The Financial Effect of New Population Estimates on the Employees' Pension and National Pension

1. Reasons for the trial calculation

- In January of this year the new population projections ("Population Projections for Japan", National Institute of Population and Social Security Research) were made public, and large changes, such as declining birth rate and extension of average life expectancy, are visible in the future outlook of the population that serves as the basis of the pension system.

- Therefore, with the purpose of clarifying the effect of new population projections on pension finances, to promote study for the next system reform, the trial calculation was carried out based on the 1999 financial recalculation, using such figures as the number of insureds at the end of FY2000 as initial data, and mechanically replaced the previous population projection base with the new population projection base.

2. Presuppositions of the trial calculation

- Population projection 2002 population projection

(Summary of presuppositions of the 2002 population projection)

- Birth rate

![Birth Rate Graph]

- Life expectancy
  Average life expectancy in 2050 - Men: 80.95(79.43), Women: 89.22(86.47)
  Figures in ( ) are 1997 estimates.

- Other major presuppositions of the trial calculations

  - Economic factors
    - Increase in wages: 2.5% (1.0% until 2007)
    - Increase in prices: 1.5% (0.0% until 2007)
    - Return on investment: 4.0% (2.5% until 2007)
    - Change in pensions (per year, for those who are newly eligible): 2.5% (0.8% until 2008, 2.3% until financial recalculation in 2024)

  - Population research factors
    The base figures that serve as initial data for calculations are from the end of FY2000, and the basic ratios (e.g. rate of withdrawal) aside from the population projection are the same as those in 1999's financial recalculation.

  - Financial burden on the national treasury
    In cases where the government pays 1/2, the increase will begin in October 2004.
3. Results of the trial calculations, and points deserving attention

(1) Trial calculation results

The rate of final premium (based on gross pay) from FY2025 on will be per the following.

<table>
<thead>
<tr>
<th></th>
<th>1999 Financial Recalculation Base</th>
<th>High Estimate</th>
<th>Medium Estimate</th>
<th>Low Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/3 Paid by the Government</td>
<td></td>
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<tr>
<td>Employees' Pension</td>
<td>21.6% (100)</td>
<td>22.8% (106)</td>
<td>24.8% (115)</td>
<td>27.5% (127)</td>
</tr>
<tr>
<td>National Pension (FY1999 value)</td>
<td>25,200 yen (100)</td>
<td>27,100 yen (108)</td>
<td>29,600 yen (117)</td>
<td>33,000 yen (131)</td>
</tr>
<tr>
<td>1/2 Paid by the Government</td>
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</tr>
<tr>
<td>Employees' Pension</td>
<td>19.8% (100)</td>
<td>20.6% (104)</td>
<td>22.4% (113)</td>
<td>24.8% (125)</td>
</tr>
<tr>
<td>National Pension (FY1999 value)</td>
<td>18,500 yen (100)</td>
<td>19,900 yen (108)</td>
<td>21,600 yen (117)</td>
<td>24,000 yen (130)</td>
</tr>
</tbody>
</table>

Note 1: Figures inside ( ) are indexed, taking the 1999 Financial Recalculation Base as 100.

Note 2: Current premium rates are 13.58% (based on gross pay) for the Employees' pension, and 13,300 yen for the National pension.

When looking at the financial effects on the rate of final premium, using the 1999 Financial Recalculation Base as a comparison, the high estimate is up 5%, the medium estimate is over by 15%, and the low estimate sees a 25-30% increase.

Main factors involved:
The high estimate is based on the effect of an extension of life expectancy; in the medium estimate, the effect of the extension of life expectancy amounts to 5% and the effect of a reduced birthrate is at the 10% level; and in the low estimate, the effect of the extension of life expectancy is 5%, while the effect of a reduced birthrate amounts to 20-25%.

Specific influences are, for the present, those that arise with the extension of life expectancy; the effects of the reduced birthrate will come about over a longer period in the future, from roughly 2020 onward.

(2) Points deserving attention

The aging population with a reduced birthrate in the current new population projection is, compared even with the U.S. and the main European countries, progressing to a remarkable degree. Because this will have a large influence on future Japanese society and economy in general, further promotion was called for of large-scale measures to deal with the reduced birthrate, and a "Meeting to consider society with a reduced birthrate" was begun under the auspices of the Minister of Health, Labour and Welfare.

In the current reform of the pension system, a necessary reaction to the new population projection will be, while looking at studies of future measures to deal with the reduced birthrate, sufficient examination from a broad range of viewpoints, in a form set up by the people.

At that time, together with employment measures, it will be important to study measures increasing support for groups like the elderly and women.
Percentage of the Population Aged 65 and Over in the Major Developed Nations: 1950 - 2050

Other countries, - UN, "World Population Prospects 2000"

Total Fertility Rate in the Major Developed Nations: 1950 - 2000

Sources: Japan - Ministry of Health, Labour and Welfare, Minister's Secretariat, Statistics and Information Department, "Vital Statistics of Japan"
Other countries - UN, "Demographic Yearbook" and Council of Europe, "Recent Demographic Developments in Europe and North America"
Data for Germany prior to 1991 are for West Germany.