

For All Generations



Investment Principles

Our overarching goal should be to achieve the investment returns required for the public pension system with minimal risks, solely for the benefit of pension recipients from a long-term perspective, thereby contributing to the stability of the system.

Our primary investment strategy should be diversification by asset class, region, and timeframe. While acknowledging fluctuations of market prices in the short term, we shall achieve investment returns in a more stable and efficient manner by taking full advantage of our long-term investment horizon. At the same time, we shall secure sufficient liquidity to pay pension benefits.

3

We formulate the policy asset mix and manage and control risks at the levels of the overall asset portfolio, each asset class, and each investment manager. We employ both passive and active investments to attain benchmark returns (i.e., average market returns) set for each asset class, while seeking untapped profitable investment opportunities.

4

By fulfilling our stewardship responsibilities (including the consideration of ESG [Environmental, Social, and Governance] factors), we shall continue to maximize medium- to long-term investment returns for the benefit of pension recipients.

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- Investment results of Government Pension Investment Fund, including this annual report, are available on the Fund's website (https:// www.gpif.go.jp/en/).
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About GPIF

Government Pension Investment Fund (GPIF) manages and invests Japan's pension reserve fund, which is used to pay Employees' Pension Insurance and National Pension. Our goal is to contribute to the stability of the pension scheme by distributing the investment return to the government.

POINT

Pension system in Japan

The Japanese pension system adopts a pay-as-you-go system, in which pension premiums collected from working generations support older generations.

Because the low birth rate and the increase in the aging population in Japan are progressing rapidly, the portion of pension premiums that have not allocated to benefits are accumulated as pension reserve in order to reduce an unduly burden of future generations. GPIF gains investment returns by investing the pension reserve in capital markets in Japan and overseas. The pension reserve including investment returns will be used for future pension benefits according to the pension fiscal plan for approximately 100 years. The financial source obtained from pension reserve accounts for about 10 percent of the total pension finance.



(Note) The above diagram is for illustrative purposes; for details on the public pension system, refer to the Ministry of Health, Labour and Welfare website.

POINT

Long-term, Diversified Investment

The investment principles of GPIF provide that "our primary investment strategy should be diversification by asset class, region, and timeframe. We shall achieve investment returns in a more stable and efficient manner by taking full advantage of our long-term investment horizon."

We allocate our investment assets of ¥159 trillion as of the end of March 2019 to widely diversified assets such as bonds and equities in Japan and overseas, holding 5,111 equities and bonds from 3,457 issuers.



GPIF invests in a variety of asset classes.

GPIF in numbers

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(Equities)

(Bonds)



(Note) Data as of the end of March 2019.

Message from the Chairperson of the Board of Governors



The Board of Governors, established in October 2017, comprises 10 members: the President of GPIF and nine outside experts with a broad range of pertinent knowledge and experience. The Board makes decisions on important matters related to investment strategy and to the management of the organization. The formulation of the Policy Asset Mix, which happens once every five years, is one such important decision. The Board also supervises the activities of the executives in cooperation with the Audit Committee.

With this system in place, the separation of roles between the Board and the Executive Office, which is led by the President, is clear. This separation of policy decision-making and supervision from execution is expected to enhance the transparency of GPIF's inner workings. In fiscal 2018, GPIF made a thorough review of the set of internal regulations that are the backbone of its governance, and it has been applying the revised regulations since the beginning of fiscal 2019.

 The chief role of the Board is to help GPIF become worthy of greater trust from the Japanese public. To this end, it is important above all to ensure that GPIF invests pension reserves in a safe and efficient manner with the long-term benefit of the pension beneficiaries, in other words the Japanese public, solely in mind. In this time of economic and social upheaval, such investment decisions are never easy to make. However, the Board is committed to devoting all of its energies to meeting the expectations of the Japanese public by concentrating the wisdom of its members in close collaboration with Executive Office.

Chairperson of the Board of Governors

平野英治 Eiii Hirano

Government Pension Investment Fund, Japan

Toyoaki Nakamura
Sadayuki Horie
Yasuyuki Kato
Nobuaki Koga
Shuji Iwamura

Tomio Arai
Sakae Komiyama
Eiji Hirano
Naoko Nemoto
Norihiro Takahashi

Message from the President

We pledge to continue fulfilling our mission of contributing to the stability of the public pension finance and the stability of the lives of Japanese public, by exercising fiduciary responsibilities for the pension reserve funds.



The mandate of Government Pension Investment Fund is to contribute to the stability of the Employees' Pension Insurance and National Pension schemes by managing and investing the pension reserve funds entrusted to us by the Minister of Health, Labour and Welfare and by disbursing investment returns into the Pension Special Account.

The investment return for fiscal 2018 was positive due to the strong performance of foreign equities.

Taking an overview of the market environment in fiscal 2018, stock prices in Japan and overseas remained firm, as exemplified by the Dow Jones Industrial Average Index hitting a record high in the first half of the year. At the end of 2018, however, it plunged due to an increase in investors' risk aversion on concerns about the outlook of the global economy and corporate earnings, in addition to anticipation of the federal funds rate hikes. Equity prices, notably U.S. equities, subsequently rebounded sharply toward the end of fiscal 2018 and the yen depreciated against the U.S. dollar in the foreign exchange market, as the equity market regained its composure on the back of factors such as the U.S. Federal Reserve Board (FRB) adopting a cautious stance toward normalization of the monetary policy. As a result of these developments, the annual rate of return came to +1.52%, bringing more than ¥65 trillion cumulative amount of returns since fiscal 2001, when GPIF started managing pension reserve funds. While, the returns constantly fluctuate, GPIF is resolved to continue to comply with the Investment Principles and the Code of Conduct and fulfill its fiduciary duty so that it can set aside the necessary amount of pension reserve funds for the public pension scheme by managing assets from a long-term perspective without being distracted by short-term market fluctuations. In this annual report for fiscal 2018, we aim to improve further transparency by adding new analysis and relevant information, as we did in the previous year, so that we can give a clearer picture of our activities.

We pledge to continue, by exercising fiduciary responsibilities for the pension reserve funds, to fulfill our mission of contributing to the stability of the public pension finance and the stability of the lives of Japanese public, as we develop into an organization worthy of the public's trust. I would sincerely appreciate your continued understanding and support.



Government Pension Investment Fund, Japan

Overview of Fiscal 2018



Returns are marked to market as of the end of fiscal 2018, and include unrealized gains and losses. Short-term portfolio returns are influenced by the current market trends.





Under the Medium-term Objectives established by the Minister of Health, Labour and Welfare (MHLW), GPIF's investment target is to secure a long-term real return (net investment yield on the pension reserve funds [hereinafter "pension reserve"] less the nominal wage growth rate) of 1.7% with the minimal level of risk.

 \rightarrow For the roles of reserve fund in pension finance, refer to page 57.



Real return on investment (cumulative)

(Note1) Real return on investment (%) is calculated as (1 + nominal return on investment [%]) / (1 + nominal increase in wages [%]) - 1.

(Note2) The "Reference Case" and "Economic Revitalization Case" are scenarios included in the Economic and Fiscal Projections for Medium- to Long-term Analysis, submitted by the Cabinet Office.



Summary of Major Initiatives

Promoting Activities Aimed at Fulfilling Stewardship Responsibilities GPIF has conducted stewardship activities, such as strengthening collaboration with Japanese and foreign institutional investors and parties that signed the Principles of Responsible Investment (PRI), with the objectives of appropriately fulfilling its responsibilities to pension beneficiaries, as their fiduciary, and enhancing medium- to long-term investment returns.

For details, refer to page 38-46.



- Support for the Task Force on Climate-related Financial Disclosures (TCFD) and participation in Climate Action 100+
- Calling for proposals on new business models by passive asset managers
- The Business and Asset Owners' Forum and the Global Asset Owners' Forum
- A questionnaire survey on investee companies on stewardship activities by external asset managers



- Selection of Global Environmental Stock Indices
- Publication of ESG Report
- Collaboration with the World Bank Group in green bonds



Selecting external asset managers through the Asset Manager Registration System

In fiscal 2018, GPIF selected an external asset manager for real estate (Global-Core style), in addition to asset managers for infrastructure (Global-Core style) and real estate (Japan-Core style) that were selected in fiscal 2017. GPIF commenced deployment for/in these mandates.

• Enhancing portfolio risk management

Portfolio risk management framework for alternative investments has been enhanced, following substantial capital deployed by discretionary asset managers (multi-manager investment strategy) for infrastructure and real estate in fiscal 2018.

1 Investment Results

[1] Rate of investment return / Amount of investment returns, etc.

1 Rate of investment return

The rate of investment return for fiscal 2018 is



						(Unit: %)
		1Q	2Q	3Q	4Q	Total
	Total	1.68	3.42	-9.06	6.21	1.52
nts	Domestic bonds	0.14	-0.79	1.01	1.07	1.43
tme	Domestic equities	1.03	5.89	-17.57	7.63	-5.09
Invest	Foreign bonds	0.56	1.79	-2.74	3.17	2.70
irket	Foreign equities	5.17	7.07	-15.71	13.91	8.12
Mai	Short-term assets	0.00	-0.00	-0.00	0.02	0.02
F	ILP bonds	0.48	0.48	0.49	0.48	1.93



(Note 1) Fiscal 2018 runs from April 1, 2018 to March 31, 2019.

(Note 2) The GPIF's portfolio consists of funds invested in the markets (hereinafter "market investment" that is marked to market) and FILP bonds (see Note 5), which are held to maturity and valued at amortized costs.

(Note 3) In this report, returns are calculated as the weighted average of gross market investment returns and FILP bond returns weighted by total amount invested. The rate of return within each asset class other than FILP bonds is time-weighted.

 (Note 4) Alternative asset funds contain a mixture of asset classes, and the investment returns of such funds are allocated to each asset on a pro-rata basis according to the targeted asset composition ratio in the investment plan at the start of investment of such funds (the same shall apply hereinafter).
(Note 5) FILP bonds are government bonds issued to finance the Fiscal Investment and Loan Program (FILP).

(2) Amount of investment returns

The amount of investment returns for fiscal 2018 is

+¥2,379.5 billion.

Interest and dividend income contributed to positive returns, despite unrealized losses in domestic equities.

					(Ui	nit: ¥billion)
		1Q	2Q	3Q	4Q	Total
	Total	2,622.7	5,414.3	-14,803.8	9,146.3	2,379.5
	Domestic bonds	61.4	-336.5	424.2	446.8	595.9
Investments	Domestic equities	419.9	2,423.0	-7,655.6	2,739.4	-2,073.2
	Foreign bonds	134.0	441.2	-718.2	840.4	697.5
Market	Foreign equities	2,003.0	2,882.3	-6,858.1	5,113.9	3,141.1
	Short-term assets	0.1	-0.1	-0.4	1.5	1.1
F	ILP bonds	4.3	4.3	4.3	4.3	17.2



(Note 1) Investment returns are gross of fees.

(Note 2) Due to rounding off, the sum of each item in individual quarters does not necessarily match the total number for the fiscal year.



(3) Cumulative returns and asset size since fiscal 2001

Cumulative returns from fiscal 2001 to fiscal 2018 are +¥65,820.8 billion and the value of investment assets at the end of fiscal 2018 is ¥159,215.4 billion



FY2001 FY2002 FY2003 FY2004 FY2005 FY2006 FY2007 FY2008 FY2009 FY2010 FY2011 FY2012 FY2013 FY2014 FY2015 FY2016 FY2017 FY2018



Asset size

Chapter 1

(Note) The balance of FILP bonds increased from fiscal 2001 to fiscal 2007 due to increased underwriting, and decreased since fiscal 2008 due to redemption on maturity.

(4) Investment income

Returns on investment assets are valued at market prices and can be classified into investment income (interest dividend income) and capital gains and losses (realized and unrealized gains or losses due to price fluctuations). Investment of the pension reserve is intended to deliver stable returns in accordance with a policy asset mix established from a long-term perspective. Therefore, investment income, which is generated stably from holdings of investment assets, is important. In particular, while market fluctuations may cause capital losses in the short term, investment income is relatively immune to such volatility and generates a continuous stream of positive return.

The breakdown of investment income shows that investment income from domestic and foreign equities has been increasing while that from domestic bonds has been decreasing in recent years.

In fiscal 2018, the total amount of investment income is

¥3,040.9 billion (rate of return: +1.91%),

and the cumulative amount of investment income for the 18 years since fiscal 2001, when GPIF started managing pension reserve, is

¥33,900.6 billion (rate of return: +1.62%[annual rate]).



Cumulative returns and investment income since fiscal 2001

-10,000 L FY2001 FY2002 FY2003 FY2004 FY2005 FY2006 FY2007 FY2008 FY2009 FY2010 FY2011 FY2012 FY2013 FY2014 FY2015 FY2016 FY2017 FY2018



Investment income

13

																		(Uni	t: ¥billion)
	Cumulative	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Domestic	14,232.9	390.5	439.0	488.5	626.3	720.8	827.5	1,038.4	1,225.7	1,255.9	1,180.9	1,076.1	968.3	952.4	855.1	672.3	577.9	498.4	438.9
bonds	(1.28%)	(1.49%)	(1.26%)	(1.03%)	(1.03%)	(1.10%)	(1.12%)	(1.21%)	(1.41%)	(1.51%)	(1.52%)	(1.50%)	(1.30%)	(1.36%)	(1.51%)	(1.27%)	(1.21%)	(1.12%)	(1.02%)
Domestic	6,140.0	44.7	64.4	99.2	123.9	165.3	210.2	244.1	266.3	234.3	266.0	303.2	324.8	366.6	445.7	607.5	684.3	782.4	907.0
equities	(1.58%)	(0.65%)	(0.87%)	(0.83%)	(1.00%)	(0.87%)	(1.10%)	(1.77%)	(2.34%)	(1.59%)	(1.98%)	(2.14%)	(1.85%)	(1.76%)	(1.41%)	(1.99%)	(1.95%)	(1.92%)	(2.35%)
Foreign	6,410.7	54.4	77.8	135.7	192.8	247.7	338.5	399.5	398.3	401.4	353.1	331.1	320.0	383.8	420.4	490.4	517.8	628.2	719.8
bonds	(3.23%)	(4.04%)	(3.06%)	(3.43%)	(3.33%)	(3.28%)	(3.73%)	(4.13%)	(3.98%)	(3.96%)	(3.75%)	(3.33%)	(2.71%)	(2.74%)	(2.31%)	(2.59%)	(2.63%)	(2.63%)	(2.59%)
Foreign	7,101.9	45.4	69.6	107.2	162.2	210.6	263.7	318.3	308.8	301.1	292.4	323.5	360.4	438.1	530.0	771.4	753.4	869.9	976.1
equities	(2.20%)	(1.19%)	(1.56%)	(1.81%)	(1.99%)	(1.96%)	(2.09%)	(2.92%)	(3.40%)	(2.27%)	(2.23%)	(2.48%)	(2.42%)	(2.22%)	(1.76%)	(2.48%)	(2.16%)	(2.25%)	(2.33%)
Total	33,900.6	537.8	651.8	831.4	1,106.0	1,347.9	1,640.7	2,000.8	2,199.4	2,193.7	2,093.2	2,034.1	1,973.9	2,141.1	2,253.2	2,542.4	2,533.4	2,778.9	3,040.9
	(1.62%)	(1.39%)	(1.30%)	(1.18%)	(1.27%)	(1.31%)	(1.43%)	(1.67%)	(1.87%)	(1.79%)	(1.80%)	(1.79%)	(1.64%)	(1.69%)	(1.64%)	(1.89%)	(1.75%)	(1.78%)	(1.91%)

(Note 1) Due to rounding off, the sum of the figures for each individual fiscal years does not necessarily match the cumulative amount of investment income. (Note 2) The figures for domestic bonds include investment income from FILP bonds (including convertible corporate bonds in fiscal 2001), while the total includes investment income from short-term assets.

(Note 3) The annual rate of return (cumulative) represents the geometric mean of the rates of return for individual fiscal years (annualized).

(5) Comparison to MHLW's investment return target



until retirement.

GP	IF's investment pei	rtorm	ance																		(Unit: %)
		FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	Last13years (annualized)	Last18years (annualized)
ance	Nominal investment return (After deducting interest on debts, investment management fees, etc.)	-4.01	-6.69	7.61	2.91	9.57	3.52	-4.69	-7.61	7.88	-0.27	2.29	10.21	8.62	12.24	-3.84	5.82	6.86	1.49	3.10	2.70
erform	Nominal rate of increase in wages	-0.27	-1.15	-0.27	-0.20	-0.17	0.01	-0.07	-0.26	-4.06	0.68	-0.21	0.21	0.13	0.99	0.50	0.03	0.41	0.95	-0.06	-0.16
ď	Real investment return	-3.75	-5.61	7.90	3.11	9.76	3.51	-4.63	-7.37	12.44	-0.95	2.51	9.98	8.48	11.14	-4.31	5.79	6.43	0.54	3.17	2.87

Investment return target assumed in the MHLW's financial valuation

																						(UIIII: %)
			FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017		Last13years (annualized)	
Г	on	Nominal investment	4.00	4.00	0.00	0.00	1.00	2.20	2.00	2 00	1 47	1 70	1 0 2	2.02	2 2 2	1 2 4	1.88	2.17	2.57	3.08	2.18	2.20
	ed in luati	return	4.00	4.00	0.80	0.90	1.60	2.30	2.60	3.00	1.47	1.78	1.92	2.03	2.23	1.34	1.61	1.88	2.13	2.42	2.05	2.11
	valt	Nominal rate of increase	2.50	2.50	0.00	0.60	1.30	2.00	2.30	2.70	0.05	3.41	2.66	2.81	2.60	1.00	2.47	2.52	3.56	3.73	2.44	2.14
	ds l	in wages	2.50	2.50	0.00	0.00	1.50	2.00	2.50	2.70	0.05	5.41	2.00	2.01	2.00	1.00	1.63	2.27	2.86	2.76	2.23	1.99
	Yields tuarial	Real investment return	1.46	1.46	0.80	0.30	0.30	0.29	0.29	0.29	1.42	1 5 0	0.72	-0.76	-0.36	0.34	-0.59	-0.35	-0.99	-0.65	-0.26	0.05
	ac	Rear investment return	1.40	1.40	0.60	0.50	0.50	0.29	0.29	0.29	1.42	-1.50	-0.72	-0.76	-0.50	0.54	-0.02	-0.39	-0.73	-0.34	-0.17	0.11

(11, 14, 0/)

(6) Investment assets and portfolio allocation

(Consolidated with GPIF and the Pension Special Account) Inside: policy asset mix (figures in parentheses indicate deviation limits) Outside: at the end of March 2019 **Foreign equities** 25.53% **Domestic bonds** ¥41,897.5 billion 26.30% ¥43,162.7 billion <u>25</u>% 35% $(\pm 8\%)$ ±10%) 15% Short-term assets(Note 5) ±4%) 7.67% 25% ¥12,587.1 billion **Foreign bonds** $(\pm 9\%)$ 16.95% ¥27,818.7 billion **Domestic equities** 23.55%

¥38,655.6 billion

	Market value (¥billion)	Allocation of pen- sion reserve (A)	Policy asset mix (B)	Deviation (A–B)
Domestic bonds	43,162.7	26.30%	35% (±10%)	-8.70%
Market investments	42,266.4	25.75%		—
FILP (Book value)	896.3	0.55%	—	—
bonds (Market value)	(957.6)	—	—	—
Domestic equities	38,655.6	23.55%	25% (±9%)	-1.45%
Foreign bonds	27,818.7	16.95%	15% (±4%)	1.95%
Foreign equities	41,897.5	25.53%	25% (±8%)	0.53%
Short-term assets	12,587.1	7.67%		—
Total	164,121.6	100.00%	100.00%	—

(Note 1) The figures above are rounded off, so the sum of each item does not necessarily match the total number.

(Note 2) The amounts in the Market value column include accrued income and accrued expenses.

(Note 3) The book value of FILP bonds is stated at amortized cost plus accrued income.

(Note 4) While the pension reserve as a whole includes reserves managed under a special account as of the end of fiscal 2018 (about ¥4.9 trillion), this amount is prior to the adjustment for revenues and expenditures and differs from the amount in the final settlement of accounts.

(Note 5) The Policy Asset Mix is as follows: Domestic bonds 35% (±10%), Domestic equities 25% (±9%), Foreign bonds 15% (±4%), Foreign equities 25% (±8%). Based on the current market trends, deviation limits for domestic bonds are flexibly managed as an interim measure. Specifically, short-term assets can be added to domestic bonds within the range allocated for domestic bonds.

(Note 6) The allocation for alternative investments is 0.26% (up to a maximum of 5% of total portfolio).

(1) Allocation changes for each asset class due to rebalancing

(Unit: ¥hillion)

				(Unit: ¥biilion)
	Domestic bonds	Domestic equities	Foreign bonds	Foreign equities
Allocated/withdrawn	-1,950.8	+29.3	+3,210.6	+96.0

(Note 1) Each figure shows the net rebalancing amount.

(Note 2) Redemptions and coupon revenue from the Special Fund for cash outflow were ¥2,159.4 billion. Coupon revenue from the Special Fund for FILP bonds was ¥17.2 billion.

(B) Factor analysis of difference from compound benchmark return

In fiscal 2018, the total rate of return against a compound representing an on all investment assets came to benchmark return of excess rate of return amounting to .92% % The average of the annual rate of return for the 13 years since the GPIF's while the compound benchmark The excess rate of return was establishment in fiscal 2006 on all rate of return was investment assets was 10% 0.03% 3.13%

GPIF breaks down the difference between the total rate of return on all investment assets and the compound benchmark rate of return into the following three factors to ascertain which factors contribute to the deviation.

- (i) Asset allocation factor: Deviations resulting from differences between the actual asset mix and the policy asset mix used as the basis for calculating the compound benchmark
- (ii) Individual asset factor: Deviations resulting from differences between the actual return on each asset class and the corresponding benchmark rate of return for that class

(iii)Other factors (including errors): Deviations involving both the asset allocation and individual asset factors in addition to calculation errors

(Note) Calculation errors come from differences in the methods used for calculating the rates of return on invested assets as a whole and on the compound benchmark.

In fiscal 2018, the return deviation attributable to asset allocation was -0.38%. Domestic bonds, which delivered a notably higher return than the compound benchmark return in the third quarter, were underweighted on average compared with the policy asset mix. The return deviation attributable to individual asset factors was +0.02% as a whole although there are positive and negative deviations depending on the asset class.

Factor analy	vsis of the	difference fr	om the com	pound bench	mark return i	n fiscal 2018
i actor anar	y 313 OI 111C	unrerence in	onn the com	pound benen	markietuini	11115cal 2010

-		-					(01111. 90)		
		Rate of return		Factor analysis of excess rate of return					
	Return of GPIF	Benchmark return	Excess rate of return	Asset allocation factor (1)	Individual asset factor (2)	Other factors (including error)(3)	(1)+(2)+(3)		
Total	+1.52	+1.92	-0.40	-0.38	+0.02	-0.04	-0.40		
Domestic bonds	+1.44	+1.39	+0.05	-0.14	+0.02	-0.00	-0.13		
Domestic equities	-5.09	-5.04	-0.05	-0.09	-0.02	+0.00	-0.11		
Foreign bonds	+2.70	+2.46	+0.24	-0.01	+0.03	+0.00	+0.02		
Foreign equities	+8.12	+8.21	-0.09	-0.06	-0.02	-0.00	-0.08		
Short-term assets	+0.02	+0.02	0.00	-0.08	0.00	0.00	-0.08		

(Note) The "compound benchmark return" is expressed in terms of an annualized rate calculated on the basis of the "compound benchmark rate return (monthly basis)," which was obtained by weight-averaging the benchmark rates of return on individual assets according to the shares in the policy asset mix (domestic bonds: 35%; domestic equities: 25%; foreign bonds: 15%; foreign equities: 25%).

Factor analysis of the difference from the compound benchmark return on overall assets (from fiscal 2006 to 2018)

		Rate of return		Fa	ctor analysis of e	excess rate of retu	rn
	Return of GPIF	Benchmark return	Excess rate of return	Asset allocation factor (1)	Individual asset factor (2)	Other factors (including error)(3)	(1)+(2)+(3)
FY2006-FY2018	3.10	3.13	-0.03	-0.03	+0.01	-0.01	-0.03
FY2006	4.56	4.64	-0.08	-0.06	-0.00	-0.02	-0.08
FY2007	-6.10	-6.23	+0.13	+0.17	-0.02	-0.02	+0.13
FY2008	-7.57	-8.45	+0.88	+0.90	-0.12	+0.11	+0.88
FY2009	7.91	8.54	-0.63	-0.70	+0.08	-0.01	-0.63
FY2010	-0.25	-0.02	-0.23	-0.26	+0.12	-0.09	-0.23
FY2011	2.32	2.59	-0.27	-0.19	-0.01	-0.07	-0.27
FY2012	10.23	9.00	+1.24	+1.40	+0.03	-0.19	+1.24
FY2013	8.64	7.74	+0.90	+0.92	-0.06	+0.04	+0.90
FY2014 from Apr.1 to Oct.30	3.97	3.50	+0.46	+0.47	-0.03	+0.02	+0.46
FY2014 from Oct.31 to Mar.31, 2015	8.19	9.98	-1.78	-1.99	+0.01	+0.19	-1.78
FY2015	-3.81	-3.81	+0.00	+0.21	-0.15	-0.06	+0.00
FY2016	5.86	6.22	-0.37	-0.66	+0.33	-0.04	-0.37
FY2017	FY2017 6.90 7.26		-0.37	-0.36	+0.00	-0.01	-0.37
FY2018	1.52	1.92	-0.40	-0.38	+0.02	-0.04	-0.40

(Note 1) The annual rate of return of GPIF's investment and benchmark rate of return represent the geometric mean of the rates of return in individual fiscal years (an annualize rate).

(Note 2) From fiscal 2006 to 2007, analysis was conducted on the difference between the rate of return on market investments (time-weighted rate of return) and the compound benchmark return. From fiscal 2008 onward, analysis has been conducted on the difference between the rate of return on overall invested assets including FILP bonds (modified total return) and the compound benchmark return.

(Unit: %)

(Unit: %)

9 Fees and expense

In fiscal 2018, total fees were

The average fee rate on the total investment assets for fiscal 2018 was

Total fees decreased by ¥19.3 billion from the previous fiscal year, despite an increase in total assets under management. The decline was partially attributable to a new performance-based fee structure, since some active asset managers failed to achieve the target excess return rate (for the performance-based fee structure, refer to page 53).

¥29.5 billion.

0.02%



Management and custodian fees by asset class

Management and	d custoc	lian fee	s by ass	et class								(U	nit: ¥billion)
	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Total	30.9	34.3	28.8	25.8	24.6	23.1	22.2	25.3	29.1	38.3	40.0	48.7	29.5
Domestic bonds	8.5	10.2	10.0	7.1	6.7	6.4	4.7	3.6	3.8	3.8	3.9	4.0	1.6
Domestic equities	9.8	9.6	7.0	6.6	6.5	6.2	5.9	7.8	5.7	8.3	8.8	10.6	7.5
Foreign bonds	4.9	6.3	6.1	6.0	5.6	5.2	5.7	6.8	8.5	9.1	12.5	17.2	9.2
Foreign equities	7.7	8.2	5.6	6.1	5.8	5.3	6.0	7.2	11.2	17.0	14.9	16.9	10.7
Alternative assets	—	—	—	—	_	—	—		—	—	0.0	0.0	0.3

(Note 1) Management and custodian fees are rounded off to the nearest ¥100 million.

(Note 2) The total includes fees and expenses related to short-term assets.

(Note 3) Fees paid to custodians exclude certain expenses that are deducted from the entrusted assets, such as custody fees and attorney fees.

Average fee rate	against	externa	illy man	aged as	sets								(Unit: %)
	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Total	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02
Domestic bonds	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.01
Domestic equities	0.05	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.02	0.03	0.03	0.03	0.02
Foreign bonds	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.07	0.08	0.04
Foreign equities	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.05	0.05	0.05	0.04	0.03
Alternative assets	—	_	_	_	_	_	_	_	_	_	_	0.14	0.23
Average balance (¥trillion)	107.7	120.2	119.6	123.9	118.1	112.0	111.5	123.9	131.9	139.0	137.3	155.7	158.9

Average fee rate against externally managed assets

(Note 1) Total includes in-house investment assets.

(Note 2) The average balance includes in-house investment assets. For FILP funds managed in-house investment, average monthly book values calculated by the amortized cost method are used.

(Column) Comparison of Investment Cost between GPIF and Major Overseas Public Pension Funds

GPIF's average investment cost over the past 13 years is 0.04%, which is lower than that of overseas public pension funds. Average investment cost for overseas public pension funds include the nine institutions below^(Note 1). The reasons for GPIF's low investment costs are: (1) the majority of GPIF's holdings are allocated to passive funds, and (2) we constantly strive for our management efficiency.



(Note 1) Canada Pension Plan Investment Board (CPPIB: Canada), The Government Pension Fund Global (GPFG: Norway), California Public Employees' Retirement System (CalPERS: the U.S.), California State Teachers' Retirement System (CalSTRS: the U.S.), Swedish National Pension Fund (AP1, AP2, AP3, AP4: Sweden) and National Pension Service (NPS: South Korea)

(Note 2) Investment cost includes investment management fees, general and administrative expenses, and operational expenses.



[2] Portfolio risk management

The purpose of investment management of a pension reserve is to contribute to the stable management of a public pension scheme into the future through stable and efficient management from a long-term perspective solely for the benefit of the pension beneficiaries. Based on this principle, GPIF performs portfolio risk management in accordance with the following basic policies.

- (1) GPIF formulates a policy asset mix and appropriately manages it to ensure the achievement of investment return required for the pension finances with the minimum risk.
- (2) GPIF adopts a basic principle for risk management of diversifying investment portfolios across multiple asset classes having different risk-return profiles, etc.
- (3) GPIF performs risk management at each level of the overall asset portfolio, asset class, and external asset manager, etc., as well as ensuring the achievement of the benchmark rate of returns for each asset class.
- (4) GPIF carries out flexible investment based on a proper outlook for the market environment, within a permissible range of deviation for the policy asset mix, upon thorough analysis on the current trends marked by the fast-changing economic and market environment. Meanwhile, GPIF's investment should not, by any means, be based on a speculative outlook on the market environment, but rather upon a highly reliable one.
- (5) Although there are short-term fluctuations in market prices, GPIF aims to earn investment returns more stably and efficiently by taking advantage of its long-term investment horizon and maintain the liquidity necessary for a pension payout. In order to assure liquidity, GPIF takes appropriate measures including selling assets in a smooth manner, while giving consideration to market price formation, securing assets without shortage.
- (6) Regarding investment and management of the pension reserve, GPIF constantly strives to strengthen its expertise, clarify the system of accountability, and implement thorough compliance with the duty of care and fiduciary duty of a prudent expert.

Market risk	The risk of changes in the value of portfolio assets, including derivatives, due to fluctuations in various market risk factors such as interest rates, foreign exchange rates, equities, and alternative assets
Liquidity risk	The risk of facing a difficulty in securing necessary funds or incurring losses due to being forced to raise funds at an interest rate significantly higher than normal, resulting from reasons such as an unexpected increase in cash outflow (cash management risk) and the risk of incurring losses resulting from the inability to conduct market transactions due to confusion in the market or being forced to conduct market transactions due to a such as a priced to conduct market transactions at prices significantly more disadvantageous than normal (market liquidity risk)
Credit risk	The risk of incurring losses due to reduction or elimination of the value of assets, including derivatives, due to factors such as deterioration in the financial position of issuers of the portfolio assets, institutions entrusted with asset management, etc. or counterparties of derivatives transactions
Country risk	The risk of incurring losses in foreign assets due to foreign currency situations or political and economic conditions of countries relevant to the said assets





In accordance with the Portfolio Risk Management policy, GPIF performs risk monitoring and reporting, to each committee, periodically and as necessary, based on domestic and overseas macroeconomic trends and geopolitical risks, as well as various risk management indicators including tracking errors, Value at Risk (VaR) and stress tests, and implements appropriate measures that take into account long-term risk-return profiles.

To better understand and analyze the investment risk of its entire portfolio, GPIF uses Aladdin[®] provided by BLACKROCK SOLUTIONS[®] that adopts a multifactor model to analyze tracking error, VaR, stress tests based on past market events and various hypothesis scenarios, and profit and loss simulations of changes in equity prices and/or exchange rate fluctuations, etc. It is important not to focus on a specific risk indicator but rather to monitor various risk indicators to enhance portfolio risk management.

These risk management indicators are appropriate to monitor short-term risks. However, considering that longterm perspective is crucial to carry out investment management of the pension reserve fund safely and efficiently, long-term risk management takes a higher priority for GPIF. With respect to long-term risk management, GPIF performs a periodic verification of the risk to the policy asset mix to examine the risk that the reserve asset might fall short of the planned reserve asset in the projected pension finance.

GPIF promotes ESG investment, because it is a method used for portfolio risk management from a long-term perspective in terms of reducing the negative impacts of various environmental, social and governance issues on the portfolio in the long run.

In fiscal 2018, GPIF established the Portfolio Risk Management policy with the objective of enhancing the portfolio risk management based on the Internal Control Policy. We clarified each risk in order to ensure that they do not overlap and to cover all the risks based on the Portfolio Risk Management Policy. In addition, we enhanced the rules for country risk management. We also strengthened our information gathering and research functions on domestic and overseas macroeconomic trends and geopolitical risks, etc. and enhanced our country risk analysis and forwardlooking analysis capabilities. Regarding investment in alternative assets, GPIF strengthened the risk management system by enhancing the middle office function to adopt a multilayered check and balance system following the fullscale launch of investment in infrastructure and real estate based on a discretionary investment mandate (multi-manager investment strategy). (For details, refer to page 37.)



(Note 1) Classifications of countries are determined by the countries of issuers for bond investment and by MSCI Country Classification for equity investment. (Note 2) The figure for China excludes that for Hong Kong.

Asset Allocation, Tracking Errors and VaR

Changes in asset allocation during fiscal 2018 stayed within the permissible range throughout the fiscal year. The estimated tracking error *¹ of the entire pension reserve was stable throughout the fiscal year, without major changes. The VaR *² of the overall pension reserve mostly leveled off throughout the fiscal year.

*¹Tracking error measures the standard deviation of the difference (excess rate of return) between the benchmark rate of return and the rate of return of an investment portfolio.

*2 VaR indicates the largest loss likely to be suffered on an investment portfolio assuming a certain holding period with a given probability (confidence level).



Asset allocation

(Note 1) Asset allocation is calculated including reserves managed in the Pension Special Account.

(Note 2) The permissible range of deviation is ± 10% for domestic bonds, ± 9% for domestic equities, ± 4% for foreign bonds, and ± 8% for foreign equities.

Based on the current market trends, deviation limits for domestic bonds are flexibly managed as an interim measure. Specifically, short-term assets can be added to domestic bonds within the range allocated for domestic bonds.



Estimated tracking error and VaR of overall pension reserve

(Note) VaR is calculated using the delta method over a one-year holding period and two-year observation period.

2 | Status of Investment in Each Asset Class

[1] Domestic bonds

① Excess rate of return

Concerning domestic bond investment (market investment), the excess rate of return over the benchmark was +0.05% (+0.11% for active investment and +0.03% for passive investment). In active investment, the return outperformed the benchmark due to the positive contributions of security

selection in the government bond sector. In passive investment, the return was comparable with the benchmark. For overall domestic bond investment, the rate of return was in line with the benchmark.

2 Contribution analysis of excess rate of return

The breakdown of the excess rate of return ($\pm 0.05\%$) on domestic bond investment (market investment) by factor is as follows: fund factors^{*1}: $\pm 0.05\%$; benchmark factors^{*2}: $\pm 0.00\%$; other factors^{*3}: $\pm 0.00\%$.

Time-weighted rate of return (1)	Benchmark (2)	Excess rate of return (1)–(2)	Fund factors	Benchmark factors	Other factors
1.43	1.38	+0.05	+0.05	+0.00	-0.00

The excess rate of return was positive mainly because the rate of return on active investment using NOMURA-BPI plus Inflation-Linked bonds as the manager benchmark was higher than the rate of return of the manager benchmark (a fund factor).

Factor analysis by manager benchmarks, etc.

	NOMURA-BPI (excluding ABS) (passive)	NOMURA-BPI government bonds (passive)	NOMURA-BPI/ GPIF Customized (passive)	NOMURA-BPI plus Infration-Linked bonds (active)	Inflation- linked bonds (active)	Alternative (active)	Total
Fund factors	+0.00	+0.01	+0.01	+0.02	+0.00	-0.00	+0.05
Benchmark factors	+0.06	+0.22	-0.18	+0.08	-0.18	+0.00	+0.00

*1 Fund factors refer to those resulting from differences in rates of return between individual funds and manager benchmarks. They are calculated taking into consideration the market total average balance of each fund. The manager benchmark for inflation-indexed domestic-bond funds is calculated using NOMURA-Inflation-Linked bonds (with the principal repayment guaranteed).

*² Benchmark factors refer to those resulting from differences in the rates of return between manager benchmarks and the benchmark (a compound index consisting of NOMURA–BPI [excluding ABS], NOMURA–BPI government bonds, NOMURA–BPI/GPIF Customized, NOMURA–Inflation-Linked bonds [with the principal repayment guaranteed] and NOMURA-BPI plus Inflation-Linked bonds [weighted average according to each asset type's share of the investment amount]). They are calculated taking into consideration the market total average balance of each fund.

*3 Other factors refer to calculation errors and such.

(Ilnit·%)

[2] Foreign bonds

1 Excess rate of return

The excess rate of return over the benchmark was +0.24% (+0.89% for active investment and -0.16% for passive investment). In active investment, the excess return was positive mainly because the market value composition of EUR bonds was underweight relative to the benchmark and

the market value composition of USD bonds was overweight relative to the benchmark. In passive investment, the excess return was negative mainly because the market value composition of EUR bonds was overweight relative to the benchmark.

2 Contribution analysis of excess rate of return

The breakdown of the excess rate of return (+0.24%) on foreign bond investment by factor is as follows: fund factors*1: -0.13%; benchmark factors*2: +0.40%; other factors*3: -0.04%. (Unit: %)

Time-weighted rate of return (1)	Benchmark (2)	Excess rate of return (1)–(2)	Fund factors	Benchmark factors	Other factors
2.70	2.46	+0.24	-0.13	+0.40	-0.04

The positive excess rate of return reflected the outperformance of the manager benchmarks for global and the U.S. aggregate investments relative to the benchmark for foreign bonds (a benchmark factor).

Factor analysis	Factor analysis by manager benchmarks, etc.(Unit: %)												
	WGBI (passive)	WGBI others (passive)	5	U.S. government JPY hedged(passive)	5	1.5	Europe government JPY hedged (passive)						
Fund factors	+0.07	-0.00	-0.01	-0.00	+0.00	+0.01	-0.00						
Benchmark factors	0.00	+0.00	+0.06	+0.02	+0.07	-0.36	+0.05						

(Unit: %)

	Global aggregate (active)	U.S. aggregate (active)	Europe aggregate (active)	Inflation-linked (active)	U.S. high-yield (active)	Europe high-yield (active)	Emerging U.S. dollar (active)	Emerging local currency (active)	Alternative (active)	Total
Fund factors	-0.17	+0.01	-0.01	+0.00	-0.00	+0.00	-0.01	-0.00	-0.01	-0.13
Benchmark factors	+0.42	+0.24	-0.11	-0.00	+0.08	-0.04	+0.02	-0.06	0.00	+0.40

*1 Fund factors refer to those resulting from differences in rates of return between individual funds and manager benchmarks. They are calculated taking into consideration the market total average balance of each fund.

*2 Benchmark factors refer to those resulting from differences in rates of return between manager benchmarks and the benchmark (FTSE World Government Bond Index [not incl. JPY, no hedge/JPY basis]). They are calculated taking into consideration the balance of the average market capitalization of each fund.

*³ Other factors refer to calculation errors and such.

(3) Domestic equities

① Excess rate of return

The excess rate of return over the benchmark was -0.05% (-1.62% for active investment and +0.13% for passive investment). In active investment, security selection in chemicals and land transportation sectors contributed to

the underperformance relative to the benchmark. In passive investment, the excess return was positive reflecting the outperformance of the benchmarks such as S&P GIVI Japan relative to TOPIX.

(2) Contribution analysis of excess rate of return

The breakdown of the excess rate of return (-0.05%) on overall domestic equity investment by factor is as follows: fund factors^{*1}: -0.15%; benchmark factors^{*2}: +0.13%; other factors^{*3}: -0.03%.

Time-weighted rate of return (1)	Benchmark (2)	Excess rate of return (1)–(2)	Fund factors	Benchmark factors	Other factors
-5.09	-5.04	-0.05	-0.15	+0.13	-0.03

The negative excess rate of return reflected the underperformance of the returns of the individual funds of active investment (TOPIX and RUSSEL/NOMURA Large Cap Value) relative to the manager benchmarks (a fund factor).

Factor analysis by manager benchmarks, etc.

	TOPIX (passive)	JPX Nikkei 400 (passive)	RUSSELL/ NOMURA Prime (passive)	MSCI Japan Standard (passive)	MSCI Japan ESG Select Leaders (passive)	MSCI Japan Empowering Women (passive)	FTSE Blossom Japan(passive)	S&P/JPX Carbon Efficient (passive)	S&P GIVI Japan (passive)	NOMURA RAFI (passive)
Fund factors	-0.01	-0.00	+0.00	-0.00	-0.00	-0.00	-0.00	+0.00	+0.00	-0.00
Benchmark factors	0.00	+0.04	+0.01	+0.01	+0.04	+0.02	-0.01	+0.00	+0.06	-0.02

							(Unit: %)
	TOPIX (active)	RUSSELL/ NOMURA Large Cap Value (active)	RUSSELL/ NOMURA Small Cap (active)	RUSSELL/ NOMURA Small Cap Growth (active)	MSCI Japan Small (active)	Alternative (active)	Total
Fund factors	-0.07	-0.06	+0.01	+0.01	-0.03	+0.00	-0.15
Benchmark factors	0.00	+0.03	-0.01	-0.01	-0.01	0.00	+0.13

*¹ Fund factors refer to those resulting from differences in rates of return between individual funds and manager benchmarks. They are calculated taking into consideration the market total average balance of each fund.

*² Benchmark factors refer to those resulting from differences in rates of return between manager benchmarks and the benchmark (TOPIX [dividends included]). They are calculated taking into consideration the market total average balance of each fund.

*3 Other factors refer to calculation errors and such.

(Unit: %)

(4) Foreign equities

1 Excess rate of return

The excess rate of return over the benchmark was -0.09% (+0.85% for active investment and -0.09% for passive investment). In active investment, the return outperformed the benchmark because of the positive contributions of the portfolio being underweight in the bank sector in terms of the market value composition relative to the benchmark, security selection in the healthcare equipment and services

sector, and other factors, in the developed-country markets. In the emerging-country markets, the portfolio being overweight in the energy sector in terms of the market value composition, security selection in the consumer durables and apparel sector contributed positively, and other factors. In passive investment, the return was in line with the benchmark.

2 Contribution analysis of excess rate of return

The breakdown of the excess rate of return (-0.09%) on foreign equity investment by factor is as follows: fund factors^{*1}:-0.16%; benchmark factors^{*2}: +0.11%; other factors^{*3}: -0.04%.

Time-weighted rate of return (1)	Benchmark (2)	Excess rate of return (1)–(2)	Fund factors	Benchmark factors	Other factors
8.12	8.21	-0.09	-0.16	+0.11	-0.04

The underperformance of active investment in developed-country markets and passive investment in ACWI relative to the manager benchmarks (a fund factor) made negative contributions.

(Un								(Unit: %)		
	ACWI (passive)	North America (passive)	Europe& Middle East (passive)	Pacific (passive)	Emerging (passive)	S&P Carbon (passive)	Developed (active)	Emerging (active)	Alternative (active)	Total
Fund factors	-0.07	-0.00	-0.00	-0.00	-0.00	-0.01	-0.09	+0.01	+0.00	-0.16
Benchmark factors	-0.01	-0.01	-0.01	+0.01	-0.03	-0.00	+0.25	-0.10	-0.00	+0.11

*¹ Fund factors refer to those resulting from differences in rates of return between individual funds and manager benchmarks. They are calculated taking into consideration the market total average balance of each fund.

*2 Benchmark factors refer to those resulting from differences in rates of return between manager benchmarks and the benchmark (MSCI ACWI [not incl. JPY, JPY basis, incl. dividends, after taking into account our dividend tax factors]). They are calculated taking into consideration the market total average balance of each fund.

*³ Other factors refer to calculation errors and such.

Easter analysis by investment styles

[1] Overview

1 Investment purpose

Alternative assets have different risk-return profiles from traditional assets such as listed equities and bonds, and are less affected by price volatility in the public market, etc. Considering these profiles, the inclusion of alternative assets in GPIF's portfolio is expected to improve the investment efficiency and contribute to the stability of pension finance. In addition, as a long-term investor, GPIF can expect a premium by taking a liquidity risk for investments in alternative assets.

3 Investment in Alternative Assets

Pension funds in other countries have been promoting diversification by investing in alternative assets for the aforementioned characteristics and effects. Prior to starting investment in alternative assets, GPIF carried out careful examinations in commissioned research projects. In particular, the research conducted in fiscal 2012 reported that the inclusion of alternative investments is expected to realize investment premium for liquidity and improve the efficiency of investment through diversification. By taking into account the results of such research projects, GPIF has increased investments in alternative assets since fiscal 2017. The current Medium-term Plan (from fiscal 2015 to fiscal 2019) approved by the Minister of Health, Labour and Welfare, permits investments in alternative assets (infrastructure, private equity and real estate) up to 5% of the total portfolio.



(2) Investment history

Based on the results of the above-mentioned commissioned research projects, GPIF has been investing in alternative assets through a co-investment platform with institutional investors since 2013 (in infrastructure since fiscal 2013 and in private equity since fiscal 2015).

In fiscal 2017, GPIF started calling for applications from asset managers for alternative assets through the Asset Manager Registration System and went through the screening process for external asset managers for executing customized multimanager strategies* for GPIF based on a discretionary investment management agreement.

GPIF has worked continuously to develop the organization for investing in alternative assets by various measures, such as by establishing a specialized unit (Private Market Investment Department), employing experts, examining investment strategy by external advisors (since fiscal 2015) and developing a risk management framework. Considering the individuality of the investment performance and the low liquidity of alternative assets, risk management at the time of investment evaluation and after execution of investment is an important issue. GPIF will strive continually to enhance the framework for investing in alternative assets, including risk management.

* Multi-manager strategy is an investment approach of selecting multiple funds and an individual asset manager who invests in those funds. GPIF invests in a fund-of-funds set up by asset managers who employ a multimanager strategy. GPIF gives discretion to the appointed external asset managers to make all investment decisions.



③ Activities in fiscal 2018

A. Call for application, selection of Gatekeepers and Fund of Funds managers

Following on from last year, GPIF called for applications from external asset managers in alternative assets by utilizing the Asset Manager Registration System and went through the screening process to select external asset managers that execute customized multi-manager strategies for GPIF. To select asset managers, a GPIF team conducts several rounds of screening, including documents check, interviews, and on-site visits with external advisors to carefully examine the capabilities, investment strategies, investment track record, and risk management system, etc. of the managers.



The amount of capital deployed by appointed managers has increased, and the total value of GPIF's investment in alternative assets as of the end of March 2019 is ¥432.7 billion (0.26% of the total value of the pension reserve fund). Investments are conducted based on a discretionary investment management agreement. Appointed asset managers invest in funds in accordance with the pre-agreed guidelines that define investment objectives, strategies and certain restrictions, etc.

After the start of investment, GPIF receives a periodic report on the status of portfolio assets and monitors the performance and risks. In addition, GPIF conducts annual comprehensive evaluation of external asset managers, and properly manages investment by confirming that their fund management team composition has not changed and by monitoring the progress of their investment plans. Total value of alternative assets up until fiscal 2018



B. Development in preparation for investment in limited partnerships (LPs)

By revising Ordinance for Enforcement of the GPIF Act in September 2017, interests in limited partnerships (LPs) as limited partners were added to the securities in which GPIF may invest. The expected benefits of investing in LPs include faster access to information on investees, improvement of net returns, and enhancing risk management through simplified investment scheme with fewer intermediaries involved between investors and investees. Thus, investment in LPs has been generally adopted by institutional investors including pension funds in other countries to invest in alternative assets. Following the revision of the Ordinance, GPIF started to develop a framework including staff plan, etc. to launch investment in LPs from fiscal 2017. In fiscal 2018, GPIF continued to facilitate an implementation plan based on the framework.

[2] Infrastructure

1 Overview

Infrastructure investment is defined as investment in infrastructure such as power generation facilities, electricity transmission systems, gas pipelines or railways. Infrastructure investment is expected to generate stable revenue over the long term, for example, from usage fee. Therefore, investing in infrastructure funds has become an important strategy for pension funds in other countries.

Currently, GPIF mainly focuses on Core infrastructure, which is essential for social and economic activities under a wellestablished regulatory environment by the authorities and that can be expected to generate stable usage fees, etc. based on long-term contracts. Investments in infrastructure assets will be generally held for a long time, that is, for more than 10 years. The investments in infrastructure assets will be eventually recovered through the sale of infrastructure assets to other investors and other means.



2 GPIF's investment

A. Investment approach

GPIF aims to achieve stable mainly returns from investment income in a timely and efficient manner, in consideration of various market conditions with the focus on diversified Core infrastructure assets.

B. Investment objectives and scheme

GPIF will mainly invest in equity stakes of operational infrastructure assets and infrastructure debt backed by the income stream from operating infrastructure assets.

(i) In-house investment in a unit trust

Based on the co–investment agreement with the Ontario Municipal Employees Retirement System (OMERS), a Canadian public pension fund with an extensive track record in infrastructure investment, and the Development Bank of Japan Inc. (DBJ), GPIF has invested in a unit trust that targets operational infrastructure assets in developed countries since February 2014.

(ii) Discretionary investment

In fiscal 2018, GPIF committed to the following funds, and the funds constructed diversified investment portfolios focused on core infrastructure assets.

Asset manager name	Investment style	Start of investment
Gatekeeper: Sumitomo Mitsui Asset Management Company, Limited Fund of Funds Manager: StepStone Infrastructure & Real Assets	Global-Core	January 2018
Gatekeeper: Nomura Asset Management Co., Ltd. Fund of Funds Manager: Pantheon	Global-Core	February 2018
Gatekeeper and Fund of Funds Manager: DBJ Asset Management Co., Ltd.	Global infrastructure mandate focusing mainly on opportunities in Japan	March 2018

C. Investment status

The total value of GPIF's infrastructure investment as of the end of March 2019 was ¥293.5 billion.

The breakdown of portfolio by country shows the UK with the largest share at 45%, followed by Sweden and the U.S. both at 11%. As for the breakdown of the portfolio by infrastructure assets sector, the largest share went to port at 19%, followed by airport at 18% and water supply and sewerage at 16%. GPIF expects stable revenue to be generated mainly from its diversified core infrastructure portfolio. Internal rate of return (IRR) from the foreign infrastructure investment stood at 1.76% in USD terms, and IRR from the domestic infrastructure investment stood at 2.78% in JPY terms since its inception in February 2014. The total dividend received during the previous fiscal year was ¥1.3 billion.



[Infrastructure investment case 1]

Wind power generation facilities —Portugal—

GPIF has invested in a major wind power operating company in Portugal through an infrastructure fund that mainly invests in infrastructure assets in Europe. The investee company operates the second-largest portfolio of 27 wind power generating facilities in Portugal with a total power-generating capacity of 1,082 MW. The company earns stable revenue on a long-term basis by selling the electricity generated under the feed-in tariff framework.



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[Infrastructure investment case 2]

Telecommunications tower operating company —France—

GPIF has invested in the largest independent telecommunications tower operating company through an infrastructure fund that mainly invests in infrastructure assets in OECD countries. The company owns approximately 10,000 telecommunications towers including wireless communications towers and roof-mounted communications towers, and operates the communication infrastructure necessary for people's daily live in collaboration with major telecommunication carriers to meet the growing demand for high-speed data transmission across France.



[Infrastructure investment case 3]

Solar power generating facility —Japan—

GPIF has invested in a fund that owns a large solar power generating facility (mega-solar plant) in Japan that has a track record of stable operation of more than over five years. The facility earns stable revenue on a long-term basis by selling the electricity generated under the feed-in tariff framework.

The plant's premises are home to one of the national endangered species of fauna and flora in Japan. The facility secures approx. 10,000m² of habitat conservation area for the consideration to the species.



[3] Private equity

1 Overview

In private equity, GPIF invests primarily in funds with focus on equities of private companies (private equity [PE] funds). PE funds generally seek investment opportunities in companies at various development stages while diversifying investment timing. Types of PE funds include Buyout funds (seeking to create enterprise value of investee companies by improving post-investment management practices and corporate governance), Growth equity funds (providing capital for growth and expansion of companies), Venture capital funds (investing in start-up and early stage companies, etc. for growth potential), Turnaround funds (seeking opportunities to turn around companies facing financial challenges through balance sheet restructuring, etc.), and Private debt funds (investing in debt instruments of private companies). GPIF makes diversified investments in PE funds of these types.

(2) GPIF's investments

A. Investment approach

GPIF makes diversified investment primarily in equities of private companies at various stages of corporate development, such as start-up, growth, expansion, and turnaround, with the aim of acquiring relatively higher investment returns driven mainly by enterprise value creation, and contributing to the improvement of GPIF's overall portfolio returns.

B. Investment objectives and scheme

GPIF will invest in equities (private equity [PE]) and debts (private debts) of private companies.

(i) In-house investment in a unit trust

Based on the co-investment agreement with DBJ and the International Finance Corporation (IFC), a member of the World Bank Group, GPIF has held a unit trust that invests in PE of consumer-related companies, etc. in emerging markets since June 2015. The objective is to gain investment returns from the growth of the global economy in a well-balanced manner by adjusting the bias toward particular sectors in emerging markets public equity and investing in the strong potential for growth from favorable demographic shifts and economic developments down the road, such as consumer-related companies.

(ii) Discretionary investment

In fiscal 2017, GPIF started the process of selecting external asset managers under a discretionary investment management agreement (multi-manager investment strategy) through the Asset Manager Registration System.

C. Investment status

The total value of GPIF's private equity investment as of the end of March 2019 was ¥14.3 billion. The return profile of private equity investment generally follows a J-curve pattern (funds experience negative returns for the first several years due to cash outflows during the initial phase of building an investment portfolio). However, in the 45 months since GPIF started investment in the unit trust, the value of the investment portfolio has steadily increased and the portfolio has achieved positive returns from investment in some investee companies. As a result, as of the end of March 2019, GPIF's private equity investment recorded an internal rate

of return (IRR) of 3.43% in USD since its inception, (an IRR of -5.85% in USD as of the end of March 2018).

Looking at the breakdown of investee companies by country/region and by sector, the investment portfolio is diversified into various countries and growth sectors in emerging countries as expected. For the next step, GPIF plans to expand its diversified investment portfolio by investing primarily in developed countries through a discretionary investment management agreement (multi-manager investment strategy).



[4] Real estate

1 Overview

GPIF's real estate investment focuses on real estate funds that hold properties such as offices, retails, multi-family and logistics.

GPIF implements "core-style" investment strategy, which is expected to generate continuous and stable rental income from tenants, and this strategy has been adopted as the major investment strategy by pension funds in other countries. In the meantime, it is important to diversify the timing of investment and the type of investment products, consideration of the fact that the real estate market has cycles (prices fluctuate according to supply and demand and the financial market, etc.) and each investment amount/units tends to be relatively large. At the same time, it is necessary to engage asset managers and/or property managers, etc. to sustain asset value over the long term.

(2) GPIF's investments

A. Investment approach

GPIF aims to earn stable returns based primarily on income by diversified investment with the focus on core-style real estate funds in a timely and efficient manner by giving consideration to the market circumstances.

B. Investment objectives and scheme

GPIF will mainly invest in private real estate equities and debt backed by the income stream from such real estate assets.

(i) Discretionary investment

In fiscal 2018, GPIF selected an external investment manager for a foreign real estate mandate. In addition to the domestic funds investment started in fiscal 2017, GPIF has been building a diversified investment portfolio focused on its core-style investment strategy.

Asset manager name	Investment style	Start of investment
Gatekeeper and Fund of Funds Manager: Mitsubishi UFJ Trust and Banking Corporation	Japan-Core	December 2017
Gatekeeper: Asset Management One Co., Ltd. Fund of Funds Manager: CBRE Global Investment Partners Limited	Global-Core	September 2018

C. Investment status

The total value of real estate investment as of the end of March 2019 was ¥124.9 billion.

As for the breakdown of domestic real estate investment portfolio by property type, logistics accounted for the largest share at 31% of the total portfolio, followed by retail at 23%, office at 19%, and multi-family at 17%. GPIF also has a diversified portfolio of foreign real estate investment focused on core-style real estate funds in advanced countries*. GPIF's domestic real estate investment has recorded an IRR of 2.30% since its inception in December 2017. The total dividend received during fiscal 2018 was ¥0.3 billion. We will continue investing in real estate funds, while paying attention to the market circumstances, advised by external consultants.

* The status of investment in foreign real estate is not included in this report because the accounting periods of investee funds have not ended. Relevant information is provided in "(Column) Global Real Estate Investment Market."



Value by asset type: domestic real estate

[Real estate investment case 1]

Retail —U.S.—

GPIF has invested in a fund that owns a portfolio of assets comprising of several "High Street" properties located on 5th Avenue and Times Square in Midtown Manhattan, New York*. The majority of properties in this portfolio has long-term lease agreements with multiple "class A" tenants including luxury brand stores.



* GPIF implemented evaluating investment in this fund during fiscal 2018 and started investing in April 2019. Accordingly, this is not reflected in the performance and assets for fiscal 2018.

[Real estate investment case 2]

Office —U.S.—

GPIF has invested in a fund that owns office buildings/R&D facilities located adjacent to the campus of the Massachusetts Institute of Technology (MIT) in the Boston/Cambridge area, where life science-related companies and research institutions are concentrated and rapidly growing*. Tenants include major pharmaceuticals companies.



* GPIF implemented evaluating investment in this fund during fiscal 2018 and started investing in May 2019. Accordingly, this is not reflected in the performance and assets for fiscal 2018.

[Real estate investment case 3]

Retail —Japan—

GPIF has invested in a fund that owns a large, prime retail facility located in the central area of Chuo-ku, Tokyo. This houses diverse types of tenants, including global-brand flagship stores.



[Real estate investment case 4]

Logistics —Japan—

GPIF has invested in a fund that owns a large logistics facility located in Koto-ku, the Tokyo Bay area. The property has a long-term lease agreement with a leading logistic company. Demand for logistics facilities is rapidly growing with the expansion of e-commerce, and a large-scale logistic facility located in central Tokyo Bay has a competitive advantage due to a scarcity of supply pipe-line.



[Real estate investment case 5]

Private REITs

Since the start of domestic real estate investment in January 2018, GPIF has invested in eight private REITs with diversified portfolios, and their total market value as of the end of March 2019 was ¥15.6 billion.

Portfolio holdings of private REIT as of the end of March 2019

Private REIT name	Asset manager name	Market value (¥billion)
SG ASSETMAX-REIT	SG ASSETMAX CO., LTD.	1.5
DBJ PRIVATE INC.	DBJ ASSET MANAGEMENT CO., LTD.	1.3
DREAM PRIVATE REIT INC.	DIAMOND REALTY MANAGEMENT INC.	2.7
NIPPON OPEN ENDED REAL ESTATE INVESTMENT CORPORAION	MITSUBISHI JISHO INVESTMENT ADVISORS, INC.	2.3
NIPPON TOCHI-TATEMONO PRIVATE REIT INC.	NITTOCHI ASSET MANAGEMENT CO., Ltd.	1.4
NOMURA REAL ESTATE PRIVATE REIT, INC.	NOMURA REAL ESTATE ASSET MANAGEMENT CO., LTD.	2.0
BROADIA PRIVATE REIT, INC.	TLC REIT MANAGEMENT INC.	2.6
MITSUI FUDOSAN PRIVATE REIT INC.	MITSUI FUDOSAN INVESTMENT ADVISORS, INC.	1.8
Total		15.6

* Funds are listed in the order of the Japanese syllabary.

* The name of funds are as of the end of March 2019.
In fiscal 2018, GPIF selected its "first external investment manager for foreign real estate mandate" and started investments mainly in core-style real estate funds in advanced economy markets.

The foreign real estate investment market is large. Real estate funds in those markets have attracted many institutional investors including pension funds and sovereign wealth funds of various countries.



(Source) MSCI Real Estate Market Size 2017

Among others, the open-ended fund* market in the U.S. is recognized as the most mature market given its long history and large size. The market has many core-style real estate funds that make diversified investment in multiple property types, such as office, retails, multi-family housing, and logistics located in multiple cities. They have attracted institutional investors that pursue stable income on a long-term basis. GPIF also started investing in global real estate through this market.

The following chart shows trends in net asset value and annual rate of return of core-style open-ended funds that employ a diversified investment strategy, published by the National Council of Real Estate Investment Fiduciaries (NCREIF) since 2010.



* Open-ended funds in the U.S.: These funds have the following similar profiles with Japanese private REITs: (i) they are unlisted and thus less affected by volatility in the public equity market; (ii) their investment units have a certain degree of liquidity; and (iii) they have going-concern investment periods without a specific horizon.

[5] Portfolio risk management

In fiscal 2018, the portfolio risk management system for alternative investment has been enhanced, with substantial capital deployment by discretionary asset managers (multimanager investment strategy) for infrastructure and real estate. The key issues of risk management were sorted out for the processes of selecting candidates for external asset managers and monitoring pre and post investment phase. Collaboration between risk management department responsible for the entire GPIF and the Private Market Investment Department were facilitated, enabling more elaborate risk management.



Portfolio risk management system for alternative investments

In September 2017, interests in limited partnerships (LPs) as limited partners were added to the securities in which GPIF may invest by revising the Ordinance for Enforcement of the GPIF Act (refer to page 27). GPIF has been working continuously on strengthening its risk management framework.

4 | Stewardship Responsibilities

[1] Objectives and significance of stewardship activities

In its Investment Principles and the Code of Conduct, GPIF stipulates that it promotes activities to fulfill its stewardship responsibilities (hereinafter "stewardship activities") with the objectives of appropriately fulfilling its responsibilities to pension beneficiaries, as their fiduciary, and increasing investment returns over the medium to long term. The Investment Principles were partially amended in October 2017 to stipulate that ESG (environmental, social and governance) factors should be taken into consideration in stewardship activities.

As illustrated below, GPIF assumes stewardship responsibilities to pension beneficiaries, while external asset managers entrusted with investment by GPIF assume stewardship responsibilities to GPIF.

"Universal owner" and "cross-generational investor" are the key terms for GPIF to fulfill its stewardship responsibilities appropriately. As a "universal owner" (an investor with a very large fund size and a widely diversified portfolio) and a "cross-generational investor" (responsible for supporting pension finance with an investment horizon of as long as 100 years) to bridge the intergenerational gap of contribution, it is essential for GPIF to minimize negative externalities of corporate and government activities (environmental and social issues, etc.) and to promote steady and sustainable growth of the overall capital market as well as its underlying society. Except for some investment products, GPIF makes daily transactions and investments, and exercises voting rights, via external asset managers. Therefore, by promoting constructive dialogue (engagement) in consideration of ESG factors between its external asset managers and investee companies as well as issuers, GPIF is committed to conducting stewardship activities as a universal owner and a cross-generational investor and fulfilling stewardship responsibilities and build a win-win relationship in the investment chain. In this investment chain, a long-term improvement in corporate value would lead to the growth of the overall economy, which will eventually enhance longterm investment returns.



[2] Progress in and foundation of stewardship activities

GPIF implemented stewardship activities on a full-scale basis following the adoption of Japan's Stewardship Code in May 2014. In March 2015, GPIF formulated the Investment Principles, which lay down its guiding principle that GPIF is committed to increasing investment returns over the medium to long term for pension beneficiaries by conducting various activities to fulfill its stewardship responsibilities in equity investment. In September 2015, GPIF signed the Principles for Responsible Investment (PRI) introduced by the United Nations, as part of GPIF's efforts to enhance ESG implementation.

On June 2017, GPIF established the Stewardship Principles and the Proxy Voting Principles. The objective of these two principles is, as a responsibility of a super long-term asset owner, to clarify the requirements and principles that external asset managers should observe in conducting stewardship activities, including the exercising of voting rights. GPIF requires external asset managers to comply with these principles, and if an asset manager should decide not to comply with any of them, said manager is required to explain to GPIF the rationale behind the non-compliance. In order to fulfill its own stewardship responsibilities, GPIF appropriately monitors the stewardship activities of external asset managers, including the exercise of voting rights, and proactively conducts dialogue (engagement) with them. The Stewardship Principles are comprised of the following five items.

[Stewardship Principles]

- 1 Corporate Governance Structure of Asset Managers
- 2 Management of Conflicts of Interest by Asset Managers
- 3 Policy for Stewardship Activities, including Engagement
- 4 ESG Integration into the Investment Process
- 5 Exercise of Voting Rights

GPIF updated the Policy to Fulfill Stewardship Responsibilities in August 2017 to endorse Japan's Stewardship Code that was revised in May of that year. In October 2017, GPIF revised the Investment Principles to expand the scope of stewardship activities to cover all asset classes, as it had been focused on equity investment, and made it clear that ESG factors should be considered in conducting stewardship activities. GPIF's stewardship activities are founded on the abovementioned Investment Principles, Policy to Fulfill Stewardship Responsibilities, Stewardship Principles, and Proxy Voting Principles. We will continuously examine appropriate stewardship responsibilities for a public pension fund and promote activities to fulfill our stewardship responsibilities.



[3] Promotion of activities aimed at fulfilling stewardship responsibilities

1 Participation in global initiatives

A. Support for the TCFD

TCFD stands for Task Force on Climate-related Financial Disclosures, established by the Financial Stability Board (FSB) at the request of the G20 Finance Ministers and Central Bank Governors Meeting. In June 2017, TCFD released voluntary recommendations for use by companies in providing information on the financial impacts of climate-related risks and opportunities for appropriate investment decisions by investors. More than 620 organizations worldwide, including asset owners such as pension funds, asset managers, financial institutions such as banks, companies, and governments, have endorsed TCFD recommendations (as of March 31, 2019).

GPIF expressed its support for TCFD in December 2018. GPIF emphasizes information disclosure by companies,

B. Participation in Climate Action 100+

Climate Action 100+ (hereinafter, "CA 100+"), launched in September 2017, is a five-year initiative, established under the PRI and four groups of institutional investors that requires companies to address climate change issues. By constructive dialogue with companies that are influential significantly in formulating possible solutions to global environmental issues, this initiative focuses on improving climate change-related governance, taking initiatives for the reduction of greenhouse gas emissions, and enhancing information disclosure, among other matters. At present, more than 320 organizations including asset owners, such as pension funds, and asset managers, have joined CA100+. which is indicated in our selection of ESG indices, including environmental indices, as we ensure that the index has a "mechanism to encourage disclosure of ESG information." With respect to climate change, all passive managers for domestic and foreign equities and approximately 75% of active managers for domestic and foreign equities listed the issue as a material ESG issue in a survey conducted by GPIF. We also assume that climate change is an important issue for asset owners as well. Accordingly, we will consider our own disclosure and collect relevant information, while examining the status of endorsement of the TCFD recommendations by asset managers and how they will implement climate-related information disclosure.

GPIF joined CA100+ as a Supporter* in October 2018. GPIF has also joined the Asia Advisory Group, which provides the steering committee with advice on the characteristics of the Asian region as an asset owner. Joining the activities of CA100+ helps GPIF broaden its horizons on how engagement relating to climate change and collective engagement are actually conducted, and we will use such expertize for evaluating the stewardship activities of external asset managers.

* The qualifications of Supporters include: (1) being an asset owner; and (2) having officially announced consent to the Sign-on Statement. GPIF is not permitted by laws and ordinances to engage investee companies, and has thus joined CA100+ as a Supporter that is not required to engage them.

Signatory of:



Signed in Principles for Responsible Investment in September 2015

Six principles were advocated in 2006 by Mr. Annan, then Secretary General of the UN. Demand institutional investors to include ESG in the investment process. In January 2017, Hiro Mizuno took office as a MD of the PRI Association, and joined the Asset Owner Advisory Committee and the SDGs Advisory Committee. GPIF acquired A+, the highest score in strategy and governance module in 2018 assessment.



Announced its support in Task Force on Climate-related Financial Disclosure in December 2018



Signed in 30% Club in the UK and Thirty Percent Coalition in the U.S., in November 2016 Both were established to seek diversity on board of directors, with the aim of achieving 30% female directors.



Joined Climate Action 100+ in October 2018

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2 Survey on compensation schemes for executives and employees (an incentive structure) of external asset managers

GPIF attaches importance to the alignment of interest with external asset managers. This survey of asset managers for domestic and foreign bonds and domestic and foreign equities, was conducted with the aim of examining the alignment between asset managers and GPIF from the viewpoint of compensation. Specifically, the survey focused on the following two points: 1) whether the compensation scheme for executives and employees of external asset managers is designed to contribute to the improvement of long-term returns as expected by a long-term asset owner such as GPIF; and 2) whether the incentive scheme is not designed solely for fostering short-termism. In interviews with individual asset managers, GPIF directly talked with executives of asset managers including CEOs, CIOs, and directors in charge of human resources about their approach, policy and systems of compensation. We reaffirmed that compensation schemes are considered to indicate an important engagement theme that reflects fundamental principles of asset managers, such as their investment philosophy and corporate culture.

GPIF has already entered into multi-year contracts with some active managers, and considers that an appropriate compensation scheme is one of the effective measures to ensure alignment in seeking long term-oriented partnerships with asset managers. We will utilize the results of the survey for engaging with asset managers moving forward.

③ Proposal of new business models by passive managers

In March 2017, GPIF started calling for applications for asset managers for domestic equities (passive investment), and received proposals from new and existing managers for new business models with enhanced stewardship activities. GPIF examined those proposals as falling under "proposals for business models for 'new passive investment' that emphasizes stewardship responsibilities" stated in "Expectations & Challenges for External Asset Managers" under the GPIF's Stewardship Activities Report 2017, and appointed several asset managers. In selecting the asset managers, GPIF reviewed their investment process and policy for stewardship activities, as well as their overall business model including organizational structure and fee levels in order to implement such process and policy. The key points for evaluation are as follows.

[Setting of appropriate KPI]

- ✓ Medium- to long-term goals for engagement activities
- ✓ Annual plan for their achievement (milestone)

[Engagement system and method]

- ✓ Organizations and persons in charge of stewardship activities
- ✓ Method of engagement

GPIF will examine and evaluate the status of achievement of the KPI and the milestones for the following fiscal year, and decide whether GPIF will renew contract with asset managers based on the result of evaluation.

(4) Other activities for enhancing investment chain

In order to build the investment chain so that the return for pension beneficiaries can be increased over the medium- to long-term, GPIF has held two forums since 2016: the Business and Asset Owners' Forum and Global Asset Owners' Forum. In the former, opinions from companies can be collected on a regular basis, whereby in the latter, opinions can be exchanged with asset owners from abroad. Separately from these two forums, following the selection of global environmental stock indices and the commencement of investment linked to those indices, senior executives have attended conferences and seminars to give a presentations, such as "Evolution in ESG Investment: From the Perspective of the Environment" (Supported by The Japan Business Federation, Japan Association of Corporate Executives, and the Japan Chamber of Commerce and Industry) in November 2018, in an effort to deliver our message.

A. Business and Asset Owners' Forum

In a questionnaire survey conducted with listed companies in January 2016, many companies requested meetings with asset owners. As a result, GPIF has been holding meetings with those companies on a regular basis. Furthermore, several companies proposed the establishment of a regular platform for the constructive exchange of opinions between companies and GPIF, as an asset owner. In response, the first Business and Asset Owners' Forum was held on September 1, 2016 by three co-organizers. The forum was held again in April and October 2018, with the participation of 10 companies in total, including the three co-organizers.

At the forums, participating companies held discussions on the appropriateness of assessment by ESG evaluators including index providers, initiatives for strengthening ESG (organizational reforms, promotion of dialogue, etc.), ESG information disclosure, such as integrated reports, appropriate quarterly financial reporting, and expectations for asset owners including GPIF. GPIF continues to hold the Business and Asset Owners' Forum, as we believe the opportunity to listen to companies' voices is very useful for GPIF to fulfill its stewardship responsibilities. GPIF feeds back companies' opinions to asset managers and overseas asset owners as well so that we can contribute to improve and optimize the whole investment chain.

B. Global Asset Owners' Forum

In July 2016, GPIF established "Global Asset Owners' Forum" as a venue for the sustainable exchange of opinions with asset owners overseas, in order to improve our stewardship responsibilities for our beneficiaries by utilizing expertise of public pension funds in the world.

On November 14, 2016, the first Global Asset Owners' Forum was hosted by GPIF, CalPERS (California Public Employees' Retirement System) and CalSTRS (California State Teachers' Retirement System) as co-chairs. Recently, the Global Asset Owners' Forum convened in Tokyo in October 2018 and in Washington, D.C. in March 2019. The Tokyo meeting in October was attended by members consisting mainly of CEOs and CIOs, and discussed issues and challenges of the whole investment chain. CIOs from three co-leading hosts also participated in the Global ESG Dialogue Forum (coorganized by the Japan Business Federation and the Ministry of Economy, Trade and Industry), as speakers.



(5) Conducting a Survey of Listed Companies regarding Institutional Investors' stewardship activities

A. Objective of the survey

As GPIF entrusts domestic equity investment of the pension reserve to external asset managers, it requests them to enhance their stewardship activities. To ascertain how investee companies fulfill their stewardship activities as asset managers, including engagement among them, GPIF conducted the first "Survey of Listed Companies regarding Institutional Investors' Stewardship Activities" in 2016, of JPX Nikkei Index 400 companies. The purpose of this survey to listed companies is to examine the validity of the stewardship activities of asset managers. In 2018, GPIF conducted a fourth survey, by sending questionnaires to the TSE-listed 2,129 companies* for the purpose of assessing stewardship activities and "constructive dialogue (engagement) of asset managers as well as understanding any changes during the year since the previous survey.

* The number of companies is as of December 20, 2018.



B. Summary of the results of the survey

Of the survey respondents, 40 percent answered that there had been positive changes to the attitudes of institutional investors at IR meetings, etc. over the past year. The results of the questionnaire show that companies' ESG awareness and initiatives, as well as information disclosure, are improving significantly, as indicated by the enhancement of companies' non-financial information disclosure including ESG information, the high-level of recognition of SDGs, and climate change being listed as the most important theme of corporate ESG activities followed by corporate governance. The results have also shown that companies have perceived positive changes in investors' interest in and utilization of non-financial information. Many respondents voiced that they expect GPIF to: (i) encourage asset managers and securities companies (through asset managers) to conduct dialogue from a long-term perspective; (ii) promote reforms of asset managers including personnel and evaluation systems that can contribute to facilitating dialogue with companies and establishing ESG from a medium- to longterm perspective; (iii) promote ESG investment and direct and indirect stewardship activities that will involve small cap companies; and (iv) encourage ESG evaluators to improve their governance.



Response rate by company size



Institutional investors utilization of integrated reports



This 46.5 Financial results briefing 9.2 45.4 1 Previous survey 42.6 42.1 11.4 5.7 72.0 ②IR meeting This 5.0 72.8 69.8 survey 2 Previous 67.6 ③Briefing on ESG issues 8.4 53 4.8 This 25.3 38 ④Do not provide information sessions particularly surve 20.7 3 Previous 40.6 24.7 12.5 9.4 37.5 0 20 40 60 80 20 40 60 80 100 0 % Investors showed little interest overall Investors showed Investors 📕 This survey 📃 Previous survey Some investors showed interests high interests showed no interest overall

Where to obtain non-financial information + Reactions of institutional investors

[4] Material ESG issues recognized by external asset managers

Material ESG issues recognized by external equity managers are as follows. GPIF found that all passive managers that keep holding investees' stocks recognize climate change as a material ESG issue and tend to regard long-term issues such as "E" (environmental) and "S" (social) as particularly critical. Regarding active managers with a primary holding period of approximately several months to a few years, different ESG issues were recognized as material depending on whether they are managers for domestic equities or foreign equities. GPIF found that material issues recognized by active managers for domestic equities has expanded to include "E" (environmental) and "S" (social), in addition to "G" (governance), but they see "structure and evaluation of Board of directors" and other "G" (governance) issues as more critical. In the survey of listed companies, corporate

<Passive managers for domestic equities>

- 1 Climate change
- Supply chain 1
- 1 Misconduct
- 4 Capital efficiency
- 4 Disclosure
- 4 Human rights and community
- 4 Diversity
- 4 Other (Governance)

<Passive managers for foreign equities>

- 1 Climate change
- 1 Diversity
- Water stress, water security 1
- Other (Social) 1
- 5 Environment opportunity
- 5 Corporate governance
- 5 Supply chain
- 5 Disclosure
- 5 Deforestation
- 5 Board structure and self-evaluation
- 5 Misconduct
- 5 Risk management
- 5 Other (Governance)

[5] Definition of ESG integration

governance was the most common theme of ESG activities of Japanese companies. Taking TCFD recommendations, which GPIF supports, for example, companies are required to disclose information on their recognition and analysis on, climate change-related risks and opportunities, as well as strategies for this issue, and management framework (governance) for its implementation. It shows that a common awareness has been formed among both investors and companies that "G" (governance) is a necessary framework to ensure the resolution of long-term issues including "E" (environmental) and "S" (social) such as climate change, and to improve companies' sustainable growth and corporate value over the medium and long term. GPIF's Stewardship Principles require proactive engagement in material ESG issues by external asset managers.

<Active managers for domestic equities>

- Board structure and self-evaluation 1
- 2 Capital efficiency
- 2 Minority shareholder rights (cross shareholding, etc.)
- Supply chain 4
- 5 Corporate governance
- 5 Disclosure
- 5 Misconduct
- 5 Labor standard

<Active managers for foreign equities>

- 1 **Climate change**
- 2 Supply chain
- 3 Environment opportunity
- 3 Corporate governance
- 3 Diversity
- 3 Board structure and self-evaluation
- Other (Social)

(Note 1) This survey was conducted towards GPIF's external asset managers for equities as of December 2018.

(Note 2) Issues listed by all asset managers are marked in red.

(Note 3) Numbers in the box represent the ranking.

As described on page 39, GPIF requires that external asset managers pursue "ESG integration into their investment process" in its Stewardship Principles. GPIF defines ESG integration as "the explicit and systematic inclusion of ESG issues in investment analysis and investment decisions" following by PRI, to which GPIF is a signatory.

[6] Exercise of voting rights

(1) Concept of exercise of voting rights

The Medium-term Objectives of the Minister of Health, Labour and Welfare stipulate that GPIF should pay due consideration not to unduly exert influence on corporate management and should take appropriate measures including exercise of voting rights from the viewpoint of maximizing the long-term interest of shareholders, while considering influence on corporate management.

In this regard, GPIF in its Medium-term Plan states, "GPIF itself does not exercise voting rights and instead entrusts the external asset managers with the exercise of voting rights so as not to give rise to a concern that GPIF could have a direct influence over corporate management.

GPIF also suggests to the external managers that they should recognize the importance of corporate governance and that the voting rights should be exercised to maximize the long-term interest of shareholders. GPIF asks each external asset manager to establish a detailed proxy voting policy (guideline) and to report the voting results to GPIF."

External managers submit the guideline for voting and annually report voting results to GPIF. GPIF holds meetings with the managers on the results, and evaluates the way in which a manager exercises voting rights in the annual evaluation process of each manager, considering their exercise as an item of initiatives for fulfilling stewardship activities.

(Unit: No. of proposals: percentage)

(Unit : No. of proposals, percentage)

2 Exercise of voting rights in fiscal 2018

GPIF held meetings based on the reports on the status of exercise of voting rights from April to June 2018. Then, we evaluated asset managers based on the reports and the meetings from the viewpoints of "establishing of guidelines for the exercise of voting rights," "organizational framework," and "the status of exercise of voting rights." As a result, we confirmed that voting rights were appropriately exercised.

The status of exercise of voting rights by external asset managers for domestic equities (from April 2018 to March 2019)

Number of external asset managers who exercised voting rights: 33 funds Number of external asset managers who did not exercise voting rights: none

	(Unit, ive, of proposition, percentage)																	
Pror		Propos	sal pertaini	ng to comp	any organi	zation	Prope	osals perta remunera	ining to dir ation, etc.	ector	Proposals pertaining to capital management (excluding items pertaining to amendment of the articles of incorporation)			Proposals pertaining to			Other	
Proposal		Appoint- ment of directors	External directors			Appointment of accounting auditors	Director remuneration	Director bonuses	Director retirement benefits	tirement of stock		Acquisition of treasury stock	Mergers, acquisition, etc.	amendment of the articles of incorporation	Warning type	Trust– type	proposals	Total
Number of voting rights exercised		146,680	42,768	16,235	10,926	309	4,190	1,604	1,279	1,057	12,674	11	970	5,224	411	1	229	190,874
	Total	146,399	42,674	16,203	10,926	309	4,167	1,604	1,279	1,057	12,599	4	970	4,113	411	1	212	189,328
, sh	Total	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)
Management	Annround	131,668	36,902	13,892	8,719	305	3,839	1,327	503	814	12,150	4	954	4,015	41	0	196	169,708
inag	Approved	(89.9%)	(86.5%)	(85.7%)	(79.8%)	(98.7%)	(92.1%)	(82.7%)	(39.3%)	(77.0%)	(96.4%)	(100.0%)	(98.4%)	(97.6%)	(10.0%)	(0.0%)	(92.5%)	(89.6%)
N N	Opposed	14,731	5,772	2,311	2,207	4	328	277	776	243	449	0	16	98	370	1	16	19,620
	opposed	(10.1%)	(13.5%)	(14.3%)	(20.2%)	(1.3%)	(7.9%)	(17.3%)	(60.7%)	(23.0%)	(3.6%)	(0.0%)	(1.6%)	(2.4%)	(90.0%)	(100.0%)	(7.5%)	(10.4%)
	Total	281	94	32	0	0	23	0	0	0	75	7	0	1,111	0	0	17	1,546
er v		(100.0%)	(100.0%)	(100.0%)	(0.0%)	(0.0%)	(100.0%)	(0.0%)	(0.0%)	(0.0%)	(100.0%)	(100.0%)	(0.0%)	(100.0%)	(0.0%)	(0.0%)	(100.0%)	(100.0%)
hold	Annround	12	9	0	0	0	7	0	0	0	25	2	0	100	0	0	3	149
Shareholder	Approved	(4.3%)	(9.6%)	(0.0%)	(0.0%)	(0.0%)	(30.4%)	(0.0%)	(0.0%)	(0.0%)	(33.3%)	(28.6%)	(0.0%)	(9.0%)	(0.0%)	(0.0%)	(17.6%)	(9.6%)
2	Opposed	269	85	32	0	0	16	0	0	0	50	5	0	1,011	0	0	14	1,397
	opposed	(95.7%)	(90.4%)	(100.0%)	(0.0%)	(0.0%)	(69.6%)	(0.0%)	(0.0%)	(0.0%)	(66.7%)	(71.4%)	(0.0%)	(91.0%)	(0.0%)	(0.0%)	(82.4%)	(90.4%)

(Note 1) If a proposal has multiple items to exercise, the number of votes exercised for each item is shown. (Note 2) The figures in parentheses are percentages to the total number of votes exercised for each proposal.

(Note 3) The negative votes include one abstention.

The status of exercise of voting rights by external asset managers for foreign equities (from April 2018 to March 2019)

Number of external asset managers who exercised voting rights: 25 funds

Number of external asset managers who did not exercise voting rights: none

			pertaining to organization		Pro	posals pertai remunera	2	ctor	(excluding it	taining to capital ems pertaining to articles of incorpo	amendment	Proposals pertaining to	Poison Pills for	Other pi	oposals	
Proposal		Appoint- ment of directors	Appointment of auditors	Appointment of accounting auditors	Director remuneration	Director bonuses	Director retirement benefits	Granting of stock options	Dividends	Acquisition of treasury stock	Mergers, acquisition, etc.	amendment of the articles of incorporation	warning type	Approval of financial statement, etc.	Other proposals	Total
Number of voting rights exercised		103,285	4,140	12,404	22,168	208	398	4,216	9,877	5,416	16,242	7,786	290	13,291	39,659	239,380
	Total	101,316	3,592	12,321	21,844	208	392	4,182	9,834	5,416	16,183	6,884	278	13,285	36,287	232,022
s pt	Iotai	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)
eme	Annround	91,089	3,158	12,152	18,820	161	300	2,988	9,777	4,908	13,782	6,247	190	12,805	31,720	208,097
Management proposals	Approved	(89.9%)	(87.9%)	(98.6%)	(86.2%)	(77.4%)	(76.5%)	(71.4%)	(99.4%)	(90.6%)	(85.2%)	(90.7%)	(68.3%)	(96.4%)	(87.4%)	(89.7%)
Σ α	Opposed	10,227	434	169	3,024	47	92	1,194	57	508	2,401	637	88	480	4,567	23,925
	Obhozen	(10.1%)	(12.1%)	(1.4%)	(13.8%)	(22.6%)	(23.5%)	(28.6%)	(0.6%)	(9.4%)	(14.8%)	(9.3%)	(31.7%)	(3.6%)	(12.6%)	(10.3%)
	Total	1,969	548	83	324	0	6	34	43	0	59	902	12	6	3,372	7,358
s er	TOLAI	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(0.0%)	(100.0%)	(100.0%)	(100.0%)	(0.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)
loc	Annround	1,072	421	77	118	0	0	9	19	0	50	465	11	6	1,772	4,020
Shareholder proposals	Approved	(54.4%)	(76.8%)	(92.8%)	(36.4%)	(0.0%)	(0.0%)	(26.5%)	(44.2%)	(0.0%)	(84.7%)	(51.6%)	(91.7%)	(100.0%)	(52.6%)	(54.6%)
2,0	Onnorod	897	127	6	206	0	6	25	24	0	9	437	1	0	1,600	3,338
	Opposed	(45.6%)	(23.2%)	(7.2%)	(63.6%)	(0.0%)	(100.0%)	(73.5%)	(55.8%)	(0.0%)	(15.3%)	(48.4%)	(8.3%)	(0.0%)	(47.4%)	(45.4%)

(Note 1) Total number of votes exercised does not include the number of voting rights that were not exercised.

(Note 2) If a proposal has multiple items to exercise, the number of votes exercised for each item is shown.

(Note 3) The figures in parentheses are percentages to the total number of votes exercised for each proposal.

(Note 4) The negative votes include 946 abstentions.

5 ESG Activities

[1] Basic approach

Universal owner

GPIF is an investor with a very large fund size and a widely diversified portfolio.

Cross-generational investor

GPIF is responsible for supporting pension finance with an investment horizon of as long as 100 years, over several generations.

GPIF promotes ESG investments in order to reduce negative externalities such as environmental and social issues, and to improve the sustainable return from the whole assets, as GPIF is "Universal owner" and "Cross-generaitonal investor." "Universal owner" is a term often used in relation to pension management and ESG investment, referring to an investor with a well-diversified portfolio that largely represents the world's capital market. GPIF is a typical "universal owner" with a broadly diversified portfolio comprised of equities and bonds of the majorities of Japanese listed companies and major foreign companies.



The number of securities owned by GPIF (as of the end of March 2019)

For instance, if the share prices of some portfolio companies increase as a result of conducting business activities without paying attention to their large impacts on the environment and society for the sake of short-term revenue expansion, and society and the economy as a whole, including other companies, are negatively affected by such activities, the overall portfolio of a universal owner will be significantly impaired. In other words, the sustainability of the capital market and society is a prerequisite for the sustainability of universal owners' portfolios. The "universal ownership," the concept that universal owners conduct ESG activities proactively to control and minimize such negative externalities-lies at the core of GPIF's ESG investment. In addition, the longer the ESG risks persist, the more likely it is that they will materialize. Therefore, we consider that it has great benefits for GPIF to integrate ESG factors into its investment process as a super long-term investor responsible for supporting pension finance designed with time horizon of as long as 100 years. That is to say, conducting ESG activities is consistent with the objective of the Employees' Pension Insurance Act and the National Pension Act to "manage pension reserve safely and efficiently from a longterm perspective solely for the pension beneficiaries," and GPIF continues promoting ESG activities proactively.

GPIF conducts ESG activities not only for equities but also for other asset classes, including bonds and alternative assets, with the aim of maximizing medium- to longterm investment returns for the pension beneficiaries. Evaluation of ESG promotion activities requires the following perspectives: 1) it takes a long period of time for the effects of ESG investment to materialize; and 2) ESG investment is also aimed at improving the sustainability of the entire capital market. These perspectives are different from general investment evaluation of how much investment returns are generated over a certain period. GPIF published the first "ESG Report" in 2018 in order to measure the effects of the ESG activities, including ESG investment that would improve the sustainability of the capital market and risk-adjusted returns, and to make the PDCA (plan-do-check-act) cycle work properly.



[2] Passive investment based on ESG indices

In July 2017, GPIF selected two integrated indices and one thematic index focused on gender diversity for Japanese equities, and commenced passive investment tracking those indices. The selection criteria for the ESG indices included economic rationality based on the risk-return profile of each index and the possibility of these indices to boost the equity market in Japan through improvement of ESG evaluation. Given that environmental issues centering on climate change are transnational global issues, GPIF started to call for applications for environmental stock indices for global equities in November 2017. As a result, we selected the S&P/ JPX Carbon Efficient Index for Japanese equities and the S&P Global Ex-Japan LargeMidCap Carbon Efficient Index for foreign equities in September 2018, and commenced passive investment tracking those indices. We expect that these selected ESG indices will provide an incentive for companies to enhance their responses to ESG issues and lead to the improvement of their corporate value in the long term.



List of selected ESG indices

	FTSE Blossom Japan Index	MSCI Japan ESG Select Leaders Index MSCI (1) MSCI Japan ESG Select Leaders Index	MSCI Japan Empowering Women Index (WIN) MSCI I MSCI Japan Empowering Women Index (WIN)
Index concept	•The index uses the ESG assessment scheme that is applied to the FTSE4Good Japan Index Series which has one of the longest track records globally for ESG indexes. •The index is a broad ESG index that selects stocks with high absolute ESG scores and adjusts industry weights to neutral.	• The MSCI Japan ESG Select Leaders Index is a broad ESG index that integrates various ESG risks into today's portfolio. The index is based on MSCI ESG Research that more than 1,000 clients use globally. • The index incorporates stocks with relatively high ESG scores in each industry.	 MSCI calculates the gender-diversity scores based on various pieces of information disclosed under "the Act on Promotion of Women's Participation and Advancement in the Workplace" and selects companies with higher gender diversity scores from each sector. The first index designed to cover a broad range of factors related to gender diversity.
Subject of Investment	Domestic equity	Domestic equity	Domestic equity
Constituent universe (parent index)	FTSE JAPAN INDEX (513 stocks)	Top 700 companies (in terms of market cap) in the MSCI Japan IMI (694 stocks)	Top 500 companies (in terms of market cap) in the MSCI Japan IMI (498 stocks)
Number of index constituents	152	268	213
Assets under management	¥642.8 billion	¥804.3 billion	¥474.6 billion

	S&P/JPX S&P Global Carbon Efficient Index Ex-Japan LargeMidCap Carbon Efficient Index							
Index concept	environmental research companie independent provider, develops the in • The indices are designed to increase have low Carbon to Revenue Foot	s, S&P Dow Jones Indices, a leading						
Subject of Investment	Domestic equity	Foreign equity						
Constituent universe (parent index)	TOPIX (2,124 stocks)	S&P Global ex-Japan LargeMidCap Index (2,556 stocks)						
Number of index constituents	1,738	2,199						
Assets under management	¥387.8 billion	¥1,205.2 billion						

(Note) Number of index constituents and assets under management are as of March 31, 2019.

<Main Characteristics of carbon efficient indices>

- 1. Both indices overweight companies that have high carbon efficiency within the same industry and/or disclose the amount of carbon emissions.
- 2. Both indices adjust the over/underweight of companies in accordance with the damage on the environment by industries to which the companies belong (companies,

which belong to an industry that have more damage on the environment, are more incentivized to improve their carbon efficiency and disclosure).

3. The S&P/JPX Carbon Efficient Index covers all companies that are listed on the first section of Tokyo Stock Exchange (with some illiquid stocks excluded) thus the coverage is broader than other ESG indices. GPIF believes that in order to encourage companies to address ESG issues and disclose information proactively, it is important to help them deepen their understanding of the principles of ESG evaluation and index construction. To promote such understanding, GPIF requests for index providers to publicly disclose how they conduct ESG evaluation and how they construct indices, and to proactively engage with companies. As a result, dialogue between index providers and companies is increasing rapidly, which we hope to lead to an improvement in responses to ESG issues and information disclosure by Japanese companies.



Percentages of companies that made contact with MSCI during the ESG evaluation process

(Note) The objects of this research are companies selected by MSCI ACWI index as of the end of 2018. (Source) ©2019 MSCI ESG Research LLC. Reproduced by permission.

[3] Collaboration with the World Bank Group regarding green bonds



WORLD BANK GROUP

THE WORLD BANK

GPIF has collaborated with the World Bank Group to promote sustainable investment, including a joint research report: "Incorporating Environmental, Social and Governance (ESG) Factors into Fixed Income Investment," published in April 2018. Based on our joint research, the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC)-both members of the World Bank Group-issue Green, Social and Sustainability Bonds that contribute to building a sustainable society, and provide investment opportunities for GPIF's asset managers. GPIF promotes ESG integration in investment in order to reduce the negative impacts of environmental and social issues and improve long-term returns on its entire investment assets.

6 Other Major Initiatives

[1] Call for applications from external asset managers

(1) Call for applications through the Asset Manager Registration System

A. Status of the introduction of the Asset Manager Registration System

GPIF expanded the scope of the Asset Manager Registration System to all four traditional asset classes in February 2018. The status of registration of external asset managers as of the end of fiscal 2018 is as listed in the right table.

Asset class	The number of entries	The number of information provided			
Domestic bonds	13	0			
Domestic equities	51	10			
Foreign bonds	133	21			
Foreign equities	521	127			

B. Call for applications for managers of foreign bonds (active investment)

GPIF called for applications for active managers for highyield bonds through the Asset Manager Registration System to review the existing external asset managers, and advanced the selection process through the stage of second screening.

C. Selection for passive managers of domestic equities and foreign equities

GPIF conducted a third screening of passive managers for domestic and foreign equities through the Asset Management Registration System, for which it had completed the second screening process in fiscal 2017, and

newly selected two funds of two passive managers for domestic equities and one fund of one passive manager for foreign equities.

D. Call for applications for managers of alternative assets

GPIF has been calling for applications for asset managers who will pursue multi-manager investment strategies for alternative assets (infrastructure, private equity and real estate) since April 2017, with the aim of improving investment efficiency through investment diversification. Following the selection of one external asset manager for a domestic real asset mandate and three external asset

managers for an infrastructure mandate in fiscal 2017, GPIF selected one external asset manager for a foreign real estate mandate in fiscal 2018. We have started investing in those assets. Regarding external asset managers for a private equity mandate and a foreign real estate mandate, we are going through the screening process.



Selection Process for Asset Managers

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Calling for application through the Asset Manager Registration System

- human resources, stewardship activities, internal control, administrative operation system, information security system, etc.) • Based on the results of interview, comprehensive assessment, without considering
- investment management fees, of asset managers will be conducted. Asset managers subject to the third screening will be selected by taking the composition of external asset managers into account.

Third screening

- Interviews will be conducted with newly applied asset managers that have passed the second screening at their offices (to confirm if their investment philosophy and processes are shared by fund managers, etc. who make investment decisions and other matters).
- After interviews are conducted, a comprehensive assessment of newly applied asset managers and existing asset managers will be carried out by taking investment management fees into consideration, and GPIF's asset managers will be selected.
- The results of selection will be reported to the Board of Governors.

Assessment criteria

Qualitative assessment that takes into account quantitative performance

- Investment policies
- Investment processes
- Organization and human resources
- Corporate governance structure and conflicts of interest
- Internal control
- Stewardship activities (for equities and alternative assets)
- Information security measures
- Administrative operation system
- Information provision, etc.
- Investment management fees

(2) Introduction of a new performance-based fee structure

In April 2018, GPIF introduced a full-scale performancebased fee structure with the aim of strengthening the alignment of interest between GPIF and external active managers (encouraging them to achieve an excess rate of return over the benchmark and improving the quality of excess returns over the long term) and enhancing selfgovernance (more efficient management of investment capacity) of active managers. The outline of the new performance-based fee structure is as follows.

Outline of the new performance-based fee structure

- Investment fees should be linked to excess returns (i.e., performance-based fees), while active managers that do not deliver excess returns will only receive fees on a par with those paid to passive managers (i.e., basic fees).
- The fee scheme is structured so that the fee rate applied to funds that achieved target excess return rate is assumed to be the same level as former performance-based fee structure.
- In exchange for applying fees linked to long-term investment results to some external asset managers, a multi-year contract is concluded with some external asset managers based on market cycles.



New performance-based fee structure

③ Management and assessment of external asset managers, etc.

A. Management and assessment of external asset managers

To better manage external asset managers, GPIF has requested that monthly reports be submitted on investment performance and risk status to ascertain the status of compliance with investment guidelines, and we will receive further explanations in regular meetings and other activities. We withdraw funds from three investment funds managed by external asset managers due to contractual and other reasons. Based on a comprehensive assessment conducted in fiscal 2017, GPIF decided to give a warning to/or partially withdraw funds from four investment funds managed by external asset managers (one active domestic equity fund, two active foreign equity funds, and one passive foreign equity fund), and withdraw funds from those investment funds. In fiscal 2018, we also terminated contracts with one active foreign equity fund and one active foreign bond fund, from which there was deemed to be an urgent necessity to withdraw funds, and decided to cancel a contract with one passive domestic equity fund based on a judgment

from an investment management perspective. In addition, as described on page 51, we selected passive managers in foreign equities, and implemented a major replacement of funds accompanied by a withdrawal of funds from the three investment funds with which we decided to terminate contracts.

To better manage external asset managers who are transition managers, GPIF requested reports on transition management, ascertained the status of compliance with investment guidelines, and received explanations in regular meetings and other activities. Assessment of transition managers was conducted based on the comprehensive assessment of items including transaction execution capability, organizations and human resources. The results of this comprehensive assessment showed that there were no particular problems identified with any transitional manager, which led us to conclude that it would be appropriate to continue with the existing contracts with them.

B. Management and assessment of custodians

To manage custodians, we requested data on asset management, ascertaining the status of compliance with asset management guidelines, and received explanations in regular meetings, including onsite inspection, and other activities. Assessment of custodians was conducted through comprehensive assessment of items including operational structures and asset management systems. The results of this comprehensive assessment showed that there were no particular problems identified with any custodian, which led us to conclude that it would be appropriate to continue with the existing contracts with them.

C. Reviewing our approach to asset management

GPIF previously adopted the approach of selecting one custodian for each asset class to entrust administrative operations. However, it is widely known that such an approach involves the risk of interfering with the diversification of investment management and concerns associated with the business continuity plan (BCP). Accordingly, GPIF is reviewing its approach to asset management to enable the adoption of multiple custodians for managing a single asset class.

It is necessary for GPIF to gather investment data more quickly than before and use them for risk analysis and other matters, in order to appropriately carry out risk management associated with investment diversification and increase the effectiveness of dialogue with external asset managers. Therefore, we have implemented a system for gathering and using data for investment decisions, separately from conventional data for accounting purposes.

Regarding the adoption of multiple custodians for managing a single asset class, GPIF has switched to a multiplecustodian framework for asset classes for which the development of the necessary systems has been completed. In 2018, we adopted multiple custodians for managing foreign bonds and domestic equities. Regarding short-term assets, we called for applications for custodians from the viewpoint of widely soliciting proposals for more efficient investment methods and reducing the risk of concentration on one custodian, and selected two custodians.

(Note) For the list of external asset managers, etc., refer to page 66-67.

[2] Promoting research and study

1 GPIF Finance Awards

Today, investment techniques are becoming increasingly sophisticated and financial products are growing in diversity. In light of this, GPIF believes it is essential to foster an environment that encourages academic research in investment fields, so that the pension reserve is invested safely and efficiently.

In 2018, the ceremony for the 2nd GPIF Finance Awards was held. The Minister of Health, Labour and Welfare; the Minister

of Education, Culture, Sports, Science and Technology; and the Deputy Minister of the Cabinet Office for Financial Services attended the ceremony as guests. The award winner was determined as follows, after going through a screening process by the selection committee comprised of renowned researchers in the field of finance including Dr. Robert Merton, Professor of MIT (Nobel laureate in economics in 1997).

Award winner:	Dr. Yoshio Nozawa, Senior Economist, Federal Reserve Board (Presently, Assistant Professor at the Business School of the Hong Kong University of Science and Technology)
Profile:	He graduated from the College of Arts and Sciences, University of Tokyo and earned his MBA and Ph.D. (joint degree in finance and economics) from the University of Chicago. After working at the Development Bank of Japan and Federal Reserve Board, he assumed his present post in August 2018.
Reason for winr	ning the award:
	For valuable work in a comprehensive approach to corporate bond spread; also, he is expected to advance corporate bond pricing theory.



Selection committee members

Robert Merton	Winner of the Nobel prize in economics, Distinguished professor, MIT Sloan School of Business and professor emeritus at Harvard University
Josh Lerner	Professor, Harvard Business School
David Chambers	Professor, Cambridge Judge Business School, University of Cambridge
Kazuo Ueda	Professor, Faculty of International Studies at Kyoritsu Women's University, Director, Center for Advanced Research in Finance at the University of Tokyo (former chair of the Investment Advisory Committee)
Yuri Okina	Chairwoman, Japan Research Institute (member of the Financial System Council)
Shinichi Fukuda	Professor, Graduate School of Economics, University of Tokyo (member of the Financial System Council)
Yasuhiro Yonezawa	Professor, Waseda Business School (former chair of the Investment Advisory Committee)

(2) Promoting joint research and study

GPIF considers that it is necessary to conduct research studies and joint research projects with universities, and accumulate knowledge acquired through such research activities in order to continue investments of pension reserve safely and efficiently. In fiscal 2018, we carried out the following five research studies and joint research projects.

A. Research on compensation scheme (incentive structure) of executives and staff employees of external asset managers

Objectives: GPIF places importance on aligning interest with external asset managers. We consider that fundamental policies of asset managers, such as the investment philosophy and corporate culture, are reflected in their remuneration schemes. Accordingly, the compensation scheme for executives and staff members of asset managers was studied as a means of confirming the alignment of interest between them and GPIF. Specifically, the research study focused on the following two points: (1) Whether the remuneration scheme for executives and employees at asset managers is designed to contribute to the improvement of long-term returns as expected by a long-term asset owner such as GPIF; and (2) that the incentive scheme is not designed solely for fostering short-term benefits. Commissioned for: Mercer Japan Ltd.

Objective: GPIF is actively engaging in various ESG initiatives, such as making passive investment in equities tracking ESG indices and environmental indices and publishing the ESG Report. ESG information disclosure of companies and asset managers is a fundamental element of such initiatives, however there is growing disparity between leaders and laggards of information disclosure. A possible reason for this is that many companies are likely to be reluctant to expand information disclosure with limited management resources under the present circumstances in which different ESG information disclosure standards are available without clear explanations provided on commonalities and differences across disclosure standards and their definitions. This research study examined the current situation involving ESG information disclosure of TCFD, established by the FSB, and the Sustainability Accounting Standards Board (SASB) in the U.S. At the same time, we researched appropriate ESG information disclosure that contributes to corporate value enhancement and appropriate ESG information disclosure by public pension funds and asset managers.

Based on the results of this research study, GPIF is aiming to further improve the quality of ESG investment and enhance the sustainability of the capital market.

Commissioned for: Nissay Asset Management Corporation

C. Research on the use of artificial intelligence (AI) to study trading behaviors of fund managers

Objective: In "A study on the Use of Artificial Intelligence within Government Pension Investment Fund's Investment Management Practices," carried out in fiscal 2017, the trading data of GPIF's active managers for domestic equities was analyzed, using machine learning, and showed the possibility of classifying investment styles into patterns and identifying style drifting. In the research study project launched in fiscal 2018, more elaborate verification is carried out by expanding the scope of the constituents of the universe and extending the measurement period for domestic equities. Also the research continued to study whether similar results are confirmed in foreign equities.

Commissioned for : Sony Computer Science Laboratories, Inc.

D. Joint research project on macroeconomic forecast using the Overlapping-Generations (OLG) Model

Objective: Target returns of public pension fund investment are determined in comparison with the rate of nominal wage growth. Therefore, it is important to sophisticate the macroeconomic forecast model, including forecasts of the rate of nominal wage growth, in order to assess the profitability of investment assets appropriately. Accordingly, we enhanced the framework and method of macroeconomic forecast based on the Overlapping-Generations Model by factoring in changes in the demographic composition, in particular, the coexistence of the working generation and the retired generation in the household sector, and changes including a generation transition. In addition, we quantitatively verified the impact of changes in various parameter scenarios on macroeconomics. Joint research entity: University of Tokyo

E. Joint research project to incorporate ESG factors into fixed income investment

Objective: GPIF signed the Principles for Responsible Investment (PRI) in September 2015 and selected ESG indices for domestic equities in July 2017. Research and the practice of integration of ESG factors in the investment process for equities are well underway, but such efforts for fixed income investment have just started. Therefore, GPIF and the World Bank Group conducted joint research on practical issues arising from the integration of ESG factors in fixed income investing and other issues as the first initiative in a partnership with a view to promoting sustainable investment.

Joint research entity: The World Bank Group

1 GPIF's Roles in the Public Pension Scheme

[1] GPIF's position

1 The pension finance system and GPIF

Japan's public pension scheme is fundamentally managed as a pay-as-you-go system that incorporates the concept of intergenerational dependency, whereby pension premiums collected from working generations support older generations, instead of the advance funding method whereby funds required to cover pension benefits are accumulated in advance.

Under the pay-as-you-go pension system, it is not generally necessary to hold a large amount of reserve fund, aside from a payment reserve. However, partly because the Employees' Pension Fund had started out as an advanced funding method, the portion of pension premiums not allocated to benefits had been accumulated as reserve fund. In this sense, pension reserve has a fundamental significance in the public pension scheme in that "the portion of pension premiums not allocated to benefits will be invested as reserve fund to stabilize pension finance."

Japan's low birth rate and aging population are progressing faster than in any other country. Under the pension system revision implemented in 2004 (hereinafter the "revision of 2004"), the pension premium level will remain fixed into the future and the finite period of financial equilibrium is set to be approximately 100 years, covering the period until the current population would finish receiving the pension premium. This measure was implemented in order to balance the pension finance over 100 years (the finite financial equilibrium method). However, the fixing of a funding source for future pension benefits also makes the amount of fund fixed. Therefore, a mechanism to automatically adjust the pension benefit and premium contribution (Macro-Economic Slide Formula) was also adopted in the revision of 2004. Through these measures, the sustainability of the public pension system is designed to be improved. (see Note)

There are three laws relevant to public pension investment: the Employees' Pension Insurance Act; the National Pension Act; and the Act on the Government Pension Investment Fund as an Incorporated Administrative Agency (hereinafter the "Act on the Government Pension Investment Fund") . These laws provide that "the pension reserve shall be managed safely and efficiently from a long-term perspective solely for the pension beneficiaries" (Employees' Pension Insurance Act and National Pension Act) and "the pension reserve shall be managed safely and efficiently" (Act on the Government Pension Investment Fund). Accordingly, the most fundamental legal requirement for management of the pension reserve is "safe and efficient management of pension reserve from a long-term perspective."

As is the case in other incorporated administrative agencies (Act on General Rules for Incorporated Administrative Agencies), the relevant minister lays out the objectives of GPIF for a set period of time. "Objectives to be achieved by GPIF" (hereinafter the "Medium-term Objectives"), established by the Minister of Health, Labour and Welfare, stipulates that "GPIF is required to achieve a long-term real return (net investment yield on the pension reserve less the nominal wage growth rate) of 1.7% with minimal risks, while maintaining liquidity necessary for the pension payout, based on the current status and outlook for pension finance." In light of these requirements, GPIF, in its Medium-term Plan, established the asset allocation (Policy Asset Mix) from a longterm perspective, on the premise of portfolio diversification, and carries out investment and management of pension reserve based on the Policy Asset Mix.

(Note) For the revision of 2004 and the details of public pension scheme, refer to the website of the Ministry of Health, Labour and Welfare (https://www.mhlw.go.jp/index.html).

2 Roles of reserve fund in pension finance

The reserve fund is to be used to stabilize pension finance. In the current system that aims at balancing pension finance in about 100 years, as mentioned above, a fiscal plan is drawn up to use the pension reserve. Under this plan, investment returns on the reserve fund should be paid as a part of pension benefits initially. In addition to investment returns, the accumulated fund will be gradually withdrawn, after a set period of time. Ultimately, after 100 years or so, it is expected to maintain a reserve fund equivalent to one year of pension benefits. About 90 percent of the financial source of pension benefits (the average of approximately 100 years based on the assumption of financial verification) is funded by pension premiums and government contributions for the year, while the financial source obtained from the pension reserve (reimbursement of trust money or payment to national treasury) accounts for about 10 percent. GPIF owns a sufficient reserve fund necessary for the payment of pension benefits, and therefore short-term market fluctuations associated with the investment of pension reserve do not affect payments for beneficiaries.



[2] Key items of the Medium-term Objectives and the Medium-term Plan

1 The Medium-term Objectives period

The Medium-term Objectives periods at GPIF are: a four-year period from fiscal 2006, when GPIF was established, to fiscal 2009 (the first cycle); a five-year period from fiscal 2010 to fiscal 2014 (the second cycle); and a five-year period from fiscal 2015 to fiscal 2019 (the third cycle). The final fiscal year of each cycle corresponds to the year of financial verification that the

government conducts every five years on the public pension scheme. This is based on the stipulation of the applicable law, which specifies GPIF's policy asset mix should be established in consideration of financial verification and should be described in the Medium-term Plan.

2 Basic Policy for Investment Management (ORIM)

The Employees' Pension Insurance Act stipulates that pension reserve funds, part of the premium collected from the pension beneficiaries, are a valuable source of funding for future pension benefits, and the purpose of investing the reserve funds is to contribute to the future stability of the public pension scheme through stable and efficient management from a longterm perspective solely for the beneficiaries. The Act on the Government Pension Investment Fund provides that GPIF must consider the impact of the management of the reserve funds on the markets and other private sector activities. The Mid-Term Objectives of the GPIF also stipulate that GPIF is not allowed to select individual stocks in equity investment.

○ Article 79–2 of the Employees' Pension Insurance Act (the same philosophy is stipulated in Article 75 of the National Pension Act)

"... the pension reserve, a part of the premium collected from the pension beneficiaries, is a valuable source of funding for future pension benefits and... the purpose of the fund is to contribute to the future stability of management of the Employees' Pension Insurance through stable and efficient management from a long-term perspective solely for the pension beneficiaries of the Employees' Pension Insurance."

\bigcirc Article 20, Paragraph 2 of the Act on the Government Pension Investment Fund

"... GPIF must consider generally recognized expertise and domestic and overseas macroeconomic trends, as well as the impact of the pension reserve on the markets and other private sector activities, while avoiding concentration on any particular style of investment. GPIF's investment management should also satisfy the objectives under Article 79–2 of the Employees' Pension Insurance Act and Article 75 of the National Pension Act."

In light of these requirements, GPIF establishes the policy asset mix in the Medium-term Plan from a long-term perspective, based on the philosophy of diversified investment. Given the standardization of employees' pensions from October 2015, the policy asset mix of the third Medium-term Plan took into consideration the Reference Portfolio established jointly by GPIF, the Federation of National Public Service Personnel Mutual Aid Associations, the Pension Fund Association for Local Government Officials and the Promotion and Mutual Aid Corporation for Private Schools of Japan.

In addition to the formulation and publication of the ORIM, the Medium–term Plan requires GPIF to review the ORIM at least once a year and revise it promptly as deemed necessary.

(3) Investment objectives, risk management, improvements in transparency and others

The third Medium-term Objectives as well as the second Medium-term Objectives, as revised in October 2014, stipulate that a pension reserve must achieve a long-term real return (net investment yield on the pension reserve less the nominal wage growth rate) of 1.7% with minimal risks, while maintaining liquidity necessary for the pension payout, based on the financial verification of the pension scheme. The third Medium-term Objectives also require GPIF to make efforts not to affect market pricing or investment activities by private sectors, and to achieve the benchmark rate of return (market average rate of return) for each asset class during the period for the Medium-term Plan.

Regarding risk management for the pension reserve, it stipulates GPIF shall maintain the diversified portfolio, and manage and control risks of the overall portfolio, each asset class, and each asset manager.

(4) Other important matters for pension reserve management

The third Medium-term Objectives call for thorough compliance with the duty of care and fiduciary duty of prudent experts.

When managing the pension reserve, GPIF is required to consider the market size, take steps to prevent exposure to unfavorable market impact, and avoid the extreme concentration of investing and/or withdrawing at one time.

GPIF is further required to not exert undue influence on corporate management but rather to take appropriate measures such as exercising shareholders' voting rights for maximizing long-term returns to shareholders. In addition, it stipulates that GPIF shall fulfill Stewardship Responsibilities The third Medium-term Objectives started from April 2015 stipulates that GPIF shall combine passive and active investments, implement active investment based on the strong conviction of the excess return, taking historical performance into account, and consider non-financial factors, including environmental, social and governance (ESG) issues, to secure sustainable return.

In October 2017, the Board of Governors was established. The Board of Governors is responsible for holding deliberations and making decisions on important matters related to the introduction of a new investment method, and other issues. An outline of the deliberations at the Board of Governors is promptly conducted upon obtaining approval of the Board, by means of which we hope to help improve the transparency of GPIF's organizational operation.

based on Japan's Stewardship Code, and shall not select individual stocks itself, in consideration of the impact on corporate management.

It also sets forth that GPIF should secure the liquidity necessary for pension payouts by taking into consideration the outlook for the pension finance and the status of revenues and expenditures. At the same time, in order to enhance the functions necessary for assuring liquidity without shortage, GPIF is expected to take appropriate measures including selling assets in a smooth manner while giving consideration to market price formation and other factors.

(5) Enhancement of investment capabilities, improvement of operational efficiency

In the third Medium-term Objectives, GPIF is expected to clarify the expertise required of highly skilled professionals and the area of operations requiring such expertise, while developing an appropriate environment for attracting such talent, implementing a periodical performance evaluation system, and maintaining human resource in the most suitable way. It also stipulates that GPIF shall explain clearly to the public the appropriateness of the remuneration level applied to such highly skilled professionals by referring to comparable ones in the private sector.

GPIF is also expected to develop a comprehensive portfolio risk management system, including one specific to alternative investment, with consideration paid to cost effectiveness. In addition, it clarifies that GPIF shall make more sophisticated risk management by upgrading its forward–looking risk analysis functions, risk analysis tools, information gathering and research functions. With regard to improvements in operational efficiency, the Objectives stipulate that the average cost savings during the Medium-term Objectives period should be at least 1.34% per annum based on the fiscal 2014 level. The cost-saving target includes general administrative expenses (excluding retirement allowances and office relocation expenses) and operational expenses (excluding expenses related to computer systems, fees for external asset managers, personnel expenses for highly skilled professionals, and expenses related to short-term borrowing). Costs added or expanded pursuant to the December 2013 Cabinet Office decision and similar factors are excluded from the cost-saving target. However, the additions and expansions are included in the 1.34% costsaving target from the following fiscal year onward. The Objectives also call for continued efforts to reduce fees for external asset managers, considering changes in the amounts of each invested assets.

2 Organization and Internal Control System

[1] Governance framework

GPIF has adopted a governance framework in which the Board of Governors, established in October 2017, operates on a majority vote decision-making system and has supervisory powers to determine whether decisions are properly executed. Three Governors concurrently serve as Auditors and form the Audit Committee, of which one is a full-time member. The Audit Committee carries out audits of GPIF's operations. In addition, the Audit Committee is entrusted by the Board of Governors with the authority to supervise the status of GPIF's operations executed by the President or Executive Managing Directors. The President presides over GPIF's operations in accordance with the provisions of Article 7, Paragraph 1 of the Act on the Government Pension Investment Fund. This governance system, including the majority vote decisionmaking system, ensures the separation of decision-making and supervision from the execution or implementation of said decisions

The Board of Governors consists of 10 members: the President and nine professionals with an academic background or practical experience in economics, finance, asset management, business administration, and other fields relevant to GPIF's operations. Important decision-making carried out by the Board of Governors includes development of the Policy Asset Mix and the Medium-term Plan, preparation of annual plans and annual reports, and decisions on important matters related to the organization such as staff size. It also includes the operation of GPIF, such as the formulation of basic policies for risk management and internal control, the establishment of organizational rules and other matters, approval of the appointment of the executive director. In fiscal 2019, the Board of Governors will formulate the next Policy Asset Mix based on the results of the financial verification conducted every five years.

It has been a year and a half since our governance system shifted from individual decision-making by the President to a majority voting at the Board. The root of the word "governance" is a Greek word meaning "steering." It is essential in the practice of governance to go beyond pro-forma development to promote substantive reforms of governance, and to carry out appropriate "steering" of the organization in an effort to make GPIF an organization worthy of greater trust from Japanese public.



[2] Board of Governors

At meetings of the Board of Governors, experts in various fields, such as economics, finance, asset management and business administration, make an effort to discuss a broad range of agenda items related to GPIF's investment and operation management from a multidimensional perspective and make timely and appropriate decision-making. The Board of Governors held a total of 13 meetings in fiscal 2018. An outline of the meetings is as described in the following table. In fiscal 2018, the Board of Governors performed a sweeping review of the internal rules that form the backbone of governance, and implemented necessary revisions from the perspective of improving transparency of the organization, such as the allocation of authorities between the Board of Governors and the Executive Office and within the Executive Office, as well as clarifying the structure of regulations. In

addition, the Board of Governors deliberated and made resolutions on important matters including periodic verification of the Policy Asset Mix, review of operations, preparation of financial statements, etc., procurement of IT systems that support GPIF's operation, such as integrated network and data service for investment decisions, from a broad perspective including the improvement transparency, appropriateness of investment activities, and the pros and cons of budgetary provision. The Board of Governors also received reports from Executive Office on numerous important matters, such as issues on risk management and ESG initiatives, and engaged in frank exchanges of views on the content of reports. The details of discussion by the Board of Governors are published later on the website of GPIF as a summary of agenda items.

Outline of Meetings of the Board of Governors

Fiscal 2018

	Date of meeting	Main agenda items (only matters for resolution/deliberation are recorded)
9th meeting	Apr. 26, 2018	(Resolution) (i) Periodic Verification of the Policy Asset Mix, (ii) Change in the Standards for Payment of Remuneration and Salaries
10th meeting	May. 28, 2018	(Deliberation) Annual Report Fiscal Year 2017 (draft)
11th meeting	Jun. 18, 2018	(Resolution) Important matters related to organization and staff size (Deliberation) (i) Review of Operations in Fiscal 2017 (draft), (ii) Annual Report Fiscal Year 2017 (draft), (iii) Preparation of the financial statements, business report, and financial report for Fiscal 2017, appropriation of profit and loss and other important matters related to accounting (draft)
12th meeting	Jun. 28, 2018	(Resolution) (i) Review of Operations in Fiscal 2017 (draft), (ii) Annual Report Fiscal Year 2017 (draft), (iii) Disclosure of portfolio holdings by asset category (as of the end of March 2017), (iv) Preparation of the financial statements, business report, and financial report for Fiscal 2017, appropriation of profit and loss and other important matters related to accounting (draft)
13th meeting	Jul. 31, 2018	(Deliberation) Deviation limit management (2)
14th meeting	Sep. 18, 2018	(Resolution) Change in the Annual Plan for Fiscal 2018
15th meeting	Oct. 15, 2018	(Deliberation) Reviewing existing regulations
16th meeting	Nov. 19, 2018	(Resolution) Procurement of integrated network (Deliberation) (i) Withdrawal and utilization of data for investment decisions, (ii) Reviewing existing regulations (2)
17th meeting	Dec. 17, 2018	(Resolution) (i) Change in the Standards for Payment of Remuneration, etc. and Salaries, etc., (ii) Procurement of data service operations for investment decisions, etc. (Deliberation) Reviewing existing regulations (3)
18th meeting	Jan. 21, 2019	(Resolution) Reviewing existing regulations (4-1) (Deliberation) (i) Reviewing existing regulations (4-2), (ii) Reviewing existing regulations (5), (iii) Change of the Statement of Operation Procedures, (iv) Withdrawal and utilization of data for investment decisions (2)
19th meeting	Feb. 15, 2019	(Deliberation) (i) Reviewing existing regulations (6), (ii) Reviewing existing regulations (7), (iii) Plan for commissioned research study for fiscal 2019 (draft)

	Date of meeting	Main agenda items (only matters for resolution/deliberation are recorded)
20th meeting	Mar. 7, 2019	(Resolution) (i) Change in the Statement of Operation Procedures, (ii) Reviewing existing regulations (8-1), (iii) Reviewing existing regulations (9) (Deliberation) (i) Annual plan for fiscal 2019 (draft), (ii) Reviewing existing regulations (8-2)
21st meeting	Mar. 29, 2019	(Resolution) (i) Reviewing existing regulations (10), (ii) Annual plan for fiscal 2019 (draft) (Deliberation) Development of relevant regulations, etc. associated with change of era name

[3] Audit Committee

The Audit Committee executes its duties through staff members on the Secretariat for the Audit Committee, who assist the duties of the Audit Committee and are independent from the President and Executive Managing Directors. The Audit Committee also coordinates closely with the Internal Audit Department and the Account Auditor (Deloitte Touche Tohmatsu LLC). In addition, the Audit Committee attends committee meetings organized by the Executive Office, including meetings of the Investment Committee, the Portfolio Risk Management Committee, the Management and Planning Committee, the Procurement Committee, etc., as needed. The Audit Committee assesses and analyzes the status and appropriateness of GPIF's operations through interviews with the person in charge of each department, the President, and Executives Managing Directors as well as

[4] Execution system

1 Organization

As of April 1, 2019, GPIF has 12 executives, consisting of the Chairperson of the Board of Governors, eight Governors (including three Governors concurrently serving as Auditors), the President and two Executive Managing Directors (one for Planning and General Affairs and the other for Management and Investment Operations who is serving as the CIO), as well as 133 staff members (excepting part-time staff).

The organization consists of the Secretariat for Board of Governors, the Secretariat for Audit Committee, the General Affairs Department (General Affairs Division, Accounting Division), the Planning and Communication Department (Planning and Communication Division, Treasury Division), investigation at times. Then the Audit Committee reports and shares information obtained through these activities with the Board of Governors, and gives opinions to the Board and the President on organizational management issues such as ways to further strengthen internal controls.

The Audit Committee held 19 meetings in fiscal 2018. The Committee performed audits primarily from five perspectives: the status of achievement of Medium-term Objectives; the status of execution of duties by the Board of Governors and Governors; the status of execution of duties by the President and other executives and staff members; the status of the internal control system following the change in governance structure; and the status of accounting. The results of these audits are published as the Audit Report on GPIF's website. Chapter 2

the Research and Actuary Department, the Portfolio Risk Management Department, the Information Security Administration Department (Information Security Administration Division, IT Administration Division), the Investment Strategy Department (Investment Strategy & ESG Division), the Investment Administration Department, the Public Market Investment Department (Public Market Investment Division, Stewardship & ESG Division), the Private Market Investment Department, the Internal Fixed Income Investment Department, and the Internal Audit Department (to report directly to the President).



Organization Chart (as of April 1, 2019)

(2) Internal control system

GPIF has put an internal control system in place in accordance with the Basic Policies of Internal Control established by the Board of Governors.

Specifically, regarding the system to ensure that the execution of duties by the President, Executive Managing Directors, and staff members complies with laws and regulations, the Internal Control Committee is established to promote internal control. In addition, the Compliance Committee is established under the Internal Control Committee to ensure compliance with laws and regulations

as well as fiduciary responsibility, etc., and the Compliance Officer and the Legal Officer are appointed. All executives and staff members are informed of the necessity to comply with the Investment Principles and the Code of Conduct and act as an organization worthy of the trust of the public. A whistle blowing system is also in place, and corrective actions and preventive measures shall be taken according to our internal rules whenever an illegal or inappropriate activity is (or is expected to be) perpetrated by executives or staff members of GPIF. In addition, the Internal Audit Department is established to conduct internal auditing of GPIF's operations and related responsibilities.

Regarding the management of the risk of losses of other related systems, the Portfolio Risk Management Committee has been established to appropriately monitor and handle various risks (portfolio risks) caused during the pension management. The Internal Control Committee has been established to identify, analyze, and assess operational risks that could impede GPIF's day-to-day operations as well as to take measures against those risks. The Internal Control Committee also conducts risk management by drawing up and promoting measures necessary to be constantly aware of risk factors, prevent risks, and minimize losses in the event of risk occurrence.

In addition to the above, the Information Security Committee promotes GPIF's information security measures, the Management and Planning Committee carries out prior deliberation to make decisions on important matters related to execution of GPIF's operations, and the Investment Committee conducts prior deliberations for making decisions on important matters related to investment management. By these committees, GPIF is committed to establish its internal control system.



Administration Department, the Research and Actuary Department, the Portrollo Risk Management Department, and the information Security Administration Department. *2 The Executive Managing Director (Management and Investment Operations)/CIO is responsible for matters related to the Investment Strategy Department, the

Investment Administration Department, the Public Market Investment Department, the Private Market Investment Department, and the Internal Fixed Income Investment Department.

Investment Assets by Investment Method and by Manager, Etc.

[1] Investment assets by investment method and by asset class (market value at the end of fiscal 2018)

		Market value (¥billion)	Portfolio allocation		
Total (Invest	tment assets)	159,215.4	100.00%		
	Total	158,319.1	99.44%		
Market investments	Passive investments	123,286.2	77.43%		
investments	Active investments	35,032.8	22.00%		
FIL	.P bonds	896.3	0.56%		

			Market value (¥billion)	Portfolio allocation		
	Total (Inves	tment assets)	159,215.4	100.00%		
		Total	42,266.4	26.55%		
	Domestic bonds	Passive investments	31,927.0	20.05%		
	bonds	Active investments	10,339.5	6.49%		
		Total	38,655.6	24.28%		
	Domestic equities	Passive investments	35,015.1	21.99%		
	equites	Active investments	3,640.5	2.29%		
	- ·	Total	27,818.7	17.47%		
	Foreign bonds	Passive investments	18,426.6	11.57%		
	bonds	Active investments	9,392.1	5.90%		
	- ·	Total	41,897.5	26.32%		
	Foreign equities	Passive investments	37,917.6	23.82%		
	equities	Active investments	3,980.0	2.50%		
	Short-term asse	ts (Active investments)	7,680.8	4.82%		
	FIL	P bonds	896.3	0.56%		

(Note 1) The figure in the market value column for FILP bonds includes accrued income in the book value amount based on the amortized cost method.

(Note 2) The figures above are rounded, so the sum of each item does not necessarily match the total number.

[2] Changes in the ratios of passive and active investment (market investments)

																		(L	Jnit: %)
		FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Domestic	Passive	50.67	61.36	75.47	78.58	79.88	77.97	80.87	82.26	83.09	82.05	81.61	90.48	90.13	86.10	82.50	79.38	77.03	75.54
bonds	Active	49.33	38.64	24.53	21.42	20.12	22.03	19.13	17.74	16.91	17.95	18.39	9.52	9.87	13.90	17.50	20.62	22.97	24.46
Domestic	Passive	44.24	70.84	77.02	76.87	76.19	76.27	76.41	75.73	75.26	75.26	76.23	78.78	87.69	86.71	81.52	90.62	90.44	90.58
equities	Active	55.76	29.16	22.98	23.13	23.81	23.73	23.59	24.27	24.74	24.74	23.77	21.22	12.31	13.29	18.48	9.38	9.56	9.42
Foreign	Passive	71.42	76.85	73.30	72.45	72.04	71.91	72.31	71.71	70.93	70.62	70.87	70.60	71.70	69.85	64.94	60.89	61.98	66.24
bonds	Active	28.58	23.15	26.70	27.55	27.96	28.09	27.69	28.29	29.07	29.38	29.13	29.40	28.30	30.15	35.06	39.11	38.02	33.76
Foreign	Passive	53.25	79.03	81.56	79.86	79.69	79.85	82.94	85.35	85.59	86.23	86.01	86.74	89.37	88.05	84.15	86.45	86.32	90.50
equities	Active	46.75	20.97	18.44	20.14	20.31	20.15	17.06	14.65	14.41	13.77	13.99	13.26	10.63	11.95	15.85	13.55	13.68	9.50
Tetel	Passive	50.07	65.54	74.89	77.78	78.06	77.22	79.53	80.47	79.67	78.13	76.65	84.50	86.00	83.91	79.28	77.31	76.28	77.87
Total	Active	49.93	34.46	25.11	22.22	21.94	22.78	20.47	19.53	20.33	21.87	23.35	15.50	14.00	16.09	20.72	22.69	23.72	22.13



[3] Investment assets by manager, etc. (market value at the end of fiscal 2018)

		(U	nit: ¥billion)
Investment method	Asset manager name (Subcontractor, etc.)	Manager benchmark	Market value
	Asset Management One Co., Ltd. (former Mizuho Trust & Banking)	BPI	1,158.4
	State Street Global Advisors (Japan) Co., Ltd.	BPI	1,296.8
Demestia	Sumitomo Mitsui Trust Asset Management Co., Ltd. ${f I}$	BPI	1,297.2
Domestic bonds passive	Sumitomo Mitsui Trust Asset Management Co., Ltd. II	BPI-G	3,252.5
investment	Mitsubishi UFJ Trust and Banking Corporation	BPI-G	1,608.8
	In-house investment I	BPI	1,367.1
	In-house investment II	BPI-G	9,346.2
	In-house investment III	BPI-C	12,599.9
	Asset Management One Co., Ltd. (former DIAM) I	BPI-TIPS	1,105.1
	Asset Management One Co., Ltd. (former Mizuho Trust & Banking) II	BPI-TIPS	950.9
	MU Investments Co., Ltd.	BPI-TIPS	709.9
Domestic	Tokio Marine Asset Management Co., Ltd.	BPI-TIPS	947.8
bonds	PGIM Japan Co., Ltd.	BPI-TIPS	639.0
active investment	PIMCO Japan Ltd (Pacific Investment Management Company LLC (PIMCO), etc.)	BPI-TIPS	551.2
	Manulife Asset Management (Japan) Limited	BPI-TIPS	427.5
	Sumitomo Mitsui Trust Asset Management Co., Ltd.	BPI-TIPS	955.4
	Mitsubishi UFJ Trust and Banking Corporation	BPI-TIPS	949.3
	In-house investment	-	3,035.4
	Asset Management One Co., Ltd. (former DIAM) I	TOPIX	9,099.2
	Asset Management One Co., Ltd. (former DIAM) II	JPX	525.0
	Asset Management One Co., Ltd. (former Mizuho Trust & Banking) Ⅲ	RN-P	1,564.8
	Asset Management One Co., Ltd. IV	FTSE-BL	230.4
	Goldman Sachs Asset Management Co., Ltd. (Goldman Sachs Asset Management, L.P., etc.)	SP-G	1,945.6
	Nomura Asset Management Co., Ltd.	RAFI	1,753.5
	FIL Investments (Japan) Limited (Geode Capital Management, LLC)	ΤΟΡΙΧ	98.2
Domestic	BlackRock Japan Co., Ltd. I	TOPIX	5,630.0
equities	BlackRock Japan Co., Ltd. II	MSCI-J	0.6
passive investment	BlackRock Japan Co., Ltd. III	FTSE-BL	412.4
	Sumitomo Mitsui Trust Asset Management Co., Ltd. I	TOPIX	3,656.1
	Sumitomo Mitsui Trust Asset Management Co., Ltd. II	JPX	566.4
	Sumitomo Mitsui Trust Asset Management Co., Ltd. III	SP-C	387.8
	Mitsubishi UFJ Trust and Banking Corporation I	TOPIX	6,066.2
	Mitsubishi UFJ Trust and Banking Corporation II	JPX	817.4
	Mitsubishi UFJ Trust and Banking Corporation III	MSCI- ESG	804.3
	Mitsubishi UFJ Trust and Banking Corporation ${\mathbb N}$	MSCI- WIN	474.6
	Resona Bank, Limited.	TOPIX	982.5
	Asset Management One Co., Ltd. (former DIAM) I	ΤΟΡΙΧ	595.6
	Asset Management One Co., Ltd. (former Mizuho Asset Management) II	RN-SG	101.8
	Eastspring Investments Limited (Eastspring Investments (Singapore) Limited)	ΤΟΡΙΧ	170.5
	Invesco Asset Management (Japan) Limited	TOPIX	221.7
	Capital International K.K. (Capital International, Inc.)	ΤΟΡΙΧ	471.3
Domestic	JPMorgan Asset Management (Japan) Ltd.	RN-V	371.5
equities active investment	Schroder Investment Management (Japan) Limited	TOPIX	276.2
	Daiwa SB Investments Ltd.	RN-V	377.7
	Nikko Asset Management Co., Ltd.	TOPIX	205.9
	Nomura Asset Management Co., Ltd. I	RN-S	56.2
	Nomura Asset Management Co., Ltd. II (Dimensional Fund Advisors LP)	MSCI-JS	241.5
	FIL Investments (Japan) Limited	TOPIX	352.1
	Russell Investments Japan Co., Ltd. (Russell Investments Implementation Services, LLC.)	ΤΟΡΙΧ	187.8

		(U	nit: ¥billion)
Investment method	Asset manager name (Subcontractor, etc.)	Manager benchmark	Market value
	Asset Management One Co., Ltd. (former Mizuho Trust & Banking)	WGBI	1,902.9
	State Street Global Advisors (Japan) Co., Ltd.	WGBI	1,945.4
	Nomura Asset Management Co., Ltd.	WGBI	2,476.0
	BlackRock Japan Co., Ltd. I	WGBI	0.6
	BlackRock Japan Co., Ltd. II	WGBI	2,520.6
	BlackRock Japan Co., Ltd. III	WGBI-O	30.9
	BlackRock Japan Co., Ltd. IV	USGOV	1,038.6
	BlackRock Japan Co., Ltd. V	USGOV-H	303.3
Foreign	BlackRock Japan Co., Ltd. VI	USGOV 1-3Y	255.3
bonds passive	BlackRock Japan Co., Ltd. VI	EGBI	0.2
investment	BlackRock Japan Co., Ltd. VII	EGBI	504.7
	BlackRock Japan Co., Ltd. 🔣	EGBI-H	290.4
	Sumitomo Mitsui Trust Asset Management Co., Ltd.	WGBI	1,904.9
	Resona Bank, Limited. I	WGBI	2,026.1
	Resona Bank, Limited. II	WGBI-O	63.2
	Resona Bank, Limited. III	USGOV	1,176.0
	Resona Bank, Limited. IV	USGOV-H	284.9
	Resona Bank, Limited. V	USGOV 1-3Y	309.4
	Resona Bank, Limited. VI	EGBI	1,014.9
	Resona Bank, Limited. VII	EGBI-H	378.2
	Asset Management One Co., Ltd. (former DIAM) I (Janus Capital Management LLC)	USAGG	506.0
	Asset Management One Co., Ltd. (former Mizuho Asset Management) II (Loomis, Sayles & Company, L.P.)	G-AGG	583.0
	Ashmore Japan Co., Ltd (Ashmore Investment Management Limited)	GBI- EMGD	223.6
	AllianceBernstein Japan Ltd. (AllianceBernstein L.P., etc.)	EMBIGD	94.8
	Goldman Sachs Asset Management Co., Ltd. (Goldman Sachs Asset Management, L.P., etc.)	G-AGG	276.2
	Schroder Investment Management (Japan) Limited (Schroder Investment Management Limited, etc.)	G-AGG	531.6
	Sompo Japan Nipponkoa Asset Management Co., Ltd. (Colchester Global Investors Limited)	G-AGG	730.7
	Nomura Asset Management Co., Ltd. I (Franklin Advisers, Inc.)	G-AGG	722.0
Foreign bonds active	Nomura Asset Management Co., Ltd. II (Nomura Corporate Research & Asset Management Inc.)	USHY2%	139.5
investment	BNY Mellon Asset Management Japan Limited (Insight Investment Management (Global) Limited)	EUROAGG	519.9
	PGIM Japan Co., Ltd. (PGIM, Inc. etc.)	G-AGG	809.8
	PIMCO Japan Ltd (Pacific Investment Management Company LLC (PIMCO), etc.)	G-AGG	788.8
	FIL Investments (Japan) Limited (Fidelity Institutional Asset Management)	USAGG	542.8
	BlackRock Japan Co., Ltd. (BlackRock Financial Management, Inc., etc.)	G-AGG	447.6
	Manulife Asset Management (Japan) Limited (Manulife Asset Management (US) LLC)	G-AGG	722.8
	Morgan Stanley Investment Management (Japan) Co., Ltd. (Morgan Stanley Investment Management, Inc., etc.)	G-AGG	710.0
	UBS Asset Management Japan Ltd (UBS Asset Management (UK) Ltd)	EUROHY 2%	158.7
	Legg Mason Asset Management Japan Co., Ltd. (Brandywine Global Investment Management, LLC)	G-AGG	596.2

		(U	nit: ¥billion)
Investment method	Asset manager name (Subcontractor, etc.)	Manager benchmark	Market value
	State Street Global Advisors (Japan) Co., Ltd. I	MSCI-A	17,739.0
	State Street Global Advisors (Japan) Co., Ltd. II	MSCI - N	1,290.3
	State Street Global Advisors (Japan) Co., Ltd. III	MSCI - EU	417.0
	State Street Global Advisors (Japan) Co., Ltd. IV	MSCI - P	83.8
Foreign	State Street Global Advisors (Japan) Co., Ltd. V	MSCI-EXC	44.5
equities passive	State Street Global Advisors (Japan) Co., Ltd. VI	SP-GC	1,205.2
investment	BlackRock Japan Co., Ltd.	MSCI-A	2,714.7
	Sumitomo Mitsui Trust Asset Management Co., Ltd.	MSCI-A	9,029.9
	Legal & General Investment Management Japan KK (Legal & General Investment Management Limited)	MSCI-A	5,373.0
	Resona Bank, Limited.	MSCI-A	20.0
	Asset Management One Co., Ltd. (former Mizuho Asset Management) (Wells Capital Management, Inc.)	MSCI-E	98.2
	MFS Investment Management K.K. (Massachusetts Financial Services Company)	MSCI-K	624.1
Foreign	Nikko Asset Management Co., Ltd. (INTECH Investment Management LLC)	MSCI-K	888.0
equities	Nomura Asset Management Co., Ltd.	MSCI-E	110.3
active investment	BNY Mellon Asset Management Japan Limited (Walter Scott & Partners Limited)	MSCI-K	489.3
	Mitsubishi UFJ Trust and Banking Corporation (Baillie Gifford Overseas Limited)	MSCI-K	750.9
	UBS Asset Management (Japan) Ltd (UBS Asset Management (UK) Ltd)	MSCI-K	888.2
	Lazard Japan Asset Management K.K. (Lazard Asset Management LLC)	MSCI-E	62.2
	DBJ Asset Management Co., Ltd.	_	13.4
	Gatekeeper : Nomura Asset Management Co., Ltd. Fund of Funds Manager : Pantheon	-	37.4
Alternative infrastructure	Gatekeeper : Sumitomo Mitsui Asset Management Company, Limited Fund of Funds Manager : StepStone Infrastructure & Real Assets	_	98.0
	In-house investment (Unit Trust Manager : Nissay Asset Management Corporation)	-	144.8
Alternative private equity	In-house investment (Unit Trust Manager : Nissay Asset Management Corporation)	_	14.3
Alternative real estate	Gatekeeper : Asset Management One Co., Ltd. Fund of Funds Manager : CBRE Global Investment Partners Limited	-	54.5
	Mitsubishi UFJ Trust and Banking Corporation	-	70.4
Short-term	In-house investment I	_	7,628.5
assets	In-house investment II	-	52.3
Subtotal		-	158,316.1
FILP bonds	In-house investment	-	896.3
Total	34 companies, 115 Funds	-	159,212.4

		(Unit: ¥billion)
Investment method	Custodian, etc. name	Market value
	Trust & Custody Services Bank, Ltd. (Domestic bonds, Short-term assets)	50,723.3
Custorite	State Street Trust and Banking Co., Ltd. (Foreign bonds, Alternative assets, Short-term assets)	20,596.3
Custody	Japan Trustee Services Bank, Ltd. (Domestic equities)	37,564.3
	The Master Trust Bank of Japan, Ltd. (Domestic equities, Foreign bonds, Foreign equities)	50,329.6
Total		159,213.6
	Russell Investments Japan Co., Ltd. (Domestic equities) (Russell Investments Implementation Services, LLC.)	0.1
Transition	BlackRock Japan Co., Ltd. (Foreign bonds) (BlackRock Asset Management North Asia Limited)	0.6
management	BlackRock Japan Co., Ltd. (Foreign equities) (BlackRock Asset Management North Asia Limited)	0.1
	Russell Investments Japan Co., Ltd. (Foreign equities) (Russell Investments Implementation Services, LLC.)	0.3
Total		1.2

(Note1) The figure in the market value column for FILP bonds includes accrued income in the book value amount based on the amortized cost method.

- (Note2) While the 34 asset managers in the total column do not include in-house investment, the 115 funds in the total column include nine in-house investment funds.
- (Note3) The figure in the total market value column for funds managed by asset managers (115 funds managed by 34 managers) does not include accrued dividend income from closed funds (statutory trust accounts).
- (Note4) Figures in the market value column for custodians do not include accrued dividend income (foreign equities: ¥1.7 billion) from closed funds (statutory trust accounts).
- (Note5) Manager benchmarks are shown in the table below and the sources of those benchmarks are as listed in the right-hand column of the table below.

		Manager benchmark	Source of benchmark
Domestic bonds	BPI	NOMURA-BPI (excluding ABS)	Nomura Research Institute, Ltd.
	BPI-G	Nomura-BPI government bonds	Nomura Research Institute, Ltd.
	BPI-TIPS	Nomura-BPI plus Inflation-Linked bonds	Nomura Research Institute, Ltd.
	BPI-C	NOMURA-BPI/GPIF Customized	Nomura Securities Co., Ltd.
	ΤΟΡΙΧ	TOPIX (incl. dividends)	Tokyo Stock Exchange, Inc.
	JPX	JPX-Nikkei Index 400 (incl. dividends)	Tokyo Stock Exchange, Inc.
	RN-P	RUSSELL/NOMURA Prime Index (incl. dividends)	Nomura Research Institute, Ltd.
	RN-V	RUSSELL/NOMURA Large Cap Value Index (incl. dividends)	Nomura Research Institute, Ltd.
	RN-S	RUSSELL/NOMURA Small Cap Index (incl. dividends)	Nomura Research Institute, Ltd.
Domestic equities	RN-SG	RUSSELL/NOMURA Small Cap Growth Index (incl. dividends)	Nomura Research Institute, Ltd.
	MSCI-J	MSCI Japan Standard (incl. dividends)	MSCI G.K.
	MSCI-JS	MSCI Japan Small (incl. dividends)	MSCI G.K.
	MSCI-ESG MSCI-WIN	MSCI Japan ESG Select Leaders Index MSCI Japan Empowering Women Index (WIN)	MSCI G.K. MSCI G.K.
			FTSE International
	FTSE-BL	FTSE Blossom Japan Index	Limited
	SP-C	S&P/JPX Carbon Efficient Index (JPY basis)	S&P Opco, LLC
	SP-G	S&P GIVI Japan (Gross Total Return)	S&P Opco, LLC
	RAFI	Nomura RAFI reference Index	Nomura Asset Management Co., Ltd.
	WGBI	FTSE World Government Bond Index (not incl. JPY, no hedge/JPY basis)	FTSE Fixed Income LLC
	WGBI-O	FTSE World Government Bond Index (not incl. JPY, USD, EMU Government Bond, no hedge/JPY basis)	FTSE Fixed Income LLC
	USGOV	FTSE US Government Bond Index (no hedge/JPY basis)	FTSE Fixed Income LLC
	USGOV-H	FTSE US Government Bond Index (JPY hedged/JPY basis)	FTSE Fixed Income LLC
	USGOV 1-3Y	FTSE US Government Bond Index 1–3years (no hedge/JPY basis)	FTSE Fixed Income LLC
	EGBI	FTSE EMU Government Bond Index (no hedge/JPY basis)	FTSE Fixed Income LLC
Foreign	EGBI-H	FTSE EMU Government Bond Index (JPY hedged/ JPY basis)	FTSE Fixed Income LLC
bonds	G-AGG	Bloomberg Barclays Global Aggregate Index (not incl. JPY, no hedge/JPY basis)	Bloomberg Index Services Limited
	USAGG	Bloomberg Barclays US Aggregate Index (no hedge/JPY basis)	Bloomberg Index Services Limited
	EUROAGG	Bloomberg Barclays EURO Aggregate Index (no hedge/JPY basis)	Bloomberg Index Services Limited
	USHY2%	Bloomberg Barclays U.S. Corporate High Yield 2% Issuer Capped Bond Index (no hedge/JPY basis)	Bloomberg Index Services Limited
	EUROHY2%	Bloomberg Barclays EURO Corporate High Yield 2% Issuer Capped Bond Index (no hedge/JPY basis)	Bloomberg Index Services Limited
	GBI-EMGD	J.P. Morgan Government Bond Index-Emerging Markets Global Diversified Index (no hedge/JPY basis)	J.P. Morgan Securities LLC
	EMBIGD	J.P. Morgan EMBI Global Diversified (no hedge/JPY basis)	J.P. Morgan Securities LLC
	MSCI-A	MSCI ACWI (not incl. JPY, China A, JPY basis, incl. dividends, after taking into account our dividend tax factors)	MSCI G.K.
	MSCI-K	MSCI KOKUSAI (JPY basis, incl. dividends, after taking into account our dividend tax factors)	MSCI G.K.
	MSCI-N	MSCI North America(JPY basis, incl. dividends, after taking into account our dividend tax factors)	MSCI G.K.
Foreign equities	MSCI - EU	MSCI Europe & Middle East(JPY basis, incl. dividends, after taking into account our dividend tax factors)	MSCI G.K.
	MSCI-P	MSCI Pacific(not incl. JPY, JPY basis, incl. dividends, after taking into account our dividend tax factors)	MSCI G.K.
	MSCI-E	MSCI EMERGING MARKETS (JPY basis, incl. dividends, after deducting taxes)	MSCI G.K.
	MSCI-EXC	MSCI EMERGING MARKETS (not incl. China A, JPY basis, incl. dividends, after deducting taxes)	MSCI G.K.
	SP-GC	S&P Global Ex-Japan LargeMidCap Carbon Efficient Index	S&P Opco, LLC

[4] Investment performance by manager, etc.

① Investment performance (over the last year) (from April 2018 to March 2019)

Investment method	Asset manager name	Time-weighted return (A)	Benchmark return (B)	Excess rate of return (C)=(A)–(B)	Remarl colum
	Asset Management One Co., Ltd. (former Mizuho Trust & Banking)	1.89%	1.89%	-0.00%	
	State Street Global Advisors (Japan) Co., Ltd.	1.92%	1.89%	+0.02%	
Domestic	Sumitomo Mitsui Trust Asset Management Co., Ltd. I	1.92%	1.89%	+0.02%	
onds passive	Sumitomo Mitsui Trust Asset Management Co., Ltd. II	2.05%	2.04%	+0.01%	
investmentt	Mitsubishi UFJ Trust and Banking Corporation	2.03%	2.04%	-0.01%	
	In-house investment I	1.94%	1.89%	+0.05%	
	In-house investment I	2.07%	2.04%	+0.03%	
	In-house investment II	0.78%	0.76%	+0.02%	
	Asset Management One Co., Ltd. (former DIAM) I	1.97%	1.87%	+0.10%	
	Asset Management One Co., Ltd. (former Mizuho Trust & Banking) II	1.98%	1.87%	+0.11%	
	MU Investments Co., Ltd.	2.14%	1.87%	+0.28%	
Demestie	Tokio Marine Asset Management Co., Ltd.	1.92%	1.87%	+0.05%	
Domestic bonds active	PGIM Japan Co., Ltd.	1.98%	1.87%	+0.11%	
investment	PIMCO Japan Ltd	1.78%	1.87%	-0.09%	
	Manulife Asset Management (Japan) Limited	2.65%	1.87%	+0.78%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd.	2.06%	1.87%	+0.19%	
	Mitsubishi UFJ Trust and Banking Corporation	1.91%	1.87%	+0.04%	
	In-house investment	-1.05%			
	Asset Management One Co., Ltd. (former DIAM) I	-5.04%	-5.04%	-0.01%	
	Asset Management One Co., Ltd. (former DIAM) II	-4.34%	-4.32%	-0.02%	
	Asset Management One Co., Ltd. (former Mizuho Trust & Banking) III	-4.79%	-4.83%	+0.05%	
	Asset Management One Co., Ltd. IV	-5.97%	-5.99%	+0.01%	
	Goldman Sachs Asset Management Co., Ltd.	-3.87%	-3.94%	+0.07%	
	Nomura Asset Management Co., Ltd.	-5.48%	-5.48%	-0.00%	
	FIL Investments (Japan) Limited	-1.02%	-0.97%	-0.05%	0
	BlackRock Japan Co., Ltd. I	-5.04%	-5.04%	-0.00%	
Domestic equities	BlackRock Japan Co., Ltd. II	-3.41%	-3.40%	-0.02%	
passive	BlackRock Japan Co., Ltd. III	-6.03%	-5.99%	-0.04%	
investment	Sumitomo Mitsui Trust Asset Management Co., Ltd. I	-5.09%	-5.04%	-0.05%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. II	-4.35%	-4.32%	-0.03%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. III	-8.89%	-8.88%	-0.01%	0
	Mitsubishi UFJ Trust and Banking Corporation I	-5.07%	-5.04%	-0.03%	
	Mitsubishi UFJ Trust and Banking Corporation II	-4.36%	-4.32%	-0.04%	
	Mitsubishi UFJ Trust and Banking Corporation III	-2.87%	-2.75%	-0.11%	
	Mitsubishi UFJ Trust and Banking Corporation IV	-3.41%	-3.37%	-0.04%	
			-0.97%	-0.04%	0
	Resona Bank, Limited.	-1.01%	-5.04%	-0.04%	
	Asset Management One Co., Ltd. (former DIAM) I				
	Asset Management One Co., Ltd. (former Mizuho Asset Management) II	-6.49%	-8.67%	+2.18%	
	Eastspring Investments Limited	-9.26%	-7.32%	-1.94%	
	Invesco Asset Management (Japan) Limited	2.02%	-5.04%	+7.06%	
	Capital International K.K.	-4.88%	-5.04%	+0.16%	
Domestic	JPMorgan Asset Management (Japan) Ltd.	-6.10%	-3.64%	-2.46%	
quities active	Schroder Investment Management (Japan) Limited	-3.81%	-5.04%	+1.22%	
investment	SEIRYU Asset Management Ltd.	-11.93%	-3.85%	-8.08%	
	Daiwa SB Investments Ltd.	-7.55%	-3.64%	-3.91%	
	Nikko Asset Management Co., Ltd.	-8.04%	-7.32%	-0.72%	
	Nomura Asset Management Co., Ltd. I	-12.49%	-7.97%	-4.52%	
	Nomura Asset Management Co., Ltd. II	-3.84%	-10.82%	+6.98%	
	FIL Investments (Japan) Limited	-10.38%	-5.04%	-5.34%	
	Russell Investments Japan Co., Ltd.	-7.03%	-5.04%	-2.00%	
	Asset Management One Co., Ltd. (former Mizuho Trust & Banking)	2.48%	2.46%	+0.02%	
	State Street Global Advisors (Japan) Co., Ltd.	2.47%	2.46%	+0.01%	
	Nomura Asset Management Co., Ltd.	2.47%	2.46%	+0.01%	
	BlackRock Japan Co., Ltd. I	2.86%	2.84%	+0.02%	
	BlackRock Japan Co., Ltd. II	6.85%	6.82%	+0.03%	
	BlackRock Japan Co., Ltd. III	-0.57%	-0.56%	-0.01%	0
	BlackRock Japan Co., Ltd. IV	1.86%	1.86%	+0.01%	0
	BlackRock Japan Co., Ltd. V	-4.26%	-4.27%	+0.00%	
Foreign	BlackRock Japan Co., Ltd. VI	2.83%	2.80%	+0.04%	0
bonds	BlackRock Japan Co., Ltd. VI	3.35%	3.32%	+0.03%	0
passive investment	BlackRock Japan Co., Ltd. VII	4.04%	3.93%	+0.11%	0
	Sumitomo Mitsui Trust Asset Management Co., Ltd.	2.50%	2.46%	+0.04%	
	Resona Bank, Limited. I	2.50%	2.46%	+0.04%	
	Resona Bank, Limited. I	6.88%	6.89%	-0.01%	
	Resona Bank, Limited. II	4.65%	4.67%	-0.02%	0
	Resona Bank, Limited. II	-2.55%	-2.64%	+0.09%	\vdash
					0
	Resona Bank Limited V	1 0 20/			
	Resona Bank, Limited. V Resona Bank, Limited. VI	1.03%	0.99%	+0.04%	

Investment method	Asset manager name	Time-weighted return (A)	Benchmark return (B)	Excess rate of return (C)=(A)–(B)	Remarks column
	Asset Management One Co., Ltd. (former DIAM) I	8.53%	8.74%	-0.21%	
	Asset Management One Co., Ltd. (former Mizuho Asset Management) II	3.79%	4.03%	-0.24%	
	Ashmore Japan Co., Ltd	-4.35%	-3.81%	-0.54%	
	AllianceBernstein Japan Ltd.	6.17%	8.46%	-2.29%	
	Goldman Sachs Asset Management Co., Ltd.	4.40%	4.03%	+0.37%	
	Schroder Investment Management (Japan) Limited	3.17%	4.03%	-0.86%	
	Sompo Japan Nipponkoa Asset Management Co., Ltd.	1.92%	4.03%	-2.12%	
	Nomura Asset Management Co., Ltd. I	5.33%	4.03%	+1.29%	
Foreign bonds	Nomura Asset Management Co., Ltd. II	9.13%	10.25%	-1.12%	
active investment	BNY Mellon Asset Management Japan Limited	-3.16%	-2.91%	-0.26%	
investment	PGIM Japan Co., Ltd.	5.20%	4.03%	+1.17%	
	PIMCO Japan Ltd	4.40%	4.03%	+0.37%	
	FIL Investments (Japan) Limited	9.47%	8.74%	+0.73%	
	BlackRock Japan Co., Ltd.	3.36%	4.03%	-0.67%	
	Manulife Asset Management (Japan) Limited	2.72%	4.03%	-1.31%	
	Morgan Stanley Investment Management (Japan) Co., Ltd.	3.27%	4.03%	-0.76%	
	UBS Asset Management (Japan) Ltd.	-3.13%	-3.22%	+0.09%	
	Legg Mason Asset Management (Japan) Co., Ltd.	-0.78%	4.03%	-4.81%	
	State Street Grobal Advisors (Japan) Co., Ltd. I	8.15%	8.20%	-0.05%	
	State Street Grobal Advisors (Japan) Co., Ltd. II	-0.47%	-0.45%	-0.02%	0
	State Street Grobal Advisors (Japan) Co., Ltd. 🎞	6.54%	6.59%	-0.05%	
	State Street Grobal Advisors (Japan) Co., Ltd. IV	8.35%	8.41%	-0.06%	0
Foreign equities	State Street Grobal Advisors (Japan) Co., Ltd. V	-7.36%	-7.44%	+0.08%	
passive investment	State Street Grobal Advisors (Japan) Co., Ltd. VI	-4.31%	-4.22%	-0.09%	0
investment	BlackRock Japan Co., Ltd.	6.63%	6.69%	-0.06%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd.	9.36%	9.42%	-0.07%	
	Legal & General Investment Management Japan KK	-1.10%	-1.09%	-0.01%	0
	Resona Bank, Limited.	1.95%	1.98%	-0.03%	
	Asset Management One Co., Ltd. (former Mizuho Asset Management)	-1.43%	-3.64%	+2.21%	
	MFS Investment Management K.K.	11.21%	10.06%	+1.15%	
Fee 1	Nikko Asset Management Co., Ltd.	7.13%	10.06%	-2.93%	
Foreign equities	Nomura Asset Management Co., Ltd.	-0.81%	-3.64%	+2.82%	
active investment	BNY Mellon Asset Management Japan Limited	15.53%	10.06%	+5.47%	
investment	Mitsubishi UFJ Trust and Banking Corporation	6.69%	10.06%	-3.36%	
	UBS Asset Management (Japan) Ltd	15.57%	10.06%	+5.51%	
	Lazard Japan Asset Management K.K.	-4.16%	-3.64%	-0.21% -0.24% -0.54% -2.29% +0.37% -0.86% -2.12% +1.29% -1.12% -0.26% +1.17% +0.37% +0.37% +0.73% -0.67% -1.31% -0.67% -1.31% -0.67% -0.05% -0.05% -0.05% -0.05% -0.05% -0.06% +0.08% -0.06% +0.08% -0.06% +0.08% -0.07% -0.01% -0.01% -0.03% +2.21% +1.15% -2.93% +2.82% +5.47% -3.36%	

(2) Investment performance (alternative assets)

Alternative assets	Investment style	Asset manager name	IRR (local currency)	IRR (JPY)	Local currency	Start of investment
	Global infrastructure mandate focusing	2.78%	2.78%	JPY	March 2018	
Infrastructure	mainly on opportunities in Japan (Note 8)	inities in	_	_	USD	April 2018
	Global-Core	Nomura Asset Management Co., Ltd.	-2.55%	-1.63%	USD	February 2018
	Global-Core	Sumitomo Mitsui Asset Management Company, Limited	1.45%	1.63%	USD	January 2018
	Global-Core	In-house investment	2.11%	0.99%	USD	February 2014
Private equity	Emerging markets-Diversified	In-house investment	3.43%	3.03%	USD	June 2015
Real estate	Global-Core	Asset Management One Co., Ltd.	_	_	USD	September 2018
	Japan-Core	Mitsubishi UFJ Trust and Banking Corporation	2.30%	2.30%	JPY	December 2017

(Note 1) Funds are listed in the order of the Japanese syllabary.

(Note 2) Asset managers entrusted with investment for more than one contract using the same investment method are indicated in Roman numerals.

(Note 3) The time-weighted returns and the benchmark returns are annualized rates that exclude the effect of the trade suspended period for asset transfer.

(Note 4) Excess returns and information ratio may not equal the value calculated using the figures in the table because the figures are rounded off to two decimal places. (Note 5) Time-weighted returns do not include returns from securities lending investment.

(Note 6) Internal rate of return (IRR) is a rate of return calculated by taking into account the effects of the size and timing of cash flows of investment target funds during the investment period. The calculation period of IRR is from the start of investment to the end of the current fiscal year.

(Note 7) Actual investments in alternative assets are denominated in major investment currencies. IRR (yen-denominated funds) is calculated by converting cash flows denominated in major investment currencies into yen at the going market exchange rate and is subject to exchange rate fluctuations throughout the investment period. (Note 8) Domestic assets (currency: JPY) are managed separately from foreign assets (currency: USD).

(Note 9) A circle in the remarks column indicates an external asset manager with less than one year of investment period. The rates of returns of external asset managers with less than one year of investment period show periodic rates of returns. The rate of returns for investments in alternative assets shows the rate of returns of investment products with an investment period of one year or more. (A hyphen in the column indicates an asset with less than one year since the implementation of investment.)

Code of Conduct

[1] Social responsibility

GPIF's mission is to contribute to the stability of the public pension system (Employees' Pension Insurance and National Pensions) by managing the reserve assets and distributing the proceeds to the government. (ϕ)

(2) Fiduciary duty

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We fully understand that the reserve assets are instrumental for future pension benefits payments, act solely for the benefit of pension recipients, and pledge to pay due attention as prudent experts in exercising our fiduciary responsibilities. The Chairperson and the member of the Board of Governors shall by no means be motivated by benefitting the organizations to which they belong.

3 Compliance with laws and maintaining highest professional ethics and integrity

We shall comply with laws and social norms, remain fully cognizant of our social responsibilities associated with pension reserve management, and act with the highest professional ethics and integrity to avoid any distrust or suspicion of the public.

4 Duty of confidentiality and protecting GPIF's asset

- We shall strictly control confidential information that we come to access through our businesses, such as non-public information related to investment policies and investment activities, and never use such information privately or illegally.
- We shall effectively use GPIF's assets, both tangible and intangible (e.g., documents, proprietary information, system, and know-how), and protect and manage such assets properly.

[5] Prohibition of pursuing interests other than those of GPIF

- We shall never use our occupations or positions for the interests of ourselves, relatives, or third parties.
- We shall never seek undue profits at the expense of GPIF.

[6] Fairness of business transactions

- We shall respect fair business practices at home and abroad, and treat all counterparties impartially.
- We shall never make transactions with anti-social forces or bodies.

[7] Appropriate information disclosure

- We shall continue to improve our public information disclosure and public relations activities.
- We shall ensure the accuracy and appropriateness of our financial statements and other public documents that are required to be disclosed by laws and ordinances.
- We shall remain mindful that our outside activities, regardless of whether business or private (e.g., publications, speeches, interviews, or use of social media) affect the credibility of GPIF, and act accordingly.

[8] Developing human resources and respect in the workplace

- We are committed to GPIF's mission by improving our professional skills and expertise, promoting communication and teamwork and nurturing a diversity of talents and capabilities.
- We shall respect each person's personality, talents and capabilities, perspectives, well-being, and privacy to maintain a good work environment, and never allow discrimination or harassment.

[9] Self-surveillance of illegal or inappropriate activity

- Whenever an illegal or inappropriate activity is (or is expected to be) perpetrated by executives, staff, or other related personnel, such activity shall be immediately reported to GPIF through various channels including our whistleblowing system.
- When such a report is made, we shall conduct the necessary investigation and take corrective actions and preventive measures according to our internal rules.

Government Pension Investment Fund, Japan Annual Report Fiscal Year 2018

This document has been prepared and released to the public in accordance with Article 26, Paragraph 1 of the Act on Government Pension Investment Fund and Article 79-8, Paragraph 1 of the Employees' Pension Insurance Act.

Inquiries

Planning and Communication Division, Planning and Communication Department Government Pension Investment Fund Toranomon Hills Mori Tower, 1-23-1 Toranomon, Minato-ku, Tokyo, Japan 105-6377 Tel: +81-3-3502-2486 (direct dial) Fax: +81-3-3503-7398 Website: https://www.gpif.go.jp/en/

