The Effect of Population Aging on the Japanese Economy and Society: A Case of Vietnam

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Abstract: Population aging is an urgent problem facing many countries globally. It is happening at different rates in

many regions. This process is happening more rapidly in developing countries, including countries with young populations. This changing process constantly brings challenges and dynamic opportunities in many economic, cultural, political, and social fields in life. The aging population is one of the most important trends of the twenty-first century. Speaking of this issue, first of all, to mention Japan. Japan ranks 11th in the topmost populous country in the world and is also one of the countries with the highest population life expectancy in the world. Due to social and economic problems, many young Japanese currently tend not to marry or have children, causing the fertility rate to drop sharply. With a low birth rate and high life expectancy, population aging is quickly becoming a serious problem for Japan. This paper analyses the challenges that Japan is facing and draws mention of some solutions for developed countries, including Vietnam. The results of the article show that developed countries like Vietnam need to consider more about olicies and plans for

the long term in the future.

1 INTRODUCTION

The world's population is not only increasing but also gradually aging. Our world is experiencing huge demographic changes and no country is immune to the consequences. Increasing life expectancy and decreasing fertility are considered enormous achievements in modern medical and scientific development, especially when living conditions are much better than before. However, at the same time, population aging is also an inevitable result of the reduction in the birth rate and the rate of the elderly increasing faster than other age groups. Population aging is still a difficult problem for the Japanese government, it entails a lot of consequences for the problems in Japan's socio-economy (Charvat et al., 2015). The population structure has gradually shifted to the aging trend, leading to a serious shortage of young workers in most industries, leading to a shortage of human resources. The health conditions of the elderly cannot be guaranteed nor are young workers enough to meet the labor market.

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2 LITERATURE REVIEW

According to the classification of Cowgill and Holmes (1970), when the population aged 65 and over is between 7% and 9.9% of the total population, the population is considered "aging". Similarly, 10% -19.9% is called the "old" population; 20% -29.9% call the "very old" population and 30% or more are called "super old" population, many reports from the United Nations and international organizations use this classification. And in recent years, Japan has been one of the countries with a fast rate of aging population, while the fertility rate has dropped sharply (Charvat et al., 2015). Population experts warn that the trend of having few or no families and having children is becoming a common phenomenon in Japan (Hagihara et al., 2013).

The impact of human resource quality on socioeconomic growth is at the heart of policy debates and related research. Consequently, the relationship between population and economic growth has traditionally been emphasized (Goh & McNown. 2020). Since the 1980s, changes in the age structure of the population towards economic growth have attracted the attention of researchers (Maison, 1997; Bloom and Williamson, 1998). Besides, according to estimates of the National Institute of Population and Social Security (2007, 2008), the number of people over 65 years old was 25.76 million (20.2%) in 2005; 36.67 million (31.8%) in 2030 and the number of elderly living alone (excluding the elderly living in social welfare facilities) increased from 3.87 million to 7.17 million. Due to the rapid decline in the birth rate, Japan will soon be a super old society unlike any other in the world.

3 METHODOLOGY

The paper analyzes in-depth influences in two key economic and social areas in Japan. In addition to applying statistical methods, analyzing and synthesizing data, the article also has comparative statements that have been referenced from the literature of many previous research scholars. Materials used for synthesis and analysis are mainly statistics of relevant ministries published.

4 RESULTS

Japan's current population was 126,429,826 as of August 6, 2020 according to the latest data from the United Nations. The population density is 347 people / km2. The average age is 48.4 years old. Japan population is currently 1.68% of the world population. The Japanese Ministry of the Interior and Communications has released the results of the survey, showing that the country's population has decreased for the 11th consecutive year, and recorded the largest number and rate of decline in the history of population statistics (Ihori et al., 2006). Over the past six years, the Japanese population has decreased continuously, reflecting the trend of rapid aging and a low birth rate (Sakai et al., 2000).

As of early 2017, it is estimated that Japan has the following age distribution: under 15 years old, from 15 to 64 years old, and population 65 years and over. Population data by age (estimated): 16,585,533 adolescents under 15 years old, 80,886,544 people aged 15 to 64, 28,913,148 people over 64 years old. Below is a simplified model of the population pyramid divided into three main age groups (Figure 1). The aging of the Japanese population begins later than the developed countries in Europe and America, and the rate of aging is very fast. Since 1990, when the period of population growth peaked, working-age

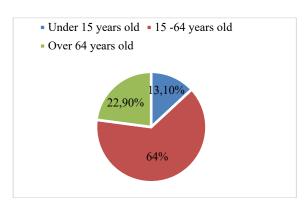


Figure 1: Age structure in Japan (estimate as of early 2017)

people are getting older, at the same time, the number of young workers aged 15 to 19 is decreasing (Goh and McNown, 2020). Population aging is already happening and the total workforce is starting to decline. If the fertility rate continues to decline, the aging rate will increase rapidly in the future. Below are future population estimates based on hypothetical calculations by the Ministry of Home Affairs and Communications Census 2010, National Population and Social Security Research Institute 2015 Japan (Figure 2).

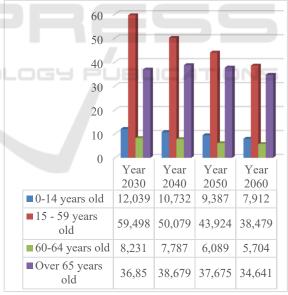


Figure 2: Estimated future population of Japan (2015)

Not only in Japan, but aging is becoming one of the topics of worldwide concern. Without careful preparation, the government will have to spend huge amounts of money and these expenditures will have a negative impact on the state budget as well as the long-term financial sustainability of the entire economy (Takaki et al., 2014). Although it has been adjusted and supplemented, there are still many shortcomings that cannot meet and adapt to the current situation of the elderly life as well as the consequences of changing the population age structure towards aging. Without proper strategies and policies, Japan will face more challenges both now and in the future.

5 DISCUSSION

5.1 The Effects of Population Aging on Japan's Economy

The primary impact is sluggish economic growth due to a shortage of young workers, and the aging population is causing many industries in Japan to scale down their operations or move production locations to other countries. Some companies working in other fields, even though they do not have difficulties in production capital or compete at home and abroad, have to narrow their production because they cannot find a source of labor, especially young workers. good force. Facing alarming population aging situation, the Government of Japan issued a warning, by 2060 nearly 40% of the population of this country is elderly. This is a big obstacle to the recovery of Japan's economic growth as the young workforce is less and less. If there are too few young people in the workforce, it will be difficult to have enough taxpayers - the main source of income - to operate and develop the economy. At the same time, the scarcity of young workers causes the rate of economic growth and technical innovation to decline (Charvat et al., 2015).

Next is the decrease in consumer demand, threatening economic growth. Elderly people tend to save more than young people, but spending on consumer goods is less, so the consumer market is also adversely affected, the revenue of businesses also declines. Depending on the age at which this change takes place, a country with an aging population may experience low interest rates and low inflation rates. Also because older people consume less, countries with a high proportion of the elderly often experience low inflation (Goh and McNown, 2020). In addition, a decrease in population also means that production decreases and consumption demand also goes down, directly affecting GDP growth of the world's third largest economy. Meanwhile, the ratio of public debt to GDP of the country is 237.6%. Public debt in Japan is mainly paid off through people's savings at banks or buying government bonds. That makes the third world economy have to increase the speed of borrowing to pay debts in the coming time (Hagihara et al., 2013).

Population aging causes the burden of social security benefits to put pressure on young people's shoulders. For the elderly, pensions are the main source of income. The aging population brings a burden on social security benefits as the number of pensioners is increasing. Data from the National Institute of Population and Social Security of Japan shows that in 2001, Japan spent 81,400 billion yen on social security expenses, accounting for 22.0% of national income; pension accounts for 11.50% of social security costs, an increase of 130% compared to 1995. The broad social security policy based on progressive income tax, although there are many advantages in implementing social justice, also makes a part of business owners dissatisfied, leading to a lot of investment capital being moved to other countries, reduce the growth motivation in the country, etc. This has created great pressure on society on the Japanese Government in the process of reforming and upgrading the social security system (Goh and McNown. 2020).

Besides, the "gap between generations" is increasing. As many elderly are influential in the political sphere, national policy will pay more attention to social welfare programs such as increasing health budgets, expanding healthcare facilities and pensions. This would provoke a wave of protests from young people that threaten the unity inherent in Japanese society (Hagihara et al, 2013). Japan's health spending, for example, increased from 6.1% (16 trillion yen) in 1985 to 8.6% (31.5 trillion yen) in 2003, and is expected to grow to 12, 2% by 2025. At the same time, the proportion of health spending for the elderly in the total health budget of Japan continues to increase steadily each year (from 25.4% in 1985 to 36.9% in 2003). It has led to a huge financial burden on Japan's healthcare. Since 2000, Japan has built and implemented a project called Healthy Japan. This is a 10 year project to improve the nation's health. The project's biggest goal is to stop people from lifestyle-related diseases that have killed about 60% of Japanese people, including cancer, cardiovascular disease and stroke, and prolong the amount of time they have. healthy life (Ohtake and Saito, 1998).

5.2 Comparison of the Population Aging of Japanese Society and the Population Aging of Vietnam

In Vietnam, due to the change in the age structure of the population following the decreasing trend of the proportion of children under 15 years old and the increase in the proportion of the population aged 60 and over, the aging index tends to increase. up rapidly over the past two decades. This is both an achievement but also a challenge, we need a strategy to capture and adapt, turn challenges into opportunities. After the population aging period begins in 2011 with 9.9% of the population aged 60 and over, Vietnam will go through the aging population from 2026 - 2054 when the proportion of people aged 65 and over. accounting for 10-19.9%. Vietnam is not rich yet, but the population is already aging. And from 2054 - 2069, Vietnam will go through a very old population stage, when people aged 65 and over account for 20 - 29.9%. Vietnam is also considered a country that has time to move from "population aging" to "aging population" into the fast group in the world, the forecast is 20 years, while Japan and China are 26 years, the UK and Spain 45 years.

According to the Population and Housing Census at the year of 2019, the average life expectancy of Vietnamese people is 73.6 years; of which, life expectancy for men is 71 years and for women is 76.3 years. From 1989 to now, the average life expectancy in Vietnam has continuously increased, from 65.2 years in 1989 to 73.6 years in 2019. The difference in life expectancy between men and women over the two recent Censuses almost unchanged, maintaining at about 5.4 years.

In 1960, the average life expectancy of the world population was 48.0 years and that of the Vietnamese population was 40.0 years old, which is 8 years lower than the average life expectancy of the world population, that is, it takes about 80 years for the life expectancy of Vietnam to increase to the level of the world (Giang et al., 2020). In 2019, the average life expectancy of the world population is 72.0 years and that of the Vietnamese population is 73.6 years old, 1.6 years higher than the average life expectancy of the world. If we also calculate the highest average life expectancy growth rate of 0.1 years / year, the population of Vietnam is about 16 years older than the world population. Thus, the total time the population of Vietnam is aging rapidly compared to the world average is about 96 years.

The total number of households nationwide is 26,870,079 households, an increase of 4.4 million households compared to the same period of the 2009 census. On average, each household has 3.6 people / household, 0.2 lower than person / household compared with 2009. In the period 2009 - 2019, the average growth rate of the number of households is 1.8% / year, 1.2 percentage points lower than the

period 1999 - 2009 and the period the section with the lowest rate of increase in the number of households in the past 40 years. Small household size will be one of the major challenges for the family and community based aged care model.

Although there are policies in place to increase fertility in areas with low fertility below replacement fertility while reducing fertility in areas with high fertility, the most recently reported fertility rate in Ho Chi Minh City is above 1, 3 children / mother is still the lowest fertility rate in the country and tends to decrease further (Goh & McNown. 2020). Experience in Korea and many countries shows that if the fertility level is already low, it will be difficult to increase fertility again. When fertility is low, the population ages at a faster rate. In addition, the elderly characteristic in Vietnam is that over 70% have to work by themselves with support from their children, only 25.5% live on pensions and social allowances (Ihori et al., 2006).

Regarding social insurance, in 2020, Hanoi City will only have about 40% of employees participating in social insurance and by 2021, 45% of workers nationwide will participate in social insurance. festival. As the population ages, the increase in the number of old people and the increase in the proportion of the elderly without pensions / benefits will become a burden on social security.

According to 2019 data, the sex ratio at birth stands at 111.5 boys per 100 girls. In which, this rate in the poorest quintile is 108.2 boys per 100 girls and the richest quintile is 112.9 boys per 100 girls, while the ratio is if true. must be 105 boys / 100 girls. As a result of this situation, it is forecasted that by 2034, Vietnam will have a surplus of 1.5 million men of married age and this number will increase to 2.5 million young men by 2059. So far, the intervention has not been effective. Currently, very few provinces have any form of support for families giving birth to a baby girl, the level of support is not much. From mid-2020, the Government has also issued guidance on adjusting fertility to suit the region / region, in which localities with low fert

6 SOME RECOMMENDATIONS

Adapting to population aging should be considered a priority issue, requiring timely and comprehensive solutions to target all population groups to prepare for the aging society in the near future, not just practice. focuses on solving problems of the elderly group. Therefore, it is necessary to implement some effective solutions. One of the policies to limit the

rate of population aging is to maintain replacement fertility. Viet Nam has maintained a replacement fertility rate, keeping the total fertility rate around 2 children per mother from 2006 to the present. However, the policies to further support are very few, even not yet available. We need more schools, kindergartens, and support for young couples to improve the aging of the population.

Firstly, it is important to raise awareness and understanding of managers, policymakers as well as the entire community about the challenges of population aging with the lives of the elderly in particular and the whole society in general. That means that we need to have more awareness and responsibility of each citizen, family and the entire society in promoting the role and experience of the elderly, taking care of the elderly, building a friendly environment for the elderly (Giang et al.,2020). The effects of population aging need to be integrated into socio-economic development strategies, plans and projects.

Second, the social subsidy for vulnerable elderly groups needs to be expanded and reach a universal system for all elderly, with special emphasis on supporting the rural elderly and elderly women (Korinek et al., 2019). The rate and method of payment should be considered to suit the living conditions and health of the elderly. The object identification needs to be reformed to avoid errors in the acceptance or exclusion of the object.

Third, strengthening health care, building and expanding aged care services with active and proactive participation of all social sectors and strengthening national capacity in care for the elderly should also be taken into consideration (Korinek et al., 2019). Attention should be paid to the management and control of chronic diseases (especially cardiovascular disease, hypertension, osteoarthritis, diabetes, and cancer, etc.) along with the application of new technologies in early diagnosis and treatment, long-term treatment of chronic diseases. It is necessary to build a system of hospitals and geriatric research organizations nationwide. In the long term, with abundant and qualified human resources, Vietnam can provide human resources for geriatric nursing both regionally and internationally (Ihori et al., 2006).

Fourth, we need to strengthen the role of political, social and professional organizations in formulating, advocating and implementing policies for the aging of the population and the elderly (Shiode et al., 2014). Activities to mobilize families, communities and the whole society to take care of the elderly need to be promoted and replicated (Korinek et al., 2019). It is

necessary to coordinate with specialized agencies in research and propose diversification of ways and models of organizing life for the elderly such as living with children, living in nursing homes or in care facilities. the elderly in the community. We also organize community activities for the elderly on a regular basis to improve understanding and contribute ideas of the elderly to the State's policies as well as the community's life (Giang et al., 2020).

Fifth, the young population will have to be better prepared to enter old age in a healthier and more secure state, which will facilitate solving the problems that arise as the population ages in future. It is necessary to raise awareness of the society about the increasing life expectancy, the younger generation will live longer than the previous generation (Korinek et al., 2019). We also need to encourage people to seek out tips on maintaining a healthy lifestyle and how to change their habits with age; carrying out advocacy activities to raise awareness about changes in old age and eliminate negative emotions and fear of old age. Young people are encouraged to participate in volunteer work to help the elderly, thereby it helps the young generation experience the life of the elderly.

7 CONCLUSION

Population aging is a scenario that will happen in most countries. Population aging in the context of economic recession and crisis is a huge challenge for Japan and Vietnam as the aging population requires more spending on health care, retirement, and benefits. It makes the economic and social burden more serious if there is no strategic planning and proper implementation of adaptation policies and plans. Applying more comprehensive approaches to population aging, the country might solve current problems resulting from the impact of population aging on both the elderly and the young and in line with economic development plans.

CONFLICT OF INTEREST

There is no conflict of interest in the paper.

REFERENCES

Charvat, H., Goto, A., Goto, M., Inoue, M., Heianza, Y., Arase, Y. and Inoue, M. (2015). Impact of population

- aging on trends in diabetes prevalence: a metaregression analysis of 160,000 Japanese adults. *Journal* of diabetes investigation, 6(5): 533-542.
- Giang, L. T., Nguyen, N. T., Nguyen, T. T., Le, H. Q., and Tran, N. T. T. (2020). Social support effect on health of older people in Vietnam: Evidence from a national aging survey. *Ageing International*, 45(4): 344-360.
- Goh, S. K. and McNown, R. (2020). Macroeconomic implications of population aging: Evidence from Japan. *Journal of Asian Economics*, 68: 101198.
- Hagihara, A., Hasegawa, M., Hinohara, Y., Abe, T. and Motoi, M. (2013). The aging population and future demand for emergency ambulances in Japan. *Internal* and emergency medicine, 8(5): 431-437.
- Ihori, T., Kato, R. R., Kawade, M. and Bessho, S. I. (2006). Public debt and economic growth in an aging Japan. In Tackling Japan's Fiscal Challenges, pages 30-68.
- Korinek, K., Teerawichitchainan, B., Zimmer, Z., Brindle, E., Nguyen, T. K. C., Nguyen, H. M. and Tran, K. T. (2019). Design and measurement in a study of war exposure, health, and aging: protocol for the Vietnam health and aging study. *BMC public health*, 19(1): 1-11.
- Ohtake, F. and Saito, M. (1998). Population aging and consumption inequality in Japan. *Review of Income and Wealth*, 44(3): 361-381.
- Sakai, M., Brown, J. and Mak, J. (2000). Population aging and Japanese international travel in the 21st century. *Journal of Travel Research*, 38(3): 212-220.
- Shiode, N., Morita, M., Shiode, S. and Okunuki, K. I. (2014). Urban and rural geographies of aging: A local spatial correlation analysis of aging population measures. *Urban Geography*, 35(4): 608-628.
- Takaki, M., Nakama, T., Ishida, M., Morimoto, H., Nagasaki, Y., Shiramizu, R. and Morimoto, K. (2014). High incidence of community-acquired pneumonia among rapidly aging population in Japan: a prospective hospital-based surveillance. *Japanese journal of infectious diseases*, 67(4): 269-275.