# Financial Report on the Public Pension System Fiscal Year 2007 (Summary)

## 1. Fiscal Revenue and Expenditure

## ☐ The Financial Status of Public Pension Plans as a whole – 44.7 trillion yen in Benefits

The financial status of public pension plans as a whole for FY2007 reveals that 28.2 trillion yen of revenue was income from contributions and 7.7 trillion yen was from subsidies by state etc., while 44.7 trillion yen of the expenditure was for pension benefits. The reserve at the end of FY2007 was 188.5 trillion yen at book value and 191.6 trillion yen at market value (Figure 1, Figure 2-1-1 in the report).

## ☐ Contributions – Increased for employee pension plans and decreased for NP

Contributions of Employees' Pension Insurance (EPI) were 22.0 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 3.0 trillion yen, Mutual Aid

Figure 1 Financial Status (FY2007)

Classification		Public pension plans as a whole	
		100 million yen	
Total revenue	(book value)	463,416	
	(market value)	[362,533]	
Contributions	Contributions		
Subsidies by state etc.	76,847		
Subsidies for "bestowals" payments of prior	15,088		
Investment income	33,492		
(Remittances from the Government	(13,017)		
	(market value)	[ $\triangle$ 67,583]	
Payment of the cost for the occupational port	Payment of the cost for the occupational portion exceed EPI		
Payment of the cost for contracting back in to	5,552		
Welfare and Medical Service Agency payme	5,700		
Transfer from the reserve	Transfer from the reserve		
Others		※ 802	
Total expenditure		450,987	
Benefits		447,338	
Others		3,649	
Balance of revenues and expenditures	(book value)	12,429	
	(market value)	[△ 88,454]	
Reserve at the end of fiscal year	(book value)	1,884,852	
	(market value)	[1,915,595]	

Note: To calculate revenue and expenditure in consolidated base, the following contributions and corresponding revenue are excluded from both revenue and expenditure summation because those contributions and income are paid from one public pension plan to other public pension plan: contribution to Basic Pension, contribution to the equivalent to benefits of Basic Pension (old law (pension law effective before FY1986)), contribution representing inter-plan fiscal adjustments between NPSP and LPSP and contribution to support JT MAA, JR MAA and NTT MAA that consolidated to EPI. Additionally the amout of transfer from the surplus of previous year (1,432.2 billion yen) in Basic Pension Account is excluded from "Others" (\*) in revenue.

Corporation for Private School Personnel (PSP) were 0.3 trillion yen and National Pension (NP) were 1.9 trillion yen (Figure 2-1-4 in the report). In FY2007, contributions of all employee pension plans increased, while contribution of NP decreased.

## ☐ Pension Benefits – Increased for Employee Pension Plans and Basic Pension

Benefits<sup>1</sup> of EPI were 22.3 trillion yen, those of NPSP were 1.7 trillion yen, LPSP were 4.4 trillion yen, PSP were 0.2 trillion yen, NP's National Pension Account were 1.7 trillion yen, and NP's Basic Pension Account were 14.5 trillion yen (Figure 2-1-12 in the report). Pension benefits are increasing under all employee pension plans. With regard to NP, while Basic Pension Account continued to increase significantly, National Pension Account has tended to decrease.

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<sup>1</sup> of EPI was 127.1 trillion yen (130.2 trillion yen), that of NPSP was 8.8 trillion yen (8.9 trillion yen), LPSP was 40.2 trillion yen (39.9 trillion yen), PSP was 3.5 trillion yen (3.4 trillion yen), NP's National Pension Account was 8.3 trillion yen (8.5 trillion yen) and NP's Basic Pension Account was 0.7 trillion yen. (Figure 2-1-15 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 2-1-17 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 crosssectional way from the viewpoint of pension finances by Actuarial Subcommittee. It is calculated by excluding "transfer from the reserve" in EPI and NP (National Pension Account) and the amount of transfer from the surplus of previous year in Basic Pension Account. The total amount of revenue on the adjusted financial status base for public pension plans as a whole was 42.2 trillion yen at book value, 32.1 trillion yen at market value and the total amount of expenditure on the adjusted financial status base was 45.1 trillion yen (Figure 2, Figure 2-1-3 in the report).

The balance of revenues and expenditures on the adjusted financial status basis was -2.9 trillion yen at book value and -13.0 trillion yen at market value. Following the pension revisions in FY2004, public pension

Figure 2 Adjusted Financial Status to observe the events related to the present year (FY2007)

"The table compared and analyzed in a cross-sectional way from the viewpoint of pension finances by Actuarial Subcommittee"

	Classification		Public pension plans as a whole
			100 million yen
	Total amount	(book value)	422,072
		(market value)	[321,189]
	Contributions		282,029
Revenue	Subsidies by state etc.		76,847
(adjusted	Subsidies for "bestowals" payments of prior period		15,088
financial	Investment income	(book value)	33,492
status base)	(Remittances from the Government Pension Investment Fund)		(13,017)
		(market value)	[ $\triangle$ 67,583]
	Payment of the cost for the occupational portion exceed EPI		2,560
	Payment of the cost for contracting back in to EPI of EPFs		5,552
	Welfare and Medical Service Agency payment		5,700
	Others		802
Expenditure	Total amount		450,987
(adjusted	Benefits		447,338
financial status base)	Others		3,649
-	Balance of revenues and expenditures	(book value)	△ 28,915
	on the adjusted financial status base	(market value)	[△ 129,797]
	Reserve at the end of fiscal year	(book value)	1,884,852
		(market value)	[1,915,595]

*Note:* To calculate revenue and expenditure in consolidated base, the following contributions and corresponding revenue are excluded from both revenue and expenditure summation because those contributions and income are paid from one public pension plan to other public pension plan: contribution to Basic Pension, contribution to the equivalent to benefits of Basic Pension (old law (pension law effective before FY1986)), contribution representing inter-plan fiscal adjustments between NPSP and LPSP and contribution to support JT MAA, JR MAA and NTT MAA that consolidated to EPI.

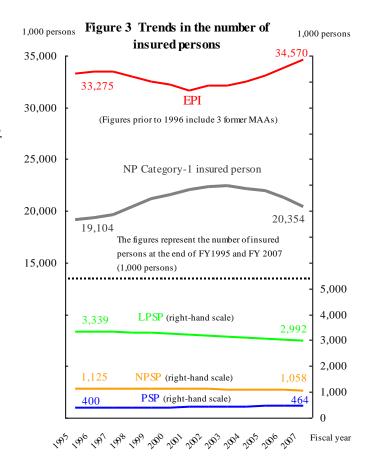
plans are now financed according to the closed-period-balancing method where both the investment income and capital of reserves can be used to pay benefits. These values should be evaluated by comparing with the future projections.

Note 1: The finances of public pension plans are managed by the closed-period-balancing method which makes use of reserves. In EPI and NP (National Pension Account), "transfer from the reserve" is recorded in the budget in advance if it is necessary, to ensure the expenditures such as pensions benefits. Therefore, the "balance of revenues and expenditures on the adjusted financial status base" (Figure 2) differs from the "balance of revenues and expenditures" (Figure 1) which shows the overall results of pension plan management including "transfer from the reserve" and so on.

### 2. Insured Persons

## ■ Number of Insured Persons – Increased for EPI and PSP

The total number of insured persons by employee pension plans was 39.08 million: 34.57 million by EPI, 1.06 million by NPSP, 2.99 million by LPSP and 0.46 million by PSP. In addition, the number of insured persons by NP Category-1 was 20.35 million and by NP Category-3 was 10.63 million. These brought the total number of participants in public pension plans as a whole to 70.07 million (Figure 3, Figure 2-2-1 in the report). In FY 2007, the numbers of insured persons by EPI and PSP increased, and the number of insured persons by employee pension plans increased by 1.9%. On the other hand, the number of insured persons by NP Category-1 decreased by 4.1%, and the total number of participants in public pension plans as a whole decreased by 0.5%.



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

Standard monthly remuneration per capita (not including employee bonuses) was 312,000 yen for EPI, 413,000 yen for NPSP, 447,000 yen for LPSP and 369,000 yen for PSP (Figure 2-2-7 in the report). On the other hand, standard remuneration per capita including employee bonuses (total remuneration base; amount per month) was 372,000 yen for EPI, 546,000 yen for NPSP, 595,000 yen for LPSP and 484,000 yen for PSP (Figure 2-2-8 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.

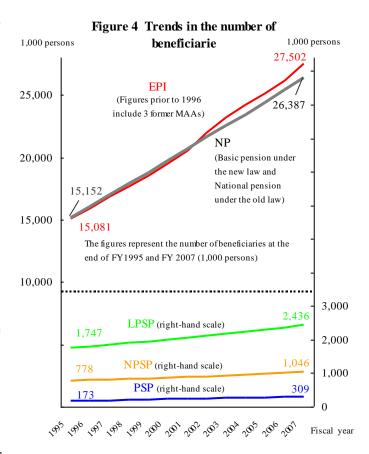
### 3. Beneficiaries

## □ Number of Beneficiaries – Continued to Increase for all Public Pension Plans

There were 27.50 million beneficiaries in EPI, 1.05 million beneficiaries in NPSP, 2.44 million beneficiaries in LPSP, 0.31 million beneficiaries in PSP and 26.39 million beneficiaries in NP (both Basic Pension under the new law and National Pension under the old law) (Figure 4, Figure 2-3-1 in the report). The total number of people having pension benefit eligibilities for some sort of public pension was 34.80 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)<sup>1</sup> per month<sup>2</sup> (including the amount of the old-age basic pension) was 158,000 yen for EPI (including portion paid by Employees' Pension Fund on behalf



of EPI), 204,000 yen for NPSP, 215,000 yen for LPSP, 201,000 yen for PSP and 54,000 yen for NP (old-age basic pension benefits under the new law and old-age pension benefits of NP under the old law) (Figure 2-3-14 in the report). The average monthly amount declined under all employee pension plans from FY2006 due mainly to the raising of the pension age to 63 (except for women under EPI).<sup>3</sup> On the other hand, the average monthly amount of benefits for NP is continuing to increase (Figure 2-3-16 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.
- **Note 3**: There is a five-year lag in the raising of the age at which payment of the fixed amount portion starts for women only under EPI.

### 4. Financial Indicators

## ☐ Pension Support Ratio – Higher for PSP, lower for NPSP and LPSP. Ratio decreased for all Public Pension Plans

The pension support ratios<sup>1</sup> continued to decline in all public pension plans (Figure 2-4-2, 2-4-3 in the report). It was 2.74 for EPI, 1.62 for NPSP, 1.79 for LPSP, 4.67 for PSP and 2.67 for NP. PSP with higher pension support ratio may be considered less mature than EPI. Conversely, NPSP 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 rate<sup>1</sup> was 17.8% for EPI, 18.7% for NPSP, 17.6% for LPSP, and 12.4% for PSP (Figure 2-4-8, 2-4-9 in the report). In FY2007, the rates rose for NPSP, LPSP, and PSP, and remained unchanged for EPI.

**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.

## 5. Cohort Analysis

### ☐ Cohort Changes in Estimated Total Standard Remuneration by Age Group

Trends in estimated total standard remuneration were analyzed focusing on age-specific cohorts (groups of individuals born in the same fiscal year). Although total standard remuneration for all employee pension plans rose 2.6 trillion yen overall from FY2006 to FY2007, the amount decreased for 55-and-over cohorts and increased for those aged 54 and under, indicating a shift in remuneration from older to younger age groups (Figure 5 below and Figure 2-5-5 in the report). A factor analysis of cohort changes shows that, overall, the contributions of changes in the number of insured persons and annual wage increases rose,

while the contribution of across-the-board wage increases declined. Considered by cohort according to age group, however, we find the contributions of all three factors to have increased in younger cohorts and decreased in those aged 55 and over. There has also been a marked decline in the contribution of across-the-board wage increases in the 35- to 44year-old age group.

Figure 5 Factor analysis of cohort changes in estimated total standard remuneration by age group (FY2006 to FY2007)

O All employee pension plans

Age group (end FY2007)	Total change	Change in number of insured	Annual wage increases	Across-the-board wage increases	
	100 million yen	100 million yen	100 million yen	100 million yen	
Up to 24 years	29,012	22,439	5,509	1,064	
25-34 years	23,303	9,132	13,261	910	
35-44 years	14,040	6,423	10,586	△ 2,969	
45-54 years	2,422	1,330	570	522	
55-64 years	△ 34,450	△ 23,583	△ 9,957	△ 910	
65 years and over	△ 8,346	△ 7,615	△ 550	△ 181	
All ages	25,982	8,127	19,418	△ 1,563	

Notes: 1. Age groups are based on the ages of each cohort at end FY2007.

- Analyzed using estimated total standard remuneration calculated as follows: (monthly standard remuneration per capita x 12 + standard employee bonus per capita) x number of insured persons at end of fiscal year
- Increases for same-aged individuals between FY2006 and FY2007 are counted as being due to across-the-board wage increases.

## 6. Comparison of Actual Values and 2004 Actuarial Valuation

### ■ Analysis of the Difference in Reserves

Although the actual nominal rate of return on investment was less than the future projection in FY2007, the fact that it considerably exceeded future projections up to FY2006 resulted in actual reserves exceeding future projections (Figure 6 below and Figure 3-4-2 of the report).

Figure 6 Differences between actual reserves in FY2007 and future projections of the 2004 actuarial valuation

Category	EPI	NPSP & LPSP	NPSP	LPSP	PSP
End FY2007	trillion yen	100 million yen	100 million yen	100 million yen	100 million yen
Reserve Actual	[164.4]	489,669	88,142	401,527	34,677
		[487,537]	[88,958]	[398,579]	[34,328]
Future projection	158.8	473,617	87,891	385,726	33,542
Difference	[5.6]	16,052	251	15,802	1,134
(= actual - future projection)	[3.0]	[13,920]	[1,067]	[12,853]	[785]
Proportional difference	[3.5]	3.4	0.3	4.1	3.4
(actual value / future projection - 1) (%)	[3.3]	[2.9]	[1.2]	[3.3]	[2.3]

Notes: 1. Values in square brackets are at market value.

- 2. Actual reserves of employee pension funds are estimated actual reserves including minimum actuarial reserves for EPI, etc.
- 3. Values for future projections were processed to reflect the increase in subsidies by the State, etc. for the Basic Pension resulting from revisions in 2004, and were estimated by the Actuarial Subcommittee.

A breakdown of the difference shows the contribution of the nominal rate of return on investment to have decreased since FY2006 (Figure 3-4-3 of the report). A more detailed analysis shows that the nominal wage growth rate was lower than the future projection, which acted to push actual reserves below the future projection (Figure 3-4-6 of the report).

### (Financial Status "in Real Terms")

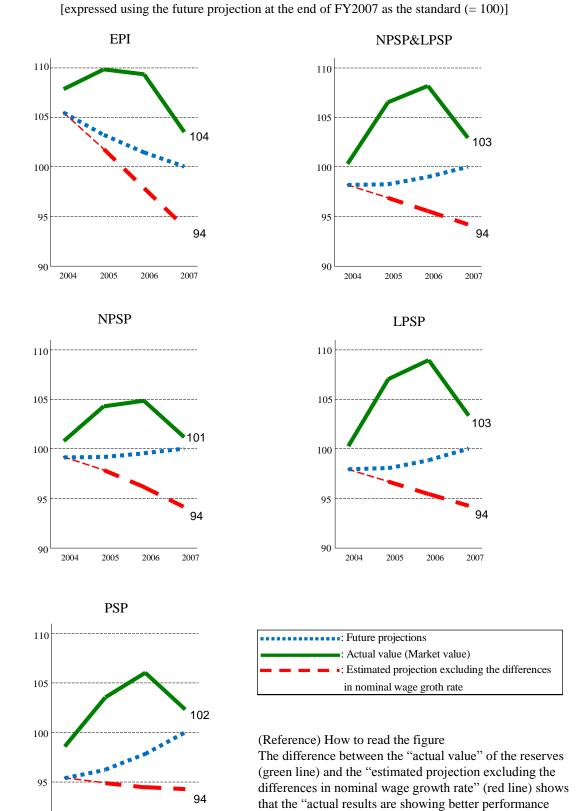
In public pension plan, both revenues (such as contributions) and expenditures (such as benefits) generally increase and decrease in response to the nominal wage growth rate over the long term. Therefore, even if the actual value and the future projection of the reserves diverge due to differences in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

Estimates excluding differences in the nominal wage growth rate were calculated for reserves and compared with the actual values, and it was found as a result that actual reserves exceeded these estimates (Figure 7 below and Figure 3-4-9 of the report). This shows that, from the viewpoint of pension finances, actual results are showing better performance than the future projections.

**Note 1:** The future projections in the 2004 actuarial valuations are estimated values calculated by replacing the nominal wage growth rates used in the original valuation with actual values.

<sup>4.</sup> Actual values for "NPSP & LPSP" were estimated by the Actuarial Subcommittee.

Figure 7 Difference between Actual Reserves and Future Projections of 2004 Actuarial Valuation



than the future projections", as described above.