

Fiscal Year 2017 Review of Operations

Annuity Retirement Benefit Association Reserve Fund



全国市町村職員共済組合連合会

National Federation of Mutual Aid Associations for Municipal Personnel

Table of Contents

·Fiscal Year 2017 Investment Results (Overview)	P 3
Section 1 Administration and Investment of Funds in FY2017	
·Fiscal Year 2017 Asset Mix	P 5
·Fiscal Year 2017 Investment Return	P 6
·Fiscal Year 2017 Investment Income	P 7
·Fiscal Year 2017 Value of Assets	P 8
·Fiscal Year 2017 Status of Risk Management	P 9
·Fiscal Year 2017 Fees	P 10
Section 2 Systems and activities concerning administration and investment of funds	
·Basic Approach to Investment	P 12
·Benchmark Portfolio	P 13
·Governance	P 14
Section 3 Reference Data	
·Changes in the investment return, etc. (since the integration of employee pension plans)	P 20
·Changes in the value of investment assets and the asset mix (since the integration of employee pension plans)	P 21
·Issues Held (as of the end of Fiscal Year 2017)	P 22

Fiscal Year 2017 Investment Results (Overview)

Investment return +0.42% *Realized return (book value basis)
(FY2017)

Investment income +JPY826 million *Realized income
(FY2017) (book value basis)

Value of investment assets: JPY253.4 billion *Book value
(End of FY2017)

* As pension investment funds are intended for long-term investment, the investment status must be judged from the long-term perspective.

(Note 1) The return and income represent figures after the deduction of fees, etc. settled within the relevant period.

(Note 2) Realized income represents the sum of trading profits/losses and interest and dividend income, etc.

Section 1 Administration and Investment of Funds in FY2017

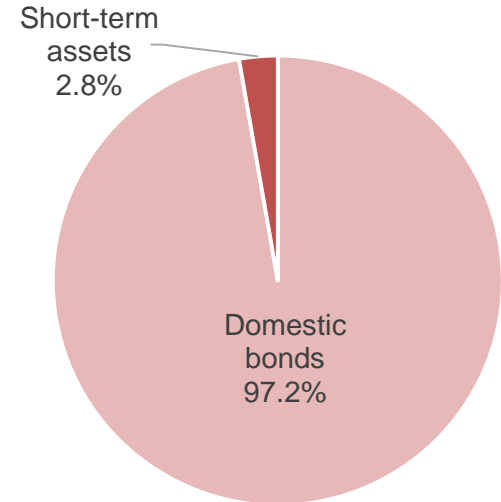
Fiscal Year 2017 Asset Mix

The composition by asset (book value basis) is as follows:

(Unit: %)

	FY2016	FY2017			
	End of FY	End of Q1	End of Q2	End of Q3	End of FY
Domestic bonds	95.4	99.9	98.3	100.0	97.2
Short-term assets	4.6	0.1	1.7	0.0	2.8
Total	100.0	100.0	100.0	100.0	100.0

Composition by Asset Class
(as of end of FY2017)



(Note 1) Concerning the benchmark portfolio, the share in the mix is 100% for domestic bonds.

(Note 2) Due to rounding, the total sum of individual figures may not necessarily add up to 100%.

(Note 3) Starting in fiscal year 2016, short-term assets held by each fund were classified into relevant asset classes in principle.

Fiscal Year 2017 Investment Return

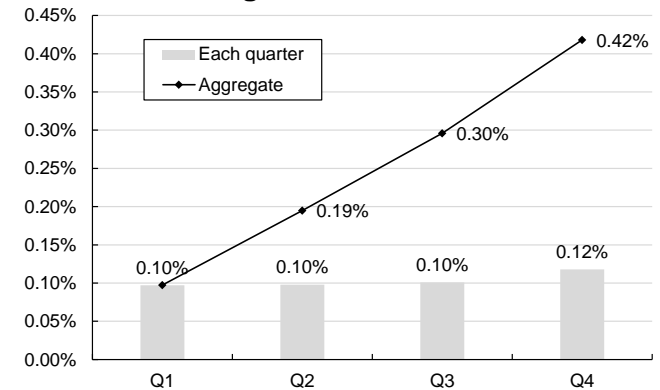
The realized return for FY2017 was 0.42% for the overall assets.

Domestic bonds held by the Annuity Retirement Benefit Association Reserve Fund were evaluated based on book value on the premise of continued holding until maturity.

(Unit: %)

	FY2017				
	Q1	Q2	Q3	Q4	FY total
Realized return	0.10	0.10	0.10	0.12	0.42
Domestic bonds	0.10	0.10	0.10	0.12	0.43
Short-term assets	0.00	0.00	0.00	0.00	0.00

Changes in realized return

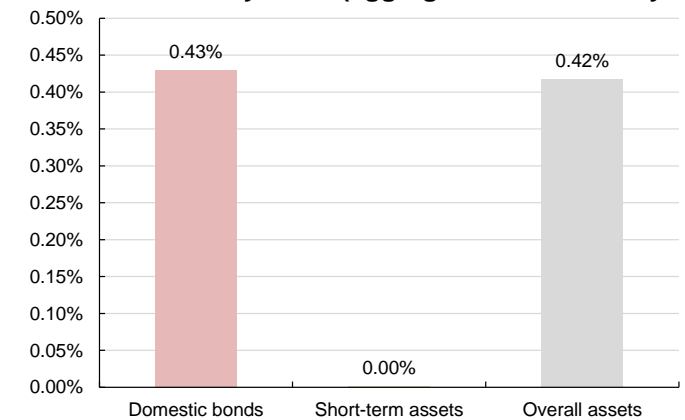


(Reference)

(Unit: %)

	FY2017				
	Q1	Q2	Q3	Q4	FY total
Modified total return	0.42	0.38	0.33	0.55	1.73

Modified total return by asset (aggregate for the fiscal year)



(Note 1) The return in each quarter is the period rate.

(Note 2) The realized return and modified total return represent figures after the deduction of fees, etc. settled within the relevant period.

(Note 3) The modified total return represents the realized return adjusted for the effects of changes in valuation profits/losses that would arise if the assets are evaluated based on market value.

Fiscal Year 2017 Investment Income

The realized income for FY2017 was JPY826 million (for overall assets).

Domestic bonds held by the Annuity Retirement Benefit Association Reserve Fund were evaluated based on book value on the premise of continued holding until maturity.

(Unit: JPY100M)

	FY2017				
	Q1	Q2	Q3	Q4	FY total
Realized income	1.53	1.84	2.09	2.80	8.26
Domestic bonds	1.53	1.84	2.09	2.80	8.26
Short-term assets	0.00	0.00	0.00	0.00	0.00

(Reference)

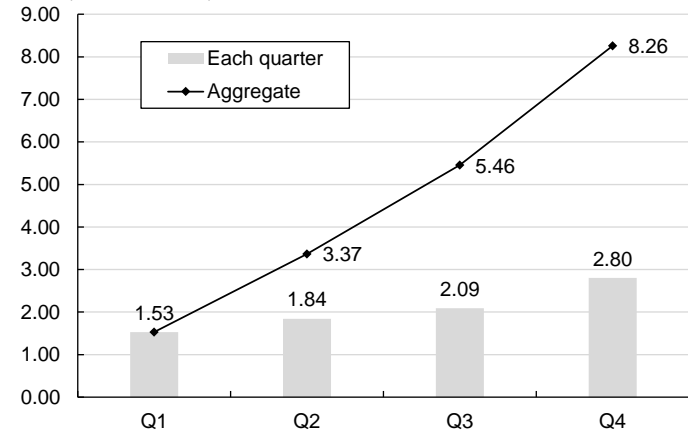
(Unit: JPY100M)

	FY2017				
	Q1	Q2	Q3	Q4	FY total
Investment income	6.60	7.12	6.91	13.12	33.75

- (Note 1) The realized income and investment income represent figures after the deduction of fees, etc. settled within the relevant period.
 (Note 2) Realized income represents the sum of trading profits/losses and interest and dividend income, etc.
 (Note 3) The investment income represents the realized income adjusted for the effects of changes in valuation gains/losses based on market value.
 (Note 4) Due to rounding, the total sum of individual figures may not necessarily add up to FY total.

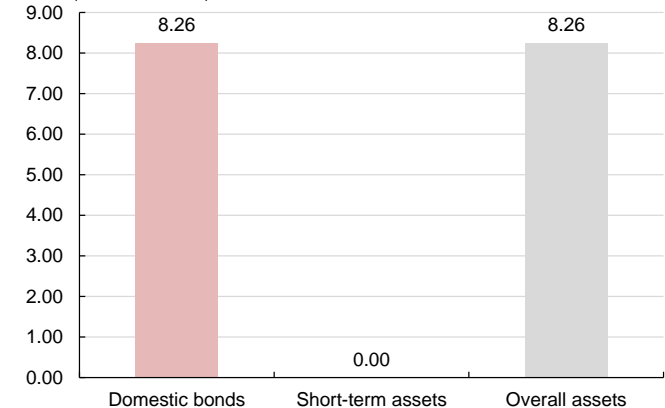
Changes in realized income

(Unit: JPY100M)



Investment income by asset (aggregate for the fiscal year)

(Unit: JPY100M)



Fiscal Year 2017 Value of Assets

The book value, total market value and valuation gains/losses by asset is as follows.

(Unit: JPY100M)

	FY2016 End of FY			FY2017											
	Book value	Total market value	Valuations profits/losses	End of Q1			End of Q2			End of Q3			End of FY		
				Book value	Total market value	Valuations profits/losses	Book value	Total market value	Valuations profits/losses	Book value	Total market value	Valuations profits/losses	Book value	Total market value	Valuations profits/losses
Domestic bonds	1,447	1,428	-19	1,650	1,637	-13	1,932	1,923	-9	2,146	2,143	-2	2,464	2,470	6
Short-term assets	70	70	0	1	1	0	33	33	0	1	1	0	70	70	0
Total	1,517	1,498	-19	1,651	1,638	-13	1,964	1,955	-9	2,146	2,144	-2	2,534	2,540	6

(Note 1) Due to rounding, the total sum of individual figures may not necessarily add up to Total.

(Note 2) The total market value and valuation profits/losses are indicated here for reference. The valuation profits/losses were tentatively calculated based on the market value.

(Note 3) Starting in fiscal year 2016, short-term assets held by each fund were classified into relevant asset classes in principle.

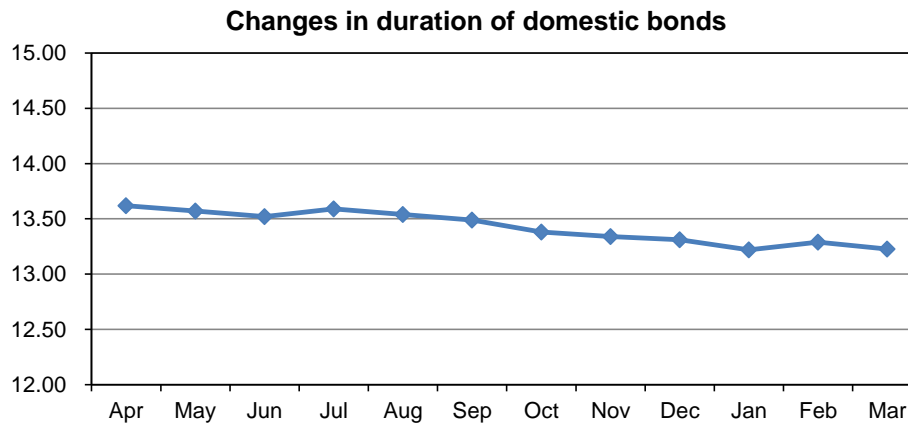
Fiscal Year 2017 Status of Risk Management

○ Domestic bonds

1. Change in duration

A modified duration is the one of the indicators of a market risk for bond investment, which shows sensitivity of bond prices in the case of a fluctuation in interest rate to a certain degree (hereinafter “duration.”)

The modified duration of domestic bonds was from 13.22 to 13.62.



Fiscal Year 2017 Fees

There are no fees related to investment because the full amount of funds of the Annuity Retirement Benefit Association Reserve Fund is invested in domestic bonds, etc. through in-house investment.

Section 2 Systems and Activities Concerning Administration and Investment of Funds

Basic Approach to Investment

- As a basic policy, funds shall be invested for the purpose of contributing to the stable management of annuity retirement benefit plan operations in light of the characteristics of a cash balance-type pension program, whose benefit level is linked to the government bond yield or other benchmarks.
- In addition, funds shall be managed appropriately by establishing a benchmark portfolio so that investment returns needed for the fund (i.e. assumed return (meaning the assumed return stipulated in Article 28, Paragraph (5) of the Order for Enforcement of the Local Public Service Mutual Aid Association Act (Cabinet Order No. 352 of 1962))) will be generated with the minimum risk.

Basic Policy for Management and Investment of Annuity Retirement Benefit Association Reserve Fund (Extract)

1. Basic Policy

The Federation shall manage the Annuity Retirement Benefit Association Reserve Fund with the objective of contributing to the stability of the annuity retirement benefit plan operations based on the characteristics of a cash-balance pension plan whose benefit level is linked to government bond yields or other benchmarks, from the long-term perspective in a safe and efficient manner.

Accordingly, the Federation shall administer and invest the Annuity Retirement Benefit Association Reserve Fund by establishing an asset mix from the long-term perspective (the “benchmark portfolio”).

2. Investment target

The investment of the Annuity Retirement Benefit Association Reserve Fund, which has the characteristics of a cash-balance pension plan, shall be managed appropriately by establishing the benchmark portfolio so that investment returns needed for the fund (i.e., assumed return (meaning the assumed return stipulated in Article 28, Paragraph (5) of the Order for Enforcement of the Local Public Service Mutual Aid Association Act (Cabinet Order No. 352 of 1962))) will be generated with the minimum risk.

In doing so, attention shall be paid not to distort, among other things, price formation in the market and private sector investment activities.

<Change of basic policy>

By the system revision in October 2017, it was decided that Annuity Retirement Benefit Association Reserve Fund is to be used as a new fund resource for loan business of member associations (associations constituting the Federation). Due to this revision, effective from fiscal year 2018, the basic policy was amended so as to enable a part of the Annuity Retirement Benefit Association Reserve Fund to be deposited with member associations. Specifically, new provisions on the investment of deposits by member associations were added as a part of investment methods.

Benchmark Portfolio

1. Benchmark portfolio (asset mix)

	Domestic bonds
Asset mix	100%

The Federation manages the Annuity Retirement Benefit Association Reserve Fund with the objective of contributing to the stability of the annuity retirement benefit plan operations based on the characteristics of a cash-balance pension plan whose benefit level is linked to government bond yields or other benchmarks. To this end, the Federation determined an asset mix from the long-term perspective.

In relation to the asset mix of the Annuity Retirement Benefit Association Reserve Fund, the full amount of funds is invested in domestic bonds.

Governance ①

1. Organization

As of April 1 of 2018, the Federation has executives consisting of one president, 13 managing directors and three auditors, including one full-time managing director and one full-time auditor with academic knowledge. The maximum number of employees is 120.

The organization consists of the General Affairs Department (General Affairs Division, Planning Division, Insurance Division and Welfare Division), the Finance Department (Accounting Division, Investment Planning Division, In-house Investment Division and Fund Management Division), the Pension Department (Pension Planning Division, Pension Information System Division, Pension Inspection Division, Pension Benefit Division and Retirement Pension Benefit Division), as well as the Investment Risk Management Office and Audit Office.

The Investment Risk Management Office was newly established on April 1, 2018, as a section separate from the Finance Department from the standpoint of improving and reinforcing risk management and the mutual checks and balances function.

2. General Assembly

The General Assembly consists of 61 members, 47 of which are elected by mutual vote the Presidents of associations which are the members of the Federation (hereinafter the "Member Associations"). Among the members of the General Assembly, 14 are elected by mutual vote of the Executive Directors of the Member Associations.

Revision of the articles of incorporation, the formulation and revision of the rules of operations, annual business plans, budgets and account settlement, disposal of important assets and assumption of significant debt are subject to resolution of the General Assembly.

3. Fund Management Committee

This is a committee consisting of members who possess academic knowledge or practical experience in areas such as the pension system, economics, finance and fund management, which studies expert matters pertaining to the establishment and revision of basic policies and the administration and investment of the Employees' Pension Insurance Benefit Association Reserve Fund, Annuity Retirement Benefit Association Reserve Fund and Transitional Long-term Benefit Association Reserve Fund (hereinafter the "Funds").

4. Long-term Benefit Fund Committee

This is a committee also participated in by the representatives of Member Associations, which conducts research and study relating to basic policies for investment of Funds and other important matters.

5. Operational Management Committee

This is a committee also participated in by the representatives of Member Associations, which conducts research and monitoring of business administration and fund management implemented by the Federation and the Member Associations, as well as assessment of business.

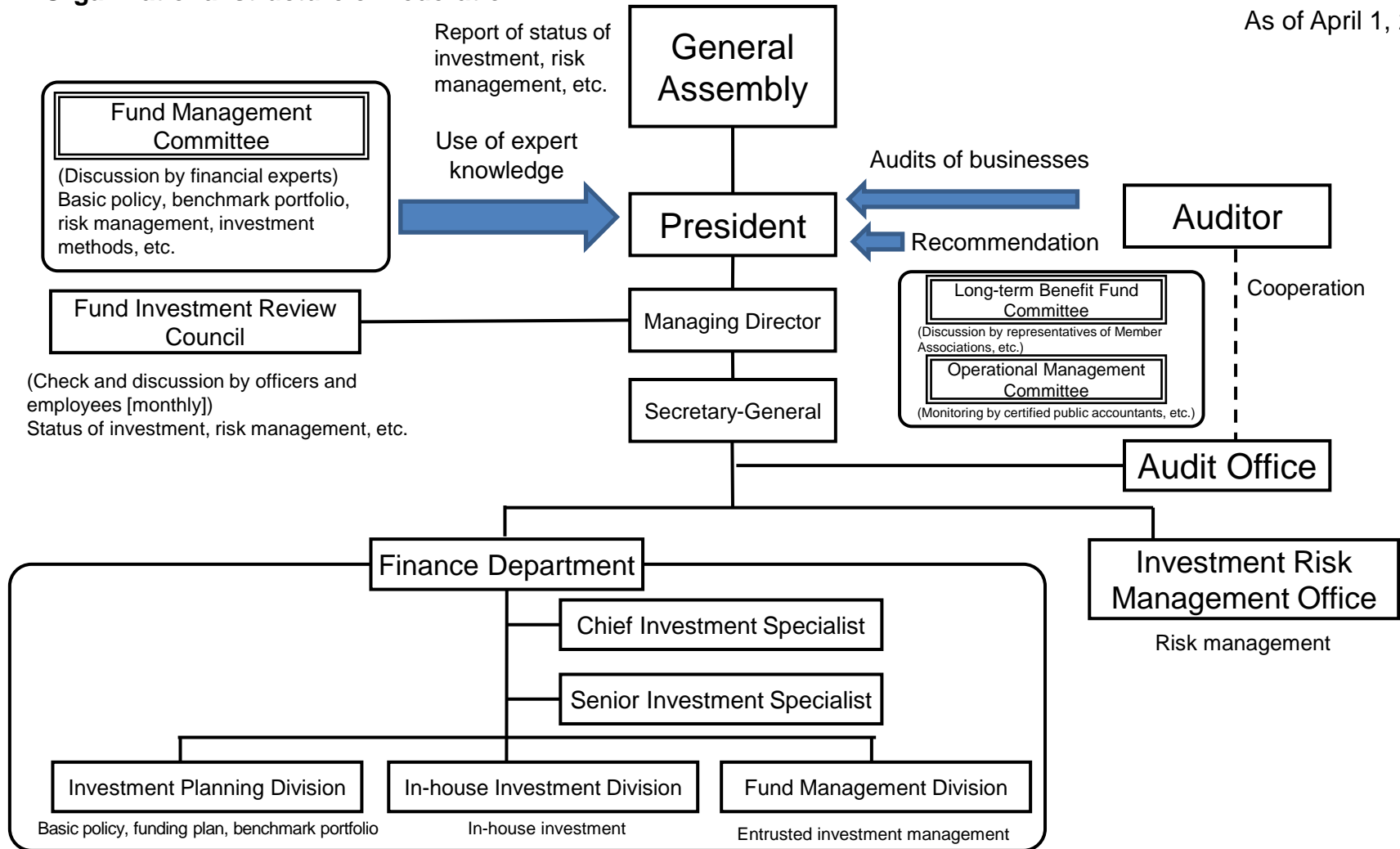
6. Fund Investment Review Council

This is a council for ensuring the safe and effective investment of surplus from business operation of each of the accountings of the Federation, discussing decision-makings as to the investment of funds, analyzing the investment status and checking the status of risk management indicators. This council is constituted by a full-time managing director (hereinafter a "Senior Managing Director"), the Secretary-General, the General Manager of Finance Department, the Chief Investment Specialist, the Senior Investment Specialist, the Manager of Investment Planning Division, the Manager of In-house Investment Division, the Manager of Fund Management Division, the Manager of Investment Risk Management Office, and other members as may be deemed necessary. In principle, the council regularly meets once a month, and from time to time depending on the necessity.

Governance ②

7. Organizational structure of Federation

As of April 1, 2018



Governance ③ (Fund Management Committee)

○ Fund Management Committee

The Federation has established the Fund Management Committee, which is comprised of members who possess academic knowledge or practical experience in areas such as the pension system, economics, finance and fund management. Members are appointed by the President.

As an advisory body for the President, the Fund Management Committee has a duty to conduct research on basic issues relating to fund management, discuss matters necessary for the achievement of the purpose to contribute to the safe and efficient fund management, and to report the findings to the President. The Committee is also to give advice to the President for any other important matters relating to the fund management.

For expert matters relating to the management and investment of Funds, including the adoption and amendment of basic policies for the management and investment of Funds including benchmark portfolio, deliberation at the Fund Management Committee is required.

List of Committee Members (As of April 2018)

Yoshitaka Kai	Professor, The Kyoto College of Graduate Studies for Informatics
Yasuyuki Kato	Professor, Graduate School of Management, Kyoto University
Katsuyuki Tokushima	Chief Fixed Income Analyst, Financial Research Department, NLI Research Institute
Masashi Toshino	Professor, Faculty of Economics, Seikei University
Hiroshi Miyai	President and Representative Director, Asset Management Life
Kenji Wada	Professor, Faculty of Business and Commerce, Keio University

Governance ④ (Approach to Risk Management)

- Generally speaking, "risk" refers to a danger or possibility of negative impact. In the field of asset investment, risk can mean the magnitude of price fluctuation occurring under a certain condition or uncertainty towards the future.
- Risks in the field of asset investment include interest rate fluctuation risk, price fluctuation risk, credit risk and liquidity risk. For asset investment, for various risks commensurate with investment, it is important to understand the magnitude and multifaceted impacts of risks from a long-term perspective.
- The Federation appropriately implements risk management for investment in consideration of the following points: that investment of funds should be made safely and efficiently from a long-term perspective; and the characteristics of a cash-balance pension plan whose benefit level is linked to government bond yields or other benchmarks.

Implementation policy for risk management concerning investment of the fund (extract)

Basic approach concerning risk management

The National Federation of Mutual Aid Associations for Municipal Personnel appropriately conducts risk management related to the investment of funds in light of the following matters.

- (i) Investment of funds should be made safely and efficiently from a long-term perspective.
- (ii) A benchmark portfolio should be developed and investment of funds should be made based on the benchmark portfolio through appropriate diversification across multiple asset classes with different risk/return profiles and other characteristics (hereinafter referred to as "diversified investment") in principle.
- (iii) Each fund should be invested in consideration of the relationship between all Local Public Service Personnel Mutual Aid Associations' liabilities and the funds of all Local Public Service Personnel Mutual Aid Associations in the future.
- (iv) Risk management shall be appropriately implemented in consideration of the characteristics of a cash-balance pension plan whose benefit level is linked to government bond yields or other benchmarks.

Governance ⑤ (Risk Management Efforts)

○ **Management of the deviation of the asset mix**

- Investment based on the benchmark portfolio requires the management of various risk factors. Therefore, in order to secure returns in line with the benchmark portfolio from the long-term perspective, it is important, in particular, to manage the degree of deviation of the asset mix ratio of the fund from that of the benchmark portfolio.
- Specifically, for its asset as a whole, the Federation keeps track of and manages the status of the deviation of the fund from the benchmark in terms of the asset mix.

○ **Management of asset administration institutions**

The Federation requires asset administration institutions to fulfill the fiduciary responsibilities and develop systems to ensure compliance with laws, and appropriately manages them by keeping track of their status of asset administration.

○ **Verification of the benchmark portfolio**

It is necessary to periodically verify the benchmark portfolio, which is formulated in consideration of long-term economic forecasts. The Federation considers it necessary to check whether the existing benchmark portfolio is appropriate from the viewpoint of ensuring safe and efficient investment over the long term.

○ **Reporting on the status of risk management and improvement measures implemented**

The status of risk management and improvement measures implemented are reported to the General Assembly and the Fund Management Committee.

Section 3 Reference Data

Changes in the investment return, etc. (since the integration of employee pension plans)

1. Investment return

(Unit: %)

	FY 2015 (second half)	FY2016	FY2017
Realized return	0.13	0.39	0.42
Domestic bonds	0.16	0.41	0.43
Short-term assets	0.02	0.00	0.00

(Reference)

(Unit: %)

	FY 2015 (second half)	FY2016	FY2017
Modified total return	8.06	-3.30	1.73

2. Value of investment income

(Unit: JPY100M)

	FY 2015 (second half)	FY2016	FY2017
Realized income	0.27	3.74	8.26
Domestic bonds	0.26	3.74	8.26
Short-term assets	0.01	0.00	0.00

(Reference)

(Unit: JPY100M)

	FY 2015 (second half)	FY2016	FY2017
Investment income	16.96	-32.39	33.75

(Note 1) The investment return for fiscal year 2015 is the period rate for the second half of fiscal year 2015.

(Note 2) The investment income for fiscal year 2015 is the aggregate amount of investment income for the second half of fiscal year 2015.

Changes in the value of investment assets and the asset mix (since the integration of employee pension plans)

(Unit: JPY100M, %)

	End of FY2015		End of FY2016		End of FY2017	
	Book value balance	Composition	Book value balance	Composition	Book value balance	Composition
Domestic bonds	434	85.33	1,447	95.41	2,464	97.24
Short-term assets	75	14.67	70	4.59	70	2.76
Total	509	100.00	1,517	100.00	2,534	100.00

Issues held (as of the end of Fiscal Year 2017)

The tables below show the top 10 bond issues held through in-house investment as of the end of March 2018, classified by issuer name. For information concerning bond issues ranked 11th or lower, see the website of the Federation.

The status of holding related to issuers does not represent the assessment of issuers, etc. by the Federation.

○ Domestic bond (in order of book value balance)

No.	Names of issuer	Book value balance (in 100M yen)
1	Japan Finance Organization for Municipalities	1523
2	Fukuoka Prefecture	41
3	Aichi Prefecture	41
4	Nagoya City	36
5	Hiroshima Prefecture	35
6	Hyogo Prefecture	35
7	Yokohama City	34
8	Osaka City	33
9	Government of Japan	33
10	Kyoto Prefecture	33
Total	54 Issuers	2,464

(Note 1) The names of issuers are provided by the Federation based on data registered in the T-STAR/GX system of Nomura Research Institute and BarraOne system of MSCI as of the end of March 2018.

(Note 2) The book value balance of bonds is an aggregated figure calculated for each issuer by the Federation based on data registered in T-STAR/GX system of Nomura Research Institute.