Financial Report on the Public Pension System
Fiscal Year 2010 (Summary)

1. Fiscal Revenue and Expenditure

- The Financial Status of Public Pension Plans as a whole

The financial status of public pension plans as a whole for FY2010 reveals that 28.7 trillion yen of revenue was income from contributions and 11.2 trillion yen was from subsidies by state etc., while 48.8 trillion yen of the expenditure was for pension benefits. The reserve at the end of FY2010 was 171.9 trillion yen at book value and 170.7 trillion yen at market value (Figure 1, Figure 2-1-1 in the report).

- Contributions – Increased for EPI and PSP

Contributions of Employees' Pension Insurance (EPI) were 22.7 trillion yen, those of National Public Service Personnel Mutual Aid Association (NPSP) were 1.0 trillion yen, Local Public Service Personnel Mutual Aid Association (LPSP) were 2.9 trillion yen, Mutual Aid Corporation for Private School Personnel (PSP) were 0.3 trillion yen and National Pension (NP) were 1.7 trillion yen (Figure 2-1-4 in the report). In FY 2010, contributions of EPI and PSP increased, causing those of public pension plans as a whole to increase by 1.5%.

- Pension Benefits – Increased for Employee Pension Plans and Basic Pension

Benefits of EPI were 24.0 trillion yen, those of NPSP were 1.7 trillion yen, LPSP were 4.5 trillion yen, PSP were 0.3 trillion yen, NP's National Pension Account were 1.3 trillion yen, and NP's Basic Pension Account were 17.0 trillion yen (Figure 2-1-11 in the report). Benefits continued to increase for employee pension plans and Basic Pension Account.

Note 1: Benefits for each pension plan include the equivalent to benefits of Basic Pension (the partial amount of benefits under the old law regarded equivalent to Basic Pension). The benefits paid by the National Pension Account are mainly those under the old National Pension Law. The benefits paid by the Basic Pension Account are those of Basic Pension.
Reserve

Reserve\(^1\) of EPI was 113.5 trillion yen (114.2 trillion yen), that of NPSP was 8.2 trillion yen (8.1 trillion yen), LPSP was 38.4 trillion yen (36.6 trillion yen), PSP was 3.4 trillion yen (3.4 trillion yen), NP's National Pension Account was 7.7 trillion yen (7.7 trillion yen) and NP's Basic Pension Account was 0.7 trillion yen (Figure 2-1-13 in the report). Note that the reserve of EPI does not include that of the substitutional part of the Employees' Pension Fund.

Note 1: The values are at book values. The values in parentheses are at market values. The method for market value assessment is as presented in Figure 2-1-15 in the report.

Adjusted Financial Status to observe the events related to the present year

Adjusted financial status to observe the events related to the present year is compared and analyzed in a cross-sectional way from the viewpoint of pension finances by Actuarial Subcommittee, and is divided into “balance of revenues and expenditures on the adjusted financial status base excluding investment income” and “investment income.”

The total amount of revenue on the adjusted financial status base excluding investment income for public pension plans as a whole was 42.2 trillion yen and the total amount of expenditure was 49.1 trillion yen, resulting in a negative balance of 6.8 trillion yen. Investment income also showed -0.2 trillion yen at market value, and the reserve at the end of the fiscal year at market value for public pension plans as a whole declined 7.6 trillion yen from the previous fiscal year to 170.7 trillion yen (Figure 2, Figure 2-1-3 in the report).

A breakdown by plan shows that the balance of revenues and expenditures on the adjusted financial status base excluding investment income was negative for employee pension plans and positive for NP, and investment income (market value) was negative for EPI, LPSP, and NP, and positive for all other plans. As a result, reserves at the end of the fiscal year (market value) decreased for employee pension plans and increased for NP (Figure 3, Figure 2-1-3 in the report).
Figure 3  Adjusted Financial Status to observe the events related to the present year for Public Pension Plans (FY2010)

<table>
<thead>
<tr>
<th></th>
<th>EPI</th>
<th>NPSP</th>
<th>LPSP</th>
<th>PSP</th>
<th>NP (National Pension Account)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of revenues and</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>expenditures on the</td>
<td>million yen</td>
<td>million yen</td>
<td>million yen</td>
<td>million yen</td>
<td>million yen</td>
</tr>
<tr>
<td>adjusted financial</td>
<td>△ 63,044</td>
<td>△ 3,266</td>
<td>△ 9,660</td>
<td>△ 282</td>
<td>2,388</td>
</tr>
<tr>
<td>status base excluding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>investment income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment income</td>
<td>△ 3,069</td>
<td>979</td>
<td>△ 145</td>
<td>52</td>
<td>△ 194</td>
</tr>
<tr>
<td>(market value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserve at the end of</td>
<td>1,141,532</td>
<td>80,942</td>
<td>366,356</td>
<td>33,733</td>
<td>77,394</td>
</tr>
<tr>
<td>fiscal year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(market value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: There are amounts under the Basic Pension Account in addition to the above.

2. Insured Persons

- **Number of Insured Persons – Decreased for LPSP and NP**

  The total number of insured persons by employee pension plans was 38.83 million: 34.41 million by EPI, 1.05 million by NPSP, 2.88 million by LPSP and 0.48 million by PSP. In addition, the number of insured persons by NP Category-1 was 19.38 million and by NP Category-3 was 10.05 million. These brought the total number of participants in public pension plans as a whole to 68.26 million (Figure 2-2-1 in the report). In FY 2010, the number of insured persons by EPI, NPSP, and PSP increased, but the number of insured persons by LPSP, NP Category 1 and Category 3 decreased. The total number of participants in public pension plans as a whole decreased by 0.7%.

- **Standard Remuneration per Capita – Male-female differences were smaller for NPSP and LPSP**

  Standard monthly remuneration per capita (not including employee bonuses) was 306,000 yen for EPI, 409,000 yen for NPSP, 432,000 yen for LPSP and 367,000 yen for PSP (Figure 2-2-5 in the report). On the other hand, standard remuneration per capita including employee bonuses (total remuneration base; amount per month) was 359,000 yen for EPI, 533,000 yen for NPSP, 557,000 yen for LPSP and 476,000 yen for PSP (Figure 2-2-6 in the report). For NPSP and LPSP, the differences of remuneration between male and female insured persons were smaller than those for EPI and PSP.

  *Note:* Extension of remuneration calculations to cover bonuses began in FY2003.
3. Beneficiaries

Number of Beneficiaries – Continued to increase for all Public Pension Plans

There were 31.98 million beneficiaries in EPI, 1.18 million beneficiaries in NPS, 2.74 million beneficiaries in LPSP, 0.37 million beneficiaries in PSP and 28.86 million beneficiaries in NP (both Basic Pension under the new law and National Pension under the old law) (Figure 2-3-1 in the report). The total number of people having pension benefit eligibilities for some sort of public pension was 37.96 million. The number of beneficiaries is continuing to increase for all public pension plans.

Average Monthly Amount of Old-age Pension (for Long-Term Contributors)

The average amount of old-age (for long-term contributors)\(^1\) per month\(^2\) (including the amount of the old-age basic pension) was 150,000 yen for EPI (including portion paid by Employees’ Pension Fund on behalf of EPI), 196,000 yen for NPS, 205,000 yen for LPSP, 192,000 yen for PSP and 55,000 yen for NP (old-age basic pension benefits under the new law and old-age pension benefits of NP under the old law) (Figure 2-3-8 in the report). The average monthly amount declined under all employee pension plans from FY2009. The growth in NP benefits, on the other hand, continues (Figure 2-3-11 in the report).

Note 1: “Old-age (for long-term contributors)” is the one under the new law that requires fulfilment of the eligible period in one plan stipulated in the old-age basic pension (25 years; including 20 years of contributions in the interim measure and 15 years of contributions in the special measure for the middle and older age), as well as the one under the old law.

Note 2: At the comparison, besides that the Mutual Aid Associations (MAAs) has the “occupational portion exceed EPI”, it is necessary to bear in mind that there are differences on male-female ratio and average contribution period by the plan compared.

4. Financial Indicators

Pension Support Ratio – Higher for PSP, lower for NPS and LPSP

The pension support ratio\(^1\) was 2.39 for EPI, 1.53 for NPS, 1.53 for LPSP, 4.19 for PSP, and 2.40 for NP. All were down from FY 2009 except NPS, which remained unchanged (Figures 2-4-1, 2-4-2 in the report). PSP with higher pension support ratio may be considered less mature than EPI. Conversely, NPS and LPSP with lower pension support ratios are considered mature plans.

Note 1: The ratio of insured persons to beneficiaries (only old-age (for long-term contributors)).

Comprehensive Cost Rate

The comprehensive cost rates\(^1\) were 19.7% for EPI, 20.2% for NPS, 20.2% for LPSP, and 13.6% for PSP, which were all higher than the corresponding contribution rates (Figures 2-4-6, 2-4-7 in the report). Rates for all plans rose in FY 2010, with the rate of increase being particularly marked in the case of PSP.

Note 1: The rate of real expenditure for which the plan must provide its own resources to the total standard remuneration. The comprehensive cost rate for EPI is calculated on the account base and does not include the portion paid by Employees’ Pension Fund on behalf of EPI. If this portion is included, the rate works out at 20.6% (estimated actual values).
5. Comparison of Actual Values and 2009 Actuarial Valuation

- Analysis of the Difference in Reserves

Actual reserves in FY 2010 fell short of future projections for all employee pension plans (Figure 4, Figure 3-1-1 in the report).

A breakdown of the factors giving rise to the differences shows the nominal rate of return on investment in FY 2010 to have been below the future projection, causing actual reserves to fall short of future projections in FY 2010. The nominal wage growth rate was also less than the future projection, which acted to push actual reserves below the future projection (Figure 3-1-4 in the report).

Figure 4 Differences between Actual Reserves in FY2010 and Future Projections of the 2009 Actuarial Valuation

<table>
<thead>
<tr>
<th>Category</th>
<th>EPI</th>
<th>NPSP &amp; LPSP</th>
<th>NPSP</th>
<th>LPSP</th>
<th>PSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>End FY2010 Reserve Actual Value</td>
<td>[140.7]</td>
<td>465,480</td>
<td>81,822</td>
<td>383,658</td>
<td>34,083</td>
</tr>
<tr>
<td></td>
<td>100 million yen</td>
<td>100 million yen</td>
<td>100 million yen</td>
<td>100 million yen</td>
<td>100 million yen</td>
</tr>
<tr>
<td>Future projection</td>
<td></td>
<td>470,958</td>
<td>82,607</td>
<td>388,350</td>
<td>34,864</td>
</tr>
<tr>
<td>Difference</td>
<td>[△ 2.0]</td>
<td>[△ 5,477]</td>
<td>[△ 785]</td>
<td>[△ 4,692]</td>
<td>[△ 781]</td>
</tr>
<tr>
<td>(= actual value - future projection)</td>
<td>[△ 23,660]</td>
<td>[△ 1,665]</td>
<td>[△ 21,995]</td>
<td>[△ 1,131]</td>
<td></td>
</tr>
<tr>
<td>Proportional difference</td>
<td>(actual value / future projection - 1) (%)</td>
<td>[△ 1.4]</td>
<td>[△ 1.2]</td>
<td>[△ 1.0]</td>
<td>[△ 1.2]</td>
</tr>
<tr>
<td></td>
<td>[△ 5.0]</td>
<td>[△ 2.0]</td>
<td>[△ 5.7]</td>
<td>[△ 3.2]</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1. Values in square brackets are at market value.
2. Actual reserves of employee pension funds are estimated actual reserves including minimum reserves for EPI, etc.
3. Actual values for “NPSP & LPSP” were estimated by the Actuarial Subcommittee.

(Financial Status “in Real Terms”)

In public pension plan, both revenues (such as contributions) and expenditures (such as benefits) generally increase and decrease in response to the nominal wage growth rate, etc. over the long term. Therefore, even if the actual value and the future projection of reserves diverge due to differences in the nominal wage growth rate, the overall size of pension finances will only similarly increase or decrease, and the impact on financial status will be minor over the long term.

Estimates* of future projection correcting for factors such as differences in the nominal wage growth rate were calculated for reserves, and these are shown compared against actual reserves in real terms in Figure 5 (Figure 3-1-6 in the report).

Note 1: The future projections in the 2009 actuarial valuation are estimated values calculated by replacing the nominal wage growth rates used in the original valuation with actual rates and correcting for the estimated impact of the component linked to inflation.
Figure 5  Difference between Actual Reserves and Future Projections of the 2009 Actuarial Valuation
[expressed using the future projection at the end of FY2010 as the standard (= 100)]
6. Comparative Analysis relative to Past Data: Changes over decade from FY 2000 to FY 2010

☐ Changes over decade in Insured Persons – Number of Insured Persons increased for PSP and EPI

A comparison of FY 2000 and FY 2010 shows the number of insured persons to have increased 19.5% for PSP and 6.9% for EPI. Other plans saw declines: -5.7% for NPSP, -11.1% for LPSP, -10.0% for NP Category 1, and -12.9% for NP Category 3. Average age rose for all plans except NP Category 1, which fell, and aging of insured persons for EPI and PSP was particularly rapid (Figure 4-1-1 in the report).

☐ Changes over decade in Beneficiaries – Number of Beneficiaries increased considerably for all Public Pension Plans

The number of beneficiaries increased considerably for all plans over the 10-year period, with EPI and PSP growing particularly greatly by more than 60%. Regarding beneficiaries of old-age pension (for long-term contributors), average age rose for all plans and the age distribution shifted upwards (Figures 4-1-4, 4-1-5 in the report). For employee pension plans, the proportion accounted for by old-age pensions (for short-term contributors) increased. The increase was particularly marked in the case of NPSP, for which the proportion rose from 4.5% at the end of FY 2000 to 14.9% at the end of FY 2010 (Figure 4-1-6 in the report).

☐ Change in Reserve at the end of fiscal year

Comparing reserves at market value at the end of FY 2002 (for which fiscal year figures are available for all plans) and the end of FY 2010 reveals a fall of approximately 18 trillion yen from 132.1 trillion yen to 114.2 trillion yen for EPI. This was due to a cumulative eight-year negative balance of revenues and expenditures on the adjusted financial status base (excluding investment income) of -36.4 trillion yen that exceeded investment income of 18.3 trillion yen (Figure 6, Figure 4-1-7 in the report). NPSP and NP reserves similarly declined.

In the case of LPSP and PSP, investment income exceeded the negative balance of revenues and expenditures on the adjusted financial status base (excluding investment income), as a result of which the reserve was unchanged for LPSP and increased for PSP (Figure 7, 4-1-8 in the report).

Figure 6  Change in EPI Reserve at the end of fiscal year

(2) Balance of revenues and expenditures on the adjusted financial status base (excluding investment income)
-36.4 trillion yen
(3) Investment income (market value) 18.3 trillion yen
(4) Others 0.1 trillion yen
Change between FY 2003-2010 (cumulative)
(1) Reserve at the end of FY 2002 (market value) 132.1 trillion yen
(5) Reserve at the end of FY 2010 (market value) 114.2 trillion yen

Figure 7  Changes in Reserves at the end of fiscal year for each plan (end FY2002 to end FY2010)

<table>
<thead>
<tr>
<th></th>
<th>EPI</th>
<th>NPSP</th>
<th>LPSP</th>
<th>PSP</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Reserve at the end of FY 2002 (market value)</td>
<td>132.1</td>
<td>8.7</td>
<td>36.6</td>
<td>3.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Change between FY 2003-2010 (cumulative)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Balance of revenues and expenditures on the adjusted financial status base (excluding investment income)</td>
<td>Δ 36.4</td>
<td>Δ 2.0</td>
<td>Δ 5.8</td>
<td>Δ 0.2</td>
<td>Δ 3.1</td>
</tr>
<tr>
<td>(3) Investment income (market value)</td>
<td>18.3</td>
<td>1.4</td>
<td>5.8</td>
<td>0.4</td>
<td>1.3</td>
</tr>
<tr>
<td>(4) Others</td>
<td>0.1</td>
<td>0.0</td>
<td></td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>(5) Reserve at the end of FY 2010 (market value)</td>
<td>114.2</td>
<td>8.1</td>
<td>36.6</td>
<td>3.4</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Note: "Others" consists of transfers from business accounts and impairment outside profit/loss, etc.
7. Cohort Analysis

- Cohort Rate of Change in Insured Persons by fiscal year (Inter-year Comparison of Insured Persons at same age)

Focusing on year-of-birth cohorts (groups of individuals born in the same fiscal year = groups of individuals of the same age at the end of the fiscal year), an analysis was made of trends in insured persons. This enables us to identify trends such as those exhibited by the group of individuals aged 29 at the end of FY 2009 up until reaching the age of 30 at the end of FY 2010, the rate of change for which is expressed as the "cohort rate of change for 30-year-olds in FY 2010" (i.e., expressed in terms of age after change).

An examination of the cohort rate of change for EPI reveals the impact among both males and females of graduation from university or other institution of higher learning and entry to employment in the 20-24 age range and retirement from employment in the 60-69 age range. Also apparent in the case of females is the impact of retirement due to marriage, childbirth, or childcare, etc. and subsequent re-employment, resulting in a distinctively shaped curve (Figure 4-2-1 in the report).

An inter-year comparison shows that men and women follow almost the same curve each year up to the age of 59, and the curves as a whole move vertically in parallel from year to year.

The cohort rate of change is noticeably lower in FY 2008 (FY 2007 to FY 2008) and FY 2009 (FY 2008 to FY 2009), when the economy slowed and employment conditions deteriorated, and, conversely, higher in FY 2006 (FY 2005 to FY 2006) and FY 2007 (FY 2006 to FY 2007), when the economy was in comparatively better shape (Figure 8, Figure 4-2-1 in the report).

The change in the number of insured persons for EPI depends to a large extent on "age," and each age range exhibits its own distinctive trends. In addition, the environment surrounding employment in each fiscal year (economic trends, etc.) has an overall impact (on all ages). Further, economic conditions have a greater impact on males and females aged 20-24 when they enter employment after graduation, and on females when they re-enter employment from the age of 35-39.

Figure 8  Cohort Rate of Change in Insured Persons by fiscal year

- Expandedexcerpt for EPI males
- Expanded excerpt for EPI females