

EABER WORKING PAPER SERIES

PAPER No. 98

CHANGING POPULATION IN JAPAN AND A LIFE-LONG ACTIVE SOCIETY TO COPE WITH IT

PAPER PREPARED FOR THE “PROSPERITY IN ASIA: THE INTERGENERATIONAL DIMENSIONS”
CONFERENCE, THE AUSTRALIAN NATIONAL UNIVERSITY, 16-17 APRIL 2015.

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JEL CODES: J11, J14, J18

I. Unprecedented population ageing

As seen in Figure 1, Japan's population ageing is globally unprecedented both in its level and its speed. As for the level, the proportion of older people aged 65 years old and over is now one quarter of the total population of Japan, making it already the largest proportion in the world. And this proportion is going to be 1/3 of the total population in 2035 when today's newborn babies are adults.

As for the speed, in Japan it took only 24 years from 1970 to 1994 for this proportion to increase from 7% to 14%, while in European countries it took between 50 to 100 years and more. So for example, Japan's ageing has been 2 times faster than that of Germany and more than 4 times faster than that of France.

Japan's ageing population also has a sort of depth. By "depth," I mean that within the older population itself the proportion of very old people aged 75 years old and over is increasing particularly rapidly. The proportion of very old people aged 75 years old will be 20% in 2035.

This tremendously aging population has an enormous impact on the Japanese economy and society. As you can imagine, its most significant impact is on social security. As a result of this ageing population the total expenditure on social security was almost 110 trillion yen in the 2012 fiscal year which is 22.8% of the GDP. Roughly half of this amount is for public pensions and one third of this amount is for medical care and long-term care.

The other impact of an ageing population is that we have a smaller work force and therefore productivity will decrease unless there is substantial improvement in the productivity per worker. It also leads to lower earnings from work and therefore decreasing consumption, unless there is a substantial increase in income per capita.

In order to cope with an ageing population, we should take every possible measure. One is of course to stop, or at least moderate population ageing. As I will discuss a little later, we should take adequate measures to reverse the trend of the decreasing fertility rate.

However, even in the unlikely event that our fertility rate recovered drastically, new born babies today would not be able to contribute to the Japanese economy until they are grown up, in other words, in 20 to 25 years' time. So we need to find other measures to cope with an ageing population as a structural change under which we can live for a while, say for at least a quarter of a century hereafter.

In these circumstances, one very important potential solution is to promote the employment of older people. This means more older people continuing to work as an active generation to sustain our economy and society, and in order to make this possible we should establish a society in which the will and ability of older people can be fully utilized. From here I

will refer to this as the life-long active society.

II. Ageing as the Result of Economic and Social Success

Of course, an ageing population itself is the result of economic growth and this is exactly the case with Japan. In Japan, as in other developed countries, two major driving forces of its ageing population are closely related to the increase in per capita income.

One is of course the increase in life expectancy. In 1947, immediately after World War Two, Japan's life expectancy was just 50 years for males and 54 years for females. 65 years later, it has now reached 80 years for males and 86 years for females, as seen in Figure 2. And without substantial improvement in living standards, which is only possible through economic growth, particularly rapid economic growth, you do not see such a drastic improvement in life expectancy.

The other factor that creates an ageing population is a decreasing fertility rate. As seen in Figure 3, the fertility rate of Japanese women was about 4.5 in the late 1940s, and this declined to 2 in the 1960s and early 1970s. But it started to depart from the level of 2 in the mid-1970s and reached as low as around 1.4 recently. Though it recovered a little bit, this is still one of the lowest fertility rates even among OECD countries.

By the way one interesting note on the trend of Japan's fertility rate is the sharp drop in 1966. That is because, by the Chinese way of counting years, 1966 was a HINOEUUMA year and there is a superstition that girls born in a HINOEUUMA year will exploit their husbands.

So to try to avoid the possible risks for girls in the future marital market, parents refrained from having babies that year. This shows the incredibly significant impact of superstition on human behavior.

It is widely known that the combination of rapid wage increases and the unchanged traditional division of work between men and women, as can be seen in Japan, Korea and some Southern European countries, usually creates an extremely low fertility rate. That is because women have to pay a higher opportunity cost for having babies under such conditions.

III. The Creation of a Life-long Active Society

So the ageing population is essentially an unavoidable thing in developed countries. Of course we should make every effort to reverse the trend of the decreasing fertility rate, but, as I mentioned earlier, even if the fertility rate recovers drastically, today's newborns will still not be able to contribute to the Japanese economy for two decades. The trend of ageing cannot be reversed overnight. So we need to accept that there will be an ageing population for at least

two decades or a quarter of a century hereafter, and to revise our social systems to cope with the change in population structure from the pyramid shaped structure to the reverse pyramid shaped structure.

To cope with such a tremendously ageing population, it is extremely important for us to promote the employment of older people. If older people with the will and ability continue working beyond the current retirement age, it will reduce the average per capita burden of the ageing society. The increase in the number of active workers and consumers in their old age will also be a driving force of economic growth on the supply side as well as the demand side of the macro economy. That is the reason why I emphasize the importance of creating a life-long active society.

Of course, you should not force people to work against their will. In this respect, Japan has an advantage. That is the strong motivation of older people to continue working.

As seen in Table 1, the labor force participation rate of Japanese elderly in their 60s is significantly high in comparison with other developed countries. That means, according to the statistics, that the percentage of people who have the will to work in their 60s is very high in Japan and this is very fortunate thing for us. The same is true in Korea.

Thus, on one hand, even among major developed countries, Japan is facing a tremendously ageing population, so it desperately needs a Life-long Active Society. But on the other hand, it has exceptionally favorable conditions for promoting the Life-long Active Society too.

We will be able to promote a Life-long Active Society by utilizing this relatively higher motivation among older people to continue working. In this, Japan has been basically consistent in comparison with European countries, because the Japanese government has consistently promoted the employment of older people. As a result, the labor force participation rate of older people in Japan has become significantly higher in comparison with the cases of other developed countries as seen in Table 1. However, in Japan there are still some obstacles that have prevented us from promoting a Life-long Active Society, both in the social security system and in employment practices.

IV. Necessary Institutional Reforms to Establish the Life-long Active Society

One obstacle is in the public pension system. Of course it is quite natural that the pension benefit induces retirement because it is a benefit which is designed to make retirement possible. But the current public pension system includes a very strong component which encourages pension eligible workers to retire or reduce their working hours.

That is the public pension's earnings test by which a person's pension benefit is reduced dependent on their earnings from work after they have reached the pension eligible age. So, pension eligible workers tend to restrict their earnings by reducing working hours so that they can avoid the pension benefit reduction as much as possible. Sometimes they retire completely so that they can receive the full pension.

Therefore we need to revise the public pension system so as not to discourage older people from continuing to work. My understanding is that the US and the UK have already eliminated the earnings test to prevent this possible negative impact on the labor supply. In the case of Sweden, it revised its pension plan to make it more neutral to labor supply. We should also consider such a revision.

In the workplace, mandatory retirement practices are still dominant in Japan. According to a survey by Japan's Ministry of Health, Labor and Welfare, more than 90% of Japanese firms with 30 or more employees now have mandatory retirement practices. Because mandatory retirement is a practice that requires severance simply because of the worker's age, it impacts in two ways on the utilization of an older workforce.

One is that it reduces the motivation of older people to continue working. As is widely known, mandatory retirement from primary employers does not necessarily mean complete retirement from the workforce and many older workers go on to secondary job opportunities. However, as repeatedly confirmed by empirical analysis, mandatory retirement is also a major determinant of complete retirement from the labor market. Researchers, myself included, have estimated the labor supply functions and found that, roughly speaking, mandatory retirement reduces the probability of labor force participation in men aged 60 to 69 by about 20%, assuming other conditions are constant.

The other negative impact of mandatory retirement is that it reduces the utilization of the potential abilities of older workers. Again according to our empirical study, as seen in Figure 4, those who have experienced mandatory retirement have a statistically lower possibility of working in their 60s in the same occupation as they did at age 55. If we assume that a worker's ability can be fully utilized when that person works in the same occupation for many years, this means that workers subjected to mandatory retirement have a lower possibility of working in a workplace where their abilities are fully utilized.

So we need to revise mandatory retirement practices by lifting the legal minimum age of retirement or by introducing an anti age discrimination act as the US and EU did. Of course, as you can imagine, in order to really revise age-oriented employment practices like mandatory retirement, it is necessary to revise the seniority based wage and promotion system too. If an employer lifts the age of mandatory retirement with seniority based wages unchanged, it will

have many costly old workers. I hope that employers and unions will start discussing revision of retirement practices including revision of the seniority based wage system as soon as possible.

V. Reducing the Burden on Future Generations

So we have to make every effort to increase the labor force participation of older people. But still it is unavoidable for us to see the ageing population and a smaller work force at least for a while. It is urgent for us to have social security system reform to cope with an ageing population.

One important thing for us to do with social security reform is to pay more social security benefits for younger people, particularly all kinds of benefits to assist child care. In the late 1970s, when the fertility rate started declining from the level of 2, the Japanese Gov. should have been concerned about the fact that the population would start declining in one generation's time. It finally started seriously thinking about it in 1990 when the fertility rate became as low as 1.57, which was lower than the lowest historically recorded rate, a rate of 1.58, which occurred in the year of "Hinoe-uma(superstition)" in 1966, as I mentioned earlier. We called this "the 1.57 shock".

The 1.57 shock made Japanese people more conscious of the lower fertility rate. And the Japanese government introduced the so-called "Angel Plan" which was a package of policies to promote comprehensive childcare support. But the measures could not be too aggressive, because there had been virtually no measures to promote an increase in the fertility rate since the end of war. That is partly because of the stigma attached to policies for population expansion which were likened to wartime population policies.

Another unfortunate factor concerning the Angel Plan was that unlike Pensions, Medical care and Long-term care, which have a guaranteed revenue under the social insurance system, child care has not had any permanent revenue source. We have had a series of economic crisis and budget cuts, and that has prevented us from improving child care policy substantially.

So, the report of the National Council on Social Security Reform, which I chaired, recommended that more social security resources are paid for younger people, including substantial improvement of child care services. And now we reserve 0.7 trillion yen of consumption tax based revenue as the permanent revenue for child-care to ensure that no children have to wait for child-care.

Reforms of public pension and medical care and long-term care are also extremely necessary. As I wrote earlier the total expenditure on social security was almost 110 trillion yen in the 2012 fiscal year which is 22.8% of the GDP. As seen in the Table 2 in more detail.

When we think about reforms of pension and medical care, it is important for us to

recognize the fact that the nature of the problems of public pension and medical care are quite different. In other words, the problem with public pension is a linear and a rather simple one, while on the other hand the problem with medical care is a non-linear and much more complicated one.

As seen in Table 2, the expenditure on public pension benefit will increase at the same pace as increase in the pension eligible population, just increasing by 1.12 times in 2025 compared to its level in 2012. The matter of public pension is also such a simple problem of money. So technically we can reform the public pension system by simply changing the revenue and expenditure scheme like lifting pension eligible age.

On the other hand, the expenditure on medical care will increase faster than the pace of increase in the older population, because it will increase with the increasing proportion of very old people aged 75 and over among older people, combined with the increase in the quality and the cost of medicine and care. So as seen in Table 2 again, it will increase by 1.54 times in 2025 compared to its level in 2012. And when you think about the reform of medical care, it is not just a matter of money—you also have to pay much attention to service providers. Without their cooperation, it will not be possible to devise effective policies.

In any event, social security payment is rapidly increasing and as 60% of it is paid by social security insurance payment and 40% of it is paid by tax, we do not have enough tax revenue to cover it at present. Mainly because of this increase in social security expenditure, the gap between total government expenditure and tax revenue has been widening in the past decades. Now the total amount of public debt in Japan is more than 1000 trillion yen, which is more than double its GDP.

Social security system reform is highly necessary. These reforms may face some political conflict both from beneficiaries and service providers, but we have to accomplish them, otherwise we will not be able to pass on to future generations our social security system, which allowed our country to achieve the world's number 1 longevity.

VI. Conclusion

Developed countries are facing the same ageing population problem. That means that we are sharing the same policy targets to cope with an ageing population. And I think we can learn a lot from each other's experiences and vice versa.

And once again I would like to emphasize the importance of creating a Life-long Active Society. If we are able to establish a Life-long Active Society it will have valuable implications for other developed countries which are facing the same ageing problem. It will also be a good

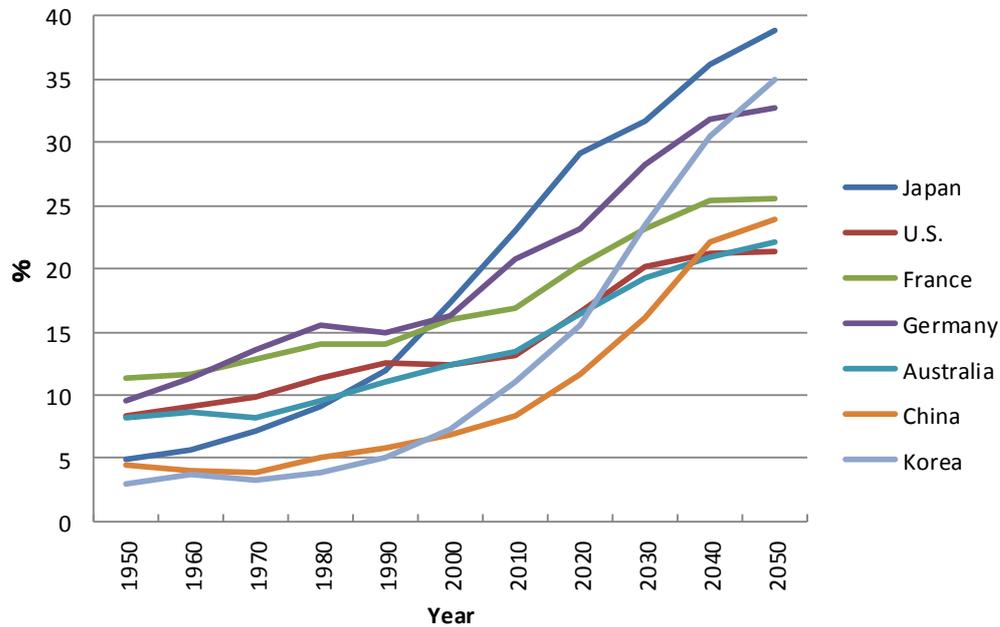
reference for developing countries as well because they will also face population ageing sooner or later.

The concept of a Life-long Active Society could and should be a global standard in an ageing era. I would like to see that in the future.

In order to make it possible, I think there will be a great deal of opportunities of joint research projects for higher educational institutions to collaborate with each other.

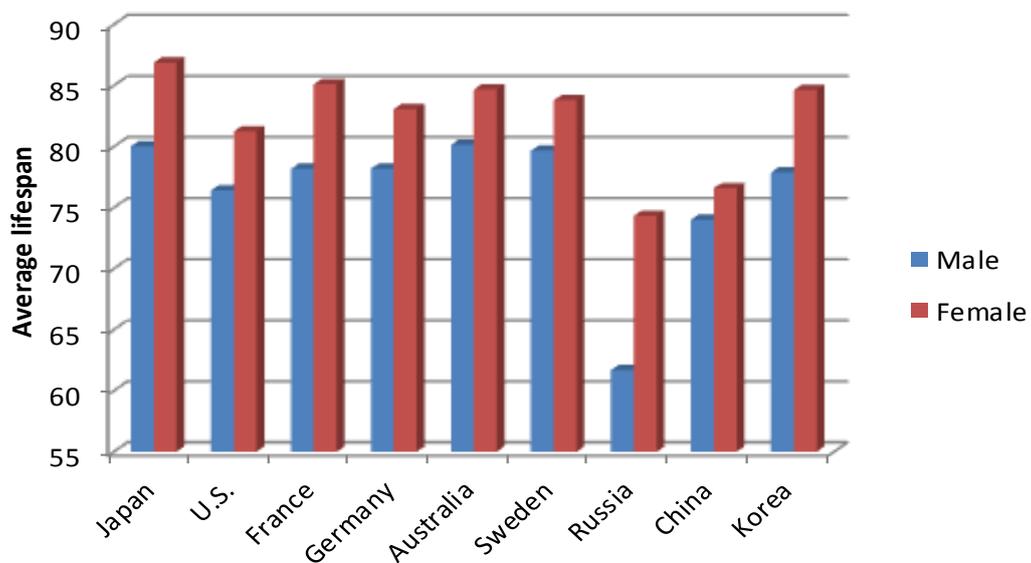
In closing let me quote Yukichi Fukuzawa, the founder of Keio University. Fukuzawa urged that, just as the guardian goose cranes its neck to watch for danger while the rest of the flock peck intently at their food, scholars must calmly analyze the developments of the present and consider what needs to be done for the future.

[Figure 1] Proportion of older population aged 65 and over in major developed countries



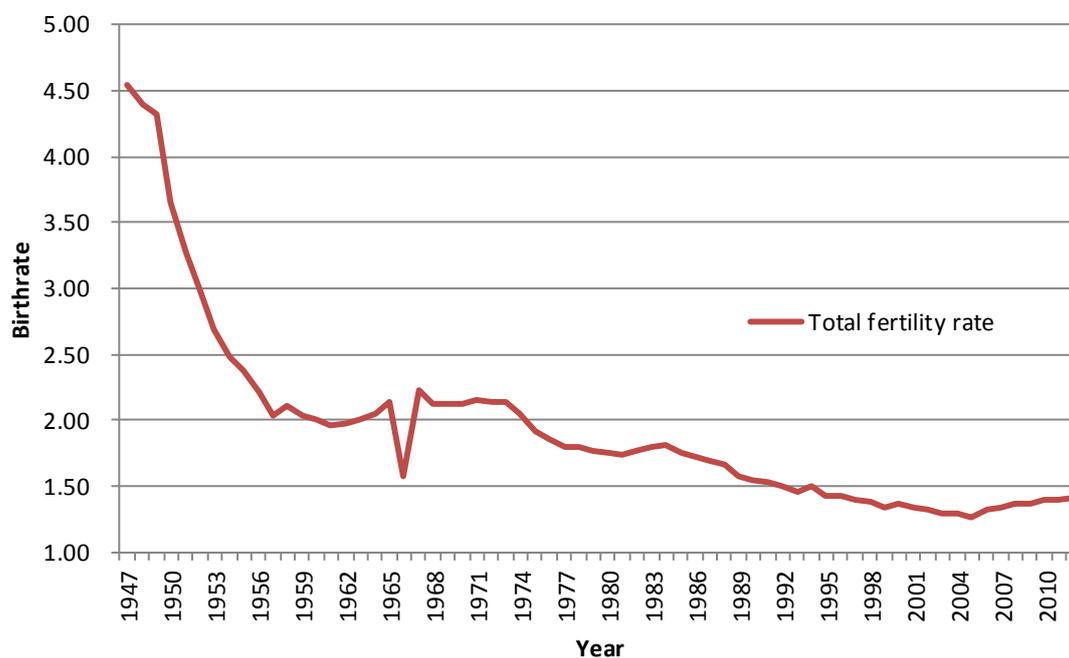
(Source) Based on data from the *World Population Prospects: The 2012 Revision*, UN

[Figure 2] Average life-spans in the major developed countries, by gender



(Source) Based on data from the *Demographic Statistics Data Book (2014)*, National Institute of Population and Social Security Research

[Figure 3] Trends in the fertility (birth) rate in postwar Japan (1947-2012)



(Source) Based on data from the *Demographic Statistics Data Book* (2014), National Institute of Population and Social Security Research

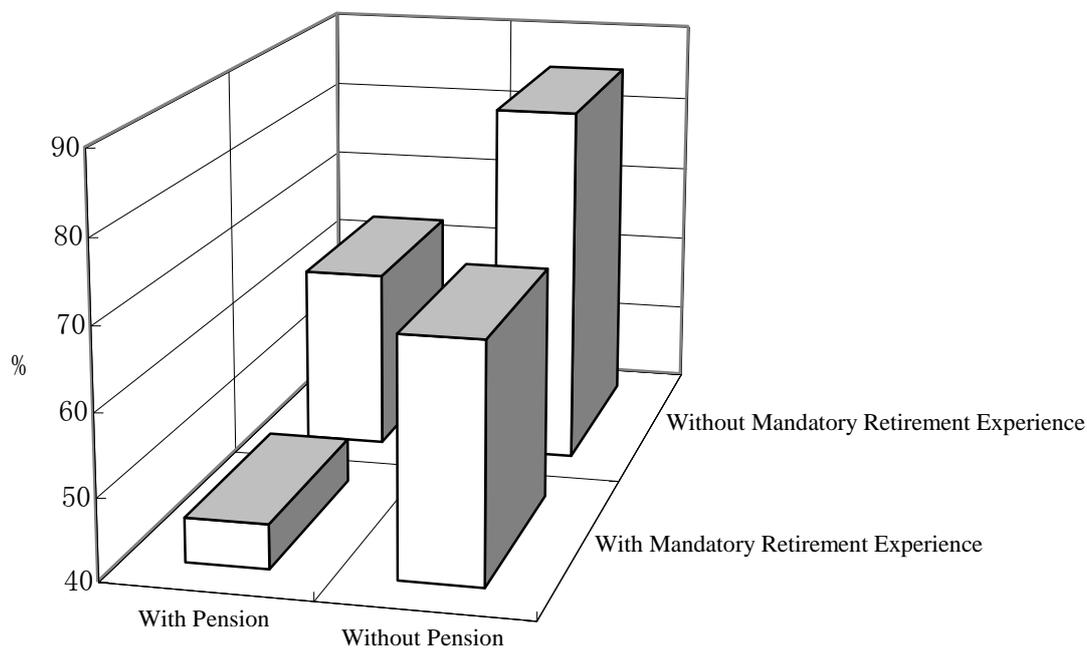
[Table 1] The labor force participation rate of older people in major countries (2010)

(Units: %)

	Japan	U.S.	France	Germany	Australia	China	Korea
Males aged 60-64	76.0	60.0	20.2	53.7	61.6	58.3	70.2
Females aged 60-64	45.7	50.7	17.7	35.5	42.8	40.6	41.5
Males aged 65 and above	28.8	22.1	2.2	5.7	15.4	27.6	40.6
Females aged 65 and above	16.2	13.8	1.0	2.8	6.8	15.1	21.7

(Source) Based on data from the *OECD Stat Extracts*, OECD

[Figure 4] Proportion of workers with the same occupation as at age 55



(Source) Seike, Atsushi and Yamada, Atsuhiko (2004) *Koreisya Shugyo no Keizaigaku (The Economics of Older Workers)*, Nihon Keizai Shinbunsha.

[Table 2] Prospect for the social security benefit expenditure

	FY2012	FY2025	Unit: trillion yen (% to GDP) FY2025/FY2012
Social Security Benefit Expenditure	109.5 (22.8%)	148.9 (24.4%)	1.36
Public Pension	53.8 (11.2%)	60.4 (9.9%)	1.12
Medical Care	35.1 (7.3%)	54.0 (8.9%)	1.54
Long-term Care	8.4 (1.8%)	19.8 (3.2%)	2.34
Children and Child-Raising	4.8 (1.0%)	5.6 (0.9%)	1.17
Others	7.4 (1.5%)	9.0 (1.5%)	1.22
GDP	479.6 (100%)	610.6 (100%)	1.27

(Source) Ministry of Health, Labour, and Welfare