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The Imbalances in Ageing, Health and Old Age Support: Examination of Prefectorial-Level Data in Japan

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Abstract

Japan is experiencing a significant demographic shift with a rapidly growing elderly population. This trend, characterized by an increasing number and proportion of older residents, is considered one of the most substantial social transformations of the 21st century. However, managing the ongoing demographic changes of rapidly aging population alongside economic targets presents significant hurdles. This study aims to investigate potential imbalances between the extent of aging and the availability of support systems – specifically livelihood, medical facilities, and health insurance – across all 47 prefectures in Japan.

JEL: J14, I18, H75, R11, O53.
Keywords: Ageing, Old-age Health, Livelihood Support for elderly, Japan, Regional variation.

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1. Background and Objective:

The number and the proportion of Japan's elderly population are experiencing growth and this demographic shift is currently being visualized as one of the most significant social transformations of the twenty-first century. According to recent data, more than one in every 10 people in Japan are today aged 80 or older. The elderly (age: 65 plus) now accounted for 29.3% of Japan's total population, also a new high, according to data released by the Ministry of Internal Affairs and Communications. The country also has one of the lowest birth-rates in the world and has long struggled with how to provide for its ageing population. According to the National Institute of Population and Social Security Research, population aged over 65 are expected to account for 34.8 percent of the population by the year 2040. The ageing process in Japan has raised the fiscal burden on the country's social security spending, and the country has been revising the budget for rise in the social security costs. The aging population places a substantial burden on the social security system, leading to soaring medical and welfare costs. This, coupled with a declining workforce, poses significant fiscal challenges for the nation.

Japan mandates participation in the National Pension system for all residents aged 20 to 59, regardless of nationality. The country's Long-Term Care Insurance (LTCI) program, established in 2000, is jointly funded by taxes and premiums from individuals aged 40 and above. Japan's healthcare system boasts universal coverage, patient freedom to choose providers, and a fee-for-service model. The government also aims to implement a nationwide program assisting single, elderly individuals even after their demise, encompassing funeral and cremation arrangements. However, achieving these goals amidst an aging population and ongoing economic challenges presents a significant hurdle for Japan. In this background, the objective of this paper is set to examine the presence of any imbalances between the extent of ageing in one

hand and support for livelihood, medical facility and health insurances on the other, across the 47 prefectures in Japan. [1]

2. Methodology and Plan of Study:

Since, the main objective of this paper is to explore on the statistical relationship between the demographic burden of aged population vis-à-vis the supports for livelihood, medical facility and health insurances on the basis of employing the cross-sectional prefectorial-level data from Japan, our analysis proceeds in the following sequences. We first examine the extent of population aging in Japan by analyzing the inherent characteristics of old-age and child dependency ratios. The population pyramids are also examined by splitting the total population between the men and women categories. It is however interesting to observe that there has not been many conclusive study results or findings on the issue of the gender aspect of ageing. This aspect is important since women in general face greater challenges in their insecurity as older adults. It may also be recalled that women in any case undergo gender disparities on account of access to work and equal pay, along with the social norm that they had to participate in various unpaid family work. We subsequently examine the regional patterns of ageing by using the official Census data for 47 prefectures in Japan. As a preliminary analysis we utilize the scatter-plot of relevant variables on the prefectorial data in a cross-sectional framework. We also analyze the Spearmen's rank correlation test and several commonly used non-parametric tests (viz., Wilcoxon signed rank test, Wilcoxon rank sum test) to examine the ranking difference between ageing burden and the government's old-age health support. Finally, the examination of the relationship between the ageing burden and the government's support on old-age livelihood and also health is finally carried out by using cross-sectional standard correlation and regression analysis. The remaining part of this paper is structured as follows. In section 2, we discuss how

[1] *The prefectures in Japan are grouped under eight regions, as follows: 1) Hokkaidō: Hokkaidō, 2) Tōhoku: Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima, 3) Kantō: Ibaraki, Tochigi, Gunma, Saitama, Chiba, Tōkyō, Kanagawa, 4) Chūbu: Niigata, Toyama, Ishikawa, Fukui, Yamanashi, Nagano, Gifu, Shizuoka, Aichi, 5) Kansai: Mie, Shiga, Kyōto, Ōsaka, Hyōgo, Nara, Wakayama, 6) Chūgoku: Tottori, Shimane, Okayama, Hiroshima, Yamaguchi, 7) Shikoku: Tokushima, Kagawa, Ehime, Kōchi, 8) Kyūshū: Fukuoka, Saga, Nagasaki, Kumamoto, Ōita, Miyazaki, Kagoshima, and 9) Ryūkyū Islands: Okinawa.*

population aging and old-age health support system works out from a macroeconomic perspective. Section 3 provides a picture of population ageing in the Japanese prefectures. In Section 4, we provide the results of empirical analysis that contains the data description, and comments on the estimation results. Section 5 summarizes and concludes.

3. Data Source:

The basic data source of this paper would be various publication from the Statistics Bureau, Ministry of Internal Affairs and communications Japan.

4. Policy Implications:

The importance of livelihood, health, and medical support has crucial implications for the well-being of the elderly population in Japan. Our findings could offer insights into how to address these imbalances, invest heavily in health support, and enhance the welfare of the elderly by improving the existing system.