The Future of Social Security Pensions in Japan:
A Review of the 2019 Government Actuarial Report

by

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1. Introduction[1]

In August 2019, the Ministry of Health, Labour and Welfare, Japan, made open the *2019 Government Actuarial Report of Social Security Pensions*. The Actuarial Report is published every five years and the 2019 version is the latest one.

The aim of this short note is to describe the three major findings given by the 2019 report and then to reconsider the future picture of social security pensions in Japan.

2. Three Major Findings from the 2019 Actuarial Report

Unexpected Increases in Replacement Rate for the Past 15 Years

One of the drastic reforms in Japan's social security pensions was made in 2004. The core of the 2004 reform was that the contribution rate was to be fixed at a certain level in 2017 and thereafter the pension system would virtually move from a defined benefit one to a defined contribution one, and that an "automatic balance mechanism" was introduced for the pension system to have a long-term healthy financing. The automatic balance mechanism would call for a reduction of the replacement rate step by step from 60% to 50% for the "model" male employee with his full-time housewife. According to the 2004 Actuarial Report, the anticipated reduction in the level of pension benefits would be 0.9% every year in real terms from 2005 on. This

[1] This paper is mainly based on Takayama (2020).

percentage is to be decided by changes in demographic factors (the number of contributors and the life expectancy at age 65).

The reality for the past 15 years turned to be contrary to the 2004 anticipation. Japan had been suffering from deflation for more than a decade until 2013. During deflation, the automatic balance mechanism was suspended to work. Instead, the benefit indexation to CPI had been in operation. Moreover, the level of take-home pay for actively working employees decreased more than the decrease in the CPI in *nominal* terms for this period. Consequently, the replacement rate for the "model" male employee with his full-time housewife in the KNH (the social security pension program for private sector employees) was increased from 59% in 2004 to 62% in 2019.[2]

This outcome is against the spirit of the 2004 reform. If Japan still preserves the baseline of the 2004 pension reform, the automatic balance mechanism needs to be redesigned to apply also in times of deflation, with benefits falling faster than the price level.

Nearly 30% Cut of Basic Pension Benefits Required for Financial Sustainability

The 2019 Actuarial Report made several assumptions in projecting the future long-term financial performance of social security pensions in Japan. First, it followed the demographic assumptions given by the 2017 population projections of National Institute of Population and Social Security Research; optimistic, medium, and pessimistic. Take the medium case for example. The total fertility rate will be 1.44 in 2065, while the life expectancy at birth in 2065 will be 84.95 years for men and 91.35 years for women. Second, it assumed two cases in the labor force participation rates (LFPR); a higher case in the future and the other case where they will remain unchanged as those of 2017. Take the former case for example. The LFPR for those males in their latter sixties will steadily hike to 72% in 2040, and the LFPR for those females in their latter sixties will go up to 54% by 2040. Third, the report assumed six cases in the annual rate of economic growth in *real* terms, ranging from -0.5% to 0.9%. The case Ⅲ, for example, assumed 1.2% for the CPI increase, 2.3% for the wage increase, 4.0% for the rate of return from investment, and 1.6% for the rate of economic growth, all in *nominal* terms. Another case Ⅵ assumed 0.5% for the CPI increase, 0.9% for the wage increase, 1.3% for the rate of return from investment, and 0.0% for the rate of economic growth, all in nominal terms, too.

[2] In 2014, the replacement rate was increased up to 63%, then turned to decrease through the automatic balance mechanism.

Using the assumptions stated above, the report checked whether or not social security pensions will maintain their healthy financing for the next 100 years, and also whether or not they will continue to pay pension benefits no less than 50% as the replacement rate for the "model" male employee at age 65 with his full-time dependent housewife, provided the current KNH system being kept unchanged. The result was that for the Case Ⅰ to Case Ⅲ with a higher LFPR, the system of social security pensions will meet two requirements above mentioned, while for the Case Ⅵ with the LFPR unchanged, it will not meet them. A higher LFPR for females and elderly males in the future were found to be a decisive factor in keeping a healthy financing of social security pensions.

A healthy financing does not always promise an adequate level of pension benefits, however. The replacement rate of 50% above mentioned is the minimum in the future which is guaranteed by law for the "model" employee couple who receive combined benefits of the basic pension (the first-tier) and the earnings-related portion (the second-tier). But, no minimum guarantee has yet been provided for the level of basic benefits solely. According to the 2019 report, the monthly amount of combined benefits for the "model" employee couple will reduce by 20% in twenty-eight years from JPY220,000 in 2019 to JPY177,000 in 2047 in terms of the 2019 wages, whereas the monthly amount of basic benefits per person will reduce more drastically from JPY65,000 in 2019 to JPY46,000 in 2047, a nearly 30% reduction in twenty-eight years, as is demonstrated in Table 1.[3]

Table 1 Estimated Changes in the KNH Replacement Rate and Its Monthly Amount of Benefits at the 2019 Wages

	The Replacement Rate (%)			The Monthly Amount of Benefits (JPY 1,000)	
Fiscal Year	2019	2024	2047	2019	2047
Basic Benefits (2 Persons Combined)	36.4	35.6	26.2	130	91
Earnings-Related Benefits	25.3	24.6	24.6	90	85
Total	61.7	60.2	50.8	220	177

Notes) 1. The replacement rate is for the "model" retired couple at age 65.

2. The medium case is assumed for future demographic figures.

Source) The MHLW, Japan (2019), *The 2019 Government Actuarial Report*, Case Ⅲ

[3] JPY1,000 equals USD9.5 as at 12 October 2020.

A long-term healthy financing of social security pensions is one of the most important factor for the sustainable system. Japan used to face difficulties in attaining the financial sustainability of pensions under the rapid population aging with a fertility decline and the bubble burst of her economy. The automatic balance mechanism introduced in 2004 was expected to be effective for social security pensions in Japan to attain their financial sustainability. The 2019 Actuarial Report shows that it will be "too powerful" to do so, forcing an unexpected drastic reduction in the level of basic benefits. This will cause another difficulties in maintaining an adequate amount of pension benefits for self-employed persons or atypical workers who are qualified to receive basic pensions only in their old age as earned entitlements based on their contributions.

Note that JPY46,000 is a monthly amount of basic pensions per person *before* tax and social security contributions are deducted. It will reduce further after their deductions, falling to less than JPY40,000. This will be far short of the minimum standard of living for retired elderly persons in Japan. Incidentally, the mean of basic consumption expenditure on food, clothing and housing was around JPY52,000 per month for single retired persons in 2019.

An additional minimum guarantee for the level of basic benefits may be required to avoid adverse side-effects of the Japan's automatic balance mechanism.

Working Longer

The 2019 report further shows what policy options will have to be implemented for the current replacement rate (62%) at age 65 of the "model" retired couple to remain unchanged in the future. It takes up a couple of age 20 as at FY 2019, who began contributing to the KNH at age 20. It assumes that the qualified maximum contribution years for the basic benefit are to be extended from current 40 to 45, and that the KNH earnings test for those employees of age 65 and above is to be abolished. Then, required working years for this couple to enjoy the replacement rate of 62% turn out to be 45 years and 10 months in Case Ⅲ, while they are 47 years and 3 months in Case Ⅴ. Thus, if current younger generations work longer than current retirees (who participated in the KNH at age 20, working seamlessly for 40 years, and received the KNH pension benefits from age 65), both generations are entitled to receive the same monthly amount of pension benefits in real terms.

In Japan, life expectancy has been getting longer and longer since 1947, and will go still further in the future. Under these circumstances, the level of pension benefits for Japanese might run down in real terms, if no changes in contributing years nor in the rate of contributions could take place. Working longer is sure to balance the two competing goals for financial sustainability and for maintaining adequacy of pension benefits. It is the best policy option that the Japanese government currently recommends in the 2019 Actuarial Report.

3. Discussions on the Normal Pensionable Age

The 2019 Government Actuarial Report did not mention any further increases in the normal pensionable age (NPA) from current 65. Instead, the government took a basic stance that it is purely a choice problem by each individual when to begin receiving old-age benefits of social security pensions.

The backgrounds underlying this basic stance are mainly following three facts. First, it is politically quite difficult for the government to actually implement any increases in the NPA, which is extremely unpopular. Second, any increases in the NPA will bring little improvements in financial sustainability in the long run under a fixed rate of pension contributions with an automatic balance mechanism. Third, unfavorable effects of any increased NPA are seen only among current and future pension contributors, while current pension beneficiaries stay undamaged. This might exacerbate the conflicts between generations.

Today, Japanese people can choose the age when they begin to receive benefits of social security pensions at their own initiative between 60 to 70, with reductions or increments in the monthly amounts of benefits. From FY 2022, the upper limit of their choice is to be expanded to age 75.

If some employee continues to work until age 70, postponing his/her receipt of pension benefits by 5 years from age 65, then he/she becomes eligible for the increased monthly amount of benefits by 42% (the rate of increment is 0.7% for each month). Postponing by 10 years from age 65 promises an increase of 84% in the monthly amount of pension benefits. All these increases of benefits are given, provided that the current earnings test is to be abolished for employees of age 65 or above.[4]

Japanese government seems to currently prefer giving such greater incentives for these postponements than to any further increases in the NPA, together with strengthening policies for employment expansion for those in their latter sixties.[5]

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[4] The abolition of the existing earnings test for those of age 65 or above is not realized yet. It is one of policy challenges in the near future.

[5] Any increases in the NPA can be a matter of policy options in Japan after the automatic balance mechanism fulfills its mission of financial sustainability by reducing the current, too generous replacement rate.

4. Concluding Remarks

As stated above, the future of social security pensions in Japan will decisively depend on 1) future demography, 2) the level of real economic growth, 3) what changes in pension programs will take place, 4) how long each individual will make pension contributions, and 5) each individual's choice when to start receiving pension benefits.[6]

In particular, working longer is a trump card for younger generations to attain the long-term healthy financing of social security pensions, together with enjoying an adequate amount of their benefits after retirement. It is absolutely necessary for pension policy makers to couple with employment policy authorities in order to actualize working longer, and to induce a higher LFPR for females.

References

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[6] The first two serious factors are related to social and economic challenges for Japan herself. They are almost beyond a control of pension policy authorities.