



The Aging Population of Japan: Causes, Expected Challenges and Few Possible Recommendations

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Abstract

The fertility rate of Japan is decreasing below the threshold levels. The balance between aged peoples ($65 \leq$) and newborn has been tilted to the former side and the ratio of old population is increasing very rapidly. These demographic changes are expected to cause many serious problems containing reduction in working age population, increase in the dependency ratio, predicament in public pension system, economic downturn and loss of societal vitality. Probably, there are also challenges of over and saturation in certain fields as the youth has more motivation towards applied sciences and technology than natural and social sciences at current times. In order to have a sustainable development, there is need for immigrant workforce. At the same time it is also essential to use the indigenous potential in the most effective way. It is expected that the results of this study will possibly be helpful for understanding and making policies to counter the problem of aging and field over or under saturation. The population data has been obtained from Institute of Population and Social Security Research. For this study, youth of Yamaguchi University and workers of different private industries of Yamaguchi city have been studied through questionnaires and interviews. The age of youth for study ranges from 20 to 24 years and the age of workers in the private industry lies between the 28 to 33 years. The general tendency of fresh blood for the marriage, its expected age and number of children after marriage has been observed. A study is also carried out to observe the deciding study year for the future field selection in the young peoples. The results of the study showed that about 95 % of youth in Yamaguchi University is in the demand of spouse mostly at the age between 27 to 30 years and the same percentage also wants to have children after marriage. Nearly 57% of youth want to have 2, 29% want to have 3, 7 % want to have 4 kids and same percentile of 7 do not want baby. The deciding class for future field selection is 2nd and 3rd grade of high school. For marriage or children, the major discouraging reasons for the persons working in private industry seems the economic constraints related to the limited number of jobs in government sectors and strict rules and limited salary of private sectors. The women working in the private industry feel no flexibility and security of job in case of child bearing. Also the other reasons can be the unavailability of baby day care and old aged houses. On the basis of this study, it is recommended to have some legislation to provide flexibility and encouragement to the women for children bearing who are working the private industry and also to increase the number of baby day care and old aged houses. It is also suggested to launch some informative courses for the scope and future job availability of different fields at the 2nd and 3rd grade of high school.

Keywords: Population, causes, challenges, youth.

Introduction

The momentum of Japan for fertility rate is decreasing and the country has to face the challenge of population decline¹ (Suzuki, 2006). The period for the long term decrease in population of Japan has started. The population growth rate was negative in 2005 for the first time since 1945. There was a small increase in population in 2006 and 2007 however the negative growth rates will become dominant causing an accelerated decline in the future². The official population projection published in 2006 projected that the population of Japan will be 95 million in 2050, which is a 25.5% decline from 128 million in 2005. This indicates that the average annual growth rate between 2005 and 2050 will be approximately -0.7% ². The total population on October 1, 2010 consisted of 62328000 (48.7%) males and 65730000 (51.3%) females. The sex ratio of the population was

94.8 males to 100 females. The ratio declined slightly from 95.0 a year earlier due to the longer life expectancy of the female population. On October 1, 2010, there were 29246000 elderly people, that is, those aged 65 or older. This accounts for 22.8 % of the total population.

The child and old age dependency ratios and it is obtained by dividing dependent population (having ages 0-14 or $65 \leq$) by working age population (having age 15-64). The elderly dependency ratio increased from 33.1% in 2007 to 34.3% in 2008² and now it is 38.5 %. According to the NIPSSR, the elderly dependency ratio will be 78.4% in 2060³.

According to the second demographic transition theory⁴. The reasons for decline is population can be the trends from familism to individualism, and the major reasons for this trend

can be: rise in cohabitation, extramarital births, divorce, female labor force participation and living alone.

It was thought that there are cyclical change in the fertility rate⁵ and this idea was contradicted with the fact that the replacement level was never recovered by many developed countries for decades¹. The theory predicted that fertility decline will proceed together with post-modern family changes such as increase in cohabitations, extramarital births and divorces. The prediction failed due to the emergence of lowest-low fertility defined as the TFR of 1.3 or less⁶ (Kohler et al., 2002). A paradoxical situation has appeared that fertility is lower in countries with more robust marriage institution, more effective gender segregation and stronger familism¹.

Material and Methods

The data for various parameters of population has been obtained from the website of institute of population and social security research of Japan. Moreover, to check the current tendencies of young peoples a questionnaire has been distributed between the ages 20-24 years. The basic questions about marriage age, expected number of children, deciding class for the selected study field were asked. The workers in the private industry between the ages 28 to 33 have also been interviewed.

Results and Discussion

Figures 1, 2 and 3 depicts the historical percentage of children, working age and old aged populations and their future projections respectively. Figure 4 shows the annual increase rate of population and figure 5 displays the percentage of youth who want to have the number of expected children in future i.e. after marriage. There is clear decrease in the young population, $0 \leq 14$, (figure 1); working age population, $15 \leq 64$, (figure 2); and annual growth rate (figure 4) with the passage of time. While the curve showing the number of old age peoples is rising (figure 3). These demographic changes are expected to cause many serious problems containing reduction in working age population, increase in the dependency ratio, and predicament in public pension system, economic downturn and loss of societal vitality¹.

Results of questionnaire study shows that about 95 % of young peoples want to have marriage mostly at the age between 26 to 30 years. Nearly 95 % of youth willing to have marriage want to have babies after it. So these studies reaffirming the studies of Toru Suzuki¹ that there is no serious decline in demand, so it is essential to study the fertility rate with reference to the difficulties to fulfill the demand. The current study data perhaps also criticizes the second demographic transition theory that there is increase in the tendency of familism to individualism⁴. It is also recognized that the countries with robust marriage institutions, traditional gender role and strong familism show the low fertility rate¹. According to research conducted by Horvard School of Public Health there is nearly a half reduction

of sperm count in the males who watch TVs for 20 hours a week and have no significant activity. So, the fertility ability of the males is supposed to be reduced⁷. It was found that body fat percentage value and physical fitness performances were inversely correlated. It was concluded that leaner subjects perform better than overweight subjects in physical performance activities /capacities which require specifically body movement through space such as running, jumping, and also in sit-ups and pull-ups performances⁸.

However, the study also indicated that there has been dominance privatization industry in Japan with the passage of time. Hence the labor cost and relaxation for the female workers in case of pregnancy has been reduced. The insecurity level for the job loss in case of child bearing and family support due to reduced salary is rising among the young peoples, after marriage. This problem seems to be even more compounded in future due to field under and over saturations. These days, approximately 2/3 proportion of youth is selecting the engineering and applied sciences field and only 1/3 proportion of youth is going towards natural and social sciences and economics. Hence creating an imbalance between two fields and can further aggravate the problem of unemployment.

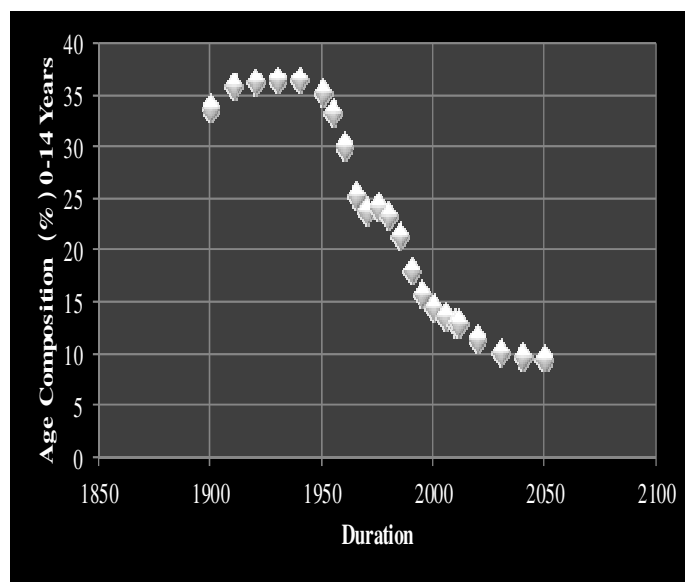


Figure-1
Age composition for 0 to 14 years population

Moreover, the results of survey have showed that the class for field selections is mostly the 2nd or 3rd grade of high school. Nearly 57% of youth want to have 2, 29% want to have 3, 7 % want to have 4 kids and same percentile of 7 do not want any children.

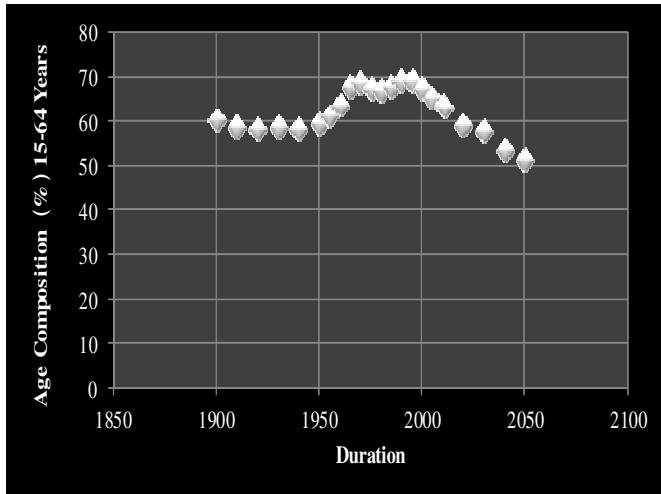


Figure-2
 Age composition for 15 to 64 years population

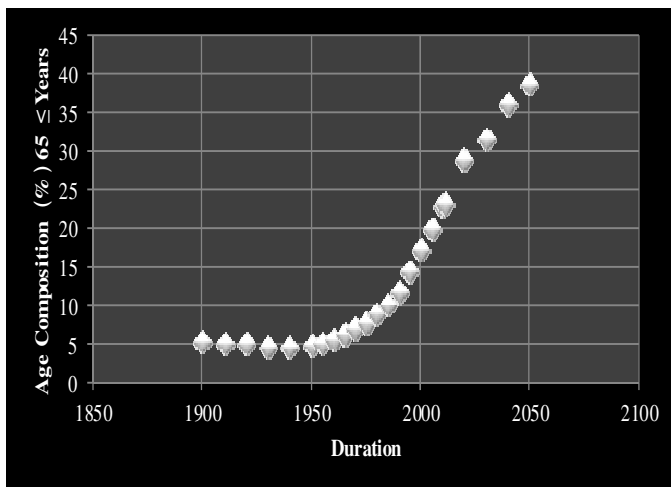


Figure-3
 Age composition for 65 ≤ years population

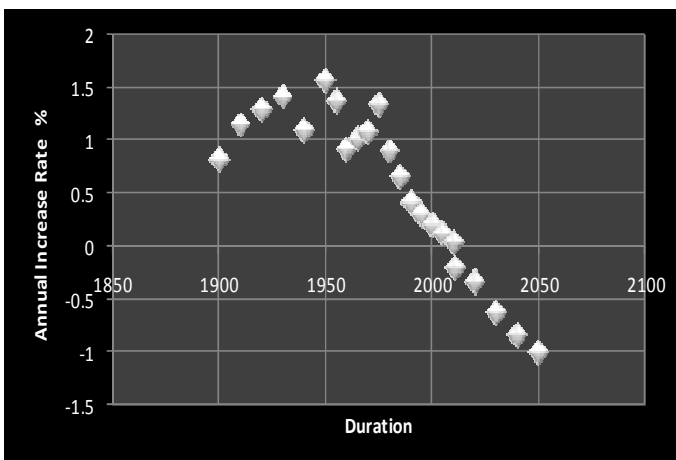


Figure-4
 Percentage annual growth rate

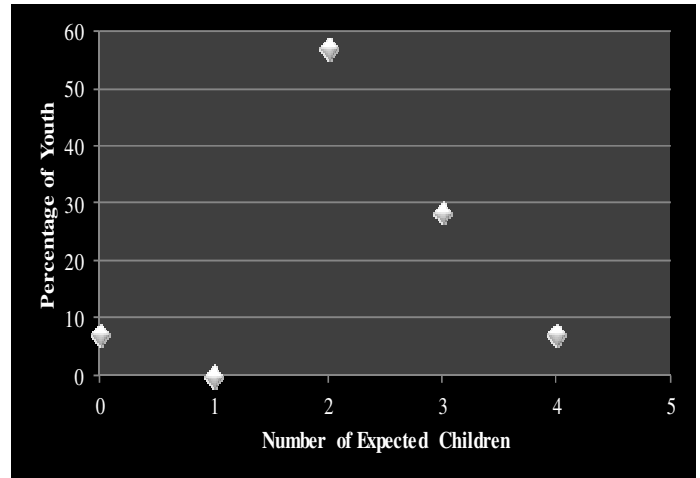


Figure-5
 Number of children expected by youth (%)

Conclusion

Japan is currently facing the challenge of aging population. It is caused by the decreased in the fertility rate. However current study indicated that the reason for low fertility rate is neither the decline in demand of spouse and children rather there has been some hindrances to fulfill this demand. The major reason is the economic insecurity which is raising the serious concerns of youth to support their family. There is also an increase in the female labor participation in the private companies. Hence the strict rules combined with limited salaries in the companies are discouraging the females for the children bearing tendency. There is also a lack of baby day care houses. All these factors might be responsible for the issue of aging and leveling a ground for cohabitation. The positive factor is that nearly 95 % of youth is in the demand of spouse and children. There are also the chances of increase in employment in future as the youth is more inclined towards applied sciences and technology than social sciences and natural sciences. This may cause over saturation and under saturation phenomenon for these fields.

Recommendations: It is recommended that there should be some legislation to provide relaxations to the females during the pregnancy and after child birth period who are working in the private companies. There should be baby day care centers and old aged houses to reduce the burden of dependent population on males and females. Due to acceleration in the aging phenomenon, the demand of medical staff will also increase with the passage of time. It is also noted that the international workers are selected, trained and then hired. A case has been observed in the local hospital in Yamaguchi city that many international nurses where selected and trained for 2 years. However, only one nurse passed the final exam and rest of them left Japan. The reason of the bad result is that all the instructors were Japanese and the students faced a lot of problems due to language gape. So, it is suggested to offer some language courses of Japanese before entering such courses or should

introduce the training courses in English. It is also suggested to launch awareness courses especially in the 2nd and 3rd grade of high school classes. These lectures may guide them about the scope of various fields and future availability of jobs in them. It is also noted that there is also strong need of interdisciplinary research.

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