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**Future retirees face high risk of lower living standards,
greater income inequality**

We quantitatively modeled the postretirement standard of living of future retirees reaching age 60 in 2039. We found that, absent robust economic conditions in the interim, most households headed by members of this birth cohort will have a lower postretirement standard of living than today's retirees. Additionally, economic inequality among retiree households is likely to be even greater in 30 years than today.

Japanese retirees are supported by three main income sources: public pension benefits, employer-sponsored retirement benefits (lump-sum benefits paid upon retirement and pensions), and personal savings. All three are strongly correlated with retirees' preretirement income level. With wages in a deflationary trend in recent years, today's workers are likely to have lower postretirement incomes than the generation now entering retirement.

To shed light on how large and widespread such a reduction in incomes could be, we quantitatively modeled future postretirement income levels to provide key information for thinking about how to ensure adequate postretirement incomes, a critically important component of Japan's national standard of living¹⁾.

Simulation assumptions

We conducted simulations to estimate how the three main components of postretirement income would change by income stratum in response to changes in household incomes under economic scenarios that assume different wage growth rates. The simulations projected the postretirement incomes of two-or-more-occupant households headed by workers born in 1979. To measure changes in postretirement incomes relative to today, we compared these households with two-or-more-occupant households headed by persons that were born in 1949 and reached retirement age in 2009.

For our main data source, we used the National Survey of Family Income and Expenditure²⁾. Although this survey is the most comprehensive source of household income data disaggregated by income stratum, it provides detailed data only on worker households with two or more occupants.

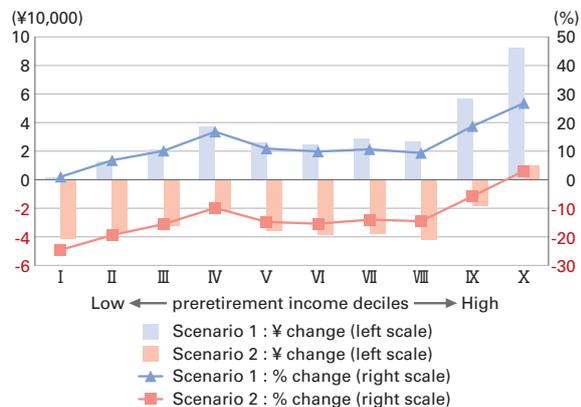
We therefore excluded single-occupant households from our simulation. Due to data constraints, we estimated postretirement incomes not for individual households but for the average household in each income stratum.

All three sources of the postretirement income are highly sensitive to retirees' preretirement wage level. We ran our simulation for two scenarios with different wage growth rate assumptions. For the 10 years through 2018, both scenarios used an average wage growth rate of -1.0%, equivalent to the average wage growth rate over the 10 years through 2009. From 2019 onward, we assumed an average wage growth rate of +2.5% for one scenario (Scenario 1) and +1.5% for the other (Scenario 2)³⁾. We further assumed that wage growth rate differentials among income strata remain consistent with their levels over the 10 years through 2009. Both scenarios assumed that the CPI inflation rate would equal its 2000–09 average of -0.26% for the 10 years through 2018 and remain constant at +1.0% thereafter⁴⁾. We thus assumed an average real wage growth rate (nominal wage growth rate minus CPI inflation rate) of +1.5% for Scenario 1 and +0.5% for Scenario 2 from the 11th year (2019) onward.

Simulation results

The accompanying graph plots estimated differences in average postretirement income in both yen and percentage terms by income stratum between households headed by 1949 birth cohort members who reached retirement age in 2009 and households headed by 1979 birth cohort members who will reach retirement age in 2039. We calculated postretirement income as the sum of (1) the monthly public pension benefits that a married couple with an average interspousal age difference would be entitled to

Exhibit Comparison of estimated postretirement household monthly incomes between 1949 and 1979 birth cohorts



Source: Nomura Pension Management Research Group

receive when the head of the household reached the age of 67, (2) employer-sponsored monthly pension benefits, and (3) lump-sum retirement benefits and personal savings converted into a monthly equivalent amount by dividing their total by the average number of months of remaining life expectancy at age 60. Additionally, we adjusted the 1979 birth cohort's postretirement income for inflation based on the assumed CPI inflation rate to enable comparison with the 1949 birth cohort on an equivalent basis.

Under Scenario 1, the 1979 birth cohort's monthly postretirement household incomes are higher than the 1949 birth cohort's across all income strata by a margin ranging from ¥0–20,000 in the low income strata (I–III) to roughly ¥30,000 in the middle income strata (IV–VII) and ¥30,000–90,000 in the high income strata (VIII–X), as shown in the graph. If an average real wage growth rate of +1.5% is realizable in the future as assumed in Scenario 1, postretirement income would rise across the income spectrum. Under Scenario 2, by contrast, which assumes an average real wage growth rate of +0.5% from 2019 onward, postretirement income decreases across all income strata except the top one (X), where it increases only slightly. Postretirement income's margin of decline under Scenario 2 is ¥30,000–40,000 in the low income strata, around ¥40,000 in the middle income strata, and ¥20,000–40,000 in the high income strata other than X. The simulation results reveal that postretirement incomes will fall below their current levels unless the Japanese

economy maintains a real wage growth rate of around +1.0%, the midpoint between the two scenarios' assumed real wage growth rates.

While postretirement incomes increase or decrease across all income strata under the two scenarios, the magnitude of the increase or decrease varies among income strata. Under the rising income scenario, postretirement incomes rise by a smaller margin in the low income strata than in higher income strata in both yen and percentage terms. Under the falling income scenario, they paradoxically fall by a larger margin in the low income strata than in higher income strata in both yen and percentage terms. In the high income strata, by contrast, postretirement incomes increase substantially under the rising income scenario and fall only modestly under the declining income scenario. Inter-strata disparities in postretirement income consequently widen under both wage growth rate scenarios. Relative to today's low-income retirees, future low-income retirees will likely fall even farther behind higher-income retirees in terms of their standard of living.

Policy implications

Given such an outlook, what type of policy measures are required? First, with respect to low income retirees, the government must consider setting a minimum level of public pension benefits from the standpoint of benefit adequacy. In the same vein, the government should also consider instituting a refundable tax credit⁵⁾ equivalent in effect to a social security benefit. In the middle income strata, individual households basically should offset any decrease in postretirement benefit income with their personal savings. The government should accordingly consider incentives to encourage people to save for retirement.

Amongst the Japanese public, however, there is currently no widespread sense of crisis regarding future postretirement incomes. Without such public concern, the government will not institute policy measures such as those mentioned above. As a first step, active discussion based on quantitative analysis like the simulation results presented above is needed.



Note

1) Last year, the Nomura Pension Management Research Group formed a working group on postretirement income security with the involvement of outside experts. This paper presents a simplified version of the working group secretariat's postretirement income projections. For more details on the working group's quantitative methods and conclusions, see Postretirement Income Security Working Group's Collected Papers: August 2011 (Nomura Pension Management Research Group) (in Japanese).

2) The National Survey of Family Income and Expenditure is a nationwide survey of 60,000 households conducted every five years by the Ministry of Internal Affairs and Communications. It compiles data on the current state of household incomes and assets disaggregated by household attributes such as income stratum and age of head of household.

3) Scenario 1's average wage growth rate of +2.5% is equal to the nominal long-term wage growth rate assumed by the mid-case economic scenario used in the Ministry of Health, Labor and Welfare's FY2009 actuarial review of the National Pension and Employees' Pension Insurance programs.

4) The actuarial review mentioned in the preceding footnote likewise assumed a long-term CPI inflation rate of +1.0%.

5) A refundable tax credit reduces the income tax liability of taxpayers with incomes above the tax credit's eligibility threshold. Additionally, taxpayers with no taxable income or not enough taxable income to benefit from the full amount of a refundable tax credit receive a cash benefit equivalent to the amount of the tax credit in excess of their income tax liability.

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