

Annual Actuarial Report on the Public Pension Plans in Japan Fiscal Year 2014 (Summary)

1. Revenues and Expenditures

The following summarises the financial statuses of public pension plans in Japan based on their statutory financial statements for FY2014.¹

□ Financial status of the public pension plans as a whole

The revenue of the public pension plans, as a whole, was composed of JPY32.6 trillion of contribution income and JPY11.8 trillion of national and local government subsidies etc., and so on. The expenditure was mainly composed of JPY50.3 trillion of benefit disbursements. The total amount of reserves was JPY203.6 trillion on a market value basis at the end of FY2014. This is the first time during the last 8 years since the end of FY2006 that the total reserve has surpassed JPY200 trillion (See **Figure 1** at the right hand side and Figure 2-3-1 in the full text of annual report.).

□ Contributions

The contribution income was JPY26.3 trillion for the Employees' Pension Insurance (EPI), JPY1.1 trillion for the National Public Service Personnel Mutual Aid Association (NPS), JPY3.1 trillion for the Local Public Service Personnel Mutual Aid Association (LPSP), JPY0.4 trillion for the Mutual Aid Corporation for Private School Personnel (PSP) and JPY1.6 trillion for the National Pension Account of the National Pension (NP). In FY2014, contribution income increased in all the plans, and it increased by 4.9% for the public pension plans as a whole (See Figure 2-3-4 in the full text of annual report.).

□ Benefit Expenditure

The benefit disbursements² were JPY23.3 trillion for EPI, JPY1.5 trillion for NPS, JPY4.4 trillion for LPSP, JPY0.3 trillion for PSP, JPY0.8 trillion for the National Pension Account³ of NP, and JPY20.0 trillion for the Basic Pension Account of NP. In FY2014, the amount of benefit disbursements increased 3.7% for the Basic Pension Account of NP but decreased for all the employees' plans. As a result, the overall benefit expenditure decreased by 0.3% (See Figure 2-3-13 in the full text of annual report.).

Figure1 Aggregate Profit and Loss Statement (FY2014)

Item	Public pension plans as a whole
	100 million yen
Total revenue (on a book value basis)	534,197
Contribution income	325,640
National and local government subsidies etc.	118,143
Subsidies for the "bestowals" payments accrued in the past	9,073
Investment income (on a book value basis)	51,041
(Transfer from the GPIF, part of the investment income)	(32,710)
Payment of the costs of the occupational portion by relevant institutions	1,392
Payment of the minimum technical provisions by dissolved EPFs, etc.	21,103
Payment by the Welfare and Medical Service Agency	2,200
Withdrawal from the reserves	5,039
Others	566
Total expenditure	506,157
Benefit disbursements	503,009
Others	3,149
Balance of revenues and expenditures (on a book value basis)	28,040
Reserves at the fiscal year end (on a book value basis)	1,631,009
Change in year-end reserves from the previous year (on a book value basis)	23,591
(For reference)	
Investment income (on a market value basis)	199,678
Reserves at the fiscal year end (on a market value basis)	2,035,950
Change in reserves from the previous year end (on a market value basis)	172,639

Note: To calculate revenues and expenditures on a consolidated basis, following contributions and corresponding revenues or expenses are excluded from the calculation of the total amounts because these are mere transfer of financial resources between two or more public pension plans: 1) the contributions of individual public pension plans to the Basic Pension, 2) the contributions to the equivalents to the benefits provided by the Basic Pension, which are prescribed by the Old Law that is still effective after the pensions reform in FY1986, 3) the contribution representing the financial adjustments between NPSP and LPSP and 4) the insurer contributions to support the JT MAA and the JR MAA both of which were merged with EPI, etc.

¹ Reported amounts are expressed on a book value basis. Here, however, market value amounts are also given.

² The benefit disbursements for each plan include those provided by the Old Law but regarded as benefits equivalent to Basic Pension under the New Law.

³ The benefits disbursed through the National Pension Account of NP are mainly those provided by the old National Pension Law. The benefits disbursed through the Basic Pension Account of NP are those of Basic Pensions provided under the New National Pension Law.

□ Reserves

The amount of reserves at the end of FY2014 was JPY136.7 trillion for EPI⁴, JPY7.8 trillion for NPSP, JPY42.5 trillion for LPSP, JPY4.2 trillion for PSP, JPY9.3 trillion for the National Pension Account of NP, and JPY3.2 trillion for the Basic Pension Account of NP on a market value basis. The amount of reserves for public pensions increased by 9.3% as a whole (See Figure 2-3-15 in the full text of annual report.).

□ ‘Adjusted financial status’ in FY2014

We are going to compare the financial status of individual plans transversely across the plans from the actuarial viewpoint. For that purpose, we expressed the financial status of a plan slight differently from the original income statement by dividing it into the following two parts: ‘annual balance of revenues and expenditures excluding investment income’ and ‘investment income.’ Hereafter we call the financial status expressed in this way the ‘adjusted financial status,’ which is shown in **Figure 2**.

More specifically, the investment income and “withdrawal from the reserves” of the Basic Pension Account of NP that were included in **Figure 1** are excluded on the revenue side, while NPSP, LPSP, and PSP losses on sale of marketable securities, etc. are excluded from “Others” on the expenditure side.

In FY2014, the total amount of revenues excluding investment income was JPY47.8 trillion whereas the total amount of expenditures was JPY50.6 trillion, giving a negative balance of JPY2.8 trillion. However, contribution income increased in all the plans, leading to a substantial increase of the payment of the minimum technical provisions by dissolved Employees’ Pension Funds (EPFs), etc., while benefit disbursements decreased in all the employees' plans. Accordingly, the adjusted financial status was seen to substantially reduce the FY2013 negative loss of balance of JPY6.5 trillion.

On the other hand, investment income was JPY20.0 trillion on a market value basis. As a result, the amount of reserves at the end of FY2013 increased by JPY17.3 trillion⁵ to JPY203.6 trillion on a market value basis (See **Figure 2** above and Figure 2-3-3 in the full text of the annual report.).

Figure 2 Adjusted Financial Status in FY2014

“This table is devised by the Actuarial Subcommittee” to analyse the financial status transversely across the plans from the actuarial viewpoint.

Item		Public pension plans as a whole
		100 million yen
Revenues (adjusted financial status base)	Total amount	478,117
	Contribution income	325,640
	National and local government subsidies etc.	118,143
	Subsidies for "bestowals" payments accrued in the past	9,073
	Payment of the costs of the occupational portion by relevant institutions	1,392
	Payment of the minimum technical provisions by dissolved EPFs, etc.	21,103
	Payment by the Welfare and Medical Service Agency	2,200
	Others	566
Expenditures (adjusted financial status base)	Total amount	505,746
	Benefit disbursements	503,009
	Others	2,737
Annual balance of revenues and expenditures excluding investment income		△27,628
Investment income (on a market value basis)		199,678
Change in year-end reserves from the previous year (on a market value basis)		172,639
Reserves at the fiscal year end (on a market value basis)		2,035,950

Note: It is calculated by excluding the investment income and “the withdrawal from the reserves” of the Basic Pension Account of NP on the revenue side, and the losses on sale of marketable securities of NPSP, LPSP, and PSP from “Others” on the expenditure side. The difference between the total revenue and the total expenditure thus obtained shows the annual balance excluding investment income.

⁴ The amount of reserves for EPI does not include the reserves of the substitution portions kept by EPFs.

⁵ Due mainly to the fact that ‘annual balance of revenues and expenditures excluding investment income’ does not include the amount of transfer from the previous fiscal year’s surplus in EPI and NP (JPY12.6 trillion for EPI, JPY12.9 trillion for NP), the sum of ‘annual balance of revenues and expenditures excluding investment income’ and ‘investment income (on a market value basis)’ does not exactly coincide with ‘change in year-end reserves from the previous year (on a market value basis).’

A breakdown of revenues and expenditures by each plan in FY2014 shows that the annual balance of revenues and expenditures excluding investment income was negative in all plans excluding the Basic Pension Account of NP, while investment income (on a market value basis) was positive in all plans. As a result, the amount of reserves at the end of FY2014 increased at a rate between 2.4% and 10.6% in all the plans (See **Figure 3** below, Figure 2-3-3 and Figure 2-3-15 in the full text of annual report.).

Figure 3 Adjusted Financial Status by Plan (FY2014)

	EPI	NPSP	LPSP	PSP	National Pension Account of NP
	100 million yen	100 million yen	100 million yen	100 million yen	100 million yen
Annual balance of revenues and expenditures excluding investment income	Δ12,371	Δ3,635	Δ11,206	Δ302	Δ1,819
Investment income (on a market value basis)	142,762	5,483	38,060	3,413	9,865
Reserves at the fiscal year end (on a market value basis)	1,366,656	77,999	424,811	41,925	92,667

Note: There is also the Basic Pension Account of NP, which is not included in the table above.

2. Insured Persons

□ The numbers of insured persons

The total number of insured persons covered by some of the employees' plans was 40.39 million, which consists of 35.99 million for EPI, 1.06 million for NPSP, 2.83 million for LPSP and 0.52 million for PSP. In addition, the number of insured persons belonging to NP Category-1 (namely, self-employed persons, etc.) was 17.42 million and the number of those belonging to NP Category-3 (namely, spouses of the insured persons in the employees' plans) was 9.32 million. These brought the total number of insured persons covered by the public pension plans to 67.13 million. In FY2014, the number of insured persons increased for EPI, NPSP and PSP, while it decreased for LPSP, and NP Category-1 and Category-3, leading to a decrease of 0.1% in terms of the total number of insured persons covered by the public pension plans (See Figure 2-1-1 in the full text of annual report).

□ Average amounts of pensionable remuneration

The average amount of monthly pensionable remuneration including bonuses in FY2014 was JPY363,000 for EPI, JPY532,000 for NPSP, JPY551,000 for LPSP, and JPY467,000 for PSP. In FY2014, the amount increased for EPI, NPSP and LPSP while it decreased for PSP (See Figure 2-1-5 in the full text of annual report).

3. Beneficiaries

□ The numbers of beneficiaries

The numbers of beneficiaries (more precisely, persons with pensions benefit eligibilities) were 35.26 million for EPI, 1.26 million for NPSP, 2.98 million for LPSP, 0.44 million for PSP and 33.00 million for NP (the Basic Pensions provided by the New Law and the National Pensions provided by the Old Law) (See Figure 2-2-1 in the full text of the annual report.). The total number of beneficiaries of the public pension plans was 39.91 million, taking account of the persons with multiple eligibilities. The increased number of beneficiaries continues in all plans.

□ Average monthly amounts of old-age pensions (for those with long contribution periods)

The average monthly amount⁶ of old-age pensions for beneficiaries with long contribution periods⁷ (including the amount of the old-age Basic Pension) at the end of FY2014 was JPY145,000 for the EPI⁸, JPY186,000 for NPSP, JPY191,000 for LPSP, JPY188,000 for PSP and JPY54,000 for NP (the old-age Basic Pensions provided by the New Law and the old-age Pension of the National Pensions provided by the Old Law). In FY2014, the amount decreased for all plans (See Figure 2-2-12 in the full text of annual report.).

4. Actuarial Indices

□ Pension support ratios

The pension support ratios⁹ were 2.33 for EPI, 1.53 for NPSP, 1.41 for LPSP, 4.01 for PSP, and 2.08 for Basic Pension¹⁰. These represent an increase in the case of EPI and NPSP, and a decrease in the case of LPSP, PSP and NP (See Figure 2-4-2 in the full text of annual report.). The pension support ratio of PSP is higher than other employees' plans such as EPI and thus we can say that PSP is less mature than other employees' plans. Conversely, NPSP and LPSP have lower pension support ratios and thus we can say that they are more mature.

□ Comprehensive cost rates

The comprehensive cost rates¹¹ were 19.8% for EPI¹², 22.1% for NPSP, 22.6% for LPSP, and 14.9% for PSP. In FY2014, the rates decreased for all the employees' plans. Furthermore, the rates were all higher than the corresponding contribution rates in all the employees' plans (See Figure 2-4-7 and Figure 2-4-9 in the full text of annual report.).

5. Comparative Analysis of Actual Results to the Projections made by the 2009 Actuarial Valuation

□ Attribution analysis of the deviations in reserves

The amount of actual reserves on a market value basis (the same hereinafter) at the end of FY2014 surpassed the projected amount for EPI, LPSP, and PSP (See **Figure 4** at the next page and Figure 3-2-31 in the full text of the annual report).

Our attribution analysis on the deviations between actual and projected reserves¹³ shows a major influence to have been the 'essential' rates of return on investment (where the 'essential' ROI means the ROI minus

⁶ When comparing the amounts of pensions, it should be reminded that the amounts for NPSP, LPSP and PSP are inclusive of the occupational portions and there are also considerable differences in the male-female ratios and the average contribution periods among the plans.

⁷ 'Beneficiaries with long contribution periods' means those of the old-age EPI pensions or the retirement pensions provided by the mutual aid associations like NPSP, with their contribution periods to individual plans fulfilling the eligibility conditions of 25 years for the old-age basic pensions. (Here, we take account of the effects of the temporary measures relaxing the eligibility condition of 25 years for specified cohorts and the special measures requiring only 15 years).

⁸ This amount includes the portion paid by EPFs on behalf of EPI.

⁹ That is the ratio of the number of insured persons to that of beneficiaries of old-age and retirement pensions.

¹⁰ For the Basic Pension, it is the ratio of the number of Category 1-3 insured persons to the number of beneficiaries of old-age the Basic Pension.

¹¹ The comprehensive cost rate is the ratio of the amount of the 'essential' expenditures in the year, which the plan has to finance by itself, to the total amount of the pensionable remunerations of the plan in the fiscal year.

¹² The comprehensive cost rate for EPI includes in the numerator the estimated amount paid corresponding to the substitution portion kept by EPFs. If we exclude the amount in the numerator, the comprehensive cost rate becomes 19.0%.

¹³ For an analysis of the deviations between actual and projected reserves, see Chapter 3, Section 4 of the full text of annual report.

the salary growth rate), which exceeded the corresponding ‘essential’ ROIs assumed in the actuarial valuations throughout the period from FY2010 to FY2014. (See Figure 3-4-2 in the full text of annual report).

Figure 4 Differences between the Actual Reserves in FY2014 End and the Projections Made by the 2009 Actuarial Valuations

		EPI	NPSP & LPSP	NPSP	LPSP	PSP
		trillion yen	100 million yen	100 million yen	100 million yen	100 million yen
Reserves (at the FY2014 end)	Actual amounts	163.8	502,810	77,999	424,811	41,925
	Projected amounts	142.0	464,996	78,210	386,787	36,952
Difference (= actual amounts - projected amounts)		21.7	37,813	Δ211	38,024	4,973
Proportion of the difference (actual amounts / projected amounts - 1) (%)		15.3	8.1	Δ0.3	9.8	13.5

- Notes: 1. Comparison on a market value basis.
 2. The actual amount of reserves for EPI includes the estimated amount of reserves corresponding to the substitution portion kept by EPFs.
 3. The actual amounts of reserves for “NPSP & LPSP” are estimated by the Actuarial Subcommittee.

□ Evaluation of the actuarial statuses

We adjusted the projected amount of reserves made by the 2009 actuarial valuation reflecting the actual developments of nominal salary growth rates, etc.,¹⁴ and then compared the actual amount of reserves with the adjusted amount thus obtained, which would serve as a baseline for evaluating the actuarial status of the plan. In this way, we can highlight the essential part of the deviation of the actual amounts of reserves from the projected amounts. (See **Figure 5** at the next page, Figure 3-5-1 and Figure 3-5-3 in the full text of annual report.).

From this analysis, we found that the actual amount of reserves at the end of FY2014 exceeded the baseline for all the employees’ plans. Thus we can conclude that the actuarial status of each employees’ plan exceeded the projected actuarial status projected by the 2009 actuarial valuation, and that, for all the employees’ plans, the rate by which the actual amount of reserves exceeds the baseline amount surpasses any single-year downward swing in the past¹⁵ with respect to the actual ‘essential’ ROI. However, from the perspective of fiscal management of pensions, we should pay attention to the long-term trend of actuarial status, regardless of short-term trend including those of demographic and economic factors.

¹⁴ For details of the technical aspects of the adjustment, see Chapter 3, Section 5 of the full text of annual report.

¹⁵ Here, we mean the period indicated in Figure 3-5-4 (For EPI, the period after FY2001 when investment on the market was allowed to start; for NPSP, LPSP and PSP, the period after nominal return on investment on a market value basis came to be reported to the Actuarial Subcommittee).

Figure 5 Evaluation of the Actuarial Statuses at the End of FY2014 (values are expressed by standardising the projected amount = 100)

