Mizuho Economic Outlook & Analysis

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Pension reform from the viewpoint of financial verification

It is important to expand the Employees' Pension Insurance coverage and promote labor participation

< Summary >

◆ The outcome of financial verification of the public pension plan, conducted every five years, was released in August 27, 2019. The report shows six future scenarios based on various economic assumptions.

◆ The income replacement ratio in 2019 was 61.7%, a slight decline from the 62.7% calculated in the previous 2014 report. Although the income replacement ratio is expected to gradually decline going forward, the report states the ratio can be maintained above 50% if economic growth and labor participation show improvement.

◆ The key issues to be addressed include application of the macroeconomic slide formula, further expansion of the Employees' Pension Insurance coverage, extension of the contribution payment period to secure an adequate source of pension benefits for future generations, and introduction of effective measures to promote labor participation.

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1. Income replacement ratio in 2019 – 61.7%

The 2019 financial verification results of the National Pension and Employees' Pension Insurance were released on August 27, 2019. Financial verification is conducted every five years to evaluate the long-term soundness of public pension finances on a regular basis and present the current status and outlook of pension finance.

In the 2019 financial verification, the income replacement ratio for the current pension benefit amount stood at 61.7%. The income replacement ratio represents the ratio of pension benefits received by a household (consisting of a husband who works as a salaried worker earning an average wage for 40 years and a wife who is a dependent spouse for 40 years) against the disposable income of an active male. The ratio was 62.7% in the 2014 financial verification, but dropped slightly lower to 61.7% in 2019, with an active male's disposable income being 357,000 yen (1/12 of annual income including bonus) and pension benefits received by a household being 220,000 yen (**Chart 1**).

Amid the nation's declining birthrate and aging population, the public pension system was reformed in 2004 to lessen the burden shouldered by future generations, by setting the maximum contribution level[1] and making it compulsory that benefits be covered within the scope of available funds (contributions, national subsidies and investment returns). For this reason, a system where the benefit amount is automatically adjusted reflecting the decline in the working generation and the longer average life expectancy (so-called macroeconomic slide formula) was adopted.

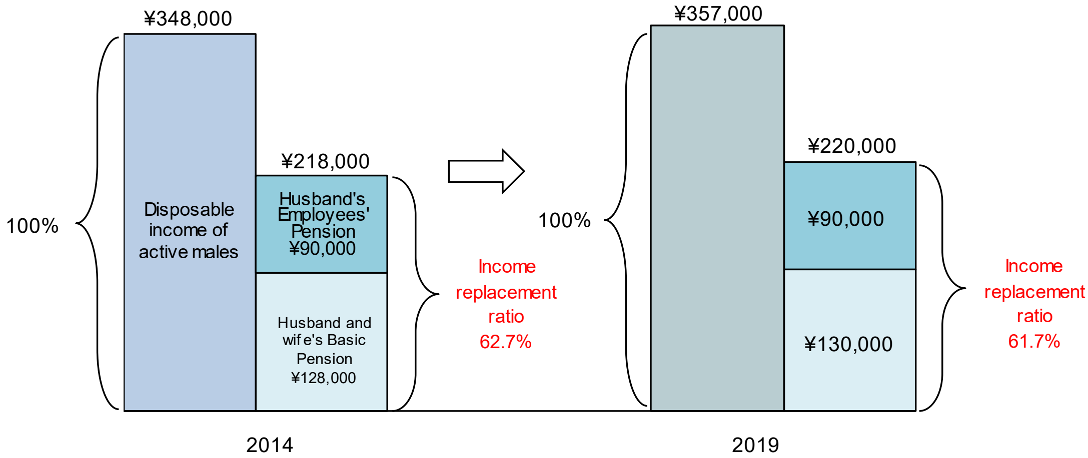
According to the Ministry of Health, Labour and Welfare, the income replacement ratio in 2019 fell because of the macroeconomic slide adjustment of 1.4% on a cumulative basis since the financial verification in 2014. However, the 2014 financial verification had already predicted that the income replacement ratio would drop to around 60% in 2019, and we can say that the benefit amount has not been adjusted to the extent projected by the 2014 financial verification given the slower-than-expected growth in wages and prices.

2. Forecast based on six economic assumptions

In this time's financial verification, six future scenarios were provided based on six economic assumptions from Case I to Case VI (**Chart 2**).

[1] The Employees' Pension Insurance rate of 18.3% and the National Pension contribution amount of 17,000 yen per month (FY2014 price) are the maximum pension burden (after 2017). The contribution amount of the National Pension is revised each fiscal year in accordance with changes in nominal wages and was revised to 16,410 yen per month in FY2019.

Chart 1: Comparison of the income replacement ratio in 2014 and 2019



Source: Made by MHRI based upon the Ministry of Health, Labour and Welfare, *The 2019 Financial Verification* (August 27, 2019).

Chart 2: Economic assumptions of the 2019 financial verification

<Up until FY2028: Two cases are set in accordance with the Cabinet Office's estimates>

		Total factor productivity increase rate	Scope of economic assumptions			
			Price (CPI) increase rate	Wage increase rate (against CPI)	Rate of return on investment	
					(Against CPI)	(Against wages)
Case I	In line with the Cabinet Office's growth achieved case	0.6% to 1.3%	1.1% to 2.0%	0.6% to 1.4%	0.0% to 1.1%	-1.3% to 0.1%
Case II						
Case III						
Case IV	In line with the Cabinet Office's baseline case	0.6% to 0.8%	1.1% to 1.2%	0.3% to 0.8%	0.6% to 1.0%	-0.1% to 0.4%
Case V						
Case VI						

<After FY2029>

	Assumptions of future economic status		Scope of economic assumptions			
	Labor participation rate	Total factor productivity increase rate	Price (CPI) increase rate	Wage increase rate (against CPI)	Rate of return on investment	
					(Against CPI)	(Against wages)
Case I	Case where economic growth and labor participation show great improvement	1.3%	2.0%	1.6	3.0	1.4
Case II		1.1%	1.6%	1.4	2.9	1.5
Case III		0.9%	1.2%	1.1	2.8	1.7
Case IV	Case where economic growth and labor participation show certain improvement	0.8%	1.1%	1.0	2.1	1.1
Case V		0.6%	0.8%	0.8	2.0	1.2
Case VI	Case where economic growth and labor participation show no improvement	0.3%	0.5%	0.4	0.8	0.4

Notes: 1. Two scenarios are set until FY2028 based on the growth achieved case and baseline case of the Cabinet Office, *Economic and Fiscal Projections for Medium to Long Term Analysis*.
2. Rate of return on investment (against wages) is calculated by deducting the rate of wage increase (against CPI) from the rate of return on investment (against CPI).

Source: Made by MHRI based upon the Ministry of Health, Labour and Welfare, *The 2019 Financial Verification* (August 27, 2019).

The income replacement ratio of households consisting of a married couple, as mentioned earlier, is forecast to remain above 50% in the future. Concerning the amount of receivable benefits estimated based on the six economic assumptions in this time's financial verification, the outcome showed that in the case where economic growth and labor participation improve greatly (Cases I-III), the income replacement ratio remains above 50% (**Chart 3**). Furthermore, the financial verification projects the adjustment period necessary to ensure a reserve in the amount of pension benefits for one year in about 100 years' time. In Cases I-III, the final fiscal year of the adjustment period was FY2046-2047.

It should be noted that in Cases IV-V where economic growth and labor participation improve to a certain extent, it was determined that the income replacement ratio over 50% could not be maintained under the current system design, and if the level of benefits were adjusted mechanically without reviewing the amount of benefits and contributions, the income replacement ratio would decline to the 40% level. In Case VI where there is no improvement in economic growth and labor participation, if the benefit amount were mechanically adjusted, the National Pension reserve would dry up in FY2052 and the system would shift to pay-as-you-go, with the level of benefits covered by contributions and national subsidies decreasing to about a 36% to 38% income replacement ratio. Also, if we divide the income replacement ratio between the Basic Pension and the Employees' Pension Insurance, the decline of the Basic Pension is greater for all cases, raising concerns for pensioners eligible to receive only Basic Pension benefits since the amount is expected to be significantly smaller.

Chart 3: Future income replacement ratio and final year of the adjustment period

	Income replacement ratio	Basic Pension of husband and wife	Employees' Pension of husband	Final fiscal year of the adjustment period
2019	61.7%	36.4%	25.3%	-
Case I	51.9%	26.7%	25.3%	FY2046
Case II	51.6%	26.6%	25.0%	FY2046
Case III	50.8%	26.2%	24.6%	FY2047
Case IV	46.5%	23.4%	23.1%	FY2053
Case V	44.5%	21.9%	22.6%	FY2058
Case VI	36% to 38%	-	-	FY2052

Note: Although the income replacement ratio must be maintained above 50%, Cases IV-V show the replacement ratio after the benefit level is adjusted until the fiscal balance is reached. Case VI is where the reserve dries up in FY2052 and a complete pay-as-you-go system is adopted, and benefits are covered by subsequent contributions and national subsidies.

Source: Made by MHRI based upon the Ministry of Health, Labour and Welfare, *The 2019 Financial Verification* (August 27, 2019).

3. Outcome of reform option estimates

The financial verification report this year includes the estimates on reform options just like in the previous report. The details of the reform options include (1) further expanding employee insurance coverage, and (2) extending the contribution payment period and the timing to start receiving benefits.

(1) Further expanding employee insurance coverage

The scope of employee insurance (Employees' Pension Insurance and Health Insurance) was expanded in October 2016 to include part-time workers (excluding students) who fulfill the conditions of weekly work hours (20 hours or more), monthly wage of 88,000 yen or higher, employment expected to be one year or longer, and being employed by a workplace with 501 or more workers.[2] As of March 2019, 435,000 part-time workers have joined the Employees' Pension Insurance. The option estimate shows the calculation results with three different ways of expanding coverage, as depicted in **Chart 4**, and we can see that the wider the coverage of the Employees' Pension Insurance, the higher the income replacement ratio would be.

Chart 4: Income replacement ratio if employee insurance coverage is expanded further

	Case I	Case III	Case V
Current	51.9%	50.8%	44.5%
Coverage expansion (a) (1.25 million people added): company size restriction abolished	52.4%	51.4%	45.0%
Coverage expansion (b) (3.25 million people added): wage and company size restrictions abolished	52.8%	51.9%	45.4%
Coverage expansion (c) (10.5 million people added): workers with a monthly salary over 58,000 yen included	56.2%	55.7%	49.0%

Note: The income replacement ratio is after adjusting the benefit level. Coverage expansion (3) indicates the case where employee insurance coverage is also applied to students, workers with an employment period of less than one year, and workplaces not covered by the Employees' Pension Insurance (such as individual firms with less than 5 employees).

Source: Made by MHRI based upon the Ministry of Health, Labour and Welfare, *The 2019 Financial Verification* (August 27, 2019).

(2) Extending the contribution payment period and the timing to start receiving benefits

The other option estimate was conducted for the four scenarios of (a) extending the Basic Pension contribution payment period up to age 65, (b) extending Employees'

[2] After April 2017, a workplace with 500 workers or less may be covered voluntarily with an agreement between the employer and workers.

Pension Insurance participation up to age 75, (c) selecting to defer receiving a pension to age 75, and (d) relaxing or abolishing the old-age pension criteria for active employees aged 65 or older.

While the estimate revealed that system revisions such as extending the contribution payment period ((a) and (b)) and selecting to delay the start of receiving a pension (c) had a positive effect on ensuring an adequate level of pension benefits, relaxing or abolishing the old-age pension criteria for active employees (d) proved negative for pension finances, lowering the income replacement ratio by 0.2%pt to 0.4%pt (**Chart 5**)

Chart 5: Income replacement ratio if the contribution payment period is extended and the starting date to receive a pension is deferred

		Case I	Case III	Case V
Current: contribution payment period 40 years (age 20-60), start receiving a pension at age 65		51.9%	50.8%	44.5%
(a) Contribution payment period of the Basic Pension extended to 45 years (age 20-65)		58.8%	57.6%	51.0%
(b) Employees' Pension Insurance participation extended up to age 75 (Basic Pension 40 years)		51.9%	51.1%	44.8%
(c) Receiving a pension is deferred to age 75 (employed until age 75 and start receiving a pension thereafter)		97.3%	95.2%	83.5%
(d) Old-age pension for active employees aged 65 or older	Relaxed (adjusted standard amount 470,000 yen → 620,000 yen)	51.8%	50.6%	44.3%
	Abolished	51.6%	50.4%	44.2%

Note: The above table is an extract of the reform option estimate results.
Source: Made by MHRI based upon the Ministry of Health, Labour and Welfare, *The 2019 Financial Verification* (August 27, 2019).

4. Future challenges of pension reform from the viewpoint of financial verification

We considered how the pension system should be reformed from the outcome of this time's financial verification.

(1) Secure pensions for future generations by implementing the macroeconomic slide formula

In terms of the pension system, the macroeconomic slide formula is an effective way of making pension finances sustainable as it adjusts the benefit amount within the scope of financial burden. Nonetheless, the macroeconomic slide formula has been exercised only twice in the past, in FY2015 and FY2019, following a prolonged decline and weak growth in wages and prices, and the benefit amount has not been restrained as anticipated.

Since a delay in adjusting the benefit amount will lower the benefit amount received by future generations, it is essential to start the adjustment at an early stage. Although the macroeconomic slide formula does not allow for the negative adjustment of pension benefits, a system was adopted in FY2018 to carry forward the previous year's unadjusted amount to the following year (carry-over formula). But if the macroeconomic slide formula were revised to enable adjustment of the benefit amount each year, it would be able to restrain the benefits for the current senior generation while improving the benefit amount for future generations. Hence, we believe further steps in revising the formula are needed, such as allowing negative adjustments to be made with a certain threshold.

(2) Expand the scope of the Employees' Pension Insurance and extend the contribution payment period as measures to raise the benefit amount

The nation's declining birthrate and aging population make benefit restraints inevitable. To respond to the problem of restrained benefits, it is necessary to (a) expand the coverage of the Employees' Pension Insurance and reduce the number of recipients who receive only the Basic Pension, and (b) extend the period of contribution payments to boost the pension amount.

For expanded coverage of the Employees' Pension Insurance, the deliberation of potential reforms is on the agenda. Not only would expanded coverage effectively improve pension finances, but it would also increase the number of Employees' Pension Insurance recipients amid concerns of a significant drop in the Basic Pension amount. We therefore believe this reform should be given high priority. In particular, the current system that allows the application of different social insurance systems to different companies depending on their size should be revised, so that the same safety net would be available regardless of company size as long as the working hours and wage standards are the same.

Extending the contribution payment period would also effectively improve the income replacement ratio, especially if payment into the National Pension were extended up to age 65. With a view to minimizing cuts in the Basic Pension, it is desirable to expand the coverage of the Employees' Pension Insurance as much as possible.

(3) Adopt a prudent approach to abolishing the old-age pension for active employees aged 65 or older

The old-age pension for active employees aged 65 or older is paid out up to half of the amount exceeding 470,000 yen, if the sum of wage[3] and Employees' Pension Insurance benefit of the recipient is over 470,000 yen (the amount is reviewed each year). According to the Ministry of Health, Labour and Welfare, there are 360,000 employees aged 65 or older whose pension payment is either entirely or partly suspended, accounting for 18% of

[3] Monthly wage equivalent amount (equivalent to 1/12 of annual income including bonus).

the 2.04 million pensioners under employment (as of end of FY2016). The total amount of suspended pensions is around 400 billion yen a year.

At present, a majority of pensioners aged 65 or older under employment receive a combination of wages and Employees' Pension Insurance benefits totaling the 200,000-yen level, and there seems to be no trend of employment adjustment at the payment suspension threshold (470,000 yen). Therefore, even if the old-age pension system for active employees aged 65 or older were abolished, we could not expect much effect in actively promoting employment after the age of 65.

Also, as the public pension system adopts a pay-as-you-go system based on intergenerational support, it seems difficult to obtain the younger generations' understanding of offering full pension benefits to relatively affluent elderly people. For example, in the case where the Employees' Pension Insurance benefit is 100,000 yen, the pensioner may receive full benefits if their wage is under 370,000 yen (making the sum of wage and Employees' Pension Insurance benefit 470,000 yen). But since the Basic Pension is also paid in the full amount, if the Basic Pension is 60,000 yen, it would raise the total income to 530,000 yen, which would exceed the average monthly wage of active male employees (439,000 yen) by about 90,000 yen.

While the system has room for revision, such as relaxing the criteria to suspend pension payments, the idea of abolishing the old-age pension for active employees aged 65 or older needs prudent deliberation since it will lead to slashing the future benefit amount.

5. Toward promoting labor participation

Amid the trend of the declining birthrate and aging population, promoting active generations to join the labor market and extending their employment period to increase the number of people capable of supporting the social security system would not only boost the amount of benefits individuals could receive, but would also contribute to the system's sustainability.

The Labour Force Survey (Detailed Tabulation) (2018) compiled by the Ministry of Internal Affairs and Communications suggests that of the 42.4 million nonlabor force population, 3.31 million people wish to be employed. The primary reasons for not seeking employment despite the will to work include "there is no prospect of finding a job" (0.95 million people) and "childbirth and child-rearing" (0.76 million people). The former reason was stated mainly by men and women aged 65 or older, and the latter reason by women aged between 25 and 44. While it is imperative to revise the current pension system, it is also important to build a society where all people who wish to work can join the labor market, by adopting such measures as creating job opportunities for seniors and enhancing support measures for a better work-life balance.