Current Status and Issues of Japan's Public Pension System

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1. Structure of the Public Pension System

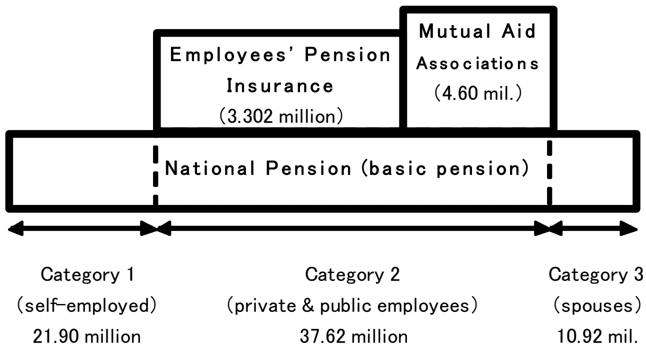
1. The Two-Tiered System

Japan's public pension system is characterized by a two-tiered structure. The lower tier consists of a flat-rate basic pension that all participants stand to receive at retirement. The upper tier is an amalgam of earnings-related occupational pension schemes (Exhibit 1).

The basic pension emerged in its present form in the 1985 pension reform of the National Pension. It covers not only employees but self-employed persons and full-time housewives. Participation in the basic pension is compulsory from age 20 to 59, and the full flat-rate benefit is paid out at the pension age except in cases with an incomplete contribution record (less than 40 years) or an exemption period.

In contrast, the upper tier consists of the Employees' Pension Insurance scheme for private sector employees, and various Mutual Aid Associations for public sector employees. Legislation was introduced in the Diet to unify these occupational pension schemes, but the bill is still under deliberation. If enacted, private and public sector employees alike would participate in the same pension scheme for the first time, sharing the same contributions and benefits.

Exhibit 1 Structure of the Public Pension System



Note: Shows number of participants at the end of March 2006.
Source: National Council on Social Security, Subcommittee on Employment and Pension.

2. Benefit Amounts of the Two Tiers

To explain the benefit amounts provided by the two-tiered public pension system, we examine the case of a model household in which the husband is a company employee and the spouse is a full-time housewife.[1]

The husband's basic pension and EPI benefit are shown in Exhibit 2. The monthly basic pension is 65,000 yen assuming the husband has a full contribution record of 40 years.[2] The full-time housewife draws the same basic pension as the husband.[3]

The husband's monthly EPI benefit is calculated as follows: average indexed earnings after revaluation × benefit multiplier × length of participation. To calculate earnings, past earnings are first revalued at the current level. For example, if the average wage level has risen 20% since a particular year, 200,000 yen earned in that year would be revalued to 240,000 yen (200,000 yen × [1 + 0.2]). The revalued past earnings are then averaged over the EPI participation period, and multiplied by the benefit multiplier to determine the benefit amount. The benefit multiplier is currently under adjustment to reflect growth of the participation period, and will ultimately reach 5.481/1,000. The participation period refers to the number of years of participation in EPI.[4]

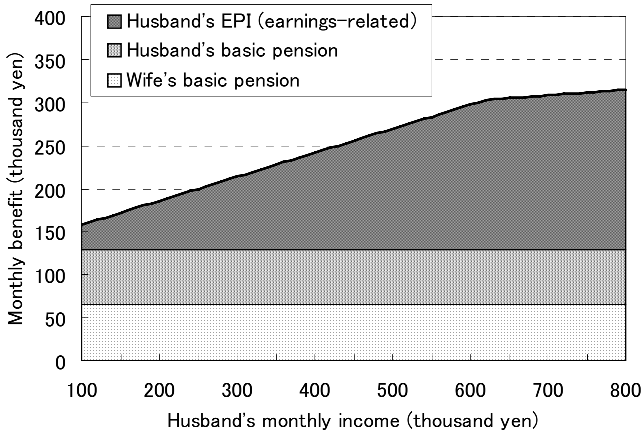
Based on this benefit formula, the benefit drawn by the model household with 40 years of EPI participation is shown in Exhibit 2. According to government calculations, if the husband earns 348,000 yen per month, the total benefit will amount to 227,000 yen (fiscal 2006). This includes the two basic pensions of both spouses totaling 130,000 yen, and the husband's EPI benefit of 97,000 yen.

For a low-income household earning half this income of 174,000 yen, the monthly pension will amount to 179,000 yen (130,000 yen for the two basic pensions, and 49,000 yen for the husband's EPI benefit).

On the other hand, for a high-income household with twice as much income of 696,000 yen, the monthly income is indexed to 620,000 yen, resulting in a monthly pension of 315,000 yen (130,000 yen for the two basic pensions, and 185,000 yen for the EPI benefit).

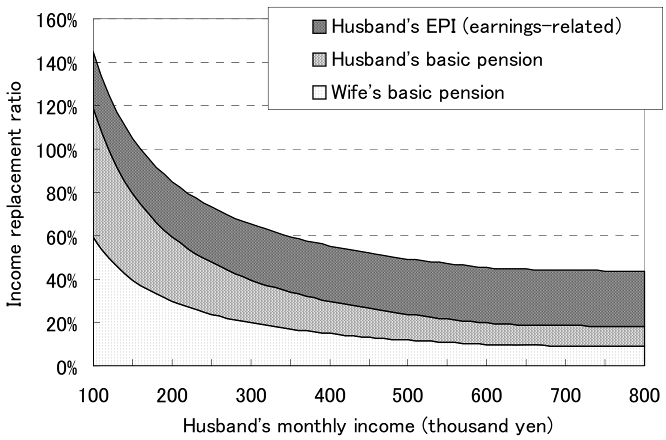
In this way, the EPI portion of the monthly pension increases with household income. However, the replacement ratio of the monthly pension (household monthly pension amount ÷ household monthly disposable income including bonus) varies widely from 59.7% for the model household to 94.0% for the low-income household, and 43.5% for the high-income household. This inverse relationship between the replacement ratio and income indicates that the basic pension produces an income redistribution effect (Exhibit 3). [7]

Exhibit 2 Monthly Public Pension



Note: See endnote 6 for an explanation of the benefit calculation method.

Exhibit 3 Replacement Ratio



Note: See endnote 6 for an explanation of the benefit calculation method.

3. Other Features

Aside from the two-tiered structure, two other features of special importance to individuals as well as the public pension system are the indexation of benefits and the benefit payment period.

Indexation is a mechanism that protects the real value of benefits against changing economic conditions. In Japan's public pension system, participants pay in contributions for approximately 40 years, and then receive benefits for the next 20 years. During this long period, the price level and living standards are likely to trend upward. In principal, the present system indexes the starting benefit each year to the wage growth rate, and subsequent benefits to the inflation rate. [8]

Regarding the benefit payment period, two important points are the lifetime benefit entitlement and pension age. Unlike company pensions, which generally provide benefits for a fixed period after retirement, the public pension provides lifetime benefits. For individuals, this allays the risk that they might outlive their pension. But for pension finances, it means that benefit expenditures will continue to grow as Japan's life expectancy increases. To accommodate the trends in longevity and employment environment, reforms have been made to gradually raise the pension age to 65.

2. Main Points of the 2004 Reform

1. Automatic Benefit Adjustment Rule Aims to Balance Pension Finances

Past population projections have underestimated the growth of life expectancy and decline of the total fertility rate in Japan. This means the pay-as-you-go public pension system is coming under increasing strain because fewer workers must support more retirees who are also living longer. There are only two options to ensure financial viability — raise contributions, or reduce benefits. Thus since 1985, pension reforms have pursued a balanced approach of capping the ultimate contribution rate (an indicator of the future contribution level) at around 20% of annual income, and trimming benefit expenditure by reducing the benefit ratio and indexing rate while raising the pension age (Exhibit 4).

However, despite the need to raise contributions and reduce benefits in the long term, political considerations prevent bold moves in the short term. In the past, when actuarial valuations of the pension system were done every five years, it was customary to set the benefit level first, and then to calculate the required contribution level. This method allowed policymakers to avoid politically sensitive decisions on contribution rate hikes and benefit cuts.

The 2004 pension reform marked a sharp policy shift. For the first time, the future contribution rate was written into law, effectively placing a rigid constraint on benefit expenditures. Thus unlike previous reforms, which admittedly tried to prevent excessive rate hikes, the 2004 reform protects future generations against the risk of excessive rate hikes.

Exhibit 4 Outline of Previous Pension Reforms

Reform year	Contribution	Benefit		
	Ultimate rate	Multiplier	Indexing	Pension age
1954	(4.7%)	0.0050	—	60
1960	(3.8%)	Increase	—	
1965	(6.9%)	Increase	—	
1969	(12.6%)		—	
1973	15.1%		Started	
1976	15.9%			
1980	26.2%			
1985	22.2%	Decrease		
1989	24.2%			
1994	22.9%		Decrease	Increase
2000	21.4%	Decrease	Decrease	Increase
2004	18.3%		Decrease	

Notes: Since ultimate contribution rates up to 1969 are not published, the ultimate rates in parentheses show the contribution rate in the final year of the actuarial valuation. Also, for comparison with the 2004 reform, ultimate contribution rates to 1994 are restated as an annual rate by dividing the monthly rate (applied to indexed monthly earnings) by 1.3.

Sources (in Japanese): Kohei Komamura et al (2005) *Decision Making Process of Pension Reform*; Kunio Nakashima et al (2005) *Actuarial Study of the Employees' Pension Reform*; MHLW Pension Bureau Actuarial Affairs Division (2005) *Actuarial Valuation Results of the Employees' Pension and National Pension.*

Under the fixed-rate contribution method, pension finances are kept from going bankrupt with a new benefit adjustment rule called macro-indexing. The key feature of the new rule is that benefits are no longer indexed to wage growth per person, but instead to total wage growth (of all participants) until such time that financial equilibrium is achieved. This means that benefit expenditures will automatically decrease in line with the secular decline of participating workers due to the declining fertility rate.

By automatically adjusting the benefit to economic and demographic factors, the new rule does what the five-year actuarial valuation did in the past. This is arguably the most important feature of the 2004 pension reform.

2. Benefit is Indexed to Economic and Demographic Factors

Below we examine the effect of macro-indexing in the case of a company employee enrolled in EPI.

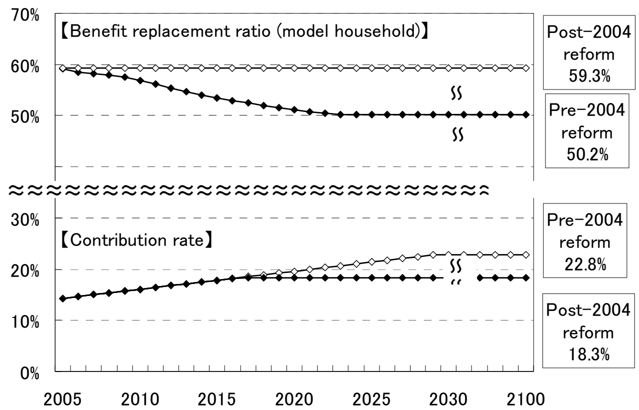
Under the 2004 reform, the ultimate contribution rate, previously estimated to reach 22.8%, will rise to only 18.3% (Exhibit 5). Notably, this rate is even below the 19.8% rate slated in the 2000 reform.

On the other hand, the benefit will gradually decrease due to macro-indexing. The income replacement ratio of the benefit will decrease from 59.3% before macro-indexing, to 50.2% by 2023 based on the government's standard assumptions in the 2004 reform (Exhibit 5). Thus the 2004 reform effectively decreases the benefit by approximately 15% (= 1 − 50.2% ÷ 59.3%) compared to the previous method.[10]

Moreover, changes in economic and demographic assumptions will also affect the future benefit amount. If assumptions are downgraded due to deteriorating conditions, macro-indexing will be extended for a longer period to correct the larger projected financial equilibrium. Conversely, if assumptions are upgraded due to improving conditions, macro-indexing will have a milder effect.

At the time of the 2004 reform, the government's optimistic scenario (improved fertility rate and strong economy) called for macro-indexing to be phased out in 2019, limiting the benefit cut to approximately 11% from the baseline. On the other hand, in the pessimistic scenario, macro-indexing would persist until 2033, reducing the benefit by approximately 23%.

Exhibit 5 Contribution Rate and Benefit Level After the 2004 Reform



Source: MHLW Social Security Council, Subcommittee on Pension Actuarial Affairs (2005), *Financial Verification of the Public Pension system Based on the Fiscal 2004 Actuarial Valuation.*

However, if conditions deteriorate even further, macro-indexing could conceivably whittle down and dislodge the public pension as the primary source of retirement income. To avert this mishap, the 2004 reform law requires that action be taken to protect the minimum benefit of a 50% replacement ratio. This level is approximately 15% below the baseline benefit prior to the 2004 reform. If an actuarial valuation indicates the benefit might dip below this threshold before the next valuation five years later, the provision requires that measures be taken including the termination of macro-indexing. However, since no specific measure nor funding source is stipulated, a political decision will be required when the time comes. Thus while we praised the 2004 reform earlier for reducing the political risk, some of it will still lurk around in the system.

3. Pension Debate After the 2004 Reform

1. Funding of the Basic Pension

Debate on the basic pension heated up in the first half of 2008 after a private member of the Economic and Fiscal Policy Advisory Committee presented controversial materials in October 2007. The debate focused on two alternative funding approaches: (1) preserving the contribution-funded social insurance approach while relying on 50% state funding, or (2) switching to a 100% tax revenue funding approach. In any case, the state-funding ratio is already slated to rise to 50% in fiscal 2009. The media, politicians, and business organizations subsequently presented various reform proposals, adding to the confusion.

In June 2008, the National Council on Social Security and its Subcommittee on Employment and Pension respectively released their interim report and interim findings. These followed on the subcommittee's assessment released in May 2008 on the impact of tax-based funding for the basic pension on the finances of the pension system and households. Notably, the interim report designates the non-payment of contributions as a critical problem not for pension finances, but for social assistance programs on the grounds that non-payers would receive little or no pension benefit, causing an excessive burden on the social assistance program. In the interim findings, the subcommittee compares the merits and demerits of the two funding approaches, and advocates viewing the two approaches as being complementary rather than mutually exclusive (Exhibit 6).

In addition, the subcommittee concludes that since non-payment of NP contributions is a trivial problem for pension finances, its resolution through the tax funding approach should not be counted as a merit of the approach. Clearly, this assessment leaves much room for debate. Regarding the contribution-funded approach, the interim report proposes aggressive countermeasures aimed specifically at the attributes of non-payers (Exhibit 7).

Two critical issues in this respect are payroll deduction of NP contributions, and EPI coverage of non-regular employees. With regard to NP contributions, contrary to common perceptions, not only are self-employed persons (category 1 insured) outnumbered by employees in the NP, but the latter also tend to be the leading non-payers (Exhibit 8). The pension unification bill mentioned earlier addresses the inequity between regular and non-regular employees by providing for EPI coverage of non-regular employees. Unfortunately, the proposed expansion is quite limited in scope and impact. Thus for non-regular employees who remain in the NP, the proposal calls for having employers collect contributions through payroll deductions similar to EPI.

Moreover, in addressing the non-payment problem, widespread support exists for a separate social assistance program targeted at low-income elders who receive little or no pension benefit. For low-income elders, social assistance implies something different from their working-age counterparts, who are better able to find jobs and work their way out of poverty. Developments along this line are already seen in countries such as Germany. On the problem of housing for elders, the government released a plan last July, "Five-Point Reassurance Plan: Emergency Policy to Bolster Social Security," which calls for a law to secure stable housing for elders in collaboration with welfare facilities.

Exhibit 6 Comparison of the Social Insurance Approach and Tax Funding Approach

	Merits	Demerits
Tax funding	① Pays benefits to everyone regardless of participation or contribution status ② Enables complete collection of contributions ③ More equitable sharing of burden across society	① Obscures linkage between contributions and benefits, making benefit protection less secure if pension finances falter ② Transition cost of adopting new system
Social insurance	① In principle, contributions are clearly linked to benefits, strengthening benefit protection ② No transition cost	① Non-payers receive little or no retirement benefits ② Administratively difficult to collect all contributions ③ Current system suffers from perception of inequity between benefits and contributions

Source: National Council on Social Security, Subcommittee on Employment and Pension, *Interim Findings: Vitality of Working Generations is Crucial to the Health of the Social Security System (2008).*

Exhibit 7 Proposed Remedies for NP Non-payment Problem

① **For low-income earners:** Automatic exemption (corresponds to minimum benefit under tax funding approach)
Predicted improvement in collection rate: 13.1% (9.6% when combined with measure no. 2)

② **For non-regular workers and employers who deny coverage:** Expansion of EPI coverage, adoption of payroll deduction
Predicted improvement in collection rate: 10.2%

③ **For confirmed non-payers (mostly middle- and high-income earners):** Thorough compulsory collection
Predicted improvement in collection rate: 6.7% (5.0% when combined with measure no. 2)

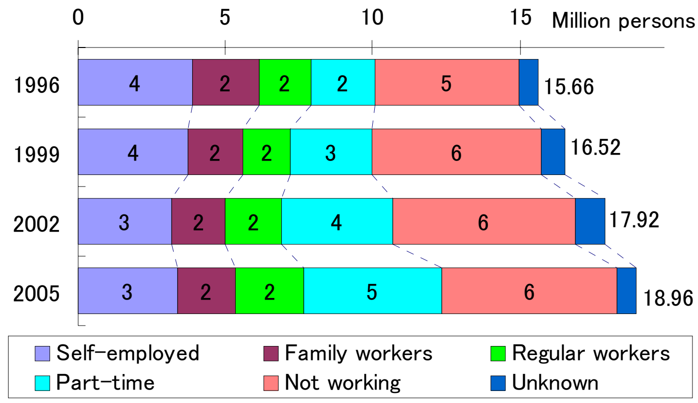
Source: National Council on Social Security, Subcommittee on Employment and Pension, *Interim Findings: Vitality of Working Generations is Crucial to the Health of the Social Security System (2008).*

2. Other Issues

Aside from the basic pension, other outstanding issues of the public pension are the status of Category 3 insured persons, and revision of the old-age pension for active workers.

Category 3 insured persons are the dependent spouses of public and private employees (category 2 insured persons), who are between the age of 20 and 59, and either full-time housewives or part-time workers with an annual income below 1.3 million yen (Exhibit 1). Category 3 has been a controversial issue because members can draw the basic pension without directly paying in contributions. However, a provision in the 2004 reform enhanced the status of category 3 insured persons by legally recognizing their right to receive one-half of the pension accumulated during marriage, on the basis that contributions are paid in jointly by the husband and wife. Meanwhile, dissenting opinions include requiring category 3 insured persons to pay NP contributions, and eliminating the problem altogether by adopting the tax funding approach.

Exhibit 8 NP Participation by Employment Status



Source: Social Insurance Agency, *Survey on Membership of Public Pensions*

Opinions also vary regarding the old-age pension for active employees. Critics argue that it deters workers from working by scaling down the benefit in portion to earned income. Supporters say that the scheme promotes employment of older workers by giving employers a hiring incentive. The five-point emergency plan mentioned earlier calls for creating an environment in which skilled and experienced older workers can work regardless of age. It recommends studying tax incentives for employers to raise the employment age limit, and revision of the scheme to motivate older workers. However, it stops short of proposing specific measures, leaving the matter unresolved.

4. The Road Ahead

1. Recognizing the Core Issue

While the current pension debate has focused on adoption of the tax funding approach for the basic pension, the most important issue to the general public concerns the dwindling public pension benefit. The pension outlook improved in the tentative calculation released in February 2007 compared to the release in the 2004 reform. Still, the baseline benefit is projected to decrease 13% from the pre-2004 reform level. Moreover, if the fertility rate drops or the economic recovery fails to meet expectations, macro-indexing could drive down the benefit to the minimum level (15% below the pre-2004 reform level) without stabilizing pension finances, necessitating even more drastic benefit cuts. Since the households of public and private employees rely on the public pension for over half of retirement income, such an outcome would have severe repercussions.

To better prepare against this contingency, households will need to rely more on private pensions such as corporate pensions and individual annuities. Pushed by labor cost cuts and the adoption of international accounting rules, corporate pensions are moving toward defined contribution plans, which shift the financial risk to individual participants. This means that in the future, individuals will increasingly need to plan and prepare for retirement on their own.

2. Issues Confronting Households and the Government

For households, the first step in retirement preparation is knowing the estimated public pension benefit. Starting next year, the government will issue public pension statements to inform individuals about their estimated pension amount. The statements will help households plan and prepare their retirement finances. Second, the public needs to better understand the features of the public pension system. Surveys show that most people are unaware of key features of the public pension such as inflation-indexed benefits and lifetime benefit payments (Exhibit 9). Good knowledge of the public pension system is essential to retirement preparedness.

Exhibit 9 Public's Knowledge of the Public Pension (Question: What features are you aware of?)

	Survey date		
	1993.05	1998.03	2003.02
Benefit is indexed to inflation & wages	31.4%	27.8%	31.7%
Benefit is guaranteed in the event of income earner's disability or death	32.1%	30.0%	42.5%
Benefit is paid for lifetime	51.3%	43.9%	55.6%
Current participants are supporting current retirees	55.9%	52.8%	58.0%
Benefit is linked to length of participation	61.8%	48.5%	62.5%
Participation is compulsory at age 20	62.1%	46.1%	66.7%
Other feature (fill in blank)	0.1%	0.3%	0.3%
Don't know	3.7%	4.3%	4.2%

Note: Shows percent of respondents who are aware of each feature.
Source: Cabinet Office, *Opinion Survey Regarding the Public Pension System.*

Exhibit 10 Information Sources on the Public Pension System

<table>
<tr><th></th><th>1993</th><th>2003</th></tr>
<tr><td>TV & radio</td><td>30.4%</td><td>53.7%</td></tr>
<tr><td>Newspaper & magazine</td><td>30.3%</td><td>42.4%</td></tr>
<tr><td>Local government PR</td><td rowspan="2">41.2%</td><td>29.5%</td></tr>
<tr><td>Social insurance office PR</td><td rowspan="2">22.8%</td></tr>
<tr><td>National government PR</td><td>8.6%</td></tr>
<tr><td>Employee welfare information</td><td>32.2%</td><td>18.5%</td></tr>
<tr><td>Friend or acquaintence</td><td>16.7%</td><td>12.3%</td></tr>
<tr><td>Technical book</td><td>1.2%</td><td>1.2%</td></tr>
<tr><td>Other</td><td>3.3%</td><td>1.5%</td></tr>
<tr><td>Don't know</td><td>6.5%</td><td>4.7%</td></tr>
</table>

Note: Shows multiple responses.
Source: Cabinet Office, *Opinion Survey Regarding the Public Pension System.*

For the government, benefit reductions must be accompanied by preferential measures so that people can feel more secure about retirement. Specifically, in addition to pension statements, tax measures and other steps are needed to encourage retirement preparation. For example, pension statements should contain not only the baseline estimated benefit, but the estimated benefit when macro-indexing is phased out, and the expected end date of macro-indexing. Recently, as attention has focused on the public pension, information sources on the public pension have shifted away from the government's public relations arm to the mass media (Exhibit 10). However, instead of relying on the media, the government should take full advantage of pension statements as a new channel of direct communication that can allay the public's concerns regarding pension finances, and provide needed information on other important aspects of the public pension system. At the same time, the government should actively respond to statement-specific inquiries.

Second, measures are needed to promote private pensions. Like Japan, Germany recently reformed its troubled public pension system and slashed benefits. To offset this impact, the German government initiated pension statements and introduced incentives to promote a grant-aided private pension scheme called *Riester Rente*. Recognizing that an income tax deduction (the typical incentive for private pensions) has little appeal to low-income households who pay minimal taxes, and can otherwise be an unclear incentive, the government offers a choice between taking the deduction or the grant.

The public pension controversy tends to generate a flurry of opinions and comments which can obscure rather than clarify the real issues. To keep the debate on track, we must constantly remind ourselves of the most fundamental issue — can we rely on the public pension as our own primary source of retirement income?

Endnotes

1. In the MHLW standard household, the income earner can be either the husband or wife. For simplicity, we assume the husband is the income earner, which is the case in the majority of one-income households.

2. The actual benefit is subject to transitional measures. For the purpose of explanation, we cited the ordinary benefit amounts in fiscal 2006 based on materials released by the Pension Subcommittee of the Social Security Council (April 26, 2007).

3. We assume the wife has never participated in EPI. However, if she had participated for some period, she would receive the corresponding EPI benefit.

4. Since the actual benefit is calculated as an annual amount, the participation period is expressed in number of months, not in number of years as shown here.

5. This amount is the average indexed monthly earnings in fiscal 2006. The benefit calculation assumes this income will remain constant. Other assumptions are that the annual bonus equals 3.6 months of income, and that the husband and wife are the same age. We make the same assumptions in this paper.

6. This benefit calculation method is the same as the one used by the Pension Subcommittee of the Social Security Council in materials released on April 26, 2007, and by the Council's Pension Actuarial Affairs Subcommittee in the *Financial Verification of the Public Pension System Based on the Fiscal 2004 Financial Reevaluation* (2005). Specifically, assuming that a bonus totaling 3.6 months of income is paid out twice a year, and that the benefit multiplier of the earnings-related pension is the final value of the transitional period, we calculated the ordinary benefit amount at age 65 in fiscal 2006 without considering transitional measures.

7. The income replacement ratios of 59% and 50% for the model household are representative of the plan design. In practice, as the exhibit shows, various income replacement ratios exist depending on income and other factors.

8. As explained in the next section, since macro-indexing will be applied until pension finances achieve balance, inflation indexing will be restrained.

9. The ultimate contribution rate is the rate necessary to achieve long-term equilibrium of pension finances under the stated assumptions. Starting with the 1954 reform, the practice began of holding down the current rate while approaching the ultimate rate gradually in the future. As a result, the ultimate contribution rate and its year of attainment are used as indicators of the burden shifted to future generations.

10. As mentioned in the previous section, while income replacement ratios vary by household income and composition, the 15% decline is common across all households.