-Saharan Africa. In most other regions, population growth will continue but only the elderly (65+) will increase, while working-age adults (15–64) and children (0–14) will decrease.（Figure2）

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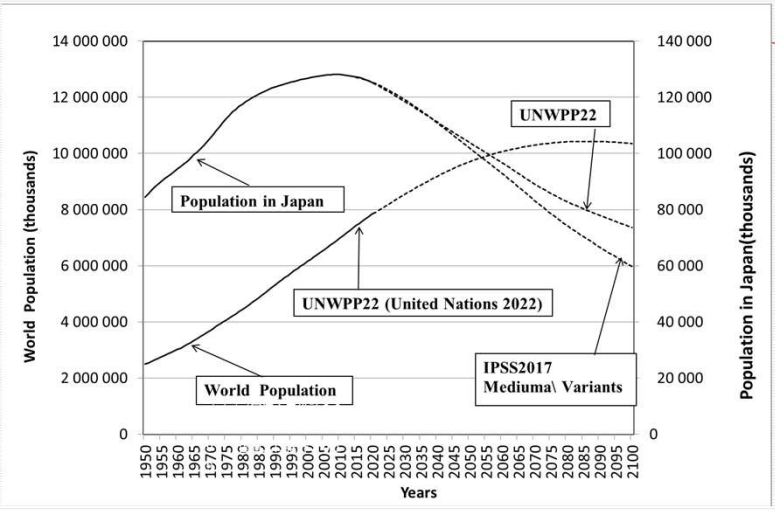
Figure1: Long term Population development of Japan



Source: United Nations, 2022a; IPSS, 2017

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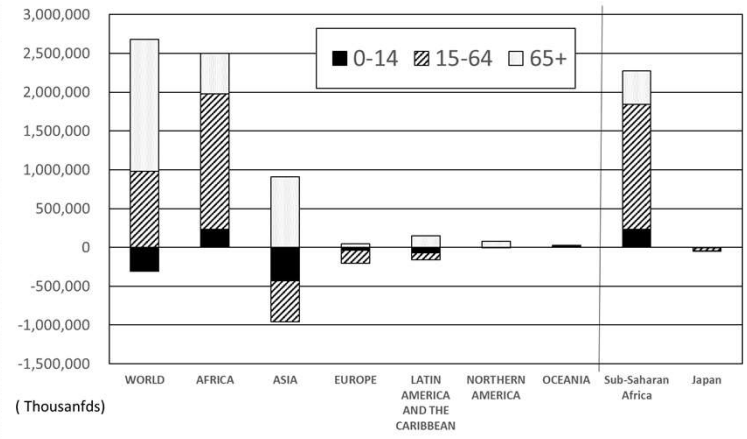
Figure 2: Population Changes in the Next 3.1 Billion by Age Group and Regions



Source: United Nations, 2022.

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∗ Japan As a Precursor Case of Depopulation

- Therefore, following Japan, the EU, China, and most countries are expected to undergo a long period of population decline by 2050.（Figure2）
- “Elsewhere, the total fertility rate has fallen below 2 births per women and has been fluctuating in recent years, typically between 1.5 and 2 births per woman. Today, such countries are home to two thirds of the world’s population.”(United Nations 2022b).
- Net Reproduction Rate (NRR) in 2022 is estimated below the replacement level in most of regions except Sub-Sahara Africa（1.94）and Oceania(1.01).（Figure 3）

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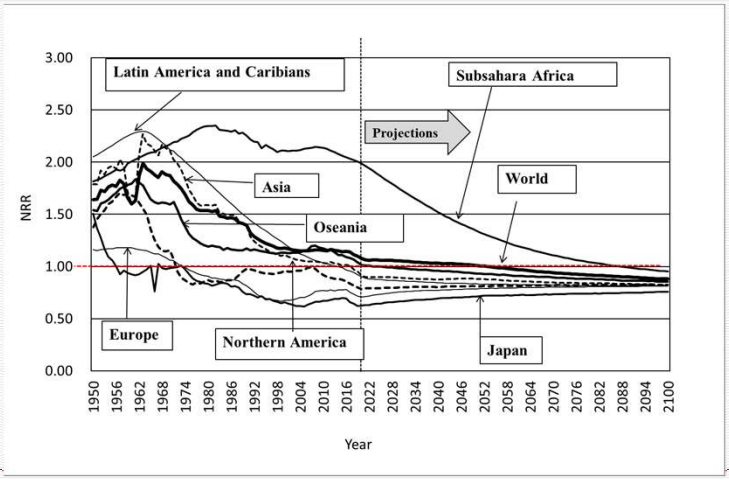
Figure 3: Changing Net Reproduction Rates by Region: Estimates (1950-2019) and Projections (2020-2100) from the UN WPP22 Medium Variant Projection



Source: United Nations 2022a.

**Japan As a Precursor Case of Depopulation

- The lowest fertility is no longer a Japanese monopoly. In East Asia, Taiwan, Singapore, Korea and China, the fertility decline is unstoppable.
- Even after cancellation of its one-child policy, China's TFR will continue to drop, partly as an impact of Covid-19. China's population would begin to decrease from 2022.

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3. Population Dynamics of Japan

- From 1950 to 2020, the population dynamics of Japan, depending mainly on natural dynamics (live births and deaths), and social dynamics (immigration and emigration) have been limited in scale (except when Okinawa reverted to Japan in 1971).（Figure 4，5）
- Since 2007, the natural dynamics turned negative and total population is shrinking continuously.
- On the other hand, around 2012, the social dynamics (immigration) began to increase, which made the population decline slightly weaken.（Figure 4，5）

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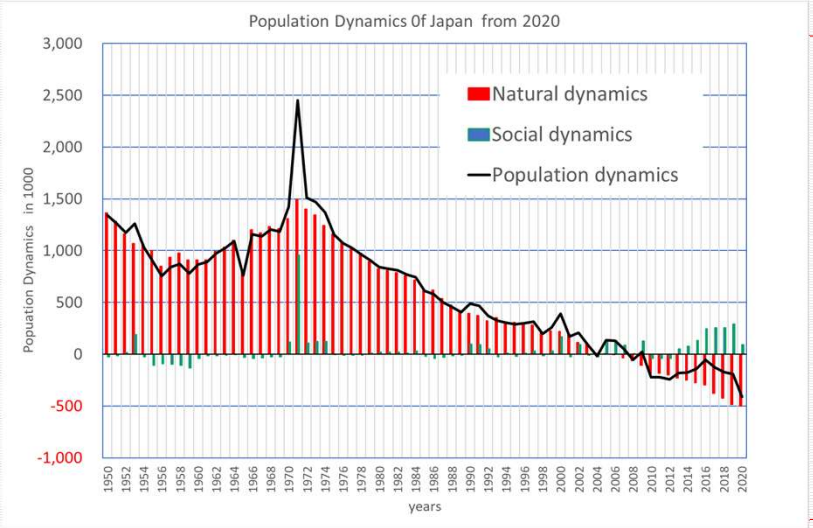
Figure 4 Population Dynamics 0f Japan 1950-2018



Source: IPSS, 2022

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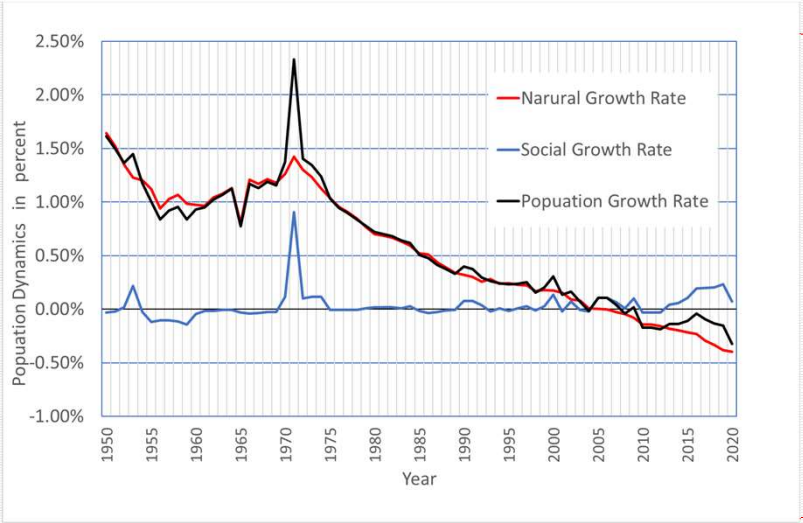
Figure 5 Population Dynamics 0f Japan 1950-2020



Source: IPSS, 2022

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* Population Dynamics of Japan

- Further, the natural dynamics (CBR: crude birth rate, CDR: crude death rate, NGR（natural growth rate) over the very long term, from 1873 to 2020, show
- the First Demographic Transition (FDT) from high fertility and mortality to low fertility and mortality and
- the Second Demographic Transition (SDT),where the natural dynamics turned negative (as a result of low fertility and aging) and depopulation began. (Fig.6)

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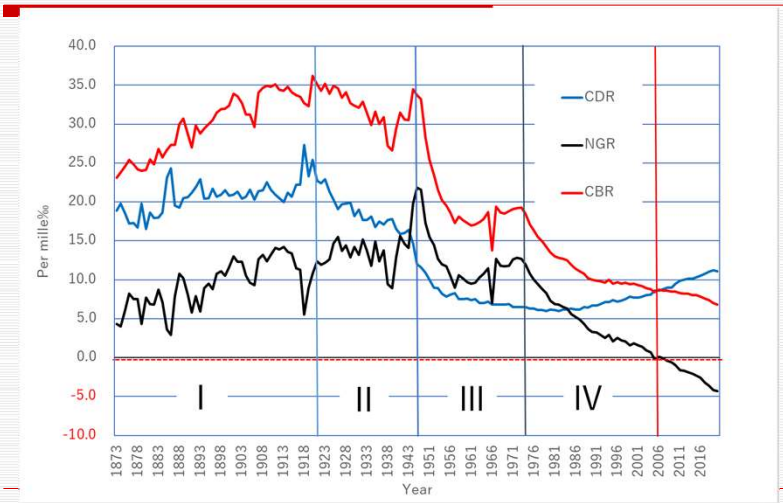
Figure 6 Long-term transition of Natural Dynamics in Japan 1873-2020



Source: IPSS, 2022

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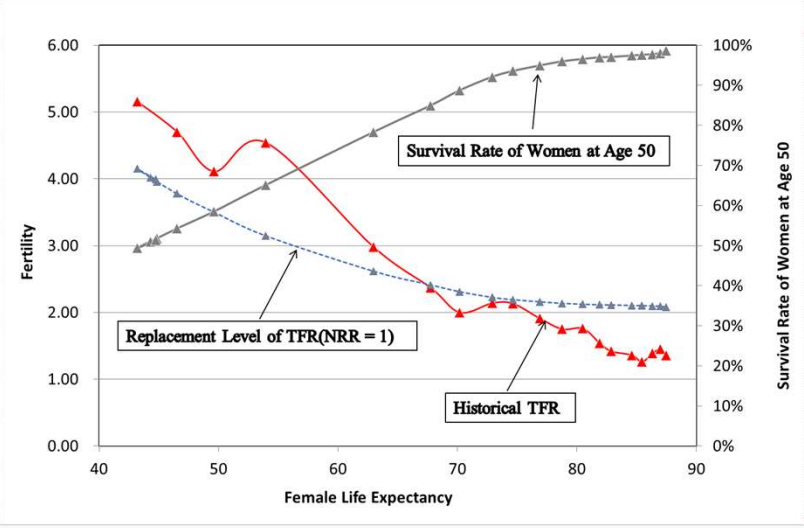
4. Causalities of Demographic Transition
(1) FDT in Japan

- The First Demographic Transition in Japan started with modernization from the Meiji Era and continued to the mid-1970s.
- The growing social capital and social production extended the average life span of women from 50 to over 70 years, thus the survival rate of women at the end of their reproductive period rose from 50 % to nearly 100 %.
- As a result, fertility was reduced from 4 to 2 children as the higher risk of having many children promoted birth control, i.e. it reached mere replacement level fertility .（Figure 7）

Figure 7:
Women's life expectancy and fertility change



Source：Hara (2020)

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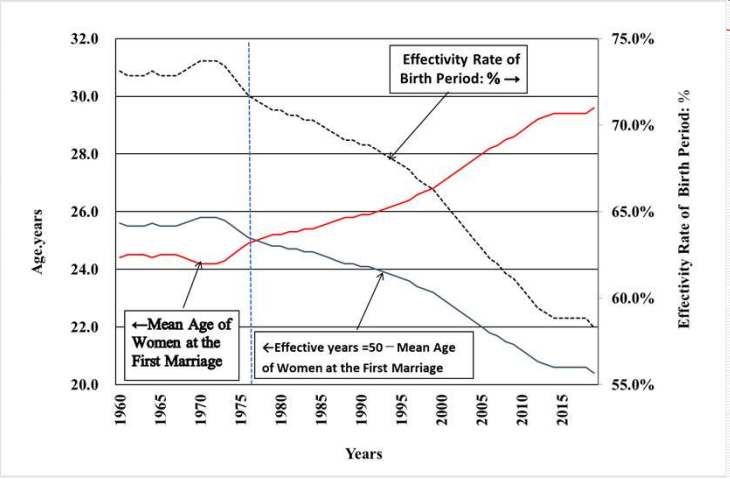
*Causalities of Demographic Transition (2) SDT in Japan

- The Second Demographic Transition in Japan was caused by the shift of reproduction to a higher age.
- With the liberalization of marriage behaviors, late marriage and late childbearing was promoted.
- Above all, the social norm on marriageable age (Kekkon Tekireiki in Japan, which pressured women to marry before 24 years old), evaporated.
- The reproductive period of women was cut back and, as a result, marriage became rarer, and more couples became childless or with only one child. The multiple child household is vanishing.(Figure 8).

Figure 8:
Effects of late marriage and late childbearing



Source：Hara (2020)

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5. Depopulation in Japan as an inevitable consequence of demographic transition

- Because of *Sakoku* ("locked Country" , Isolationist foreign policy of Tokugawa shogunate), the population in Japan has been relatively isolated from influence of international population movement. Therefore, the depopulation as a result of demographic transition began faster than the other developed countries.
- What Japan's demographic transition suggests is that human society, in its pursuit of affluence and freedom, has increased its longevity through the rapid development of its productive forces, while at the same time expanding its freedom to control its own fertility. And we are losing to control the balance of interests between Individuals and society.

*Consequences of Depopulation: social, economic, and political issues

- With decreasing population,

① The reduction of social demands is inevitable, and the cost performance based on large-scale population will loosen.

② To sustain living standards, the continuous improvement of productivity is needed.

③ This changes labor demands among industry sectors and human service sectors, both in quantitative and qualitative aspects.

④ Increasing diversity and inequality in income distribution is expected.

⑤ The maintenance and updating of infrastructure with diminishing residents,

⑥ Changes in natural environment caused by depopulation,

⑦ Acceptance, and support for increasing migration.

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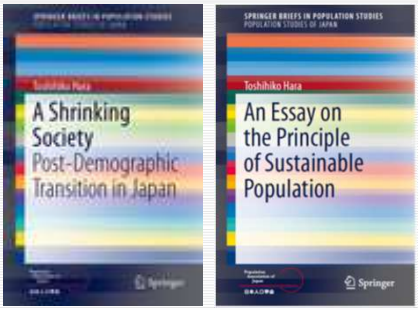

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