

Annual Actuarial Report on the Public Pension System in Japan Fiscal Year 2015 (Summary)

1. Adjusted Financial Status

In the light of the unification of employees' pension schemes in October 2015, the adjusted financial status of the public pension system as a whole was estimated¹ as follows:

The Actuarial Subcommittee compares the financial status of individual schemes transversely across the schemes from the actuarial viewpoint. For that purpose, the Subcommittee expressed the financial status of a scheme slight differently from the original income statement by dividing it into the following two parts: "Annual balance of revenues and expenditures excluding investment income"² and "Investment income." Hereafter we call the financial status expressed in this way the 'Adjusted financial status.'

Figure 1 Adjusted financial status (FY2015)

Item		Public pension system as a whole (Estimate)
Revenues (adjusted financial status base)	Total amount	100 million yen 515,612
	Contribution income	338,065
	National and local government subsidies etc.	122,043
	Subsides for the "bestowals" payments accrued in the past	4,554
	Payment of the costs of the occupational portion by relevant institutions	1,193
	Payment of the minimum technical provisions by dissolved EPFs, etc.	46,647
	Payment by the Welfare and Medical Service Agency	2,518
	Others	594
Expenditures (adjusted financial status base)	Total amount	509,602
	Benefit disbursements	506,592
	Others	3,010
Annual balance of revenues and expenditures excluding investment income		6,010 <Δ40,637>
Investment income (on a market value basis)		Δ57,594
Reserves at the fiscal year end (on a market value basis)		1,747,161

Note 1: It is calculated by excluding "Investment income" and "Withdrawal from the reserves" of the Basic Pension Account of NP on the revenue side, and "Losses on sale of marketable securities, etc." of NPO-MAAs, LPO-MAAs, and PSTE-MAA 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.

Note 2: The figure in <> indicates the amount excluding "Payment of the minimum technical provisions by dissolved EPFs, etc."

□ Adjusted financial status of the public pension system as a whole

The revenue of the public pension system as a whole was composed of JPY33.8 trillion of contribution income, JPY12.2 trillion of national and local government subsidies, etc., and so on. The total amount of revenues excluding investment income was JPY51.6 trillion. The expenditure was mainly composed of JPY50.7 trillion of benefit disbursements, and the total amount of expenditures was JPY51.0 trillion. As a result of these, the annual balance of revenues and expenditures excluding investment income was a positive JPY0.6 trillion. Note, however, that it turns around to be a negative JPY4.1 trillion if temporary factors are excluded, such as "Payment of the minimum technical provisions by dissolved Employees' Pension Funds (EPFs), etc."

On the other hand, the investment income was negative JPY5.8 trillion on a market value basis.

The amount of reserves of the public pension system as a whole at the end of FY2015 was JPY174.7 trillion on a market value basis (See Figure 1 above and Figure 2-3-2 in the full text of the annual report.).

¹ Since the employees' pension schemes were unified in October 2015, i.e., in the middle of that fiscal year, different processes of accounting were implemented for Mutual Aid Associations (namely, the National Public Officers Mutual Aid Associations (NPO-MAAs), the Local Public Officers Mutual Aid Associations (LPO-MAAs) and the Private School Teachers/Employees Mutual Aid Association (PSTE-MAA)): long-term accounting including occupational pension portion before the unification was implemented for the first half of the fiscal year, and accounting for the Employees' Pension Insurance (EPI) after the unification and transitory long-term accounting were implemented for the latter half of the fiscal year. In order to clarify the actuarial status of the entire EPI on a full-year basis, the Actuarial Subcommittee made an estimate of the EPI equivalent portion in the first half of the fiscal year for long-term accounting and combined it with accounting for EPI in the latter half, thereby estimating the financial status of EPI equivalent portion for Mutual Aid Associations in FY2015.

² It is calculated by excluding "Investment income" and "Withdrawal from reserves" of the Basic Pension Account of the National Pension (NP) on the revenue side, and "Losses on sale of marketable securities, etc." of NPO-MAAs and LPO-MAAs from "Others" on the expenditure side.

❑ Contributions

The contribution income was JPY32.3 trillion for EPI (by implementation organization, JPY27.8 trillion for EPI Account, JPY1.1 trillion for NPO-MAAs, JPY3.0 trillion for LPO-MAAs and JPY0.4 trillion for PSTE-MAA), and JPY1.5 trillion for the National Pension Account of NP. Accordingly, the contribution income for the public pension system as a whole was JPY33.8 trillion (See Figure 2-3-6 in the full text of annual report.).

❑ Benefit Expenditures

The benefit disbursements³ were JPY29.0 trillion for EPI (by implementation organization, JPY23.4 trillion for EPI Account, JPY1.4 trillion for NPO-MAAs, JPY3.9 trillion for LPO-MAAs and JPY0.3 trillion for PSTE-MAA), JPY0.7 trillion for the National Pension Account of NP⁴, and JPY20.9 trillion for the Basic Pension Account of NP. Thus, the sum of benefit disbursements for the public pension system as a whole was JPY50.7 trillion (See Figure 2-3-19 in the full text of annual report.).

❑ Reserves

The amount of reserves at the end of FY2015 was JPY162.7 trillion for EPI (by implementation organization, JPY133.9 trillion for EPI Account⁵, JPY7.2 trillion for NPO-MAAs, JPY19.6 trillion for LPO-MAAs, JPY2.1 trillion for PSTE-MAA), JPY8.8 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 pension system as a whole was JPY174.7 trillion (See Figure 2-3-23 in the full text of annual report.).

❑ Adjusted Financial Status

A breakdown of the adjusted financial status by each scheme and implementation organization of EPI shows that the annual balance of revenues and expenditures excluding investment income was negative except for EPI Account and the Basic Pension Account of NP. Note, however, that the balance for EPI Account also turns out to be negative if temporary factors are excluded, such as “Payment of the minimum technical provisions by dissolved EPFs, etc.”

On the other hand, the investment income (on a market value basis) was negative except for NPO-MAAs and the Basic Pension Account of NP (See Figure 2, Figure 2-3-2, Figure 2-3-15 and Figure 2-3-21 in the full text of annual report.).

³ The benefit disbursements for each scheme include those provided by the Old Law but regarded as benefits equivalent to Basic Pensions under the New Law.

⁴ 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.

⁵ The amount of reserves for EPI does not include the reserves of the substitution portions kept by EPFs.

Figure 2 Adjusted financial status by scheme and implementation organization of EPI (FY2015)

	EPI					NP	
	EPI Account	NPO-MAAs	LPO-MAAs	PSTE-MAA	Total amount	National Pension Account	Basic Pension Account
	JPY 100 million	JPY 100 million	JPY 100 million	JPY 100 million	JPY 100 million	JPY 100 million	JPY 100 million
Annual balance of revenues and expenditures excluding investment income	22,633 <Δ24,015>	Δ3,229	Δ11,947	Δ91	7,365 <Δ39,282>	Δ1,593	238
Investment income (on a market value basis)	Δ50,081	131	Δ3,676	Δ602	Δ54,228	Δ3,417	51
Reserves at the fiscal year end (on a market value basis)	1,339,311	71,552	195,697	20,652	1,627,212	87,768	32,181

Note 1 For NPO-MAAs, LPO-MAAs and PSTE-MAA, an estimate of EPI equivalent part of long-term accounting (long-term account for PSTE-MAA) is made, and accounting for EPI (EPI account/EPI accounting for PSTE-MAA) is added to the estimate.

Note 2 The figures in <> indicate the amount excluding "Payment of the minimum technical provisions by dissolved EPFs, etc."

2. Insured Persons

□ The numbers of insured persons

The number of insured persons was 41.29 million for EPI (by category of EPI insured persons, 36.86 million for Category-1 (private employees), 1.06 million for Category-2 (national public officers), 2.83 million for Category-3 (local public officers), and 0.53 million for Category-4 (private school teachers/employees)). In addition, the number of insured persons belonging to NP Category-1 (namely, self-employed persons, etc.) was 16.68 million and the number of those belonging to NP Category-3 (namely, dependent spouses of EPI insured persons) was 9.15 million. These brought the total number of insured persons for the public pension system as a whole to 67.12 million. While the number of insured persons for EPI increased, the number of insured persons belonging to NP Category-1 and Category-3 decreased, leading to a decrease of 0.02% in terms of the total number of insured persons for the public pension system as a whole (See Figure 2-1-1 in the full text of annual report.).

□ Average amounts of pensionable remuneration for EPI

The average amount of monthly pensionable remuneration, including bonuses, was JPY383 thousand for EPI. The amount by category of EPI insured persons was JPY365 thousand for Category-1 (private employees), JPY539 thousand for Category-2 (national public officers), JPY547 thousand for Category-3 (local public workers) and JPY465 thousand for Category-4 (private school teachers/employees). The amount increased for Category-1 (private employees) and Category-2 (national public officers) while declined for Category-3 (local public officers) and Category-4 (private school teachers/employees) (See Figure 2-1-6 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 36 million for former EPI, 1.28 million for NPO-MAAs, 3.06 million for LPO-MAAs, 0.47 million for PSTE-MAA and 33.83 million for NP (Basic Pensions provided by the New Law and National Pensions provided by the Old Law). The total number of beneficiaries of the public pension schemes was 40.25 million, excluding duplication of beneficiaries due to multiple eligibilities. The increased number of beneficiaries continues in all schemes (See Figure 2-2-2 in the full text of annual report.).

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

The average monthly amount of old-age pensions for beneficiaries with long contribution periods⁶ (including the amount of the old-age Basic Pensions and not including the amount of the occupational pension portions of NPO-MAAs, LPO-MAAs and PSTE-MAA) was JPY150 thousand for EPI (including the portion paid by EPFs on behalf of EPI), and JPY55 thousand for NP (Basic Pensions under the New Law and National Pensions under the Old Law). By implementation organization of EPI⁷, the amount was JPY145 thousand for former EPI (including the portion paid by EPFs), JPY171 thousand for NPO-MAAs, JPY174 thousand for LPO-MAAs, and JPY172 thousand for PSTE-MAA (See Figure 2-2-11 and Figure 2-2-12 in the full text of annual report.).

4. Actuarial Indices

□ Pension support ratios

The pension support ratio on a beneficiary basis⁸ was at 2.22 for EPI and 2.02 for the Basic Pension⁹ (See Figure 2-4-2 in the full text of annual report.).

□ Reserve ratios

The reserve ratio¹⁰ was 5.2 for EPI¹¹ and 7.5 for the National Pension Account of NP¹² (See Figure 2-4-7 in the text of annual report.).

⁶ ‘Beneficiaries with long contribution periods’ means those of the old-age EPI pensions or the retirement pensions provided by the Mutual Aid Associations like NPO-MAAs, with their contribution periods to individual schemes 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).

⁷ When comparing the amounts of pensions, it should be reminded that there are considerable differences in the male-female ratios and the average contribution periods among the implementation organizations.

⁸ Pension support ratio on a beneficiary basis is the ratio of the number of insured persons to the number of beneficiaries of old-age and retirement pensions.

⁹ Pension support ratio of the Basic Pension is the ratio of the number of NP Category 1 to 3 insured persons to the number of beneficiaries of old-age Basic Pension.

¹⁰ The reserve ratio is the ratio of reserve at the previous fiscal year-end to the comprehensive cost (the amount of the ‘essential’ expenditures in the year which the scheme has to finance by itself).

¹¹ The reserve for EPI is an estimate including the portion paid by EPFs on behalf of EPI and the deferred amount of national government subsidies.

¹² The reserve for the National Pension Account of NP is an estimate including the deferred amount of national government subsidies.

5. Comparative Analysis of Actual Results to the Projections made by the 2014 Financial Verification

□ Attribution analysis of the deviation in reserves for EPI

The amount of actual reserves for EPI (on a market value basis) at the end of FY2015 surpassed the projected amount in any of cases C, E and G in the 2014 Financial Verification¹³ (See Figure 3, and Figure 3-2-35 in the full text of annual report.). This is mostly attributed to the amount of reserves at the end of FY2014¹⁴, which was by far greater than the corresponding projected amount. In fact, the sum of contributions caused by factors pertaining to FY2015 turns out to be negative in any case.

Our attribution analysis on the deviation between actual and projected reserves in FY2015 shows a major influence in any case to have been the ‘essential’ rate of return on investment¹⁵ and salary growth rate, which were smaller than the corresponding ‘essential’ ROI and salary growth rates assumed in the Financial Verification. On the other hand, it was found that the demographic factors contributed positively in any case. A greater number of insured persons than projected in the Financial Verification highly contributed to the deviation (See Figure 3, Figure 3-4-2 in the full text of annual report.).

Figure 3 Contribution of generating factors to deviation of actual reserves for EPI at FY2015-end from the projections made by the 2014 Financial Verification

Factors causing deviation from the projections		case C	case E	case G
		Trillion yen	Trillion yen	Trillion yen
Deviation of actual amount of reserves at FY2015-end from the projections		13.78	13.78	15.42
Deviation of actual amount of reserves at FY2014-end from the projections A		21.17	21.17	21.65
Contribution of generating factors in FY2015, total		Δ7.39	Δ7.39	Δ6.23
FY2015	Nominal rate of return on investment B ₂₀₁₅	Δ8.64	Δ8.64	Δ8.16
	'Essential' rate of return on investment B ₂₀₁₅₋₁	Δ5.02	Δ5.02	Δ5.95
	Salary growth rate B ₂₀₁₅₋₂	Δ3.62	Δ3.62	Δ2.20
	Annual balance of revenues and expenditures excluding investment income C ₂₀₁₅	1.25	1.25	1.93
	Change in contribution income caused by deviation of salary growth rate C ₂₀₁₅₋₁	Δ0.46	Δ0.46	Δ0.32
	Change in benefit costs caused by deviation of salary growth rate and inflation rate C ₂₀₁₅₋₂	-	-	-
	Demographic factors C ₂₀₁₅₋₃	1.19	1.19	1.74
	Number of insured persons C ₂₀₁₅₋₃₋₁	1.31	1.31	1.83
	Number of beneficiaries C ₂₀₁₅₋₃₋₂	Δ0.04	Δ0.04	Δ0.01
	Modified indexation rate C ₂₀₁₅₋₃₋₃	Δ0.08	Δ0.08	Δ0.08
	Others C ₂₀₁₅₋₄	0.52	0.52	0.51

¹³ Although only cases C, E and G are shown as examples here, this is not intended to indicate that the Actuarial Subcommittee positions these cases as basic or standard cases of the 2014 Financial Verification.

¹⁴ The reserves for Mutual Aid Associations at the end of FY2014 are estimates calculated from the adjusted financial status (estimates of EPI equivalent portion).

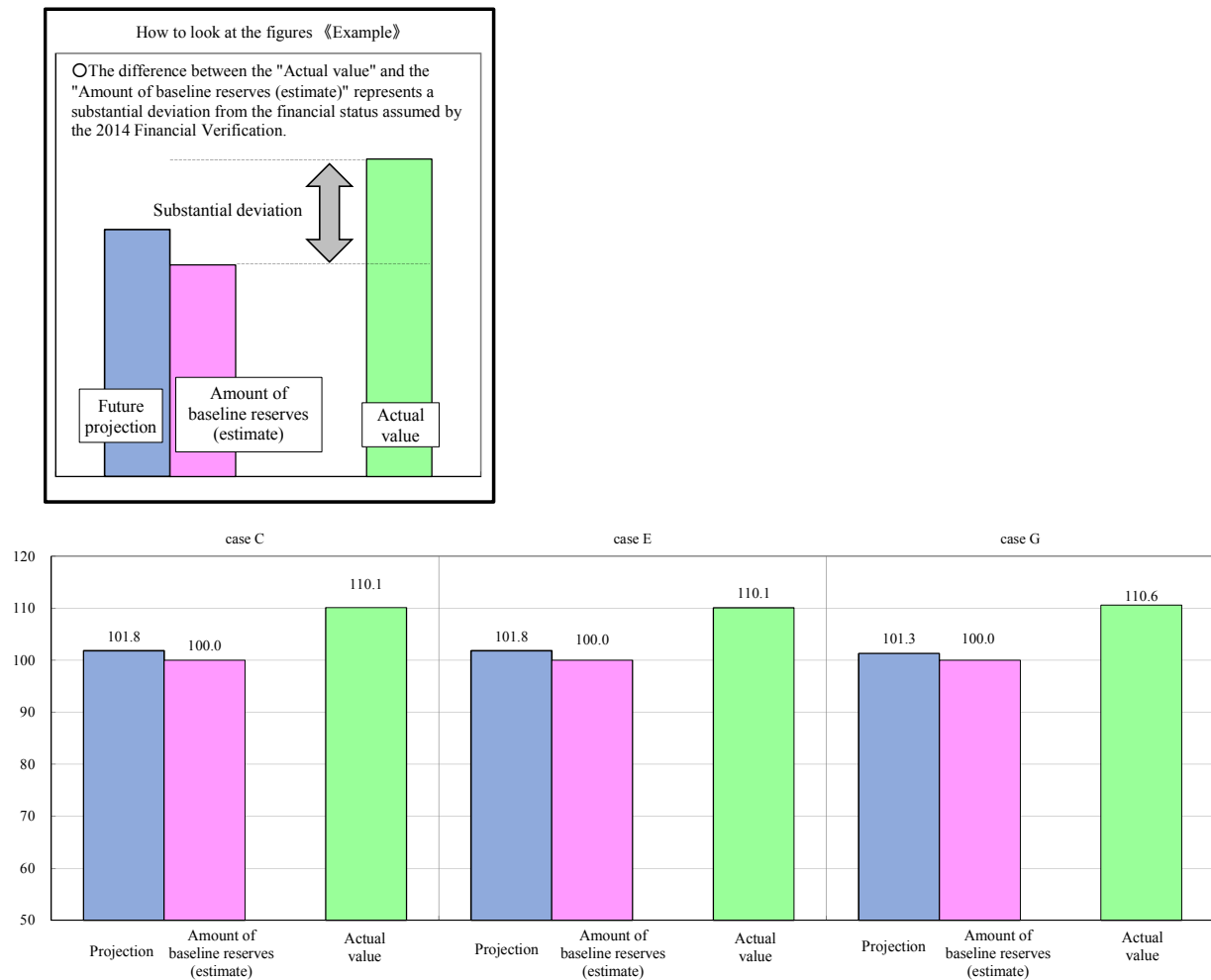
¹⁵ The ‘essential’ ROI means the ROI minus the salary growth rate.

□ Evaluation of the actuarial statuses for EPI

The Actuarial Subcommittee adjusts the projected amount of reserves for EPI made by the 2014 Financial Verification reflecting the actual developments of nominal salary growth rates, etc.,¹⁶ and then compares the actual amount of reserves with the adjusted amount thus obtained, which would serve as a baseline for evaluating the actuarial status of the scheme. In this way, the Subcommittee can highlight the essential part of the deviation of the actual amounts of reserves from the projected amounts (See Figure 4, Figure 3-5-1 and Figure 3-5-2 in the full text of annual report.).

From this analysis, it was found that the actual amount of reserves for EPI at the end of FY2015 exceeded the “baseline reserves (estimate) for evaluation” by approximately 10% in any of cases C, E and G. Note, however, that this is a result of the assessment being conducted focusing on effects of the deviation of the actual salary growth rate and inflation rate in FY2015 from the corresponding assumptions in the Financial Verification and, therefore, it is necessary to keep an eye on the effects on actuarial status of public pension, which the deviation of future salary growth rates and inflation rates from the corresponding assumptions in the Financial Verification is likely to cause. In any case, from the perspective of fiscal management of public 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.

Figure 4 Evaluation of the actuarial status for EPI at the end of FY2015
[Indicated against the amount of baseline reserves (estimate) (=100)]



¹⁶ For details of the technical aspects of the adjustment, see Chapter 3, Section 5 of the full text of annual report.