GPIF

For All Generations

ANNUAL REPORT
FISCAL YEAR 2019

Government Pension Investment Fund

Investment Principles

1. Our overarching goal is to contribute to the stability of the national pension system by securing the investment returns that it requires with minimal risk and from a long-term perspective, to the sole benefit of pension recipients.

2. Our primary investment strategy is diversification by asset class, region, and timeframe. While market prices may fluctuate in the short term, GPIF will take full advantage of our long-term investment horizon to achieve investment returns in a more stable and efficient manner, while simultaneously ensuring sufficient liquidity to pay pension benefits.

3. We formulate our overall policy asset mix and manage risks at the portfolio, asset class, and investment manager level. We utilize both passive and active management in order to achieve benchmark returns (i.e., average market returns) and seek untapped profitable investment opportunities.

4. We believe that sustainable growth of investee companies and the capital market as a whole are vital in enhancing long-term investment returns. In order to secure such returns for pension beneficiaries, therefore, we promote the incorporation of non-financial environmental, social, and governance (ESG) factors into the investment process in addition to financial factors.

5. In order to enhance long-term investment returns and fulfill our stewardship responsibilities, we shall advance various initiatives (including the consideration of ESG factors) that promote long-termism and the sustainable growth of investee companies and the capital market as a whole.

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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.

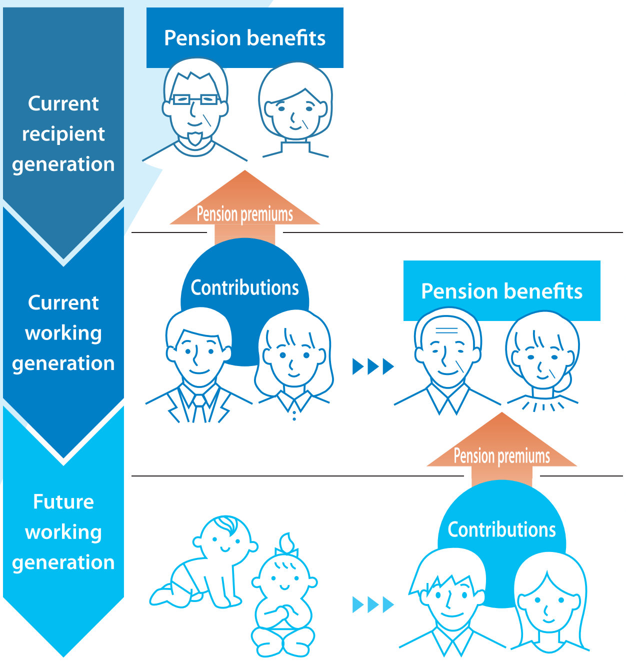
1 Pension system in Japan

The Japanese pension system adopts a pay-as-you-go system, in which pension premiums collected from working generations support older generations.
Because the decreasing birthrate and aging population in Japan are progressing rapidly, pension premiums that have not been allocated to the payout of benefits are accumulated as pension reserves and managed for a stable pension payout into the future in order to avoid placing excess burdens on future generations.

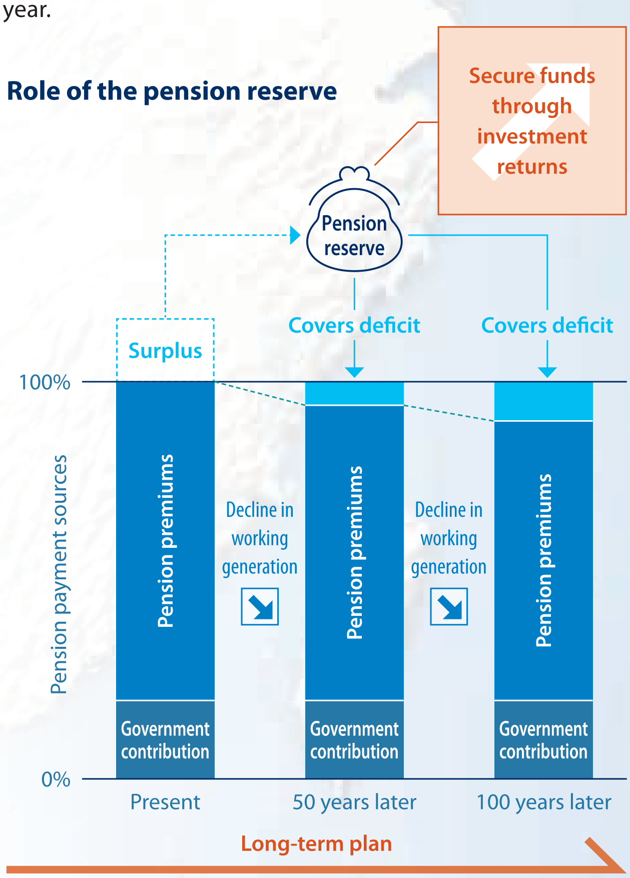
GPIF gains investment returns by investing the pension reserves in capital markets in Japan and overseas. The pension reserves including investment returns will be used for future pension benefits according to the pension fiscal plan for approximately 100 years. The financial source obtained from pension reserves accounts for about 10 percent of the total pension finance. The reserves for future payout of pension benefits are so sufficient that an evaluation loss or gain incurred in a specific fiscal year will not affect the amount of pension benefits in the following year.

Pay-as-you-go system

Japan adopts a system where working generations support the lives of the elderly generations.



Role of the pension reserve



(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.

2 Long-term, Globally Diversified Investment

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

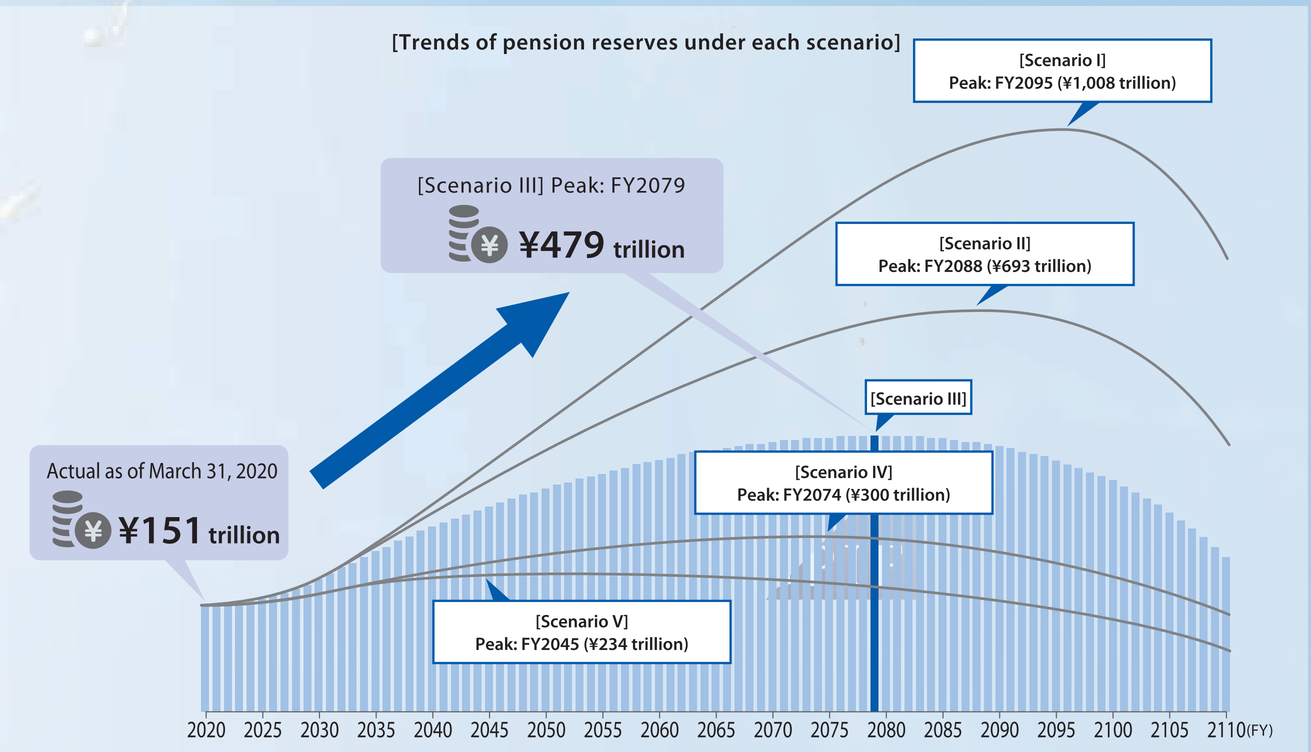
We allocate our investment assets of ¥151 trillion as of the end of March 2020 to widely diversified assets such as bonds and equities in Japan and overseas. Moreover, we are gradually expanding and enhancing our investment target to alternative assets as well.

3 Promotion of ESG (Environmental, Social and Governance) Investment

GPIF integrates ESG into the entire investment process in line with the concept of Investment Principles that, "in order to enhance long-term investment returns, we shall advance various initiatives that promote long-termism and the sustainable growth of investee companies and the capital market as a whole". GPIF allocates its investment assets of about ¥5.7 trillion in ESG indices, and holds green, social and sustainability bonds worth about ¥440 billion issued by the multilateral development banks, which are an ESG investment in a narrow sense.

▶ For details, refer to page 58-62.

Financial verification results (projections for pension reserves over approximately 100 years)



(Note 1) Population assumes medium fertility and medium mortality.
(Note 2) Asset size as of March 31, 2020 is only for the pension reserve fund and does not include Pension Special Account.
(Note 3) For details of Scenario I through Scenario V, refer to page 44.

The Board of Governors aims at making GPIF a trustworthy organization to enhance the benefits of the Japanese public by fully utilizing the expertise of the Governors with a wide range of knowledge and experiences.

The Board of Governors, established in October 2017, comprises ten 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.

During the past three years since the establishment of the Board, I believe that GPIF has gradually improved its governance through tackling various issues ranging from asset management to managerial issues. In fiscal 2019, in particular, the Board paid enormous efforts in formulating the fourth Medium-term Plan, including the policy asset mix, which started to take effect in April this year. This is an invaluable experience for the Board as well as GPIF as a whole.

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. Such investment decisions are never easy to make in the face of the global COVID-19 pandemic, which could be seen as the most serious crisis since World War II not only in Japan but also all through the whole world. However, the Board of Governors is committed to devoting all of its energies for the benefit of the Japanese public by concentrating the wisdom of its members in close collaboration with the Executive Office under the leadership of President Miyazono who was newly assigned in April.

Chairperson of the
Board of Governors

平野英治

HIRANO Eiji

Government Pension Investment Fund, Japan

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 reserves.

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 reserves 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 2019 was negative due to the weak performance of equities in Japan and overseas.

Taking an overview of the market environment in fiscal 2019, stock prices in Japan and overseas remained steadily during 2019, as exemplified by the Dow Jones Industrial Average Index hitting a historical high, despite being affected by the tensions between the U.S. and China on trade issues. However, in 2020, because of the global COVID-19 pandemic, it plunged due to an increase in investors' risk aversion on concerns about the outlook for the global economy and corporate earnings. Meanwhile, the U.S. and European interest rates sharply declined in response to the FRB's decision to cut federal funds rates and implement large-scale quantitative easing. The yen remained destabilized, while appreciated against the U.S. dollar and euro due to an increase in investors' risk aversion at the end of fiscal 2019. As a result of these developments, the annual rate of return came to -5.20%. Still, our investments have brought more than ¥57 trillion cumulative amount of returns since fiscal 2001, when GPIF started managing pension reserves. 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 reserves 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 2019, we aim to improve further transparency by adding new analysis and relevant information, as we did in the previous year, so that we can provide a clearer picture of our activities.

The global spread of COVID-19 has substantially changed how the society and the economy operate. As the whole world faces the extremely difficult challenge of finding a balance between preventing further spread of COVID-19 and maintaining social and economic activities, by exercising fiduciary responsibilities for the pension reserves, we pledge to fulfill our mission of contributing to the stability of the public pension finance and the stability of the lives of Japanese public, as an organization worthy of the public's trust.

I would sincerely appreciate your continued understanding and support.

President 宮園雅敬

MIYAZONO Masataka

Government Pension Investment Fund, Japan

Basics of GPIF's Pension Reserve Management

Characteristics of Pension Reserves managed by GPIF

Pension Reserves managed by GPIF have the following characteristics:

① The fund size is more than ¥150 trillion.

- Accordingly, it is necessary to pursue efficient investments, while carefully preventing exposures to unfavorable market impacts such as moving market prices.

② The reserve fund will not be required to be withdrawn for the next fifty years or so.

- Accordingly, it is important to invest from a long-term perspective to ensure an investment return with a long-term horizon, without being too sensitive to short-term market fluctuations.

GPIF's Investment Practice of Pension Reserves

Taking these characteristics into mind, GPIF manages pension funds with the following considerations:

① GPIF focuses on long-term risks.

- It is legally prescribed that "pension reserves, a 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 long-term perspective solely for the beneficiaries. ".
- The Medium–term Objectives prescribed by the Minister of Health Labour and Welfare ("MHLW") stipulate that a pension reserve fund must achieve a long–term real return (net investment yield on the pension reserve fund less the nominal wage growth rate) of 1.7% with minimal risks.
- A risk emphasized by GPIF is not "a short-term risk arising from temporary market fluctuation" but "a risk of failing to achieve a long-term investment return required for the pension finance."
  Accordingly, it is important to include assets that are expected to generate a high return over a long term properly.

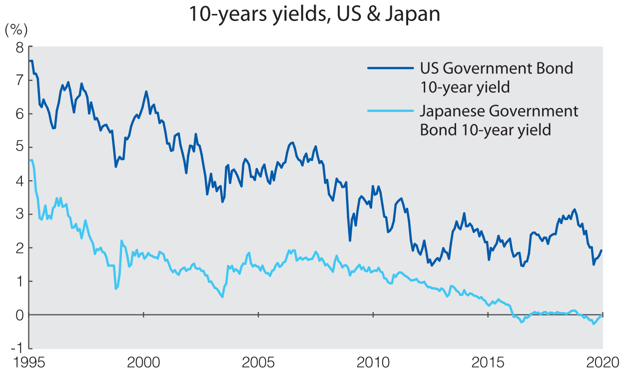
② GPIF makes diversified investments into various types of assets in Japan and overseas properly.

- By investing not only in a specific asset but in diversified types of assets in Japan and overseas separately, GPIF can expect profits from global economic activities, while controlling the risk of incurring a large loss.
- For instance, a temporary fall in asset prices due to market fluctuations could be offset by a subsequent rebound, leaving the value of a portfolio unaffected in the long run. However, in some cases, a downward trend of asset prices could continue longer than had been initially assumed. In other cases, on the contrary, if the portfolio does not hold a specific asset whose price is on the rise, the portfolio would miss an opportunity of taking profit.
  To avoid such an event, GPIF controls risks by diversifying investment portfolio across multiple asset classes, aiming to ensure the investment return required for pension finance.

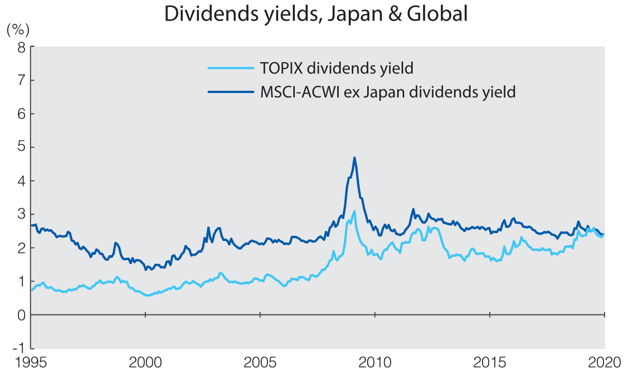
③ GPIF's investment portfolio properly incorporates equities because of high growth potential in the long run.

- Equities are exposed to greater price fluctuation risks than bonds in the short term, but could yield a higher return from a longer perspective.

10-years yields, US & Japan



Dividends yields, Japan & Global



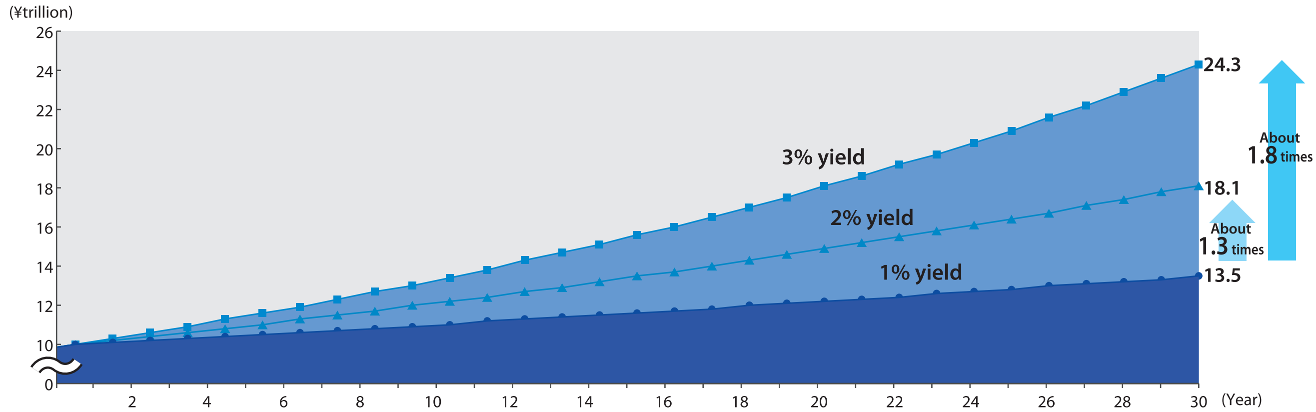
- The advantage of holding equities for a long time is that we can benefit from corporate activities in Japan and overseas and the receiving economic growth as a "dividend" and "unrealized gain" of GPIF holdings. Profits gained from economic activities of business entities are distributed as a "dividend", which ensures stable returns even when the economy matures and the growth rate declines.
  Moreover, if a company grows further, the company's stock price may rise in the long run, which ensures profitability in the form of an "unrealized gain".
- GPIF's equity investments focus on index-linked passive investments in a wide range of equities. Moreover, it partly incorporates active investments with a focus on the inefficiency of the markets and seeks profitability above that of indices.
- We are aware of certain concerns that a withdrawal from the pension reserves may affect stock prices, given the vast amount of our equity holdings.
  However, as mentioned above, the pension reserves managed by GPIF shall not be withdrawn for the next fifty years or so. (However, part of the investment gains may be allocated to pension benefits.)
  Even if the event occurs, the massive amount of funds shall be withdrawn gradually over several decades, rather than at one time. The operation shall be executed after carefully assessing market trends in Japan and overseas, with minimum impact on markets.

④ GPIF properly selects and owns foreign bonds for which higher returns than domestic bonds can be expected in the long term.

- Foreign bonds are exposed to the risk of temporary capital loss due to currency fluctuations, but are expected to yield higher returns compared to domestic bonds in the long run.
- For instance, even the 10-year yield of Japan's domestic government bond was within a 1.0% to 1.5% range when GPIF started managing pension reserves in 2001. However, it has remained at the 0% level in recent years due to the Bank of Japan's zero interest rate policy. As a result, it is impossible to achieve investment returns by way of traditional Japanese government bonds-oriented investments.
- An increasing number of European countries have also adopted zero interest rate policies, while the U.S. government bond yields remain at the 1.0% level even under today's circumstances. Moreover, the U.S. and other overseas bond markets may allow more efficient investments, given the large size of the corporate bonds' markets.
- When investing in foreign bonds, GPIF carefully assesses various risks including country risks. We understand that there are certain concerns about currency exchange risks pertaining to foreign assets, but records show that a benefit from interest rate differences exceeds the currency exchange risks in the long run. GPIF expects this benefit to continue in the future.
  Accordingly, we believe it is reasonable to hold foreign bonds at a certain volume, while assessing various risks carefully.

【Accumulation effects through cross generational investments】

A difference in yields can make big differences in the long run. For instance, while there is 2% difference between 3% yield and 1% yield, the former makes assets grow about 1.8 times when compared to 1% yield in thirty years.



(Note) Starting with ¥10 trillion and assuming yields of 3%, 2%, and 1% in each case for the period of 30 years.

⑤ GPIF verifies the policy asset mix in a timely and appropriate manner in accordance with market conditions.

- GPIF's investment had been centered on Japanese government bonds since GPIF became an incorporated administrative agency, when the interest rates of domestic bonds were higher than the present level. Subsequently, as the interest rates of domestic government bonds have declined, GPIF has increased the weight of domestic equities, foreign equities, and foreign bonds.
- GPIF continues verifying the policy asset mix in a timely and appropriate manner in accordance with market conditions.

Overview of Fiscal 2019

Investment Results

For details, refer to page 13-16.

Rate of return (Returns)

	Fiscal 2019	Since Fiscal 2001
Rate of return [annual rate]	−5.20%	+2.58%
Returns	(−¥8,283.1 billion) [annual returns]	(+¥57,537.7 billion) [cumulative returns]

Asset size

As of the end of fiscal 2019

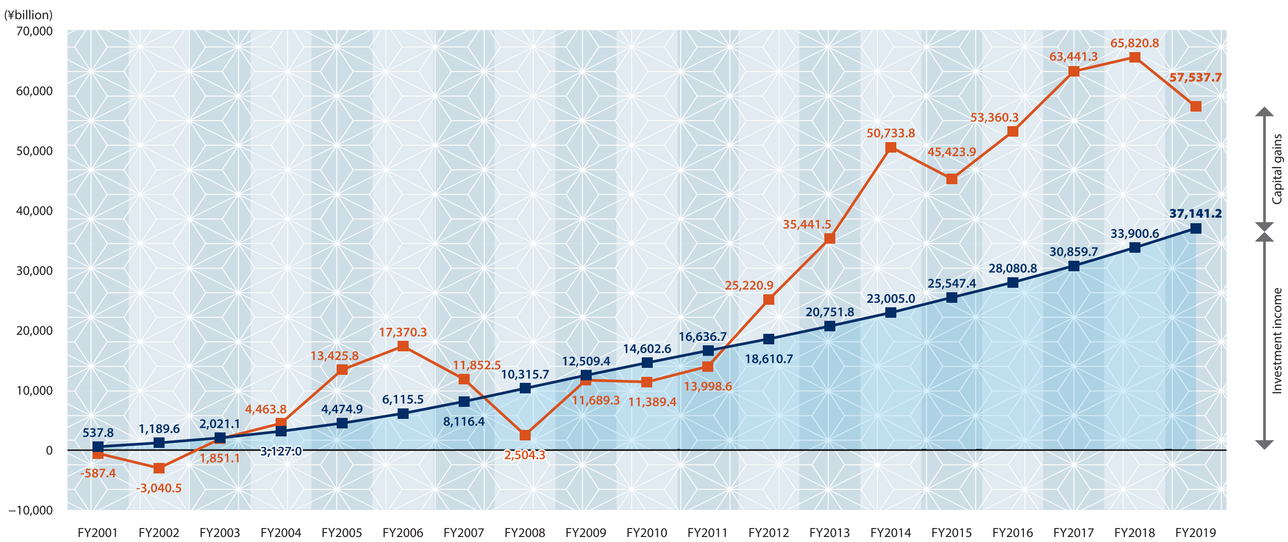
¥150,633.2 billion

Returns are marked to market as of the end of fiscal 2019, and include unrealized gains and losses. GPIF manages pension reserve fund with long-term perspective. While short-term portfolio returns are influenced by the current market trends, investment results should be monitored with long-term horizon.

Regarding investment of pension reserves, while market fluctuations may cause capital losses (realized and unrealized losses due to price fluctuations) in the short term, investment income (interest and dividend income) is relatively immune to such volatility and generates a continuous stream of positive return.

At the end of March 2020, over sixty percent of cumulative returns was investment income, which has increased steadily since fiscal 2001.

Cumulative returns since fiscal 2001



Contribution to Public Pension Finance

For details, refer to page 17.

Real return on investment

(cumulative)

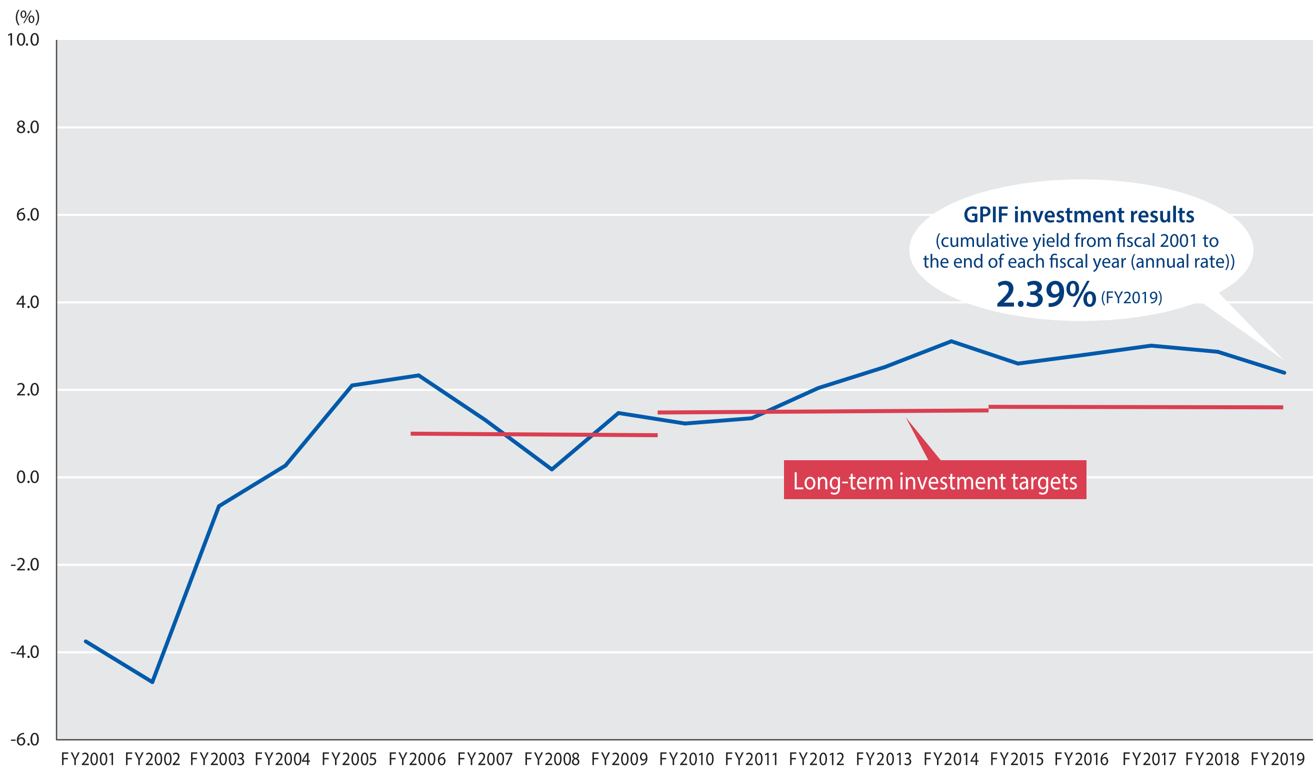
2.39% (annual rate)

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 fund less the nominal wage growth rate) of 1.7% with minimal risks.

(Note) The amount of public pension benefits is designed to increase roughly in tandem with the nominal wage growth rate in the long run. Therefore, GPIF's investment return that exceeds the contribution from the nominal wage growth rate is the real investment return in the sense that it contributes positively to pension finance. Accordingly, an evaluation of the impact of investment results on pension finance shall be carried out on the basis of "the actual rate of investment return," which is the rate of investment return (nominal investment return) minus the nominal wage growth rate.

For the roles of reserve fund in pension finance, refer to page 71-72.

Real return on Investment (cumulative) since fiscal 2001



(Note 1) Real investment return (%) is calculated as (1 + nominal investment return [%]) / (1 + nominal wage growth rate [%]) - 1.

(Note 2) Long-term investment targets are +1.1% from fiscal 2006 to fiscal 2009, +1.6% from fiscal 2010 to fiscal 2014, and +1.7% after fiscal 2015, above the nominal wage growth rate, respectively.

(Note 3) Figures represents the geometric mean of cumulative yield from fiscal 2001 to the end of each fiscal year (annualized).

Summary of Major Initiatives

Review of the Policy Asset Mix

The pension reserves shall be managed to ensure the achievements of the investment return required for the pension finance with minimum risk, in order to contribute to the stability of the pension finance in the future. Based on the result of a financial verification carried out every five years, GPIF verified the policy asset mix from a long-term perspective to determine a portfolio which fulfills the investment return required for the pension finance with the least amount of risk.

Activities as a "Universal Owner" and "Cross-generational Investor"

It is essential for GPIF, as a "universal owner" and "cross-generational investor," to ensure that negative externalities are minimized for the achievement of sustainable and stable growth of the market as a whole. Therefore, GPIF is committed to conducting stewardship activities and initiatives in consideration of ESG factors.

Alternative Investments to Gain Momentum

GPIF has steadily been increasing exposure to alternative investments in expectation of greater portfolio diversification, seeking to improve investment efficiency and further to ensure the stability of pension finance.

▶ For details, refer to page 43-48.

- Review of the policy asset mix based on the changes in the market environment including a decline in domestic interest rates etc.
- New multi-dimentional deviation limits to manage equity risk stricter
- Reclassification of JPY hedged foreign bonds and short-term assets as domestic bonds

▶ For details, refer to page 49-62.

【Promoting to Fulfill Stewardship Responsibilities】

- Revision of the Stewardship Principles and the Proxy Voting Principles
- Participation in global initiatives
- Announcement of a joint statement by asset owners
- A survey of listed companies on institutional investors' stewardship activities

【Promoting ESG Activities】

- Introduction of Index Posting
- Publication of ESG Report
- Integration of ESG factors into bond investments

▶ For details, refer to page 30-42.

- Selecting external asset managers through the Asset Manager Registration System

  In fiscal 2019, GPIF newly selected asset managers for private equities. As a result, GPIF has employed multi-manager investment strategies in all of its three alternative assets.

- Enhancing portfolio risk management

  With a substantial launch of alternative investments, in fiscal 2019, GPIF tightened up quantitative monitoring based on performance management indicators and the amount of investments, among other things, in addition to the existing management system which has been improved and enhanced to date. GPIF will strive to conduct more comprehensive and elaborate risk management.

1 | Investment Results

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

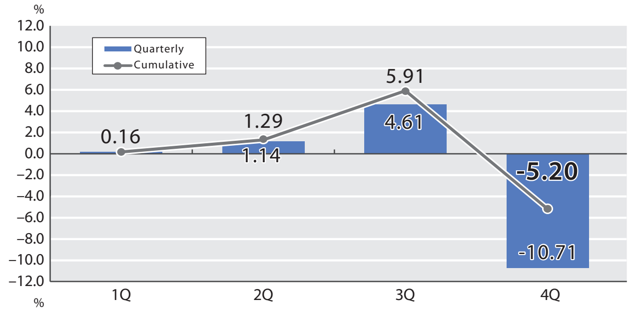
① Rate of investment return

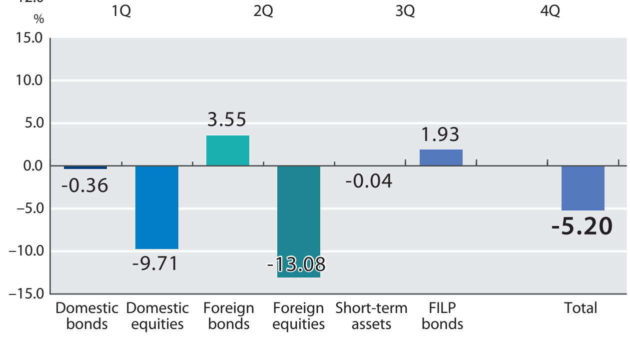
The rate of investment return for fiscal 2019 is

-5.20%.

(Unit: %)

		1Q	2Q	3Q	4Q	Total
Total		0.16	1.14	4.61	−10.71	−5.20
Market Investments	Domestic bonds	0.81	0.31	−0.96	−0.51	−0.36
	Domestic equities	−2.31	3.34	8.58	−17.63	−9.71
	Foreign bonds	0.94	1.21	0.86	0.50	3.55
	Foreign equities	1.29	0.11	9.73	−21.88	−13.08
	Short-term assets	−0.05	0.01	0.01	−0.01	−0.04
FILP bonds		0.48	0.48	0.49	0.49	1.93





(Note 1) Fiscal 2019 runs from April 1, 2019 to March 31, 2020.
(Note 2) GPIF's portfolio consists of the funds invested in the markets (hereinafter "market investment", which 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, return figures are the average of returns of market investment and FILP bonds weighted with investment principal, and are gross of fees. 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).

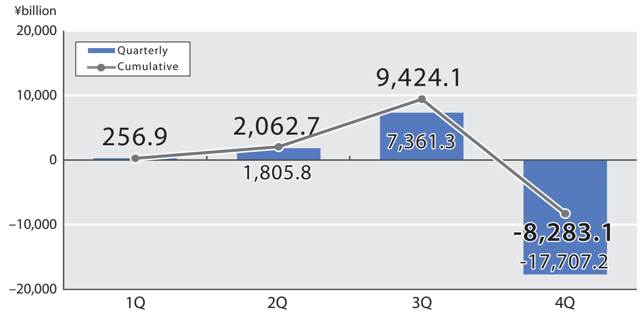
② Amount of investment returns

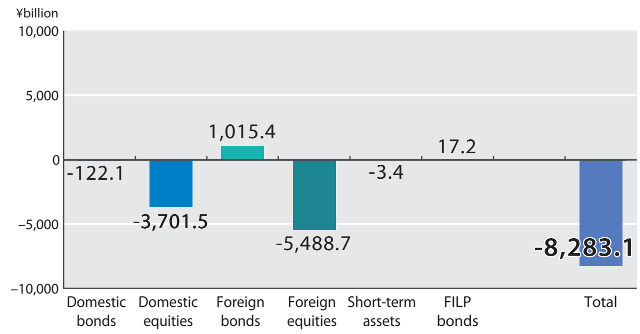
The amount of investment returns for fiscal 2019 is

-¥8,283.1 billion.

(Unit: ¥billion)

		1Q	2Q	3Q	4Q	Total
Total		256.9	1,805.8	7,361.3	−17,707.2	−8,283.1
Market Investments	Domestic bonds	339.3	131.8	−408.7	−184.5	−122.1
	Domestic equities	−892.6	1,261.6	3,348.0	−7,418.5	−3,701.5
	Foreign bonds	268.6	361.4	270.1	115.3	1,015.4
	Foreign equities	541.3	46.1	4,147.0	−10,223.1	−5,488.7
	Short-term assets	−3.9	0.6	0.7	−0.7	−3.4
FILP 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

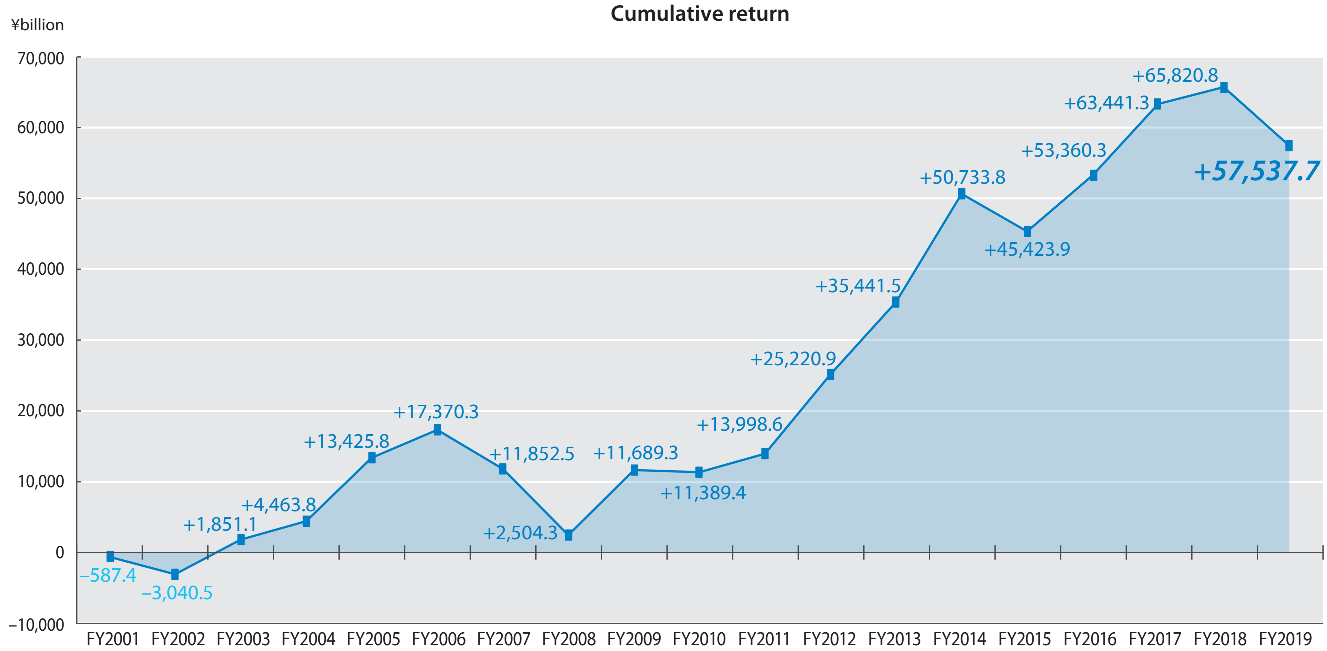
Cumulative returns from fiscal 2001 to fiscal 2019 are

+¥57,537.7 billion

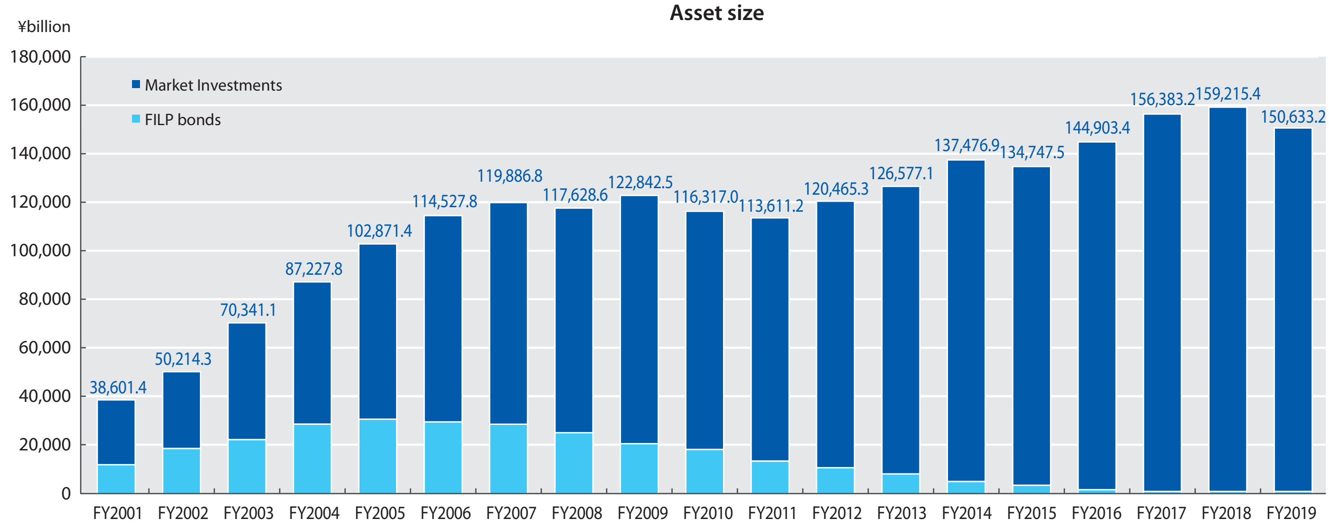
and the value of investment assets at the end of fiscal 2019 is

¥150,633.2 billion.

Cumulative return



Asset size



(Note) The balance of FILP bonds increased from fiscal 2001 to fiscal 2007 due to 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 and dividend income) and capital gains and losses (realized and unrealized gains or losses due to price fluctuations). Investments of the pension reserves are 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. Immediately after the start of managing the pension reserves, domestic bonds accounted for 60% to 70% of investment income, although those have recently declined to below 20%, while domestic and foreign equities account for about 60%. This is due to the fact in recent years that (i) the bond yields have fallen significantly, falling well below the equity dividend yields; and (ii) GPIF has lowered the allocation of bonds and raised the allocation of equities in the policy asset mix since fiscal 2014.

In fiscal 2019, the total amount of investment income is

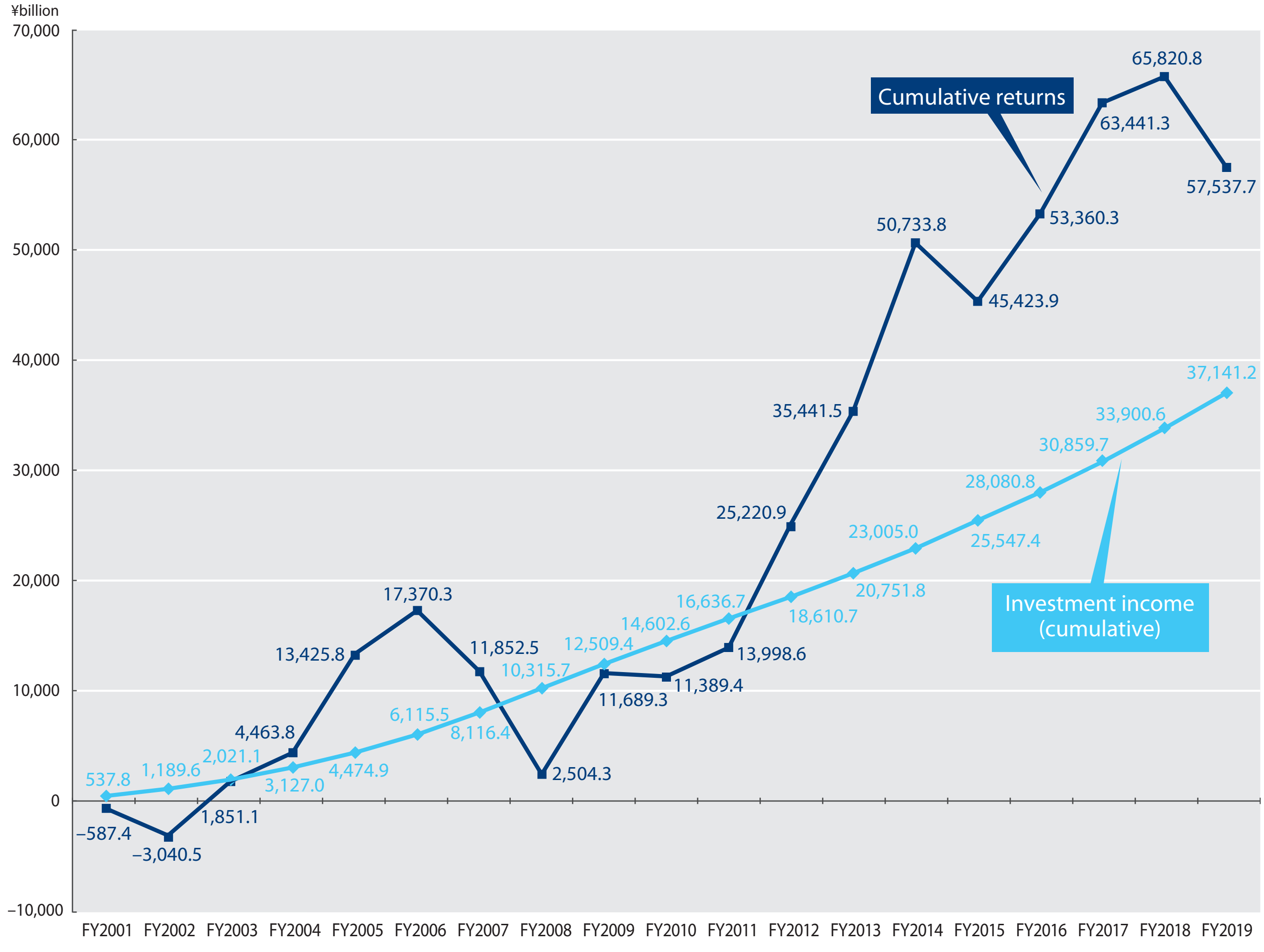
¥3,240.6 billion (rate of return: +2.16%),

and the cumulative amount of investment income for the 19 years since fiscal 2001, when GPIF started managing pension reserves, is

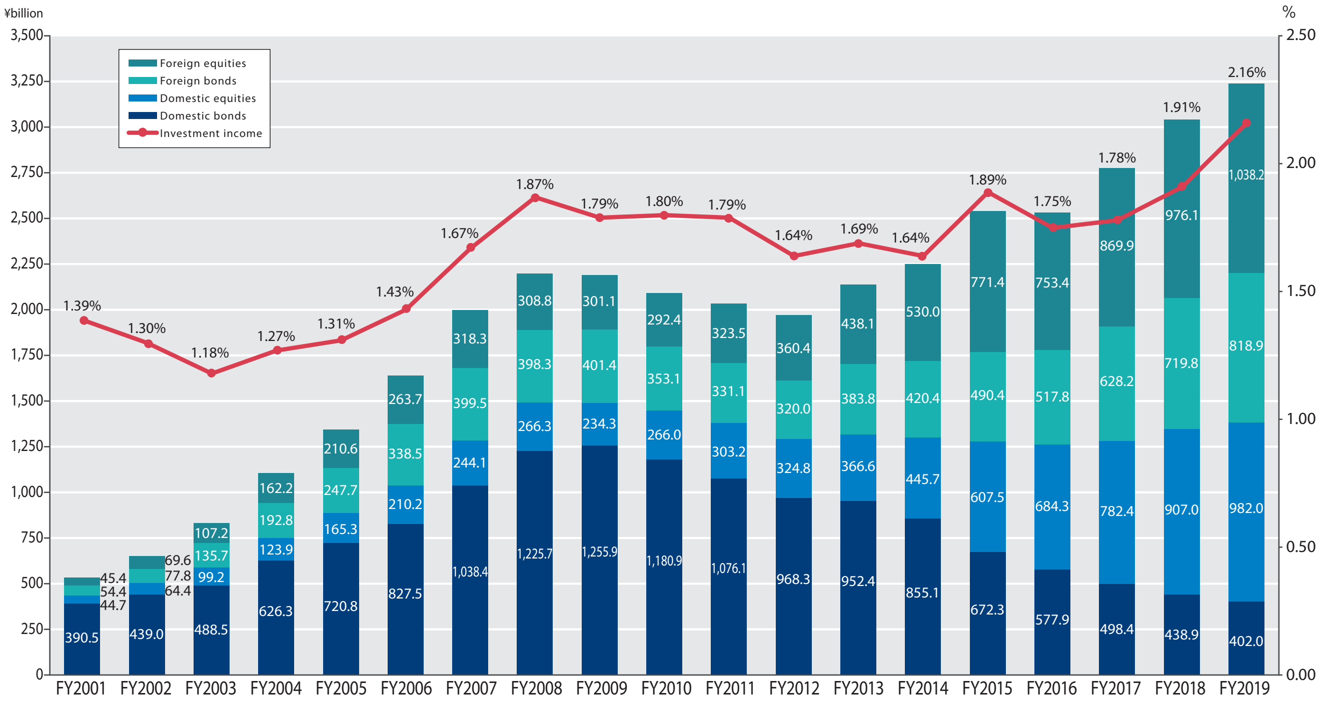
¥37,141.2 billion (rate of return: +1.64%[annual rate]).

accounting more than 60% of the cumulative returns.

Cumulative returns and investment income since fiscal 2001



Investment income



(Unit: ¥billion)

	Cumulative	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
Domestic bonds	14,634.9 (1.27%)	390.5 (1.49%)	439.0 (1.26%)	488.5 (1.03%)	626.3 (1.03%)	720.8 (1.10%)	827.5 (1.12%)	1,038.4 (1.21%)	1,225.7 (1.41%)	1,255.9 (1.51%)
Domestic equities	7,122.0 (1.64%)	44.7 (0.65%)	64.4 (0.87%)	99.2 (0.83%)	123.9 (1.00%)	165.3 (0.87%)	210.2 (1.10%)	244.1 (1.77%)	266.3 (2.34%)	234.3 (1.59%)
Foreign bonds	7,229.6 (3.18%)	54.4 (4.04%)	77.8 (3.06%)	135.7 (3.43%)	192.8 (3.33%)	247.7 (3.28%)	338.5 (3.73%)	399.5 (4.13%)	398.3 (3.98%)	401.4 (3.96%)
Foreign equities	8,140.1 (2.23%)	45.4 (1.19%)	69.6 (1.56%)	107.2 (1.81%)	162.2 (1.99%)	210.6 (1.96%)	263.7 (2.09%)	318.3 (2.92%)	308.8 (3.40%)	301.1 (2.27%)
Total	37,141.2 (1.64%)	537.8 (1.39%)	651.8 (1.30%)	831.4 (1.18%)	1,106.0 (1.27%)	1,347.9 (1.31%)	1,640.7 (1.43%)	2,000.8 (1.67%)	2,199.4 (1.87%)	2,193.7 (1.79%)

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Domestic bonds	1,180.9 (1.52%)	1,076.1 (1.50%)	968.3 (1.30%)	952.4 (1.36%)	855.1 (1.51%)	672.3 (1.27%)	577.9 (1.21%)	498.4 (1.12%)	438.9 (1.02%)	402.0 (1.11%)
Domestic equities	266.0 (1.98%)	303.2 (2.14%)	324.8 (1.85%)	366.6 (1.76%)	445.7 (1.41%)	607.5 (1.99%)	684.3 (1.95%)	782.4 (1.92%)	907.0 (2.35%)	982.0 (2.76%)
Foreign bonds	353.1 (3.75%)	331.1 (3.33%)	320.0 (2.71%)	383.8 (2.74%)	420.4 (2.31%)	490.4 (2.59%)	517.8 (2.63%)	628.2 (2.63%)	719.8 (2.59%)	818.9 (2.25%)
Foreign equities	292.4 (2.23%)	323.5 (2.48%)	360.4 (2.42%)	438.1 (2.22%)	530.0 (1.76%)	771.4 (2.48%)	753.4 (2.16%)	869.9 (2.25%)	976.1 (2.33%)	1,038.2 (2.79%)
Total	2,093.2 (1.80%)	2,034.1 (1.79%)	1,973.9 (1.64%)	2,141.1 (1.69%)	2,253.2 (1.64%)	2,542.4 (1.89%)	2,533.4 (1.75%)	2,778.9 (1.78%)	3,040.9 (1.91%)	3,240.6 (2.16%)

(Note 1) Due to rounding off, the sum of the figures for each individual fiscal year 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 long-term investment targets

The average real investment return is **2.39%** for the 19 years since fiscal 2001

and **2.49%** for the 14 years since fiscal 2006, GPIF was established as an incorporated administrative agency.

Long-term investment targets after fiscal 2015

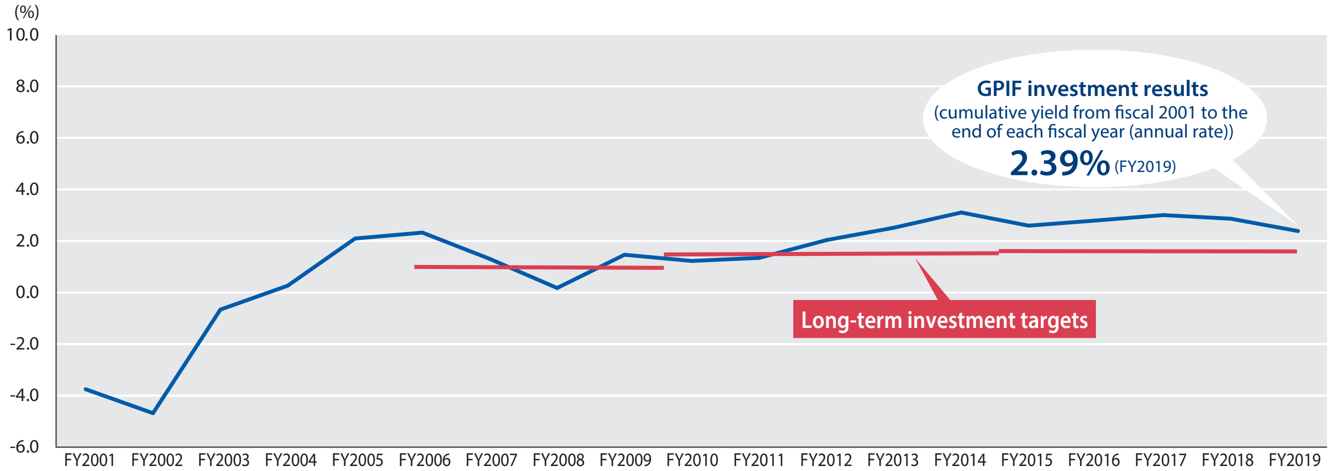
are **+1.7%** above the nominal wage growth rate.

Our average real investment return is higher than the long-term investment targets.

For the roles of reserve fund in pension finance, refer to page 71-72.

(Note) The real investment return is net investment yield on the pension reserve fund less the nominal wage growth rate, since public pension benefits are indexed to wages until retirement. GPIF's long-term investment objectives are +1.1% from fiscal 2006 to fiscal 2009, +1.6% from fiscal 2010 to fiscal 2014, and +1.7% after fiscal 2015, above the nominal wage growth rate, respectively. Note that these are required as long-term investment targets, and are not necessarily required to be fulfilled on an annual or during a specified time period (such as five years for the Medium-term Plan).

Real return on Investment (cumulative) since fiscal 2001



(Note 1) Real investment return (%) is calculated as (1 + nominal investment return [%]) / (1 + nominal wage growth rate [%]) - 1.
(Note 2) Long-term investment targets are +1.1% from fiscal 2006 to fiscal 2009, +1.6% from fiscal 2010 to fiscal 2014, and +1.7% after fiscal 2015, above the nominal wage growth rate, respectively.
(Note 3) Figures are calculated on a geometric mean basis using cumulative yield from fiscal 2001 to the end of each fiscal year (annualized).

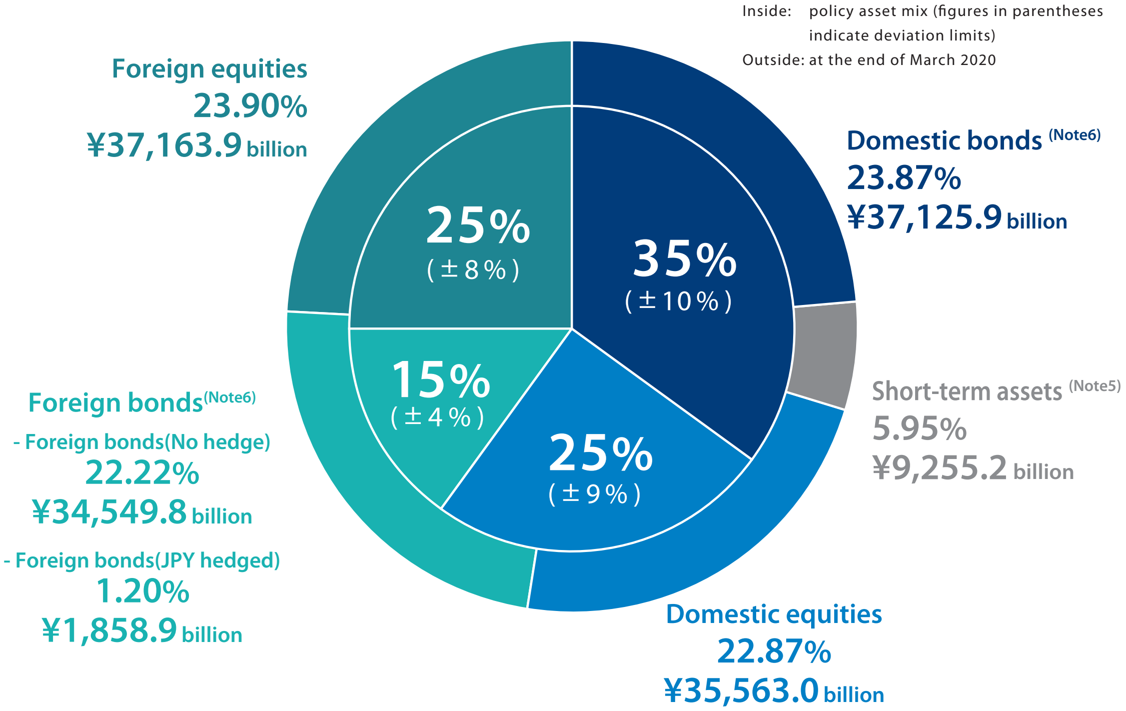
GPIF's investment performance

(Unit:%)

		FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	Last14years (annualized)	Last19years (annualized)
Performance	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	−5.22	2.48	2.27
	Nominal wage growth rate	−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	0.70	−0.01	−0.11
	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	−5.88	2.49	2.39

⑥ Investment assets and portfolio allocation

(Pension reserves managed by GPIF and the Pension Special Account)



		Market value (¥billion)	Allocation of pension reserve
Domestic bonds		37,125.9	23.87%
Market investments		36,229.7	23.30%
FILP bonds	(Book value)	896.2	0.58%
	(Market value)	(937.1)	—
Domestic equities		35,563.0	22.87%
Foreign bonds	No hedge	34,549.8	22.22%
	JPY hedged	1,858.9	1.20%
Foreign equities		37,163.9	23.90%
Short–term assets		9,255.2	5.95%
Total		155,516.8	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 2019 (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) At the end of March 2020, 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) JPY hedged foreign bonds are considered as alternatives to Domestic bonds in current market trends, and they are similar in terms of risk and return characteristics. Accordingly, JPY hedged foreign bonds are excluded from Foreign bonds and included in Domestic bonds in terms of allocation at the end of March 2020. In other cases, such as the rate of investment return for each asset class, JPY hedged foreign bonds are classified as Foreign bonds.

(Note 7) Although the allocation of Foreign bonds exceeded the deviation limit at the end of March 2020, during the period when the policy asset mix was in transition, GPIF has managed it properly according to the decision of the Board of Governors.

(Note 8) The percentage of the alternative investments: 0.61% (within maximum 5% of total portfolio)

⑦ Allocation changes for each asset class due to rebalancing

(Unit:¥billion)

	Domestic bonds	Domestic equities	Foreign bonds	Foreign equities
Allocated/withdrawn	−5,931.9	+609.5	+7,579.7	+757.0

(Note) Each figure shows the net rebalancing amount.

⑧ Factor analysis of difference from compound benchmark return

The total rate of return on all investment assets for fiscal 2019 was below the compound benchmark return (a rate obtained by weight-averaging the benchmark rates of return on individual assets according to the shares in the policy) by 0.25%. This is contributed mainly by domestic bonds being underweight from the policy asset mix weights, whose benchmark rates of return (-0.43%) exceeded the compound benchmark rates of return (-4.94%). During the period, the rate of return of foreign bonds was the highest among asset classes, which contributed significantly to the entire portfolio.

In fiscal 2019, the total rate of return on all investment assets came to **–5.20%** against a compound benchmark return of **–4.94%**, representing an excess rate of return amounting to **–0.25%**.

The average of the annual rate of return for the 14 years since the GPIF's establishment in fiscal 2006 on all investment assets was **2.49%**, while the compound benchmark rate of return was **2.53%**. The excess rate of return was **–0.05%**.

GPIF breaks down the difference between the total rate of return on all investments 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 2019, the return deviation attributable to asset allocation was -0.20%. Domestic bonds, which delivered a notably higher return than the compound benchmark return in the fourth quarter, were underweight on average to the policy asset mix. The return deviation attributable to individual asset factors was -0.05% as a whole although there are positive and negative deviations depending on the asset class.

Factor analysis of the difference from the compound benchmark return in fiscal 2019

(Unit:%)

	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	–5.20	–4.94	–0.25	–0.20	–0.05	–0.00	–0.25
Domestic bonds	–0.31	–0.43	+0.13	–0.69	+0.04	–0.01	–0.66
Domestic equities	–9.71	–9.50	–0.20	–0.03	–0.05	+0.00	–0.08
Foreign bonds	+3.55	+4.37	–0.82	+0.69	–0.12	–0.08	+0.49
Foreign equities	–13.08	–13.40	+0.32	–0.23	+0.08	+0.01	–0.14
Short-term assets	–0.04	–0.04	0.00	+0.07	0.00	0.00	+0.07

(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 2019)

(Unit:%)

	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)
FY2006-FY2019	2.49	2.53	–0.05	–0.04	+0.01	–0.01	–0.05
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	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
FY2019	–5.20	–4.94	–0.25	–0.20	–0.05	–0.00	–0.25

(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 fiscal 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.

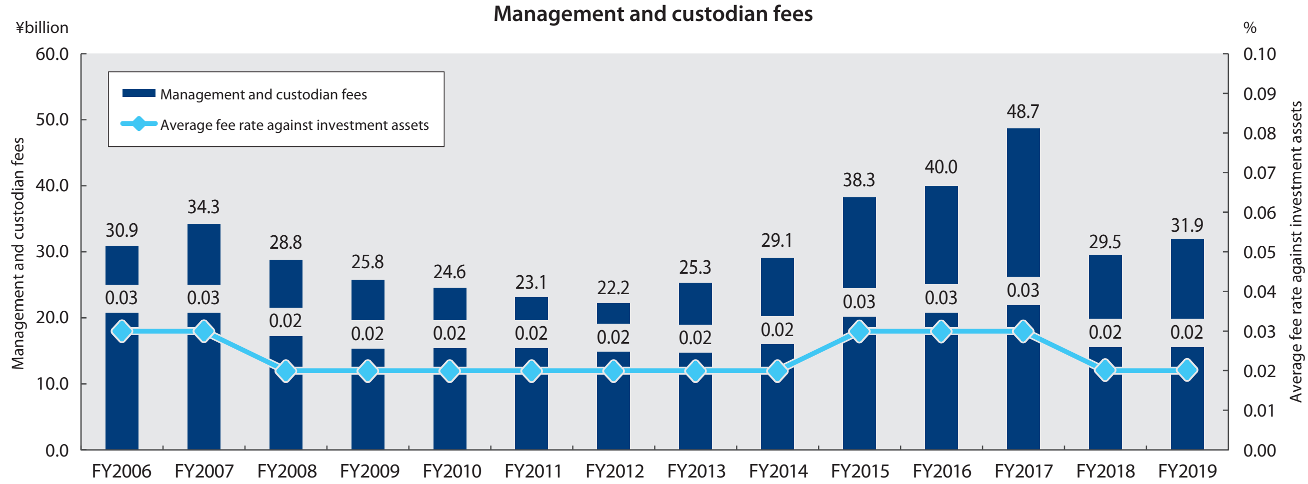
⑨ Fees and expense

In fiscal 2019, total fees were **¥31.9 billion.**

The average fee rate on the total investment assets for fiscal 2019 was **0.02%.**

Total fees increased by ¥2.5 billion from the previous fiscal year due to an increase in total assets under management. The increase was also partially attributable to active asset managers who achieved the target excess return rate mainly in foreign equities.

Management and custodian fees



Management and custodian fees by asset class

(Unit: ¥billion)

	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
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	31.9
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	2.0
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	6.5
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	7.1
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	15.5
Alternative assets	—	—	—	—	—	—	—	—	—	—	0.0	0.0	0.3	0.7

(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 externally managed assets

(Unit: %)

	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
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	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	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	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	0.02
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	0.04
Alternative assets	—	—	—	—	—	—	—	—	—	—	—	0.14	0.23	0.14
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	161.4

(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.

2 | Basic Policy of Portfolio Risk Management

[1] Basic policy

The purpose of investing the pension reserves is to contribute to the future stability of the management of the public pension scheme through stable and efficient management from a long-term perspective solely for the beneficiaries. The Medium–term Objectives approved by the Minister of Health, Labour and Welfare (MHLW) stipulate that GPIF is required to achieve a long–term real return (net investment yield on the pension reserve fund less the nominal wage growth rate) of 1.7% with minimal risks.

Amid heightened uncertainties about the recent market and economic environment, the risk GPIF focuses on refers not to "a risk caused by short-term fluctuations in market prices" but to "a risk of failing to achieve a long-term investment return required for the pension finance."

It is commonly known that, in a long-term investment, maintaining portfolio (a policy asset mix) over the long term yields a better result effectively, rather than changing the portfolio in response to short-term market fluctuations. In fiscal 2019, GPIF verified the policy asset mix from a long-term perspective based on the result of the once-every-five-years financial verification. Since long-term investment results shall be mostly attributable to a policy asset mix, we believe that the policy asset mix is the core of portfolio risk management.

GPIF manages the policy asset mix in an appropriate manner, invests in diversified assets, and carries out risk management at the level of assets as a whole, individual asset classes, and individual asset managers, respectively. At the same time, it ensures the achievements of the benchmark rates of return of both assets as a whole and individual asset classes by monitoring various indices from multilateral perspectives. In cases when it is considered necessary to take a certain measure, GPIF carries out an appropriate measure in line with a predetermined rule.

(Note) For details of the review of the policy asset mix, refer to page 43-48.

The basic policy of the above-mentioned portfolio risk management is expressly described in the "Basic Policy" of the "Portfolio Risk Management Policy" established by the Board of Governors. In accordance with this Basic Policy, GPIF manages market risks, liquidity risks, credit risks, and country risks in an appropriate manner. We also perform risk monitoring 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. GPIF does so in a timely manner, so that risks can be discussed at the Investment Committee and the Portfolio Risk Management Committee and periodically reports to the Board of Governors. As such, we implement appropriate measures taking into account long-term risk-return profiles.

<"Basic Policy" of GPIF's portfolio risk management>

(1) GPIF formulates a policy asset mix and appropriately manages it to ensure the achievement of the investment return required for the pension finance 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 classes, and external asset managers, etc., while ensuring the achievement of the benchmark rate of returns for the entire portfolio as well as for each asset class.

(4) GPIF carries out flexible investment based on a proper outlook for the market environments, within a deviation limit for the policy asset mix, upon thorough analysis on the current trends marked by the fast-changing economic and market environments; provided, however, that the outlook must indicate reasonable grounds.

(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 as well as securing assets without shortages.

(6) Regarding investment and management of the pension reserves, GPIF constantly strives to enhance its expertise, clarify the system of accountability, and implement thorough compliance with the duty of care and fiduciary duty of a prudent expert.

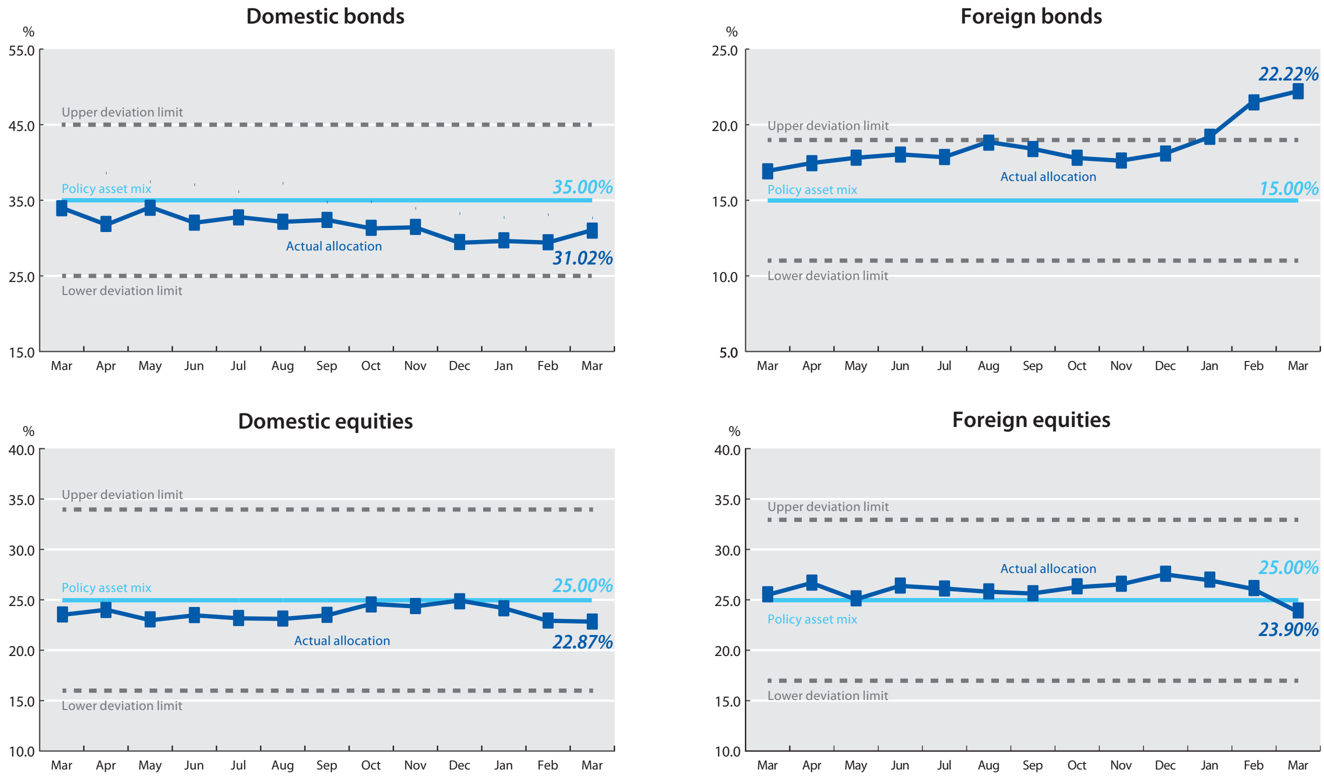
[Types of risk]

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 the 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 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

[2] Risk management based on a policy asset mix

As mentioned above, GPIF believes that the most important aspect of portfolio risk managements is a proper management of asset allocation based on a policy asset mix. Since the markets constantly change, it is essential to establish a framework that enables GPIF to manage investments flexibly within a reasonable range, while actual investments shall be carried out based on the policy asset mix. Accordingly, GPIF flexibly manages portfolio within the deviation limits, while establishing alarm points within these limits in order to assure the management of and adherence to them. Although alarm points are not equivalent to deviation limits, and exceeding an alarm point may not necessarily trigger rebalancing, we consider them as one of the indicators to facilitate the management of and adherence to the deviation limits, and expressly states a responsive process in the event of the exceeding of these two limits. Although foreign bonds allocation exceeded the alarm point in fiscal 2019, we properly managed the investments in compliance with a predetermined process. While the upper limit for alternative assets is set as 5% of the total assets, we have also established alarm points for the assets and expressly states a responsive process in the event of the exceeding of these two limits.

Management of deviation limits for each asset class



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

(Note 2) The deviation limits under the third Medium-term Plan are ±10% for domestic bonds, ±9% for domestic equities, ±4% for foreign bonds, and ±8% for foreign equities. Based on the current market trends such as a significant fall in the domestic bond yields, 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. Moreover, based on the fact that JPY hedged foreign bonds have become a potential alternative asset class to domestic bonds under the current market trends, JPY hedged foreign bonds have been subtracted from the allocation of foreign bonds, and added to domestic bonds within the range allocated for domestic bonds since October 2019.

(Note 3) Although the allocation of Foreign bonds exceeded the deviation limit at the end of March 2020, during the period when the policy asset mix was in transition, GPIF has managed it properly according to the decision of the Board of Governors.

【Monitoring of short-term risk indicators】

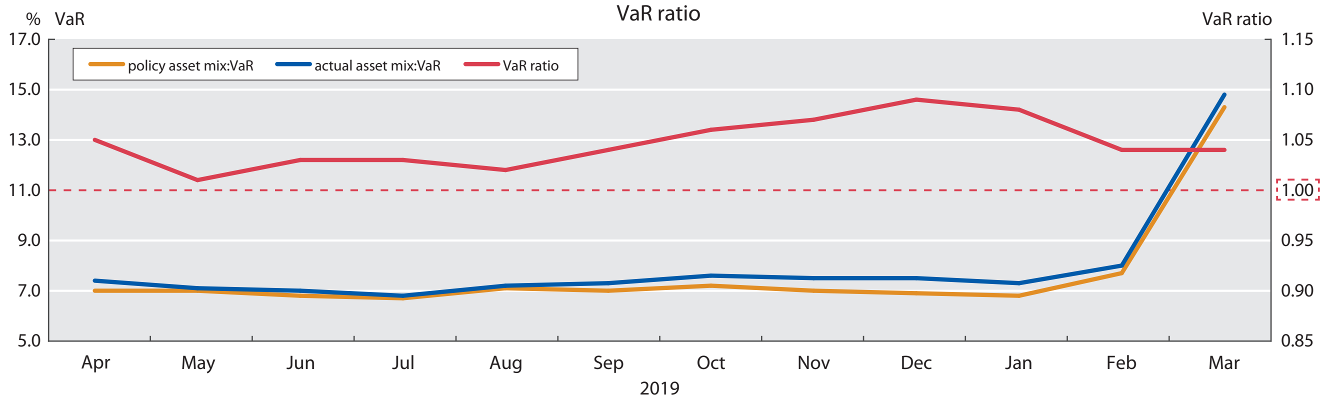
In fiscal 2019, from a multitiered risk management perspective, a VaR ratio was added to monitoring indicators as a trial in addition to the aforementioned management on a deviation limit basis. A VaR ratio is obtained by dividing VaR (See Note) for the actual asset mix by VaR for the policy asset mix, an indicator for monitoring as to what extent the risk amount of the actual portfolio deviates from that of the policy asset mix.

For instance, in either of the cases of two observing years and five observing years, VaR which is one of the commonly used risk indicators, remained almost flat until the third quarter, and then moved upward in the fourth quarter in response to a rise in market volatility (a widening of the fluctuation range) due to the COVID-19 pandemic. Conversely, the VaR ratio moved upward in the third quarter but turned downward in the fourth quarter, a movement contradictory to VaR.

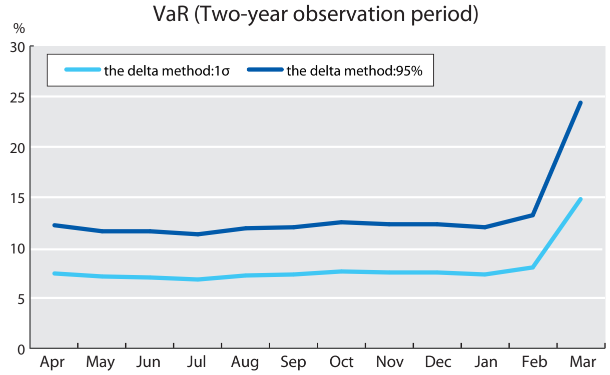
As mentioned above, GPIF is expected to ensure the achievement of the investment yield required for the pension finance and contribute to the stable operation of pension funds, and accordingly, we need to manage "a risk of failing to achieve a long-term investment return required for the pension finance." and keep it at the lowest possible level. To that end, we must monitor individual indicators from a multitiered perspective while giving careful considerations to their characteristics, in an aim to minimize the "risk of failing to achieve a long-term investment return required for the pension finance." by utilizing a short-term risk indicator such as VaR solely as one of the referential indicators.

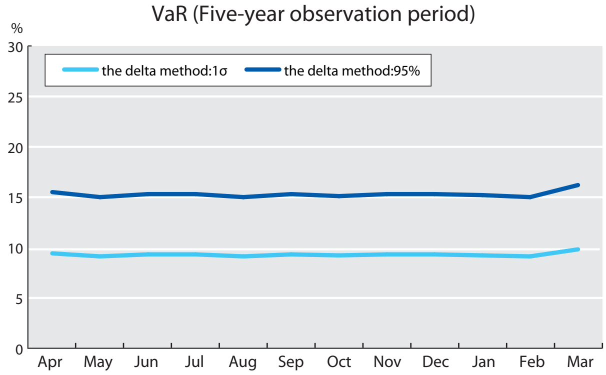
(Note) VaR indicates the largest loss likely to be suffered for individual assets assuming a certain holding period with a given probability (confidence level).

【VaR ratio and VaR】



(Note) VaR is calculated using the delta method based on the 1σ confidence level over a one-year holding period and two-year observation period.





(Note) VaR is calculated using the delta method based on the 1σ and 95% confidence level over a one-year holding period and two-year and five-year observation period (ratios are calculated on an actual asset mix basis for both periods).

[3] Diversification effect and risk management of alternative assets

Alternative assets (including infrastructure, private equity and real estate) have different risk-return profiles from traditional assets such as listed equities and bonds, and are less likely to be affected by price volatility in the public market, etc. Considering these profiles, the inclusion of alternative assets in GPIF's portfolio is expected to generate diversification effects and improve the investment efficiency. Accordingly, GPIF has increased investments in alternative assets since fiscal 2017. To fulfill the need for target asset-specific expertise, risk management of investment in alternative assets covers assessment items specifically required for in alternative investments, as well as those common to traditional assets.

Collaboration between the Portfolio Risk Management Department that is responsible for the risk management for the entire GPIF and the Private Market Investment Department was facilitated, enabling more elaborate risk management. GPIF will continue the efforts to ensure comprehensive, elaborate risk management.

(Note) For details of investment in alternative assets, refer to page 30-42.

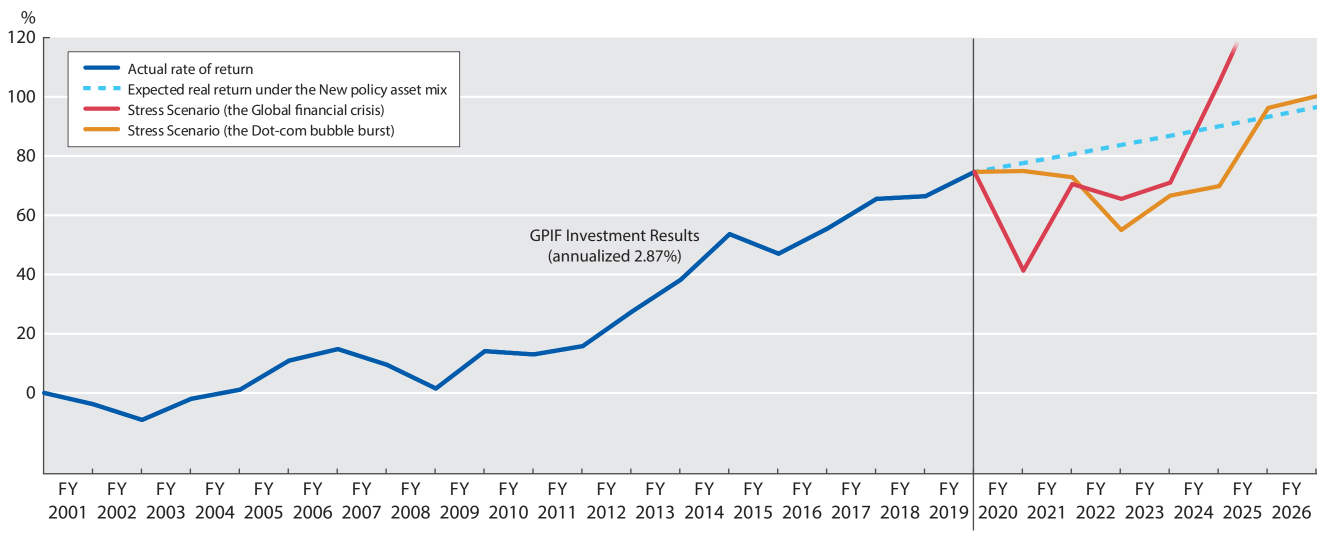
[4] Risk management from a long-term perspective

① Stress tests

Among the various risk indicators mentioned above, stress tests are used as one of the approaches for measuring the impact on returns and capital in the event of a significant market movement, and determining a method to implement a proper measure accordingly. In general, stress tests are considered as a way to assess a short-term impact suffered due to market fluctuations.

However, considering that a long-term perspective is crucial to carry out investment management of the pension reserves stably and efficiently, medium-to long-term risk management takes a higher priority for GPIF. GPIF's stress tests are carried out, therefore, in reference to overseas pension funds, by focusing on not only the assessment of how much the risks will affect our portfolios in the short terms but also the analysis of what impact will be generated in the medium to long term. In fiscal 2019, GPIF carried out stress tests with a new policy asset mix (see Note) ensuring objectivity by using two past scenarios: the global financial crisis of 2008-2009 when a massive fall in stock prices was seen, and the dot-com bubble burst of 2001 followed by slow market recovery. The result shows that, in both scenarios, although actual accumulated returns on investments since 2001 (when GPIF started management of the pension reserves) are temporarily affected, they resume an expected level in a few years following the recovery of the markets.

(Note) For details of the new policy asset mix, refer to page 43-48.



(Note 1) GPIF's investment results (annualized return of 2.87%) are based on the figures as of fiscal 2018.
(Note 2) The figure for fiscal 2019 represents the result as of Dec. 31, 2019.

② ESG as a long-term risk management measure

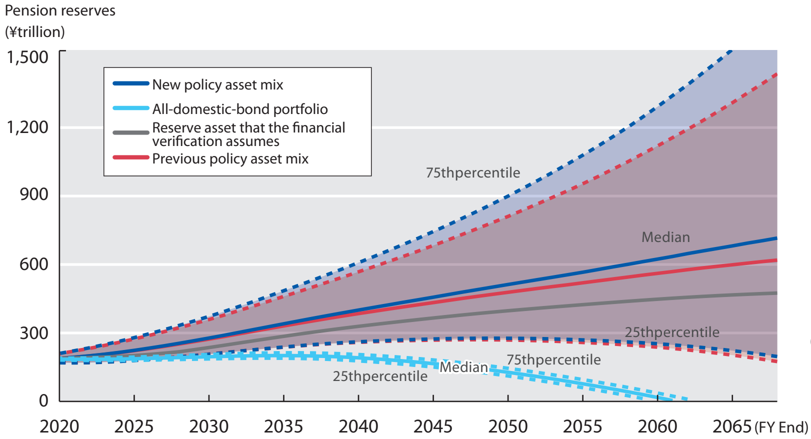
Considering that a long-term perspective is legally required to carry out investment management of the pension reserve fund safely and efficiently, long-term risk management takes a higher priority for GPIF.
GPIF promotes investment with consideration to Environmental, Social and Governance (ESG) factors, because it can be considered as the very method used for portfolio risk management from a long-term perspective in terms of reducing negative impacts on the portfolio in the long run. In fiscal 2019, GPIF newly adopted a portfolio risk management tool, by selecting the one that meets the requirement for value-added features, which will enable a long-term multiperiod scenario analysis and the measurement of long-term risks such as climate change risks. With this tool, GPIF will further enhance long-term risk management.

③ Securing the amount of planned reserves

Another important issue is how to control risks that the amount of pension reserves falls below the amount of planned reserves in the long run. The new policy asset mix was formulated in fiscal 2019 through a process of simulation with a stochastic calculation using random numbers to confirm the risks of an inability to attain the amount of planned reserves on the financial verification. Thus, we managed to select the most efficient portfolio that seeks to minimize a downside risks, while meeting investment objectives.

(Note) For details of the new policy asset mix, refer to page 43-48.

Comparison with planned reserves



Probability (risk) of falling below planned reserves

(Unit: %)

	In 25 years (As of the end of FY2043)	In 50 years (As of the end of FY2068)
New policy asset mix	38.1	39.8
All-domestic-bond portfolio	100.0	100.0

(Reference) (Unit: %)

Previous policy asset mix	40.0	43.0

(Column) The COVID-19 Pandemic

Regarding the COVID-19 pandemic, which started in the fourth quarter of fiscal 2019, GPIF carefully tries to project how GPIF's pension management will be affected as the viral infection spreads and by its prolonged impact.
As mentioned above, during the fourth quarter when the impact of COVID-19 came to the surface, investors' risk aversion increased rapidly, and stocks in Japan and overseas markets fell significantly while the yen appreciated against the euro and the U.S. dollar. After that, the markets regained their balance but remained highly volatile with a rapid recovery in domestic and foreign stock prices.
It is quite difficult to assess how the COVID-19 pandemic will affect the markets in the medium and long run at the moment. While keeping a careful eye on market trends, GPIF strives to implement appropriate risk management by periodically updating the Board of Governors with issues discussed at the Investment Committee and the Portfolio Risk Management Committee, and determine necessary measures that GPIF should take as a long-term investor.

3 | 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 +0.13% (+0.31% for active investment and +0.07% for passive investment). In active investment, the excess return was positive mainly because the market value composition of the government bond sector was underweight to the benchmark. In passive investment, the return was comparable with the benchmark.

② Contribution analysis of excess rate of return

The breakdown of the excess rate of return (+0.13%) on domestic bond investment (market investment) by factor is as follows: fund factors*1: +0.13%; benchmark factors*2: -0.00%; other factors*3: –0.00%.

(Unit: %)

Time-weighted rate of return (1)	Benchmark (2)	Excess rate of return (1)-(2)	Fund factors	Benchmark factors	Other factors
–0.36	–0.49	+0.13	+0.13	–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.]

(Unit: %)

	NOMURA–BPI (excluding ABS) (passive)	NOMURA–BPI government bonds (passive)	NOMURA–BPI/ GPIF Customized (passive)	NOMURA-BPI plus Inflation-Linked bonds (active)	Inflation-Linked bonds (active)	Alternative (active)	Total
Fund factors	+0.00	+0.00	+0.04	+0.04	+0.03	+0.02	+0.13
Benchmark factors	+0.04	+0.11	–0.01	+0.05	–0.19	+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.

[2] Foreign bonds

① Excess rate of return

The excess rate of return over the benchmark was -0.82% (-6.87% for active investment and +1.45% for passive investment). In active investment, the excess return was negative mainly because the market value composition of corporate bonds in the USD bond sector was overweight to the benchmark when the excess return rate of USD corporate bonds fell below that of U.S. government bonds. In passive investment, the excess return was positive because, among other reasons, the market value composition of USD bonds was overweight to the benchmark, and that of EUR bonds was underweight to the benchmark.

② Contribution analysis of excess rate of return

The breakdown of the excess rate of return (-0.82%) on foreign bond investment by factor is as follows: fund factors*1: -0.77%; benchmark factors*2: +0.05%; other factors*3: –0.10%.

(Unit: %)

Time-weighted rate of return (1)	Benchmark (2)	Excess rate of return (1)–(2)	Fund factors	Benchmark factors	Other factors
3.55	4.37	–0.82	–0.77	+0.05	–0.10

The negative excess rate of return reflected the underperformance of the returns of the individual funds of active investment (global aggregate) to the manager benchmarks (a fund factor).

[Factor analysis by manager benchmarks, etc.]

(Unit: %)

	WGBI (passive)	WGBI others (passive)	U.S. government (passive)	U.S. government JPY hedged (passive)	U.S. government 1-3years (passive)	Europe government (passive)	Europe government JPY hedged (passive)
Fund factors	+0.12	–0.00	+0.04	+0.00	+0.00	+0.01	+0.01
Benchmark factors	0.00	–0.02	+0.99	+0.15	–0.04	–0.29	+0.10

(Unit: %)

	Global aggregate (active)	U.S. aggregate (active)	Europe aggregate (active)	U.S. high–yield (active)	Europe high–yield (active)	Emerging U.S. dollar (active)	Emerging local currency (active)	Alternative (active)	Total
Fund factors	–0.79	–0.12	–0.00	+0.01	+0.01	–0.01	–0.05	–0.00	–0.77
Benchmark factors	–0.50	+0.06	–0.11	–0.10	–0.10	–0.03	–0.07	0.00	+0.05

*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 -0.20% (-2.08% for active investment and -0.01% for passive investment). In active investment, the return underperformed the benchmark because of the negative contributions of security selection in the medical products sector, the electronic machinery sector, as well as the information and telecommunication sector and the service sector, and other factors. In passive investment, the return was comparable with the benchmark.

② Contribution analysis of excess rate of return

The breakdown of the excess rate of return (-0.20%) on overall domestic equity investment by factor is as follows: fund factors*1: -0.03%; benchmark factors*2: -0.15%; other factors*3: –0.02%.

(Unit: %)

Time–weighted rate of return (1)	Benchmark (2)	Excess rate of return (1)–(2)	Fund factors	Benchmark factors	Other factors
–9.71	–9.50	–0.20	–0.03	–0.15	–0.02

The negative excess rate of return reflected the underperformance of the manager benchmarks for S&P GIVI Japan, NOMURA RAFI, and RUSSELL/NOMURA Large Cap Value investments to the benchmark for domestic equities (a benchmark factor).

[Factor analysis by manager benchmarks, etc.]

(Unit: %)

	TOPIX (passive)	JPX Nikkei 400 (passive)	RUSSELL/ NOMURA Prime (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	+0.02	+0.00	+0.00	–0.02	–0.01	–0.01	–0.01	–0.01	+0.00
Benchmark factors	0.00	+0.02	+0.01	+0.16	+0.08	+0.04	+0.00	–0.15	–0.14

(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	–0.03	+0.03	–0.00	–0.02	–0.00	+0.01	–0.03
Benchmark factors	0.00	–0.14	–0.01	–0.01	–0.02	0.00	–0.15

*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 [incl. dividends]). They are calculated taking into consideration the market total average balance of each fund.

*3 Other factors refer to calculation errors and such.

[4] Foreign equities

① Excess rate of return

The excess rate of return over the benchmark was +0.32% (+3.17% for active investment and +0.02% for passive investment). In active investment, the return outperformed the benchmark in part because of the positive contributions of security selection in the automobile and automobile parts sector and the consumer services sector, in the developed-country markets. In the emerging-country markets, security selection in the materials sector, as well as the medical products, biotechnology, and life science sector contributed positively, among 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 (+0.32%) on foreign equity investment by factor is as follows: fund factors*1:+0.30%; benchmark factors*2: +0.05%; other factors*3: –0.02%.

(Unit: %)

Time-weighted rate of return (1)	Benchmark (2)	Excess rate of return (1)–(2)	Fund factors	Benchmark factors	Other factors
–13.08	–13.40	+0.32	+0.30	+0.05	–0.02

Some active investment in developed-country markets and ACWI outperformed their manager benchmarks, and made positive contributions.

[Factor analysis by manager benchmarks, etc.]

(Unit: %)

	ACWI (passive)	North America (passive)	Europe& Middle East (passive)	Pacific (passive)	Emerging (passive)	S&P Carbon (passive)	ACWI (active)	Developed (active)	Emerging (active)	Alternative (active)	Total
Fund factors	+0.03	–0.02	+0.00	–0.00	+0.00	–0.00	+0.06	+0.16	+0.00	+0.07	+0.30
Benchmark factors	–0.05	+0.11	–0.04	–0.02	–0.01	+0.02	+0.00	+0.07	–0.04	–0.00	+0.05

*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 GPIF 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.

4 | Investment in Alternative Assets

[1] Overview

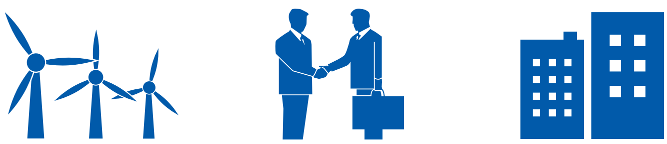
① Investment purpose

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. Also, alternative assets generally have lower liquidity while they produce higher investment return compared to traditional assets. As a long-term investor managing significant liquid assets, GPIF aims to earn excess return by strategically holding alternative assets with lower liquidity in the portfolio.

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 illiquidity 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 third Medium-term Plan (from fiscal 2015 to fiscal 2019) and the fourth Medium-term Plan (from fiscal 2020) stipulate investments in alternative assets (infrastructure, private equity, and real estate) up to a cap at 5% of the total portfolio.

Alternative Assets

Infrastructure | Private equity | Real estate



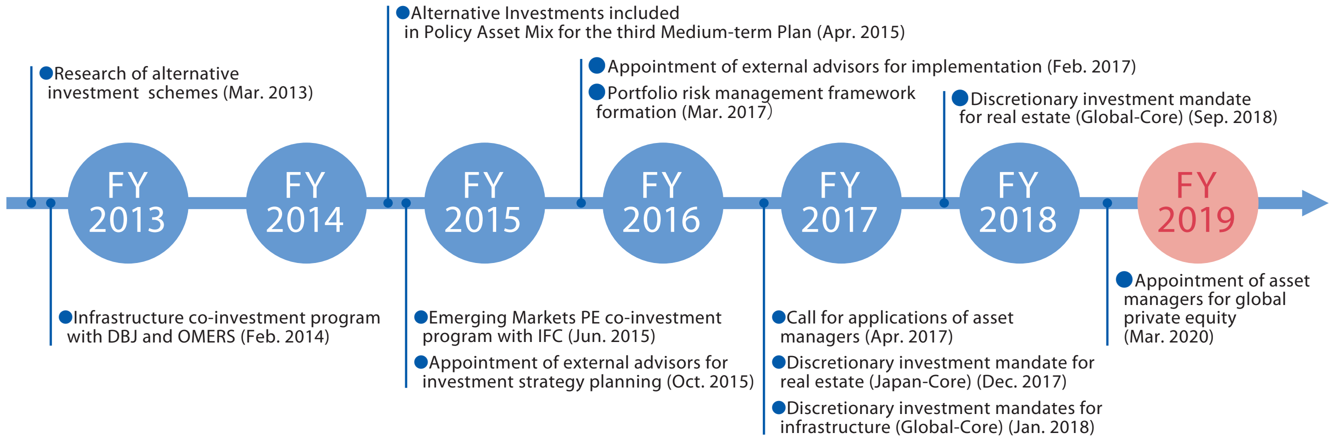
② Investment history

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.

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 2019

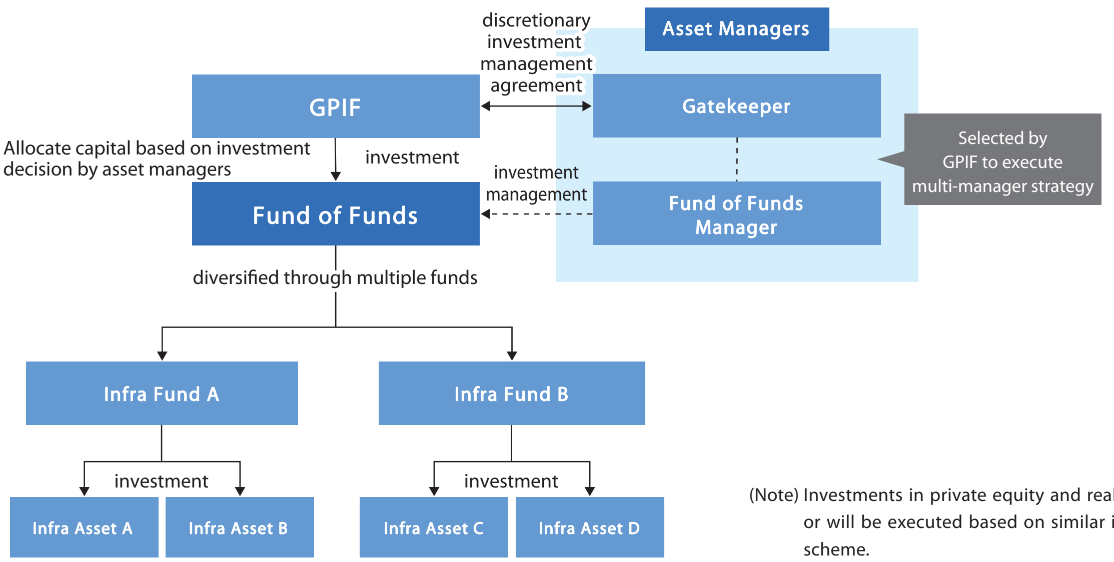
A. Call for application, selection of Gatekeepers and Fund of Funds managers

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.

With an addition of external asset managers for private equity investments, multi-manager strategies are set to be executed for all of the three alternative asset types.

To select asset managers, a GPIF team conducts several rounds of screening, including application 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 prospective managers.

(Example) Infrastructure investment scheme

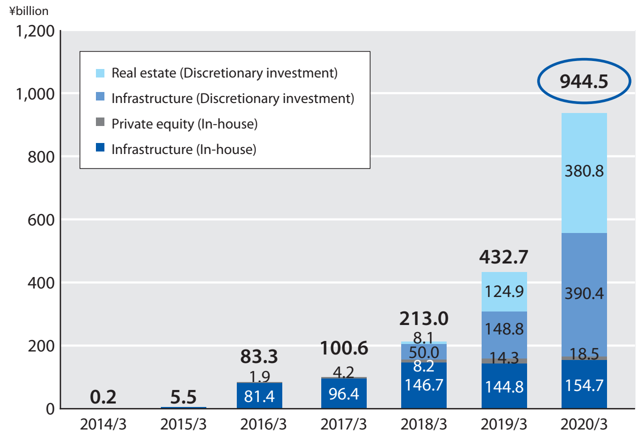


(Note) Investments in private equity and real estate are or will be executed based on similar investment scheme.

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 2020 is ¥944.5 billion (0.61% 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 2019



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

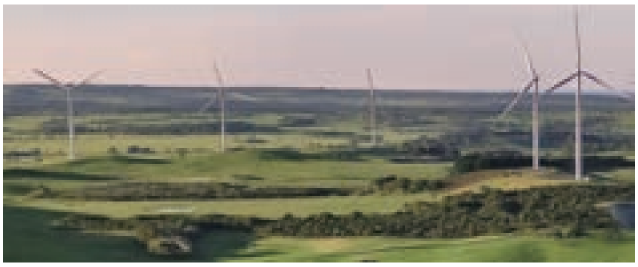
By revising Ordinance for Enforcement of the GPIF Act in September 2017, interests in limited partnerships (LPs) as limited partners were added to the securities in which GPIF may invest directly. The expected benefits of directly investing in LPs include faster access to information on investees, improvement of net returns, and enhancing risk management through simplified investment scheme with fewer intermediaries involved between investors and investees. Therefore, such investments in LPs have 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 preparation for such investments including developing a risk management framework, etc. from fiscal 2017. In fiscal 2019, GPIF continued such preparation including the enhancement of quantitative monitoring based on a performance indicator and investment size.

[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 well-established 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 returns mainly 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 schemes

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 core infrastructure assets in developed countries since February 2014.

(ii) Discretionary investment

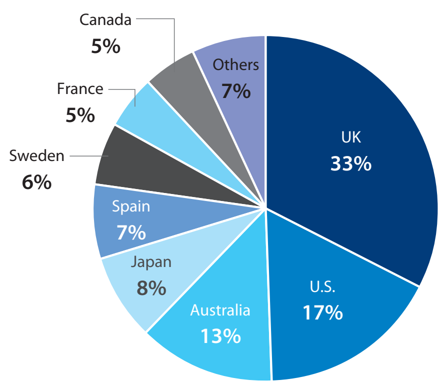
In fiscal 2019, GPIF continued to commit to the following funds, and the funds constructed diversified investment portfolios focused on core infrastructure assets.

Asset manager name	Investment style	Start of investment
Gatekeeper: Sumitomo Mitsui DS 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

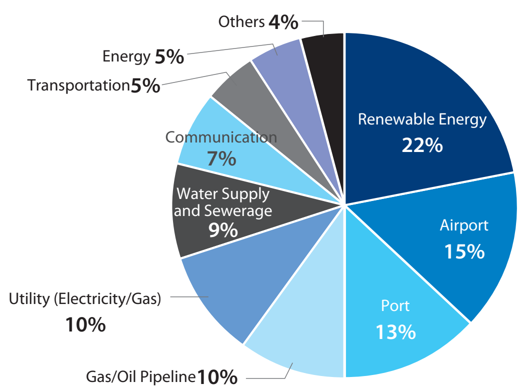
C. Investment status

The total value of GPIF's infrastructure investment as of the end of March 2020 was ¥545.1 billion.
The breakdown of portfolio by country shows the UK with the largest share at 33%, followed by the U.S. at 17% and Australia at 13%. As for the breakdown of the portfolio by infrastructure assets sector, the largest share went to renewable energy at 22%, followed by airport at 15% and port at 13%. 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 3.68% in USD terms, and IRR from the domestic infrastructure investment stood at 1.57% in JPY terms since its inception in February 2014. The total dividend (excluding repayment of principal) received from a unit trust and fund of funds during the previous fiscal year was ¥6.5 billion.

Value by country



Value by asset type



【Infrastructure investment case 1】

Toll road operating company —Spain—

GPIF has participated in a co-investment opportunity for a toll road system in south Spain with an infrastructure fund that mainly invests in infrastructure assets in Europe. With a total length of 105 km, the road is located at the core transportation corridor of the country, significantly reducing the time taken compared to an alternative route. The investee's revenue comes from the toll collected based on a stable concession system.

【Infrastructure investment case 2】

Railway infrastructure company —Australia—

GPIF has invested in a rolling stock company through an infrastructure fund that mainly invests in infrastructure assets in Australia. The investee company initially was contracted to perform the designing, manufacturing, operation and maintenance of trains on the routes operated by a public railway company in Sydney. Such trains have already been designed and manufactured, and operation and maintenance are under way. The investee company is expected to earn stable revenue based on a long-term contract with the public railway company.

【Infrastructure investment case 3】

Solar power generating facility —Japan—
GPIF has invested in an infrastructure fund that has a mega solar plant constructed on the abandoned golf course. The generated power is purchased under a feed-in tariff scheme, and the plant is expected to earn stable revenue over the long term. A facility next to the plant offers visitors a view of more than 122,000 solar panels, and plant is open to the local residents and visitors for viewing the site.

[3] Private equity

① Overview

In private equity, GPIF invests primarily in funds with focus on equities of private companies (private equity, or "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 in PE funds that primarily invest 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 schemes

GPIF will invest in PE funds that invest in equities (private equity) 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

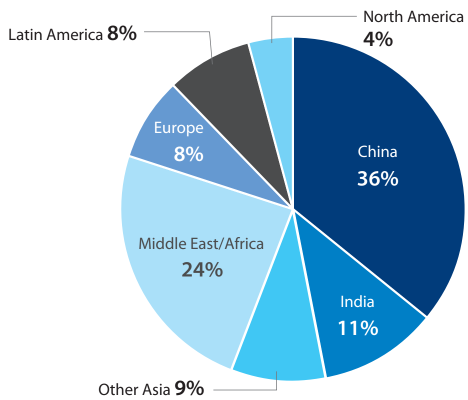
In fiscal 2019, GPIF completed the selection process of the following program.

Asset manager name	Investment style	Start of investment
Gatekeeper: Neuberger Berman East Asia Limited Fund of Funds Manager: NB Alternatives Advisers LLC	Global-Diversified Strategy	April 2020

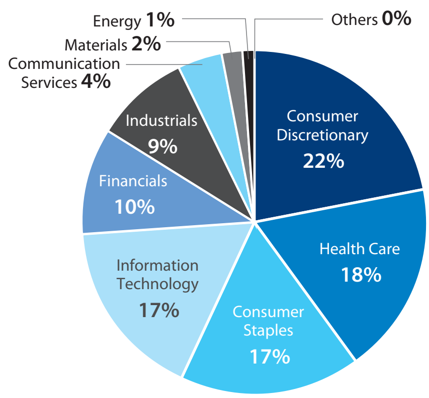
C. Investment status

The total value of GPIF's private equity investment as of the end of March 2020 was ¥18.5 billion. Looking at the breakdown of investee companies by country/region, the investment portfolio is diversified into various emerging countries mainly in Asia including China. By sector, the portfolio is diversified into various sectors including the consumer-related sectors such as consumer discretionary and consumer staples, as well as the health care. Internal rate of return (IRR) from the private equity investment stood at 4.03% in USD terms since its inception in June 2015. For the next step, GPIF plans to expand its diversified investment portfolio by investing primarily in developed countries through discretionary investment agreements with external managers for the multi-manager strategy.

Value by country/region



Value by sector



(Column) J-Curve effect of private equity investment

In general, private equity (PE) fund investments deliver negative returns in the early years, and then deliver investment returns gradually. Since the progression of cumulative investment earnings appears as a "J" shape on a time-series graph, the phenomenon is called the "J-Curve effect."

This is due to the characteristics of PE funds investment that payment of fees and start-up costs in the early years in the fund life prior to high returns to the investor as the portfolio companies increase in value.

PE fund investment incurs various fees and costs, including organizational costs which directly affect performance in early years. Since PE funds target companies in various industries, jurisdictions, and taxation systems, fees paid to legal, accounting, and taxation professionals tend to be costly. In a multi-manager strategy implemented in the form of a discretionary investment management since 2017, GPIF invests in multiple individual funds via a fund-of-funds under the instruction of a Gatekeeper, which is slightly more costly investment structure compared to investing directly to individual funds. However, highly expertized services such as individual fund manager selection and portfolio monitoring performed by Gatekeepers and Fund of Funds are critical for properly managing and for adding value to pension assets on behalf of Japanese public. In addition, it requires a lot of time and efforts to manage PE portfolio which produce higher investment returns, and compensations paid to asset managers are also higher in general than those paid to the asset managers of public stocks and bonds. GPIF aims to lower the proportion of fixed compensations, while aligning the interest of external asset managers and asset owners by increasing the proportion of performance-based compensation. GPIF will constantly make efforts to reduce administrative costs.

With regard to investment returns produced by the PE funds, it generally takes several years from when the fund starts management, identifies investee companies, makes capital contributions, and deliver investment gains as the portfolio companies eventually mature and are exited. PE funds make an investment decision only after conducting an extensive business due diligence and financial analysis of potential investee companies and establishing a mutual trust with the companies' top executives. After executing an investment, PE funds help expand the investee companies' business and develop a governance system to allow the investee companies to achieve sustainable growth and gain enterprise value substantially.

In overseas countries, especially in the U.S., PE funds have over forty years of history and have delivered investment returns outperforming public stock indices in the long run, while they are still relatively uncommon in Japan. Many of the pension funds that focus on long-term returns understand these return profiles of PE funds and invest in them.

[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, considering 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. GPIF promotes investments in a careful and strategic manner, taking into account the above-mentioned profiles of real estate investment.

② GPIF's investments

A. Investment approach

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

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 2019, GPIF has been building a diversified investment portfolio focused on its core-style investment strategy, with an external investment manager for foreign real estate, which was newly selected in fiscal 2018, in addition to an external domestic investment manager selected in fiscal 2017.

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

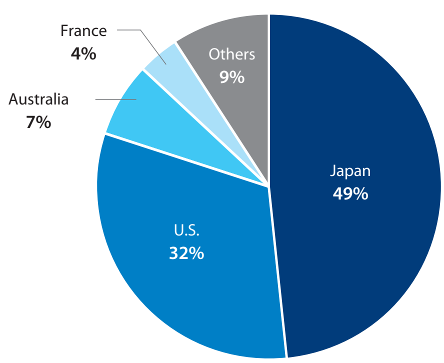
The total value of real estate investment as of the end of March 2020 was ¥380.8 billion.

As for the breakdown of real estate investment portfolio by country, Japan accounted for the largest share at 49% of the total portfolio. This was followed by foreign real estate investment including the U.S. (32%), Australia (7%), and France (4%), which GPIF started managing through newly selected foreign asset managers since fiscal 2018. As for the breakdown by property type, logistics accounted for the largest share at 31% of the total portfolio, followed by office at 26%, multi-family at 22%, and retail at 16%. The investment is diversified focused on core-style real estate funds in advanced countries.

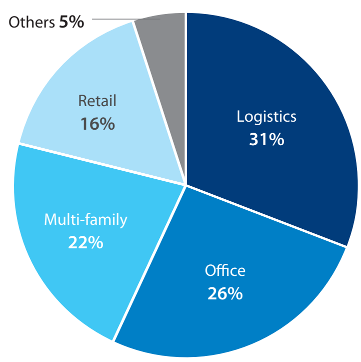
Internal Rate of Return (IRR) of domestic real estate investment since December 2017 when GPIF started managing the portfolio is 5.97%(yen-denominated), while that of foreign real estate investment since September 2018 is 4.88%(U.S.dollar-denominated). Dividend received from the Fund of Funds in fiscal 2019 (excluding repayment of principal) was ¥3.5 billion in total. We will continue investing in real estate funds, while paying attention to the market circumstances, advised by external consultants.

In addition, in fiscal 2019, GPIF joined GRESB as a Real Estate Investor Member. GRESB, an initiative established mainly by the pension funds in Europe, provides an ESG assessment standard for real estate and infrastructure investment. GPIF will discuss with managers to promote them to actively use GRESB assessment to enhance the disclosure of ESG information and constructive dialogue across the market.

Value by country



Value by property type



【Real estate investment case 1】

Office —Europe—

GPIF has invested in a fund that owns a diversified portfolio of assets comprising of several office properties located in major cities in Europe, including London and Paris. The fund takes the form of joint investment with institutional investors representing the U.S. and Europe, structured to favor long-term investment. Holding properties are operated with consideration to sustainability through the efforts to reduce energy consumption and carbon emissions.

※ The office area in London (The fund invests in the property in the front center of the above photo.)

【Real estate investment case 2】

Office —Japan—

GPIF has invested in a fund that owns the office portion of a newly completed large mixed-use facility (including cultural and retail) located in the central area of Shibuya-ward, Tokyo. The property has a long-term lease agreement with a major IT company and its group companies.

※ The central area in Shibuya-ward, Tokyo (The fund invests in the office portion i.e., upper part of the property in the center of the above photo.)

【Real estate investment case 3】

Logistics —Europe—
GPIF has invested in a fund that has logistics facilities located in European countries. The fund primarily invests in market where facilities located in major metropolitan areas and key distribution junctions. The property held through the fund is granted WELL Certified™ Gold, a certification for a facility which gives consideration to employees' health and comfort.

【Real estate investment case 4】

Logistics —Japan—
GPIF has invested in a fund that has large logistics facilities including one in Kawasaki-city, Kanagawa under a long-term lease agreement with a major logistics company. Demand for logistics facilities is rapidly growing with the expansion of e-commerce, and a large-scale logistic facility located close to the mega consuming area of central Tokyo has a competitive advantage due to the 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 2020 was ¥33.1 billion.

Portfolio holdings of private REIT as of the end of March 2020

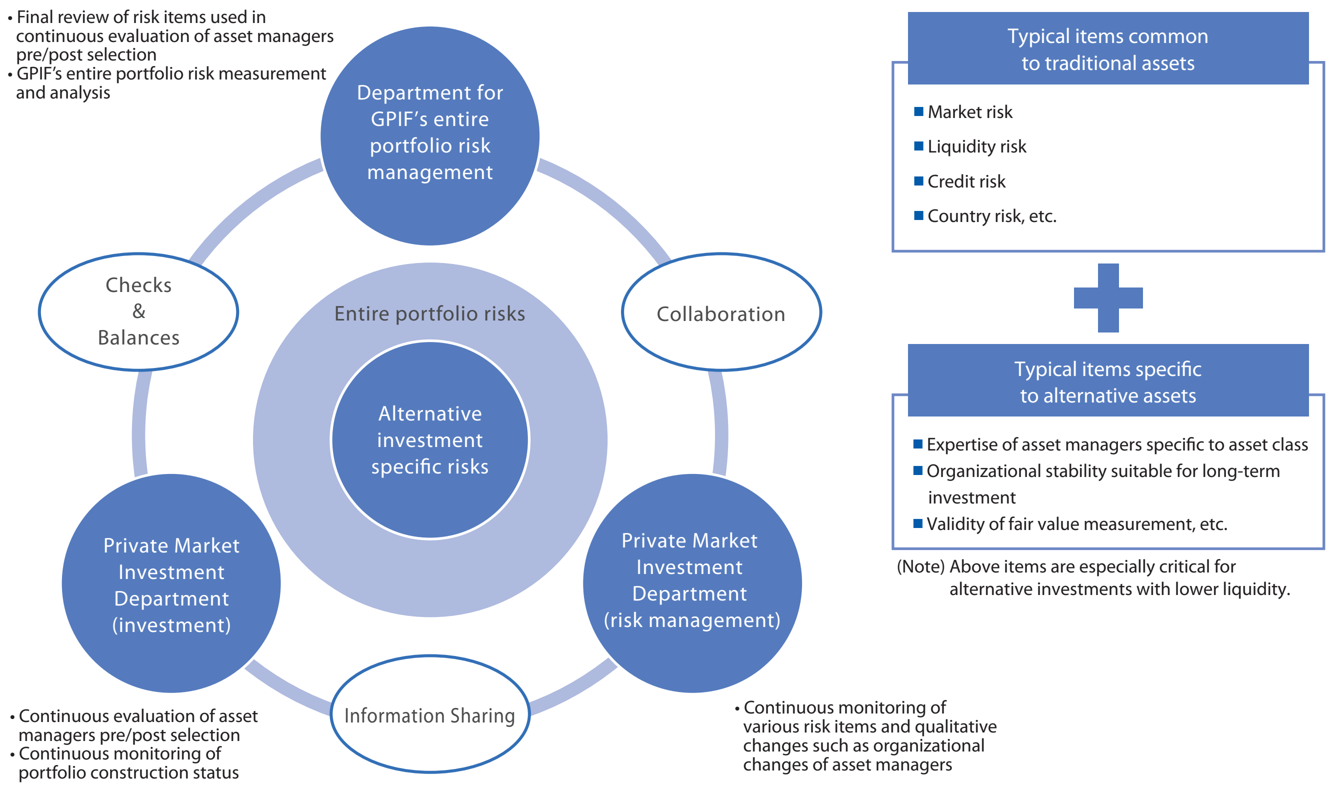
Private REIT name	Asset manager name	Market value (¥billion)
SG ASSETMAX-REIT	SG ASSETMAX CO., LTD.	3.3
DBJ PRIVATE INC.	DBJ ASSET MANAGEMENT CO., LTD.	1.8
DREAM PRIVATE REIT INC.	DIAMOND REALTY MANAGEMENT INC.	8.6
NIPPON OPEN ENDED REAL ESTATE INVESTMENT CORPORAION	MITSUBISHI JISHO INVESTMENT ADVISORS, INC.	4.1
NIPPON TOCHI-TATEMONO PRIVATE REIT INC.	NITTOCHI ASSET MANAGEMENT CO., Ltd.	2.0
NOMURA REAL ESTATE PRIVATE REIT, INC.	NOMURA REAL ESTATE ASSET MANAGEMENT CO., LTD.	4.3
BROADIA PRIVATE REIT, INC.	TLC REIT MANAGEMENT INC.	4.6
MITSUI FUDOSAN PRIVATE REIT INC.	MITSUI FUDOSAN INVESTMENT ADVISORS, INC.	4.5
Total		33.1

* Funds are listed in the order of the Japanese syllabary.
* The names of funds are as of the end of March 2020
* The figures above are rounded off, so the sum of each item does not necessarily match the total number.

[5] Portfolio risk management

In addition to the implementations and improvements made to date, GPIF continuously enhanced our risk managements in fiscal 2019 including quantitative monitoring based on a performance indicator and investment size, etc. which enabled GPIF to conduct more comprehensive and elaborate risk management.

< Portfolio risk management system for alternative investments >



With respect to COVID-19 impacts on alternative investments, GPIF requests each external asset manager to analyze and report impacts on its investment portfolio. We focus on sectors that would be directly affected by global limitations on the transfer of personnel and goods, and captures impacts and risks in a timely manner.

Moreover, GPIF analyzes macroeconomic slowdowns and changes in the long-term supply-demand structure and trends from various perspectives, and continuously monitors an investment plan of each external asset manager from a long-term perspective.

(Note) With respect to the basic policy of GPIF's entire portfolio risk managements including alternative assets, refer to page 21-25.

5 | Review of the Policy Asset Mix

[1] New policy asset mix

GPIF establishes the policy asset mix formed by the target allocation to each asset class, and manages portfolio within deviation limits. GPIF formulated the new policy asset mix for the fourth Medium-term Plan (five-year plan), which started in fiscal 2020. This formation took place for the first time since the unification of the Employee's Pension Schemes as well as the establishment of the Board of Governors.

The new policy asset mix shall meet GPIF's investment objectives, a real investment return (net investment yields on the pension reserve fund less the nominal wage growth rate) of 1.7% with minimal risks. In addition to the four deviation limits set for each asset class, new deviation limits for total bonds and total equities have been established in order to strengthen risk management on the equities.

(Note) For details of the new policy asset mix based on the fourth Medium-term Plan and previous policy asset mix, refer to GPIF's website at https://www.gpif.go.jp/gpif/portfolio.html.

【New policy asset mix】

(From April, 2020)

(Unit: %)

		Domestic bonds	Foreign bonds	Domestic equities	Foreign equities
Target allocation		25	25	25	25
Deviation limits	Asset class	±7	±6	±8	±7
	Bonds/Equities	±11		±11	

(Note 1) Alternative assets (infrastructures, private equities, real estates, and other assets determined through resolutions at the Board of Governors) will be classified into domestic bonds, domestic equities, foreign bonds, and foreign equities based on their risk and return profiles, and will be capped to 5% of total assets. However, if economic and market conditions prevent compliance with the 5% ceiling rule, this limit may be raised after deliberation and resolution by the Board of Governors.

(Note 2) JPY hedged foreign bonds and yen-denominated short-term assets are classified as domestic bonds, while foreign currency-denominated short-term assets are classified as foreign bonds.

(Note 3) In light of recent extreme economic and market volatility, GPIF may be allowed to flexibly manage investments based on an appropriate, reasonably grounded outlook for the market environments and subject to the deviation limits for the policy asset mix.

【Previous policy asset mix】

(April, 2006 - June, 2013)

(Unit: %)

	Domestic bonds	Domestic equities	Foreign bonds	Foreign equities	Short-term assets
Target allocation	67	11	8	9	5
Deviation limits	±8	±6	±5	±5	—

(June, 2013 – October, 2014)

(Unit: %)

	Domestic bonds	Domestic equities	Foreign bonds	Foreign equities	Short-term assets
Target allocation	60	12	11	12	5
Deviation limits	±8	±6	±5	±5	—

(October, 2014 – March, 2020)

(Unit: %)

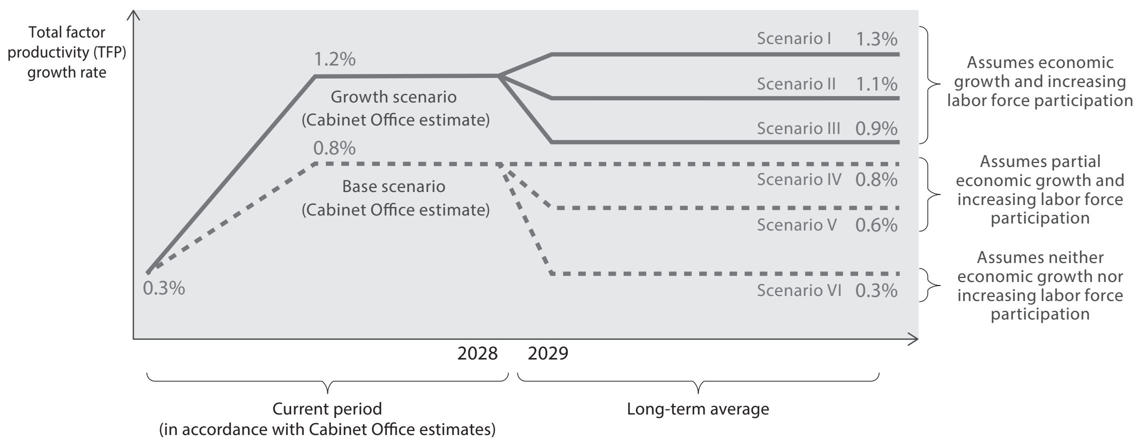
	Domestic bonds	Domestic equities	Foreign bonds	Foreign equities
Target allocation	35	25	15	25
Deviation limits	±10	±9	±4	±8

[2] Background of the formulation of the policy asset mix

Japanese public pension scheme (Employees' Pension Insurance and National Pension) is a pay-as-you-go system in which pension premiums collected from working generations support elderly generations. Given the decreasing birthrates and aging populations in Japan, funding pension benefits solely by contribution from working generations would place an unduly excessive burden on this group. The pension reserve fund managed by GPIF will therefore be used to supplement payouts for future generations.

Under this framework, the Ministry of Health, Labour and Welfare carries out a financial verification at least every five years based on the outlook for population and economic trends. The most recent verification conducted in 2019 included an analysis of six broad scenarios. The verification focused particularly on Total Factor Productivity (e.g. technological advances or productivity improvements), which is a critical factor in making long-term economic assumptions. The result was used as a basis of the target return on investments of the reserve fund, etc.

Economic assumptions in the financial verification



		Assumed future state of the economy: Labor force participation rate	Assumed future state of the economy: Total factor productivity (TFP) growth rate	Economic assumptions: CPI increase rate	Economic assumptions: Real wage growth rate (adjusted for CPI)	Economic assumptions: Rate of return on investment: Real (adjusted for CPI)	Economic assumptions: Rate of return on investment: Spread (adjusted for wages)	(Reference) Real economic growth rate from FY2029 20–30 years
Scenario I	Cabinet Office estimate for the growth scenario	Economic growth and increasing labor force participation scenario	1.3%	2.0%	1.6%	3.0%	1.4%	0.9%
Scenario II			1.1%	1.6%	1.4%	2.9%	1.5%	0.6%
Scenario III			0.9%	1.2%	1.1%	2.8%	1.7%	0.4%
Scenario IV	Cabinet Office estimate for the base scenario	Partial economic growth and increasing labor force participation scenario	0.8%	1.1%	1.0%	2.1%	1.1%	0.2%
Scenario V			0.6%	0.8%	0.8%	2.0%	1.2%	0.0%
Scenario VI		Neither economic growth nor increasing labor force participation	0.3%	0.5%	0.4%	0.8%	0.4%	–0.5%

(Note) Details of 2019 financial verification are posted on the MHLW website at https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/nenkin/nenkin/zaisei-kensyo/index.html.

[3] Details of policy asset mix formulation

① Considerations in the Medium-term Objectives

It is commonly known that, in a long-term investment, maintaining a basic asset composition (a policy asset mix) over the long term yields a better result effectively, rather than changing the asset composition in response to short-term market developments. Accordingly, public pensions' funds shall be managed with consideration to an expected rate of return and risks of individual asset classes, based on an asset allocation theory (policy asset mix) that forms the basis of reserves managements.

The fourth Medium-term Objectives for the five-year period from fiscal 2020 to fiscal 2024 established by the MHLW include the following investment objectives of reserve fund:

A. Based on the results of the financial verification, GPIF would formulate and manage the policy asset mix with the objective of achieving a long-term real return of 1.7% (net investment yield on the pension reserve fund less the nominal wage growth rate) on reserve assets with the minimal risks.

B. The policy asset mix must be formulated from a long-term perspective and it should incorporate generally recognized asset management expertise, domestic and overseas economic trends, and forward-looking risk analysis.

C. The downside risks of underperforming the nominal wage growth rate cannot exceed the portfolio comprised solely of domestic bonds, and appropriate consideration should be given to the fact that the downside risks for equities may be larger than expected. The probability that planned reserves may become smaller than originally anticipated should be properly accounted for and a thorough analysis of multiple risk scenarios should be conducted.

② Policy asset mix formulation process

Based on the results of the financial verification, the Medium-term Objectives, and recent economic conditions, GPIF decided on the following policies when formulating the new policy asset mix.

A. GPIF used multiple methods to estimate expected returns rather than a single method in order to enhance estimate precision. In addition to the previous method, GPIF has also taken into accounts the equilibrium return deemed intrinsic to market capitalization.

B. Current policy benchmarks (See Note) were used to estimate expected returns, as well as correlations between risks and returns. Since GPIF refers to the assumptions made within the financial verification during the portfolio optimization process, the estimation period for expected returns was set at 25 years, considering the models used within the financial verification to formulate long-term economic assumptions generally use a period of 25 years.

C. Given that the return target set within the Medium-term Objectives is a real return of 1.7%, that is, the return target set under Scenario III, GPIF used Scenario III as the economic scenario for the basis for wage increase assumptions when setting wage-adjusted expected returns.

D. The improved estimation method for expected returns enhances the accuracy of the optimization and is likely to result in a better target allocation, therefore, GPIF decided to eliminate constraints (such as relative asset class size, etc.), except for return requirements.

E. As the same before, the risk constraint used in the optimization included the requirement that the risks of the new policy asset mix falling below the nominal wage growth rate (lower partial probability) does not exceed those of a portfolio comprised solely of domestic bonds. GPIF also used the average nominal wage increase shortfall rate (conditional average shortfall rate) to measure the risks when optimizing the portfolio.

F. Looking at the reserves assets' nominal accumulation trends within the financial verification, while asset sizes will peak out at different points in different scenarios, GPIF expects that the investment policy can be maintained without reducing the reserves principals for the next 50 years or so. The peak of the size of nominal reserve assets is a critical point in investment operations, as it means that investment returns alone will not be able to cover cash payouts. Given that, GPIF analyzed reserves assets trends based on the new policy asset mix over the next 50 years, and compared them with planned reserve assets within the financial verification.

G. Furthermore, in light of the current low interest rates environments, yen-denominated short-term assets and JPY hedged foreign bonds are all classified as domestic bonds throughout the policy asset mix formulation process, as these assets are considered to have similar risk and return profiles to that of domestic bonds. In addition, foreign currency-denominated short-term assets are counted as foreign bonds.

(Note) GPIF refers to a benchmark used for the policy asset mix formulation as a policy benchmark. The policy benchmarks used for each asset class are as follows:

Asset class	Policy benchmark
Domestic bonds	NOMURA-BPI (excluding ABS)
Foreign bonds	FTSE World Government Bond Index (not incl. JPY, no hedge/JPY basis)
Domestic equities	TOPIX (incl. dividends)
Foreign equities	MSCI ACWI (not incl. JPY, JPY basis, incl. dividends)

③ Expected return of each asset class and assumption for the wage growth rate

GPIF projected expected return of domestic bonds by taking the average return rate calculated within the bonds investments simulation (which assumes different future long-term interest rates scenarios), and combined this with the equilibrium return rate (See Note 1) deemed intrinsic to market capitalization. To estimate expected rates of returns on domestic equities, foreign bonds, and foreign equities, GPIF used a building block method (See Note 2) for each asset that adds a risk premium to short-term interest rates, and combined this with the equilibrium return rate deemed intrinsic to market capitalization. The expected return for short-term interest rates which forms the basis for calculations is estimated using the market yield curve.

The nominal wage growth rate used to convert nominal expected return to wage-adjusted real return was 2.3%, which is the average future nominal wage increase used in the economic assumptions within the financial verification (in Scenario III).

(Note 1) The equilibrium return rate is the implied market return derived by observing current indicators such as global market capitalization and risk and correlations for each asset class.

(Note 2) The building block method estimates expected return for each asset class by adding together estimates for expected short-term interest rates and the risk premium (i.e. compensation for taking risk) for each individual asset class. Historical data for policy benchmarks were used to estimate risk premiums.

【Expected return for each asset class and the wage growth rate】

(Unit: %)

Short-term interest rate	Domestic bonds	Foreign bonds	Domestic equities	Foreign equities	Wage growth rate
−1.7	−1.6	0.3	3.3	4.9	(2.3)
(0.6)	(0.7)	(2.6)	(5.6)	(7.2)	

(Note) The numbers in the upper line indicate real returns, those in brackets in the lower line indicate nominal returns with wage growth rate.

④ Standard deviation and correlation of each asset class

GPIF estimated risks and correlations of each asset class by using the annual data of the policy benchmarks for the past 25 years after the bubble economy collapsed in Japan.

[Risk (Standard deviation)]

(Unit: %)

	Domestic bonds	Foreign bonds	Domestic equities	Foreign equities	Wage growth rate
Standard deviation	2.56	11.87	23.14	24.85	1.62

[Correlation]

	Domestic bonds	Foreign bonds	Domestic equities	Foreign equities	Wage growth rate
Domestic bonds	1.00				
Foreign bonds	0.290	1.00			
Domestic equities	−0.158	0.060	1.00		
Foreign equities	0.105	0.585	0.643	1.00	
Wage growth rate	0.042	−0.010	0.113	0.099	1.00

(Note) The expected return of a portfolio including several different assets with different risk-return profiles is the weighted average of the expected returns of individual assets, while risk (standard deviation) of the portfolio can be lower than the weighted average of those of the individual assets. This is called the "diversified effect." GPIF aims to achieve a stable investment result by diversifying the investments into multiple types of assets having different characteristics and price movements. For details, refer to GPIF's website at https://www.gpif.go.jp/gpif/.

⑤ Selection of policy asset mix

We selected the new policy asset mix from the following perspectives.

A. Based on the returns, risks, and other factors of the four asset classes, GPIF identified a variety of portfolios and estimated its projected returns, risks (standard deviations), probability in which portfolio return will short of nominal wage growth rate ("lower partial probability") and the average rate of shortages when return cannot meet the nominal wage growth rate("conditional average shortfall rate").
B. Among a variety of portfolios simulated, we selected a portfolio which meets the investment objectives (nominal wage growth rate plus 1.7%) with 'the lower partial probability' smaller than that of the reference portfolio where all are invested in domestic bonds, and the smallest "conditional average shortfall rate".

We continued to apply the currently used 5% interval to compose the new policy asset mix. GPIF has also confirmed that the new policy asset mix should fall within the range of the reference asset mix.

[New policy asset mix profile]

(Unit: %)

Real return	Nominal return	Standard deviation	Lower partial probability	Conditional average shortfall rate	
				Normal distribution	Empirical distribution (Note)
1.7	4.0	12.32	44.4	9.2	10.9

(Reference) Profiles of all-domestic-bond portfolio

(Unit: %)

−1.6	0.7	2.56	70.7	3.0	3.0

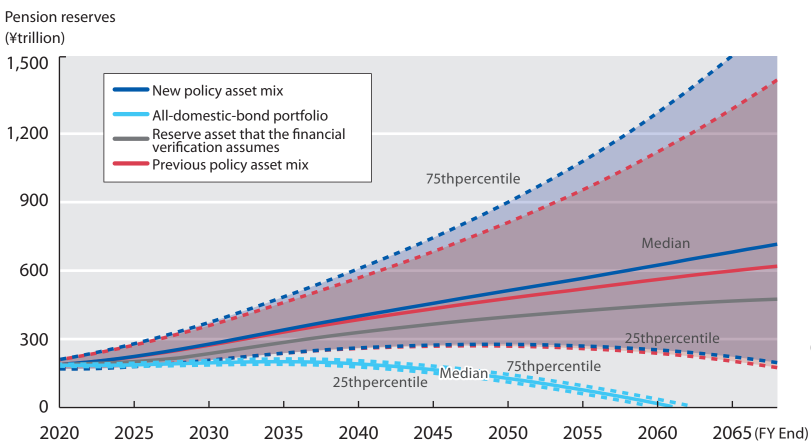
(Note) We also conducted a simulation for the conditional average shortfall rate by using the empirical distribution, in addition to the normal distribution, with consideration that equities may have a larger downside probability (tail risk). The empirical distribution is a projection based on real returns over the past 25 years.

⑥ Risk verification for new policy asset mix

In order to verify the magnitude of the risk where reserve assets fall below the size of planned reserves under pension finance, we conducted a Monte-Carlo simulation over one million times using the expected returns, standard deviations, and correlations for each asset to generate a distribution of such trends, and examined results compared to planned reserves on the financial verification (Scenario III), in a bid to test and verify the new policy asset mix.

Results indicate that the probability (risk) where fund size fall below the planned level has declined compared to the former policy asset mix. Meanwhile, a simulation conducted with an all-domestic-bond portfolio resulted in always smaller compared to the planned reserve assets.
From the above-mentioned overall perspectives with the aspects of lower partial probability and conditional average shortfall rate, the new policy asset mix is the most efficient portfolio to meet the investment objectives while minimizing downside risk.

Comparison with planned reserves



Probability (risk) of falling below planned reserves

(Unit: %)

	In 25 years (As of the end of FY2043)	In 50 years (As of the end of FY2068)
New policy asset mix	38.1	39.8
All-domestic-bond portfolio	100.0	100.0

(Reference) (Unit: %)

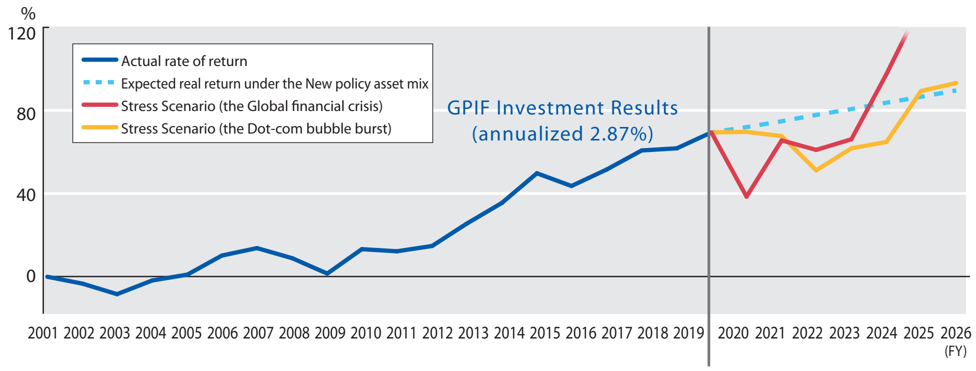
Previous policy asset mix	40.0	43.0

⑦ Implementation of stress tests

GPIF conducted multiple stress tests under the assumption of the occurrence of a financial crisis. The stress tests were conducted based on the respective scenarios using actual market data in the aftermath of the global financial crisis in 2008 and the dot-com bubble burst in 2000.

Results in both scenarios indicate that the cumulative value of real return temporarily falls, but turns upward to the level of expected return following a subsequent market rebound several years later.

[Actual and estimated real return (cumulative)]



- The negative returns with the largest annual loss over the test periods were -19.4% in the scenario of the global financial crisis and -11.4% in the scenario of the dot-com bubble burst.
- We also observed the probability of the occurrence through the empirical distribution in the stress scenario. We assessed that a loss equivalent to the aftermath of the global financial crisis would occur once every 70 years, while that similar to the aftermath of the dot-com bubble burst would be observed once every seven years.

(Note 1) GPIF's investment results (annualized return of 2.87%) are based on the figures as of the end of fiscal 2018.
(Note 2) The figure for fiscal 2019 represents the result as of Dec. 31, 2019.

(Column) Reference asset mix

Since the unification of the Employee's Pension Schemes in October 2015, four asset management entities-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-are assumed to jointly formulate a reference asset mix. When formulating the policy asset mix, each of the four entities shall take into consideration the reference asset mix.

The reference asset mix shall be reviewed upon a financial verification by the government and revised accordingly. After the 2019 financial verification was disclosed, the four entities discussed and formulated a new reference asset mix as follows:

(Unit: %)

Asset class	Domestic bonds	Domestic equities	Foreign bonds	Foreign equities
Reference asset mix	25	25	25	25
The range of median	±4	±4	±4	±4

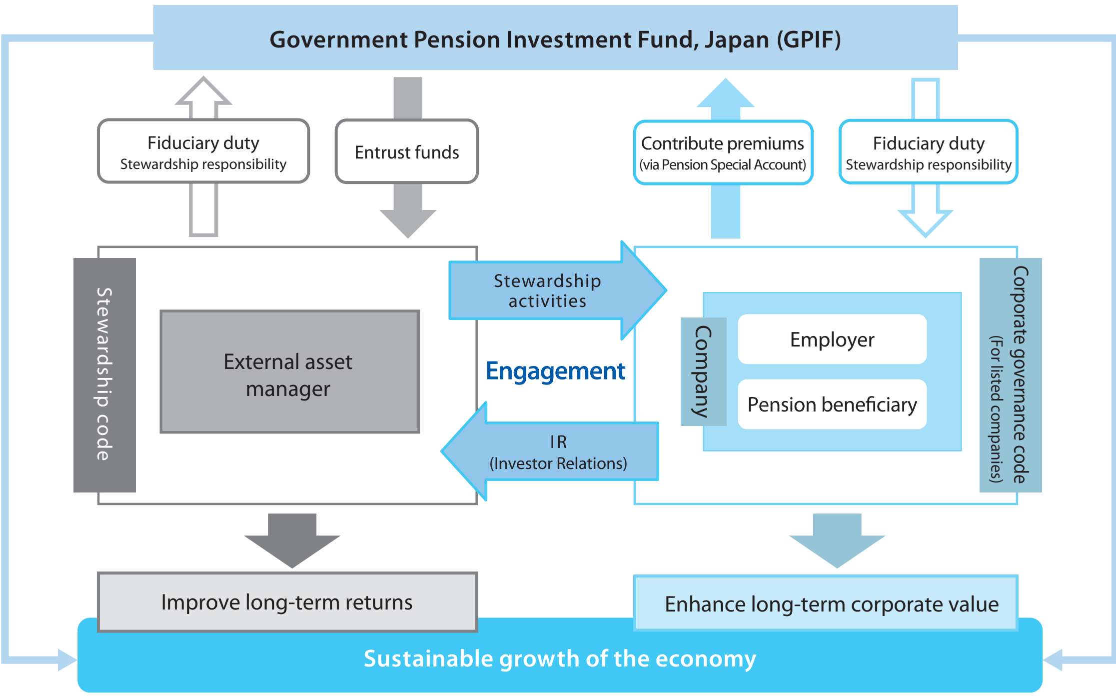
6 | Stewardship Responsibilities

[1] Objectives and significance of stewardship activities

In its Investment Principles and the Code of Conduct, GPIF stipulates that we promote activities to fulfill our stewardship responsibilities (hereinafter "stewardship activities") with the objectives of appropriately fulfilling our responsibilities to pension beneficiaries, as their fiduciary, and increasing investment returns over the 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 our 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, GPIF, as a universal owner and a cross-generational investor, contributes to the sustainable growth of the overall capital markets and promotes constructive dialogues (engagement) in consideration of ESG factors that contribute to sustainable growth between external asset managers and investee companies/issuers. Improvement of long-term corporate value would lead to the growth of the overall economy, which will eventually enhance our investment returns. GPIF shall fulfill our stewardship responsibilities by promoting engagement and building a win-win environment in the investment chain.



[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 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. 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.

2014

May 2014
Accepted Japan's Stewardship Code.
Established "Policy to Fulfill Stewardship Responsibilities."

2015-16

March 2015
Established "Investment Principles."
▶ Stewardship activities in equity investment.

September 2015
Signed "Principles for Responsible Investment (PRI)."
▶ Enhanced initiatives for ESG.

July 2016
Established "Business and Asset Owners' Forum" and "Global Asset Owners' Forum."
▶ Exchange of opinions on stewardship, ESG, etc.

2017-18

June 2017
Established "Stewardship Principles" and "Proxy Voting Principles."
▶ Requested compliance from asset managers for equity investment.

August 2017
Agreed to the revised Japan's Stewardship Code

October 2017
Partial revision to "Investment Principles."
▶ Stewardship activities including ESG-oriented initiatives were expanded to all assets.

2019-20

November 2019
Partial revision to "Policy to Fulfill Stewardship Responsibilities."
▶ Focused on prevention of activities that impede long-term corporate growth to achieve sustainable growth of the overall markets.
▶ Contribute to sustainable growth of markets.

February 2020
Partial revisions to "Stewardship Principles" and "Proxy Voting Principles"
▶ Requested compliance from managers of all domestic and foreign assets.

① Revision of the Stewardship Principles and the Proxy Voting Principles

In 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 due to circumstances of their own, the said manager is required to explain to GPIF the rationale behind the non-compliance. In order to fulfill our 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

In February 2020, GPIF revised the Stewardship Principles for the first time to expand the scope of stewardship activities to cover all asset classes, as it had been focused on equity investment, and newly call for a collaboration of stewardship division and investment division at asset managers, a constructive dialogue (engagement) with a wide range of stakeholders such as index providers, and active participation to various ESG initiatives. Meanwhile, the Proxy Voting Principles made a reminder that an exercise of voting rights shall be made as a part of a constructive dialogue throughout the year.

GPIF's stewardship activities are founded on the Investment Principles, the Policy to Fulfill Stewardship Responsibilities, the abovementioned Stewardship Principles, and Proxy Voting Principles. We will continuously examine appropriate stewardship responsibilities as a public pension fund and promote activities to fulfill our stewardship responsibilities.

② Participation in global initiatives

Starting with the signing up of PRI in September 2015, GPIF has been participating in multiple global initiatives as follows. Through joining the activities of these initiatives, we broaden our knowledge on ESG issues and utilize such expertise for evaluating the stewardship activities of external asset managers.

Climate Action 100+

Joined in October 2018

A five-year initiative led by investors, established in September 2017. Via dialogues with companies that are significantly influential in formulating possible solutions to global environmental issues, it focuses on the improvement of climate change-related governance, initiatives for the reduction of greenhouse gas emissions, the enhancement of information disclosure, etc.

GPIF, as an asset owner, has also joined its Asia Advisory Group, which provides the steering committee with advice on the characteristics of the Asian region.

Signatory of:

PRI Principles for Responsible Investment

Signed in September 2015

Six principles advocated in 2006 by Mr. Annan, then Secretary General of the United Nations, which demand institutional investors to include ESG in the investment process.

In January 2020, GPIF's Executive Managing Director and CIO, Hiro Mizuno was reappointed as Managing Director of the PRI Association, and joined the Asset Owner Advisory Committee, the SDGs Advisory Committee, Japan Networking Advisory Committee, etc.

30% Club / THIRTY PERCENT COALITION

Joined the 30% Club in the UK, and the Thirty Percent Coalition of the U.S. in November 2016. Joined the 30% Club in Japan in December 2019.

Established to seek diversity in boards of directors, with the aim of achieving 30% female directors.

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Supported in December 2018

Established by the FSB (Financial Stability Board) at the request of the G20 Finance Ministers and Central Bank Governors Meeting. In June 2017, the TCFD published voluntary recommendations to encourage information disclosure on the financial impact of climate-related risks and opportunities to enable appropriate investment decisions by investors.

Council of Institutional Investors — The voice of corporate governance

Joined August 2019

Established by a U.S. public pension fund with the aim of promoting shareholders' rights and corporate governance and collaborating in the U.S.

ICGN International Corporate Governance Network

Joined in August 2019

An industry association established by institutional investors, focusing on improvement of corporate governance and encouragement of stewardship activities with the aim of promoting efficient markets and sustainable economy.

[3] Promotion of activities aimed at fulfilling stewardship responsibilities

① Initiatives for the sustainable growth of the whole capital markets

A. Joint statement by asset owners

For a pension fund like GPIF, long-termism and sustainability of investee companies and the overall markets are critical in order to increase long-term investment returns. From this perspective, GPIF has been promoting ESG activities. In the past several years, industry groups and asset managers have made statements concerning "the significance of ESG" as well as "sustainability". GPIF, as an asset owner, decided anew that we must clarify our stance concerning long-termism and ESG, and jointly issued a statement, "Our Partnership for Sustainable Capital Markets," with CalSTRS (U.S.) and USS Investment (UK), which share the same perspectives as GPIF through discussions at the Global Asset Owners' Forum.

This statement summarizes the concept of how an asset owner, like GPIF, shall fulfill its stewardship responsibilities. As a beneficiary of the market through participation in the investment chain, and also as a pension fund responsible for future generations, we addressed this message to the whole market from the perspective of how asset owners can contribute to sustainability. The statement includes our commitment to companies that create long-term corporate value, and underlines the great significance of long-termism and ESG. As of March 2020, beside the initial three signatories, a total of ten organizations from North America, UK, continental Europe, Australia, and the Asian region have signed the statement (as of May 2020, the number of the signatories increased to 14 institutions).

B. Suspension of stock lending

As part of our stewardship responsibilities, GPIF requires our asset managers to enhance the long-term value of investee companies by conscientiously exercising voting rights for all the shares they hold, in addition to engaging in constructive dialogues with investee companies (engagement) - not only during the annual shareholder meeting season but throughout the year. Meanwhile, we identified several issues, such as an inconsistency between super long-term perspective of GPIF and the concept of stock lending, or the fact that GPIF's stock lending is conducted only for foreign equities and not domestic equities. Stock lending results in a temporary transfer of ownership rights to the borrowers, which effectively creates a gap in the period in which the stock is held by GPIF. It caused concern over inconsistency with our stewardship responsibilities. Moreover, the current stock lending scheme lacks transparency in terms of who is the ultimate borrower and for what purpose they are borrowing the stock. In light of this situation, we have decided to suspend stock lending after multiple discussions at the Board of Governors. The stock lending scheme may be reconsidered in the future if improvements are made to enhance transparency and address the inconsistencies cited above.

② Survey on compensation structure (incentive scheme) of GPIF 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 at 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 designed for avoiding 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. Since the comprehensive assessment in 2019, GPIF has utilized the questionnaire on compensation schemes for the survey for evaluation and selection of external asset managers. The following diagram summarizes the assessment by category based on a study commissioned for Mercer Japan Ltd.

	Lagging	Average	Leading
International	**Specific way of thinking about compensation (N=1)** **Degree of disclosure: Low (N=5)**	**Intermediate positioning (N=10)** Similarly to "Leading," ✓ Being used strategically, the compensation scheme has deferral of payment and fixing of amounts. Meanwhile, ✓ It does not fully reflect the investment performance.	**Compensation is used strategically (N=20)** ✓ The compensation scheme is designed to reward the contributions of teams and individuals as follows: the KPIs and their weight are mechanically calculated to a certain degree based mainly on the investment performance, and environmental factors are appropriately eliminated with discretions.
Domestic	**Compensation is not positioned as a strategy (N=7)** ✓ While the Group aims to gradually establish a system suitable to asset management, compensation has not been utilized as a strategic measure yet.	**Intermediate positioning (N=2)** ✓ The bonus for an individual is fixed based on the investment performance for the past five years or more, and the ratio of variable compensation to fixed compensation as well as the degree of such fluctuation is relatively high. ✓ The compensation scheme also includes "Deferral of payment" and investment in the funds of own company.	
	■ Compensation is not positioned strategically. ■ Great importance tends to be attached to net sales, growth rate of AUM and fees. ■ Bonus fund and individual bonus are decided in the same system and levels to those of parent companies such as banks, securities firms and insurance companies (evaluated by setting goals and the degree of achievement) ■ The ratio of bonus to base salary (in some companies, seniority is reflected rather than expertise) is low and the gap from the performance is also small. ■ The bonus fund and the evaluation for investment performance are not decided on a medium- to long-term basis (single-year basis). ■ Payment and fixing of amounts are not decided on a medium- to long-term basis, either.	Similar characteristics to the "Leading": ■ Compensation is used strategically. ■ The variable compensation ratio and the range of fluctuation are set appropriately. ■ The deferral system is applied to payment and fixing of amounts. Characteristics slightly different from the "Leading": ■ The investment performance is not reflected sufficiently. ■ The evaluation period for investment performance is not long enough (three years or shorter, etc.) ■ No system for investment in their own funds exists.	■ Compensation is used strategically. ■ The variable compensation ratio and the range of fluctuation are set appropriately. ■ Great importance is attached to investment performance. ■ Individual performance is evaluated by mechanically calculating to a certain degree, and appropriately eliminating environmental factors. ■ The evaluation period for investment performance is medium- to long-term (five years or longer). ■ The deferral system is applied to payment and fixing of amounts. ■ A system for investment in their own funds exists.

Prepared by GPIF based on "Research on compensation scheme (incentive structure) of executives and staff employees of external asset managers" for public release.

③ 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 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. In the same year, GPIF also started conducting a survey of listed companies on institutional investors' stewardship activities for the purpose of confirming how their stewardship activities including constructive dialogue (engagement) are being received by investee companies.

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 2019, with the participation of 10 companies in total, including the three co-organizers. At the Forum, participants discussed the recent dialogue between companies and investors on their initiatives regarding TCFD and the revised Corporate Governance Code (mainly focused on long-term incentives, the compensation scheme that considers ESG measurements, and corporate pension plans).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 our 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. Conducting a Survey of Listed Companies regarding Institutional Investors' stewardship activities

<Objective of the survey>

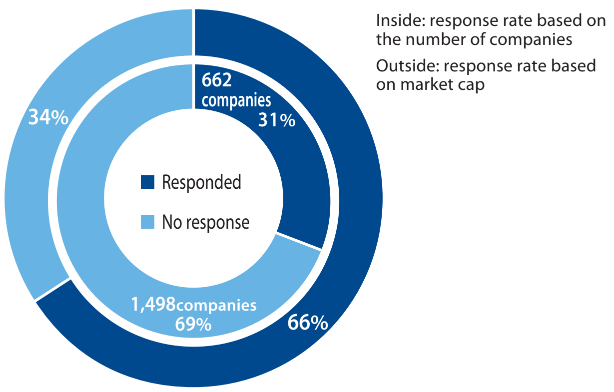
As GPIF entrusts domestic equity investment of the pension reserves to external asset managers, it requests them to enhance their stewardship activities. To ascertain how investee companies receive asset managers' stewardship activities, including engagement, GPIF conducted the first "Survey of Listed 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 2019, GPIF conducted the fifth survey, by sending questionnaires to the TSE-listed 2,160 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. 662 companies responded (accounting for 30.6%).

* The number of companies is as of December 30, 2019.

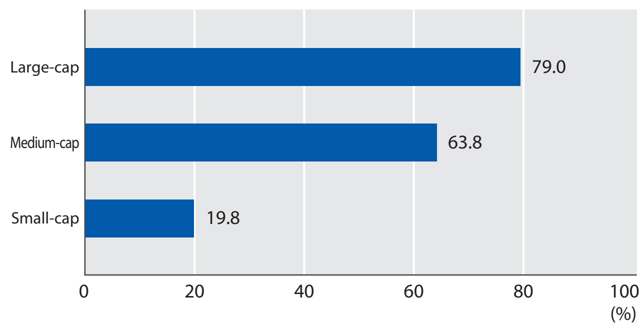
<Summary of the results of the survey>

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, new disclosure initiatives such as TCFD, 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 companies expect GPIF to: (i) encourage our external asset managers to conduct investment and engagement from a long-term perspective; (ii) promote constructive and essential dialogues; (iii) provide support for the establishment of ESG; (iv) promote ESG investment and direct and indirect stewardship activities that will involve small cap companies; and (v) encourage ESG evaluators to improve their own governance.

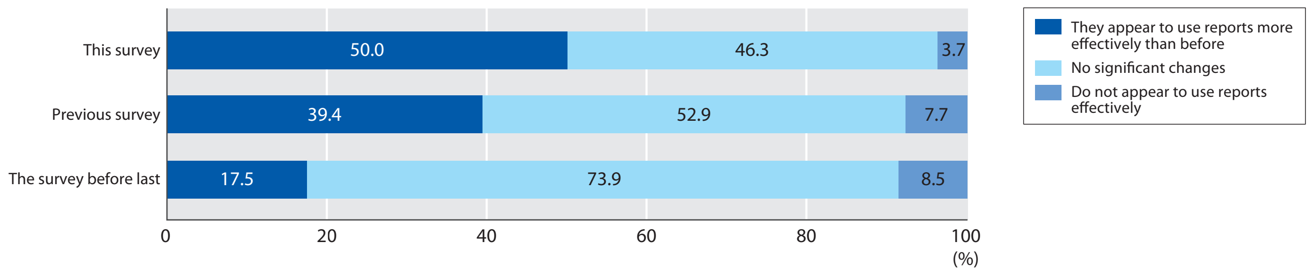
Respondents' coverage



Response rate by company size



Institutional investors utilization of integrated reports



[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" and "Disclosure" as material ESG issues and tend to regard long-term issues including "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 "Board Structure, Self-evaluation" and other "G" (governance) issues as more critical. In the survey of listed companies, corporate 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 long term. GPIF's Stewardship Principles require proactive engagement in material ESG issues to external asset managers.

<Passive domestic equity>

Climate Change	**100%**
Disclosure	**100%**
Misconduct	**100%**
Board Structure, Self-evaluation	86%
Minority Shareholder Rights	86%
Capital Efficiency	86%
Supply Chain	86%
Corporate Governance	86%
Diversity	86%
Human Rights & Community	86%
Environmental Opportunities	71%
Other (Social)	71%
Anti-Corruption	71%
Waste Management	57%
Other (ESG)	57%
Other (Governance)	57%
Health and Safety	57%
Water Stress, Water Security	57%
Biodiversity	57%
Deforestation	57%

<Active domestic equity>

Board Structure, Self-evaluation	**100%**
Minority Shareholder Rights	**100%**
Capital Efficiency	89%
Disclosure	78%
Misconduct	78%
Supply Chain	78%
Environmental Opportunities	78%
Labor Standards	67%
Climate Change	56%
Corporate Governance	56%
Diversity	56%
Human Rights and Community	56%
Waste Management	56%
Pollution & Resources	56%
Social Opportunities	56%
Product Liability	56%

<Passive foreign equity>

Climate Change	**100%**
Diversity	**100%**
Other (Social)	**100%**
Disclosure	**100%**
Corporate Governance	75%
Supply Chain	75%
Board Structure, Self-evaluation	75%
Water Stress, Water Security	75%
Other (Governance)	75%

<Active foreign equity>

Climate Change	**100%**
Diversity	88%
Other (Social)	75%
Disclosure	75%
Corporate Governance	75%
Supply Chain	75%
Board Structure, Self-evaluation	75%
Human Rights & Community	75%
Labor Standards	75%
Environmental Opportunities	63%
Health and Safety	63%

…E (Environmental)
…S (Social)
…G (Governance)
…Duplicated ESG themes

(Note 1) A survey on external asset managers for equities was conducted in December 2019

(Note 2) The ratios in the list above were obtained by dividing the number of external asset managers that selected the relevant issue as numerator by the number of external asset managers of each mandate (passive/active, domestic/foreign) as denominator.

(Note 3) "Material ESG issues" as pointed by more than 50% of the respondents are listed above. Items in red are issues pointed out by all of the respondents. When an asset manager is entrusted to both active and passive mandates, its answer is counted as the one with larger amount of mandate by GPIF.

[5] Exercise of voting rights

① Concept of exercise of voting rights

The Medium–term Objectives established by the Minister of Health, Labour and Welfare stipulate that GPIF "should take appropriate measures including exercise of voting rights while giving due consideration to 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 to avoid giving a direct influence on corporate management. However, from the viewpoint of further promoting its stewardship activities, GPIF shall conduct efficient engagement when entrusting an external asset manager, with an awareness of ESG (environmental, social and governance) materiality that leads to long-term investment returns. When doing so, GPIF shall clarify that stewardship activities including the exercise of voting rights by our external asset managers aim to improve long-term investment returns solely for the pension beneficiaries."

External asset 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 assessment meeting, considering their exercise as an item of initiatives for fulfilling stewardship activities.

② Exercise of voting rights in fiscal 2019

GPIF held meetings based on the reports on the status of exercise of voting rights from April to June 2019. 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 2019 to March 2020)

Number of external asset managers who exercised voting rights: 32 funds

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

(Unit: No. of proposals, percentage)

Proposal		Proposals pertaining to company organization					Proposals pertaining to director remuneration, etc.				Proposals pertaining to capital management (excluding items pertaining to amendment of the articles of incorporation)			Proposals pertaining to amendment of the articles of incorporation	Poison Pills (Rights plan)		Other proposals	Total
		Appointment of directors	External directors	Appointment of auditors	External auditors	Appointment of accounting auditors	Director remuneration	Director bonuses	Director retirement benefits	Granting of stock options	Dividends	Acquisition of treasury stock	Mergers, acquisition, etc.		Warning type	Trust–type		
Number of voting rights exercised		190,586	60,198	28,424	19,082	489	6,225	1,732	1,448	1,003	15,986	82	667	6,262	877	9	235	254,025
Management proposals	Total	189,943	59,939	28,377	19,046	489	6,168	1,732	1,448	1,003	15,914	20	667	5,047	877	9	221	251,915
		(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%)
	Approved	170,002	52,283	23,963	14,760	487	5,701	1,451	316	788	15,424	20	655	4,903	140	0	208	224,058
		(89.5%)	(87.2%)	(84.4%)	(77.5%)	(99.6%)	(92.4%)	(83.8%)	(21.8%)	(78.6%)	(96.9%)	(100.0%)	(98.2%)	(97.1%)	(16.0%)	(0.0%)	(94.1%)	(88.9%)
	Opposed	19,941	7,656	4,414	4,286	2	467	281	1,132	215	490	0	12	144	737	9	13	27,857
		(10.5%)	(12.8%)	(15.6%)	(22.5%)	(0.4%)	(7.6%)	(16.2%)	(78.2%)	(21.4%)	(3.1%)	(0.0%)	(1.8%)	(2.9%)	(84.0%)	(100.0%)	(5.9%)	(11.1%)
Shareholder proposals	Total	643	259	47	36	0	57	0	0	0	72	62	0	1,215	0	0	14	2,110
		(100.0%)	(100.0%)	(100.0%)	(100.0%)	(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%)
	Approved	161	78	12	12	0	3	0	0	0	29	14	0	102	0	0	10	331
		(25.0%)	(30.1%)	(25.5%)	(33.3%)	(0.0%)	(5.3%)	(0.0%)	(0.0%)	(0.0%)	(40.3%)	(22.6%)	(0.0%)	(8.4%)	(0.0%)	(0.0%)	(71.4%)	(15.7%)
	Opposed	482	181	35	24	0	54	0	0	0	43	48	0	1,113	0	0	4	1,779
		(75.0%)	(69.9%)	(74.5%)	(66.7%)	(0.0%)	(94.7%)	(0.0%)	(0.0%)	(0.0%)	(59.7%)	(77.4%)	(0.0%)	(91.6%)	(0.0%)	(0.0%)	(28.6%)	(84.3%)

(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 four abstentions.

The status of exercise of voting rights by external asset managers for foreign equities (from April 2019 to March 2020)

Number of external asset managers who exercised voting rights: 19 funds

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

(Unit: No. of proposals, percentage)

Proposal		Proposals pertaining to company organization			Proposals pertaining to director remuneration, etc.				Proposals pertaining to capital management (excluding items pertaining to amendment of the articles of incorporation)			Proposals pertaining to amendment of the articles of incorporation	Poison Pills for warning type	Other proposals		Total
		Appointment 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.			Approval of financial statement, etc.	Other proposals	
Number of voting rights exercised		90,464	4,522	10,591	18,444	181	359	4,120	7,982	4,142	9,561	6,996	248	10,436	33,316	201,362
Management proposals	Total	89,106	4,090	10,521	17,984	180	358	4,057	7,963	4,142	9,437	6,463	236	10,436	29,823	194,796
		(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%)
	Approved	77,863	3,592	10,064	15,426	155	310	3,024	7,822	3,933	7,414	5,799	181	9,983	24,799	170,365
		(87.4%)	(87.8%)	(95.7%)	(85.8%)	(86.1%)	(86.6%)	(74.5%)	(98.2%)	(95.0%)	(78.6%)	(89.7%)	(76.7%)	(95.7%)	(83.2%)	(87.5%)
	Opposed	11,243	498	457	2,558	25	48	1,033	141	209	2,023	664	55	453	5,024	24,431
		(12.6%)	(12.2%)	(4.3%)	(14.2%)	(13.9%)	(13.4%)	(25.5%)	(1.8%)	(5.0%)	(21.4%)	(10.3%)	(23.3%)	(4.3%)	(16.8%)	(12.5%)
Shareholder proposals	Total	1,358	432	70	460	1	1	63	19	0	124	533	12	0	3,493	6,566
		(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(0.0%)	(100.0%)	(100.0%)	(100.0%)	(0.0%)	(100.0%)	(100.0%)
	Approved	965	379	65	164	1	0	40	13	0	86	208	12	0	1,582	3,515
		(71.1%)	(87.7%)	(92.9%)	(35.7%)	(100.0%)	(0.0%)	(63.5%)	(68.4%)	(0.0%)	(69.4%)	(39.0%)	(100.0%)	(0.0%)	(45.3%)	(53.5%)
	Opposed	393	53	5	296	0	1	23	6	0	38	325	0	0	1,911	3,051
		(28.9%)	(12.3%)	(7.1%)	(64.3%)	(0.0%)	(100.0%)	(36.5%)	(31.6%)	(0.0%)	(30.6%)	(61.0%)	(0.0%)	(0.0%)	(54.7%)	(46.5%)

(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 1,836 abstentions.

7 | ESG Activities

[1] Basic approach

Universal owner

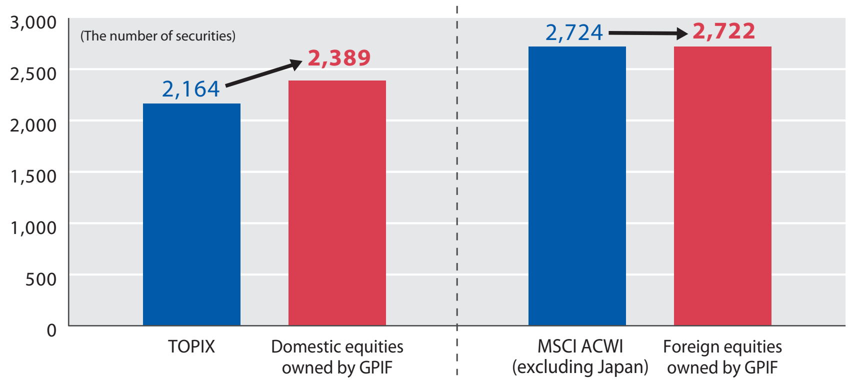
• GPIF is an investor with a very large fund size and a widely diversified portfolio.

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 a "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 2020)



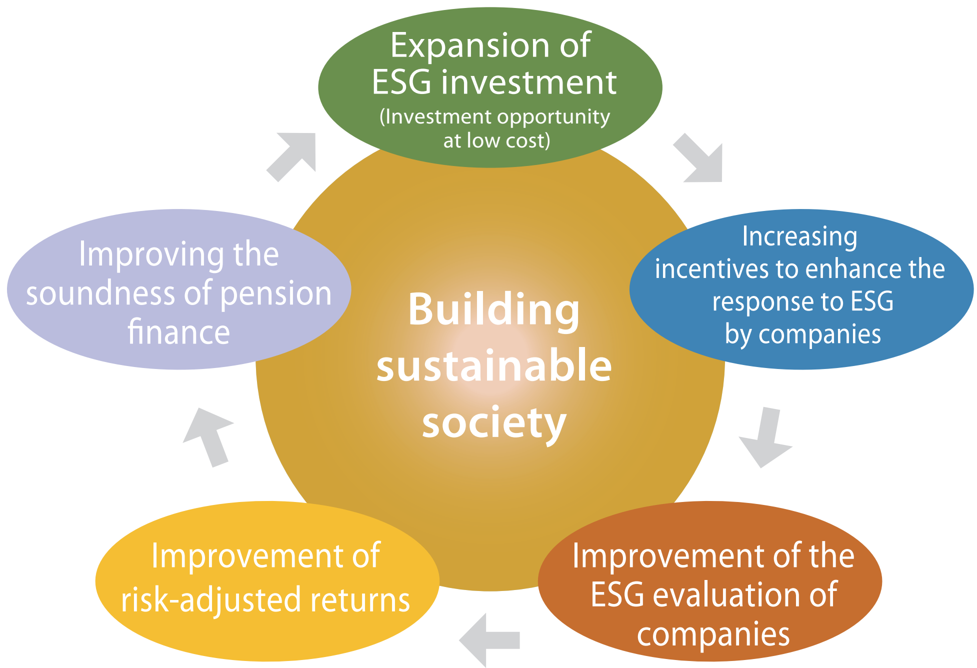
For instance, if the share prices of some portfolio companies increase as a result of conducting business activities without paying attention to their large impacts on the environment and society for the sake of short-term revenue expansion, and society and the economy as a whole, including other companies, 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 cross-generational investor responsible for supporting pension finance designed with time horizon of as long as 100 years. That is to say, conducting ESG activities in order to reduce negative externalities such as environmental and social issues, and to improve the sustainable return from the whole assets is consistent with the objective of the Employees' Pension Insurance Act and the National Pension Act to "manage pension reserves safely and efficiently from a long-term 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.

GPIF shall manage pension reserves in line with the basic policy that is meant to ensure that the reserves are managed and invested safely and efficiently from a long-term perspective (hereinafter referred to as the "Basic Policy of Reserves") announced in accordance with the Employees' Pension Insurance Act.

The Basic Policy of Reserves was revised in February 2020, stipulating that the sustainability of investee companies and the overall markets will be critical for the improvement of long-term investment returns in the management of pension reserves. It also stipulates that the reserve funds shall implement the necessary initiatives by individually examining the promotion of investments that consider ESG (environmental, social and governance) as non-financial factors in addition to financial factors, from the viewpoint of securing long-term investment returns for the interest of pension beneficiaries (applicable from April 2020).

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. In order to evaluate these ESG initiatives to confirm the effect of investment while ensuring the transparency, GPIF has published the ESG Report since 2018. In 2019, we published ESG Report 2018, the second issue, which includes a disclosure in line with the declaration of the Task Force on Climate-related Financial Disclosures (TCFD), for which GPIF has expressed our support in 2018. GPIF will continue verifying the effect of its ESG initiatives to improve its ESG-related activities.



[2] Passive investment based on ESG indices

In 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.

In 2018, with climate change increasingly becoming serious, GPIF selected the S&P/JPX Carbon Efficient Index for Japanese equities and the S&P Global Ex-Japan Large Midcap Carbon Efficient Index for foreign equities. These are stock indices designed to measure the carbon efficiency of companies (greenhouse gas emissions divided by revenues) in the indices and GPIF commenced passive investment tracking those indices.

Moreover, in 2019, GPIF announced the launch of the "Index Posting System" (IPS) - a new framework for collecting index information on a continuous basis - in order to efficiently gather various index information for the purpose of enhancing our overall fund management. IPS has started collecting information related to the following three areas during the pilot phase:

(Note) For details of Index Posting System, refer to page 66.

① Foreign equity ESG index (e.g. indices that select/weight constituents according to overall ESG metrics)

② Foreign equity diversity index (e.g. indices that select/weight constituents according to women's advancement or other diversity factors)

③ Environmental bond index

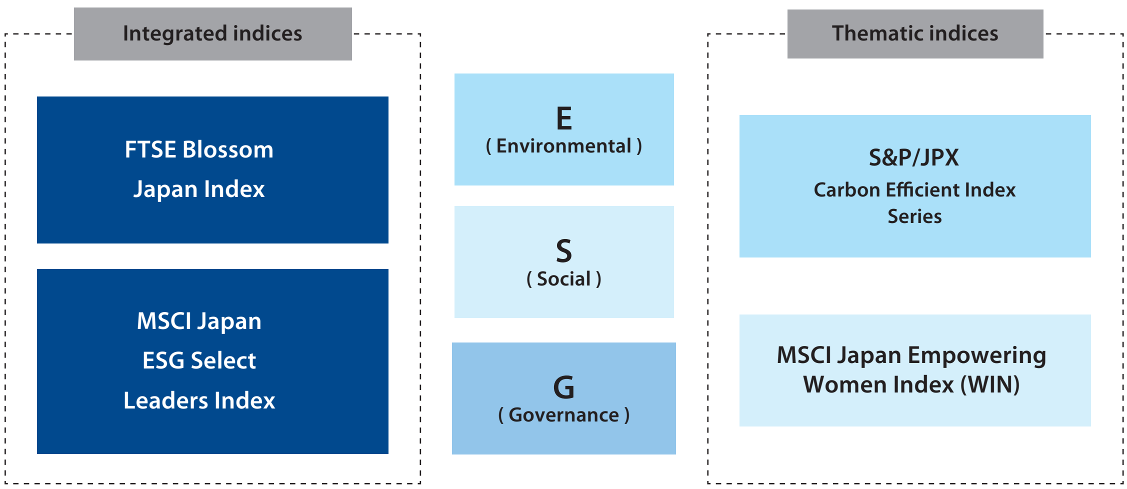
(a) Green bond index

(b) Bond indices that select/weight constituents according to environmental factors, etc.

(c) Other environmental bond indices (e.g. hybrid indices that include (a) and (b))

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



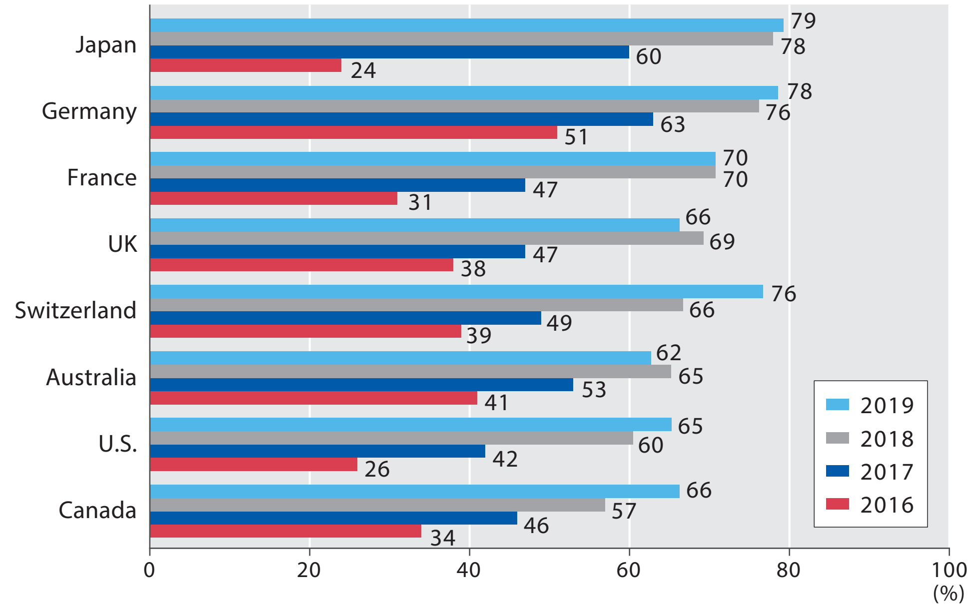
	FTSE Blossom Japan Index	MSCI Japan ESG Select Leaders Index	MSCI Japan Empowering Women Index (WIN)
Index concept	· The index uses the ESG assessment scheme that is applied to the FTSE4Good Japan Index Series which has one of the longest track records globally for ESG indices. · The index is a broad 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 (509 stocks)	Top 700 companies (in terms of market cap) in the MSCI Japan IMI (700 stocks)	Top 700 companies (in terms of market cap) in the MSCI Japan IMI (700 stocks)
Number of index constituents	181	248	305
Assets under management	¥931.4 billion	¥1,306.1 billion	¥797.8 billion

	S&P/JPX Carbon Efficient Index	S&P Global Ex-Japan LargeMidCap Carbon Efficient Index
Index concept	• Based on carbon data provided by Trucost, one of the pioneers of environmental research companies, S&P Dow Jones Indices, a leading independent provider, develops the index methodologies. • The indices are designed to increase index weights of the companies which have low Carbon to Revenue Footprints (annual greenhouse gas (GHG) emissions divided by annual revenues) and actively disclose information of carbon emissions.	
Subject of investment	Domestic equity	Foreign equity
Constituent universe (parent index)	TOPIX (2,164 stocks)	S&P Global ex-Japan LargeMidCap Index (2,896 stocks)
Number of index constituents	1,725	2,037
Assets under management	¥980.2 billion	¥1,710.6 billion

(Note) Number of index constituents and assets under management are as of March 31, 2020.

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) Universe is MSCI ACWI constituent companies. The above graph extracts major countries with 40 or more MSCI ACWI constituent companies.

[3] ESG integration in fixed income investment

GPIF has established an investment platform which provides asset managers with an opportunity to invest in green, social and sustainability bonds issued by multilateral development banks including the World Bank Group and government finance agencies of individual countries, which provide external asset managers with an opportunity for ESG integration in fixed income investment and obtaining excess returns against government bonds. Behind this, (i) demand for green bonds often exceeds supply in the primary market, and it is difficult to purchase them in the secondary market because many of the investors tend to hold them until maturity; and (ii) GPIF has sought a way to secure investment returns because it holds bonds worth about ¥74 trillion as of the end of March 2020, most of which are government bonds issued by developed countries including Japan and Europe where government bonds with negative yield have become more common. This initiative started with entering into a partnership with the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC) in April 2019, both members of the World Bank Group, and then expanded to the European Investment Bank (EIB), the Asian Development Bank (ADB), the Nordic Investment Bank (NIB), the African Development Bank (AfDB), the European Bank for Reconstruction and Development (EBRD), the Islamic Development Bank (IsDB), the Council of Europe Development Bank (CEB), and the Inter-American Development Bank (IDB). In addition to this, GPIF also established partnerships with government finance agencies, Kreditanstalt für Wiederaufbau (KfW), Kommuninvest, and BNG Bank. GPIF established investment platforms with ten multilateral development banks and three government finance agencies as of the end of March 2020. The investment in green, social and sustainability bonds through these platforms reached ¥441.4 billion as of the end of March 2020 (calculated by GPIF based on Bloomberg data for bonds in compliance with principles, etc. of International Capital Market Association (ICMA).)

GPIF promotes ESG integration not only in equity investment but also fixed income and other asset classes in order to reduce the negative impacts of environmental and social issues and improve long-term returns on its entire investment assets.

8 | 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 2019 is as listed in the right table.

Asset class	The number of entries	The number of information provided
Domestic bonds	13	0
Domestic equities	57	12
Foreign bonds	178	34
Foreign equities	541	142

B. Selection for passive and active managers of foreign bonds

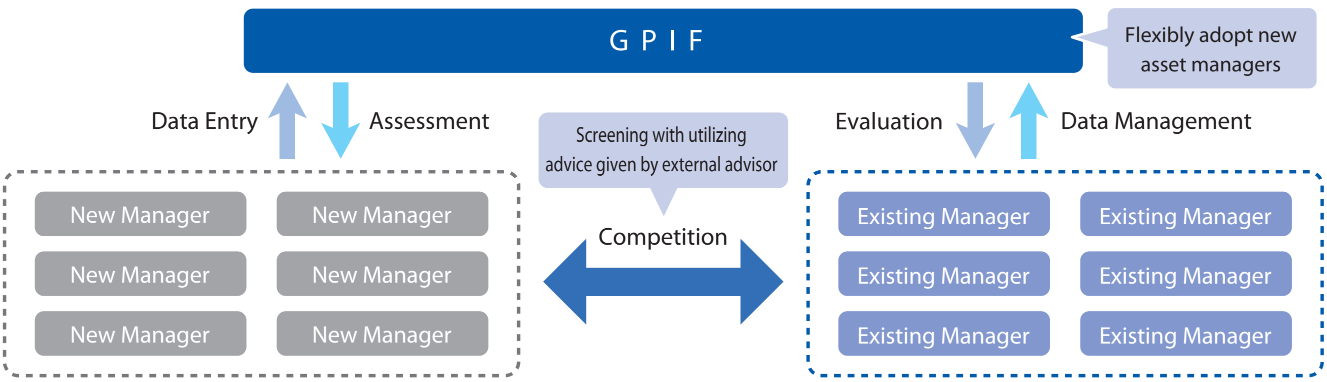
GPIF selected two MBS-TBA passive funds for foreign bonds. As for foreign bonds active investment, GPIF called for applications for active managers for high-yield bonds through the Asset Manager Registration System to review the existing external asset managers in February 2018, for which the third screening process was completed in fiscal 2019, and we newly selected four active funds and reselected two existing active funds.

C. Screening process for active managers of domestic equities and foreign equities

In order to achieve a stable excess rate of return, GPIF screened active value managers for domestic equities to review the existing external asset managers, and completed the second screening process. It also conducted a screening of active managers who pursue multi-manager investment strategies for foreign equities, and carried out the third screening process.

D. Call for applications for managers of alternative assets

GPIF has been calling for applications for asset managers who will implement multi-manager investment strategies for alternative assets (infrastructure, private equity, and real estate) since April 2017, with the aim of improving 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, one external asset manager for a global private equity mandate in fiscal 2019, and we have started investing in those assets.



② Revision of the selection process and screening criteria for external asset managers

A. In order to conduct the selection more flexibly, GPIF shall clarify the necessary profiles and investment capabilities of products and managers prior to starting a selection process, and go on to the second screening process focused on the availability of these attributes, to narrow down candidates for more detailed screening in the third screening process. We used to finalize comprehensive assessment and adoption simultaneously, but has started to finalize only an assessment in the third screening process, and then make a final decision by taking into account the composition of external asset managers, so that we could improve the consistency of assessment.

B. In accordance with Stewardship Principles with a provision of "ESG Integration into Investment Process" requesting ESG integration to external asset managers, GPIF shall assess if they include ESG issues in investment analysis and investment decisions explicitly and systematically on "Investment process", which is one of assessment criteria.

Selection Process for Asset Managers

Calling for applications through the Asset Manager Registration System

↓

Decision on selection criteria

- Investment Committee decides on the profiles and investment capabilities required for products and managers.

↓

First screening

- Based on the documents submitted by asset managers that applied for the Assert Management Registration System, asset managers subject to the second screening will be selected.
  (• Requirements for public invitation, such as approval under relevant laws and regulations
  • Investment performance, etc.)

↓

Second screening

- Based on carefully examined documents submitted by asset managers and information from an external database, as well as the results of interviews, if necessary, and screening to check if the profiles and investment capabilities meet the requirements, asset managers subject to the third screening will be selected.

↓

Third screening

- Interview will be conducted at the applicants' office to assess their investment system, capabilities, and the adequacy of their investment management fees to finalize the comprehensive score.

↓

Assignment of asset manager

- Based on the composition of external asset managers from the perspective of appropriate investment size and diversification of risk styles, asset managers will be assigned.
- 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 process (including ESG integration)
- Organization and human resources
- Internal control
- Stewardship activities (for equities and alternative assets)
- Administrative operation system
- Information security measures
- Information provision, etc.
- Investment management fees

③ Outline of a new performance-based fee structure

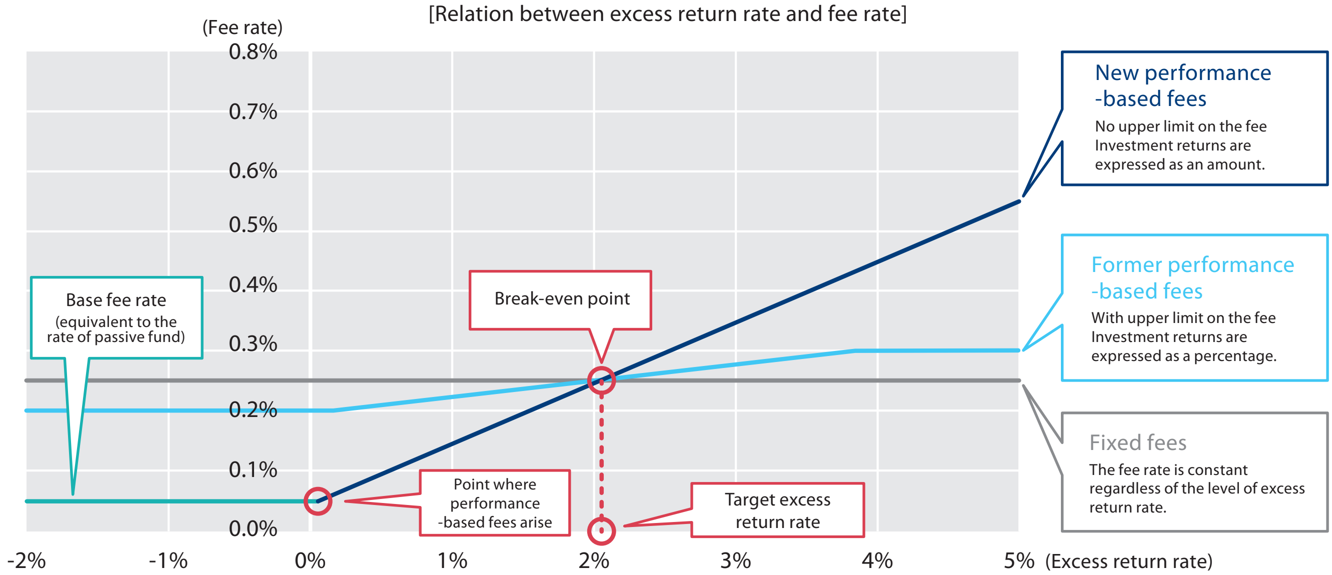
In April 2018, GPIF introduced a full-scale performance-based fee structure with the aim of strengthening the alignment of interest between GPIF and external active managers (encouraging them to achieve an excess rate of return over the benchmark and improving the quality of excess returns over the long term) and enhancing self-governance (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

[Relation between excess return rate and fee rate]



④ 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 receive further explanations in regular meetings and other activities.
In fiscal 2019, GPIF held a meeting to identify a fund of particular investment concern and decided to cancel one domestic equity active fund, and deliver a warning to three domestic equity active funds, two domestic equity passive funds, and one foreign equity passive fund accordingly.
In addition, in accordance with a replacement of a key person in a foreign bond active manager, GPIF decided to cancel one foreign bond active fund based on the continuity of investment.
As for passive investment of domestic equity and foreign equity, in order to improve the long-term investment returns of the overall investment assets, GPIF transferred the assets of existing market value-type domestic equity passive investment and foreign equity passive investment to ESG passive investment of domestic equity and foreign equity, respectively. As for foreign bond active investment, GPIF conducted the third screening process of active managers for high-yield bonds for which GPIF had called for applications in fiscal 2018, and newly selected four active funds and reselected two active funds of foreign bonds. In addition, we selected two MBS-TBA passive funds for foreign bonds.
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.

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. GPIF has shifted to a comprehensive assessment method which makes it possible to take each manager's strengths and weaknesses into consideration, as we have adopted multiple custodians and we are expected to have a wider range of choices of custodians in the future. 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 the existing contracts with them.

C. Reviewing our approach to custodians

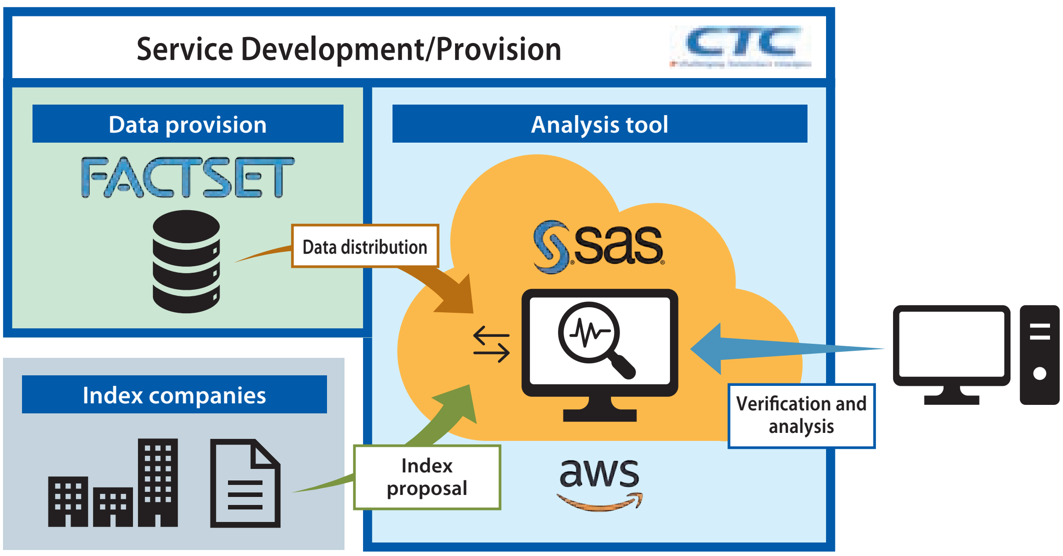
GPIF previously adopted approach of selecting one custodian for each asset class to entrust administrative operations. However, it is widely known that such approach involves the risk of interfering with the diversification of investment management and concerns over the business continuity plan (BCP). Accordingly, GPIF is reviewing our 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 engagement 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 multiple-custodian framework for asset classes for which the development of the necessary systems has been completed. In fiscal 2019, we adopted multiple custodians for managing short-term assets.

(Note) For the list of external asset managers, etc., refer to page 82-83.

[2] Introduction of Index Posting System

As passive investments account for the vast majority of GPIF's portfolio, the benchmarks that we select heavily influence our fund performance. Meanwhile, the demand for a wide variety of new types of indices has dramatically increased, as in recent years GPIF has managed money based on smart-beta, ESG, and other diverse themes.
With this in mind, GPIF launched the provisional version of the "Index Posting System" (IPS) - a new framework for collecting index information on a continuous basis - in fiscal 2019 in order to efficiently gather the latest index information for the purpose of enhancing our overall fund management. GPIF has also started establishing an infrastructure called Index Data Entry and Analysis System (IDEAS) where information of posted indices is accumulated efficiently, and integrated with financial and non-financial information including ESG-related information for analysis purposes. IPS has started collecting index information on a foreign equity ESG index, foreign equity diversity index, and environmental bond index during the pilot phase.
Since the official launch of the full version of the IPS in fiscal 2020, we have been accepting information on market-cap, smart beta, ESG, or any other indexes for equity and fixed income on a continuous basis.

〈Diagram of IDEAS (infrastructure for utilizing index and other data)〉



(Note) Logos used in the diagram are the name of service providers and their services which are actually being used within IDEAS.

[3] Promoting research and study

① GPIF Finance Awards

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

In 2019, the ceremony for the third GPIF Finance Awards was held. The Minister of Health, Labour and Welfare; the Minister of Education, Culture, Sports, Science and Technology; and Parliamentary Vice-Minister of Cabinet Office 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:	Prof. YOGO Motohiro at Princeton University
Profile:	He graduated from Princeton University. Ph.D. in economics from Harvard University. After working at the Federal Reserve Bank of Minneapolis and Wharton School of University of Pennsylvania, he assumed his present post in 2015.
Rationale:	For the outstanding work in a wide range of study areas including finance, insurance and econometrics, especially in asset pricing theory and the scheme and role of an investment company and an insurance company, and the further contributions expected in the future.

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 reserves safely and efficiently. In fiscal 2019, we carried out the following seven research studies and joint research projects.

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

Purpose of research: In "A study on the Use of Artificial Intelligence within Government Pension Investment Fund's Investment Management Practices," since fiscal 2017, the trading data of GPIF's active managers for domestic equities and foreign equities was analyzed, using machine learning, and showed the possibility of classifying investment styles into patterns and identifying style drifting. In fiscal 2019, the study was further developed to attempt to quantify information which is difficult to assess quantitatively, such as uniqueness or habits, in order to capture the consistency of investment behaviors taken by an active asset manager in the past and recent times.
Commissioned to: Sony Computer Science Laboratories, Inc.

B. Research and study on private debt

Purpose of research: GPIF intends to diversify our investment targets for the interests of the pension beneficiaries. Its past initiatives include an investment in alternative assets having different risk-return profiles from traditional assets. The study was conducted for the purpose of diversifying investments by examining whether private debt (private placements, bank loans, direct lending, real estate non-recourse loans, infrastructure debt, etc.) can become another target of investment.
Commissioned to: SAPIAT

C. Research that contributes to the formulation of the fourth Medium-term Plan

Purpose of research: GPIF is to formulate our own fourth Medium-term Plan for five years from fiscal 2020 in line with the fourth Medium-term Objectives stipulated by the Minister of Health, Labour and Welfare. It is important for GPIF to formulate the fourth Medium-term Plan from a long-term perspective because GPIF aims to "ensure the achievement of investment return required for the pension finance from a long-term perspective solely for the pension beneficiaries with minimal risks". For this purpose, the study collected information regarding long-term changes in GPIF's external environments and information needed to sophisticate the investments, etc., and also conducted the research on the long-term roles and challenges of GPIF. We utilized the results of this research for formulating the fourth Medium-term Plan with ensuring the further improvements in quality.
Commissioned to: Mizuho Research Institute

D. Research regarding a method to duplicate the performance of alternative assets

Purpose of research: Since alternative assets tend to have lower liquidity and higher fees compared to traditional assets, GPIF understands that it must ensure sufficient liquidity to pay pension benefits and evaluate investment fees and performance appropriately.
For this purpose, GPIF needs to collect information regarding (i) basic matters of performance data and indices of alternative assets; (ii) a method to duplicate the performance of alternative assets using traditional assets and listed assets; and (iii) a method to evaluate investment fees and performance, in order to organize matters to be resolved upon the adoption of the abovementioned duplication method and assessment method. This research intends to utilize the collected information and the research result as a basis of alternative asset investments for further improving their quality.
Commissioned to: Nomura Research Institute

E. Joint research of risk management indicators for a flexible investment

Purpose of research: For adopting a flexible asset allocation strategy, it is necessary to sophisticate the analysis of economic and market conditions that have been becoming highly volatile in recent days. GPIF has started research (joint research) on new risk management indicators in order to diversify risk managements for a flexible execution of investments. This research aims to develop not an indicator suggesting the current risk status, such as traditional tracking errors and VaR, but a forward-looking leading indicator, based on cutting-edge theoretical studies including novel approaches and studies that transcend existing frameworks.

Jointly research entity: Waseda University

F. Joint research on diversification effects and portfolio efficiency obtained through ESG investment

Purpose of research: GPIF, as a universal owner and a cross-generational investor, promotes the integration of ESG into our investments for reducing negative effects on environmental and social issues and improving long-term investment returns of the overall portfolio asset. In pursuing these initiatives, examination of diversification effects and portfolio efficiency obtained through ESG investments allows for more appropriate and efficient ESG initiatives, while the effectiveness must be assessed from an objective point of view. Specifically, it requires a chronological analysis method or a country-specific comparative analysis method based on a quantitative analysis taking historical changes and a difference between countries into account. This study especially utilizes a sophisticated method using a regime switching model, etc. aiming to obtain an advanced and unique outcome through the detection of regime variances and condition analysis.

Jointly research entity: Crawford School of Public Policy, Australian National University

G. Joint research towards the realization of "Society 5.0 for SDGs"

Purpose of research: We are experiencing an age of an evolution of digital transformation (DX), a change in an economic and social structure, heightening fears of global environmental issues, and a shift in people's mindset, etc., to which our conventional concept is no longer applicable. In these circumstances, Japan has been attempting to realize "Society 5.0 for SDGs" in order to establish a sustainable society with a medium to long-term economic growth.

Meanwhile, studies and the implementation of Society 5.0, a novel idea proposed by Japan's business industry, and of its relationship with ESG investments advocated by the United Nations have just started. Based on a consensus that a sustainable growth of investee companies and the overall markets is essential for increasing long-term investment returns of portfolio assets of reserve fund, this study was conducted by Japan Business Federation, University of Tokyo, and GPIF, three parties representing Japan's business world, academia and investors, respectively.

The study suggests that in Japan a corporate activity which is conducive to Society 5.0 for SDGs would contribute to the environmental and social sustainability and sustainable economic growth quantitatively and qualitatively from the standpoint of corporations, investors and academia.

Based on the study result, GPIF will advance the implementation of action plans.

Jointly research entity: Japan Business Federation and University of Tokyo

Chapter 2

Roles and Organizational Operation of Government Pension Investment Fund

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 elderly 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, to respond to changes in the population and economy appropriately, and to prepare for further decreasing birthrate and aging population expected in the future, GPIF still holds certain amount of reserve funds in the public pension scheme, while being managed under a pay-as-you-go system. It is stipulated that "the portion of pension premiums not allocated to benefits will be invested as reserve fund to stabilize pension finance."

Japan's decreasing birthrate 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 investment of pension reserve: 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."

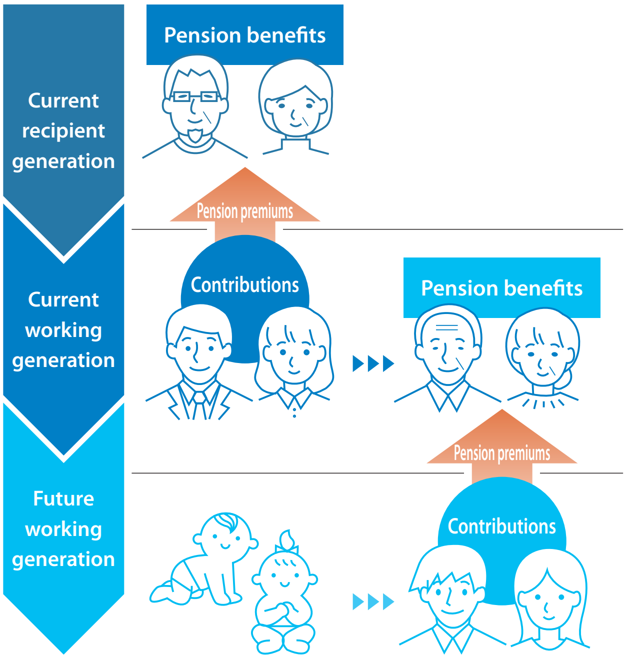
As is the case in other incorporated administrative agencies (Act on General Rules for Incorporated Administrative Agencies), the relevant minister lays out the objectives of GPIF for a set period of time. "Objectives to be achieved by GPIF" (hereinafter the "Medium-term Objectives"), established by 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 fund less the nominal wage growth rate) of 1.7% with minimal risks 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 long-term 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).

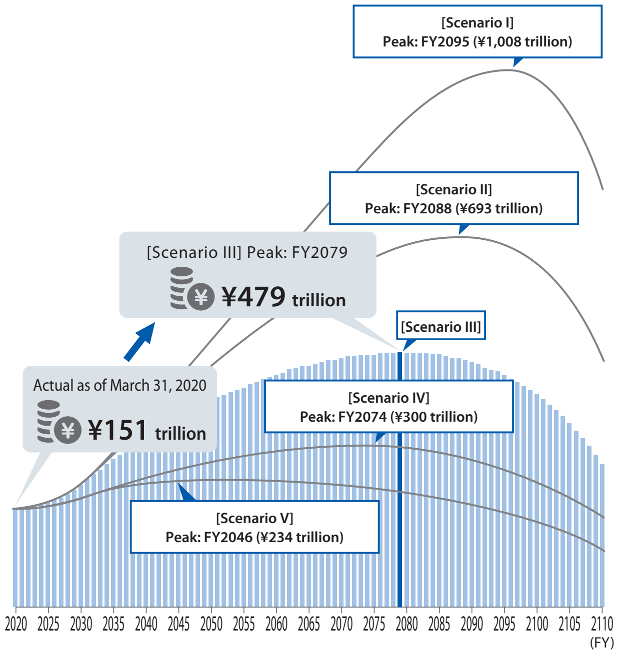
② Roles of reserve fund in pension finance

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. The reserve fund may not be reduced for about the next 50 years or so. Moreover, 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. In other words, an unrealized gain or loss in a specific year may not be reflected in the amount of pension benefits in the following year.

Japan adopts a system where working generations support the lives of the elderly generations.



Financial verification results
(projections for pension reserves over approximately 100 years)
[Trends of pension reserves under each scenario]



(Note 1) Population assumes medium fertility and medium mortality.
(Note 2) Asset size as of March 31, 2020 is only for the pension reserve fund and does not include Pension Special Account.
(Note 3) For details of Scenario I through Scenario V, refer to page 44.

[2] Regulatory requirements for pension reserve management and outline of Medium-term Objectives and Medium-term Plans

① Basic Policy for Investment Management

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 long-term 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 Medium-Term Objectives of 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 premiums 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."

○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 fourth Medium-term Plan for the five years from fiscal 2020 to fiscal 2024 from a long–term perspective, based on the philosophy of diversified investment. It is regarded that GPIF should take into consideration the reference portfolio jointly established 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 Policy for Investment Management (Operation Policy), the Medium–term Plan requires GPIF to review the Operation Policy in a timely and proper manner in light of changes in the economic environment and revise it promptly as required.

② Investment objectives, risk management, ensuring transparency and others

In the fourth Medium-term Objectives for the period from fiscal 2020 to fiscal 2024 stipulate that a pension reserve must achieve a long–term real return (net investment yield on the pension reserve fund less the nominal wage growth rate) of 1.7% with minimal risks based on the financial verification. The fourth Medium-term Objectives also require GPIF to make efforts to pay close attention 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 the total portfolio and each asset class during the period for the Medium-term Objectives.

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

The fourth Medium–term Objectives 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 GPIF shall follow the concept that the sustainability of investee companies and the overall markets will be critical for the expansion of long-term investment returns in the management of pension reserves. Based on this, GPIF shall manage the pension reserve while paying attention to the Operation Policy mentioning that pension reserves shall be managed and invested for the purpose of securing long-term returns for the pension beneficiaries, and implement necessary initiatives by individually examining the promotion of investments that consider ESG (environmental, social and governance) as non-financial factors.

In addition, important matters regarding the introduction of new investment methods and investment targets, among others, shall be resolved upon the deliberation of the Board of Governors established in October 2017.

An outline of the deliberations at the Board of Governors is promptly published upon obtaining approval of the Board, by means of which we hope to help ensure the transparency of GPIF's organizational operation.

③ Other important matters for pension reserve management

The fourth 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, pay close attention to prevent exposure to unfavorable market impact, and avoid the extreme concentration of investing and/or withdrawing at one time.

GPIF is also required to take appropriate measures regarding the exercise of voting rights, and not to select individual stocks by itself, in due consideration of the impact on corporate management and others.

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, GPIF is expected to enhance the functions necessary for assuring liquidity without shortages, including selling assets in a smooth manner while giving consideration to market price formation and other factors.

④ Enhancement of investment capabilities, improvement of operational efficiency

In the fourth Medium-term Objectives, GPIF is expected to clarify the area of operations requiring highly skilled professionals, while developing an environment for attracting such talent, providing training by highly skilled professionals to improve the operational capabilities of our staff, and formulating a policy to secure and foster human resources strategically. 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.

Moreover, GPIF is expected to conduct more sophisticated risk management by performing a forward-looking risk analysis and a long-term analysis, and the Board of Governors shall monitor the management status of individual portfolio risks properly.

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 1.24% per annum based on the fiscal 2019 level. The cost-saving target includes general administrative expenses (excluding expenses related to computer systems and personnel expenses) and operational expenses (excluding expenses related to computer systems, fees for external asset managers, index fees, personnel expenses, 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. Except for this additions or expansions, however, over 1.24% efficiency (annually by average) from the previous year is required, and the additions and expansions are ultimately included in the 1.24% cost– saving target from the following fiscal year onward.

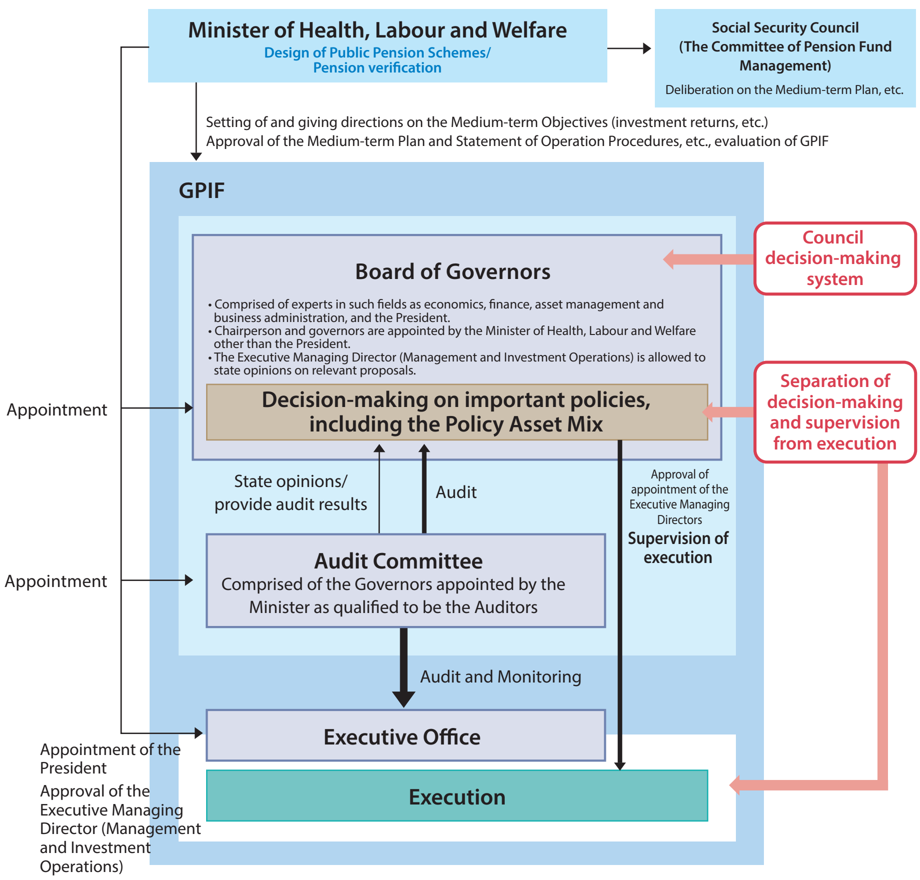
2 | Organization and Internal Control System

[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 decision-making 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 made important decisions on the formulation of the fourth Medium-term Plan and the policy asset mix which have been applicable since April 2020, among other issues.

It has been two years 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, 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 18 meetings in fiscal 2019. An outline of the meetings is as described in the following table. In fiscal 2019, the Board of Governors actively discussed the formulation of the fourth Medium-term Plan and the policy asset mix which have been applicable since April 2020, and developed the basic investment framework for the next five years. Moreover, the Board of Governors also held careful and in-depth deliberations on important compliance matters related to executives and staff, aiming to improve and strengthen internal controls which are fundamental to governance. The Board also received reports from the President or other members on the asset allocation ratio and the status of risk management for active discussion. 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

(Fiscal2019)

	Date of meeting	Main agenda items (only matters for resolution/deliberation are recorded)
22nd meeting	April 11, 2019	(Resolution) Development of relevant regulations, etc. associated with change of era name (Deliberation) Periodic verification of the policy asset mix
23rd meeting	May 16, 2019	(Deliberation) (i) Annual Report fiscal year 2018 (draft), (ii)Periodic verification of the policy asset mix (2), (iii) Operations of the Board of Governors, etc.
24th meeting	June 6, 2019	(Resolution) (i) Change in the Board of Governors regulations, (ii) Periodic verification of the policy asset mix (3) (Deliberation) (i) Review of operations in fiscal 2018 (draft), (ii) Review of the expected achievement of the third Medium-term Objectives (draft), (iii) Annual Report fiscal year 2018 (draft), (iv) Preparation of the financial statements, business report, and financial report for fiscal 2018, appropriation of profit and loss and other important matters related to accounting (draft)
25th meeting	June 28, 2019	(Resolution) (i) Review of operations in fiscal 2018 (draft), (ii) Review of the expected achievement of the third Medium-term Objectives (draft), (iii) Annual Report fiscal year 2018 (draft), (iv) Disclosure of portfolio holdings by asset category as of the end of March 2019, (v) Preparation of the financial statements, business report, and financial report for fiscal 2018, appropriation of profit and loss and other important matters related to accounting (draft), (vi) Approach to domestic bond investment (2) (Deliberation) Introduction of the management of new operational risks
26th meeting	July 18, 2019	(Resolution) Management of operational risks in line with the new regulations (Deliberation) (i) Procurement of data service operations for accounting and disclosure purposes, (ii) Approach to domestic bond investment (3)
27th meeting	August 27, 2019	(Resolution) (i) Important matters related to organization and staff size, (ii) Procurement of data service operations for accounting and disclosure purposes, (iii) Supplementary procurement related to a risk management tool, (iv) Change in the portfolio risk management regulations
28th meeting	September 30, 2019	(Resolution) (i) Consent to the appointment of the Executive Managing Director (Management and Investment Operations) and the Executive Managing Director (Planning and General Affairs), (ii) Change in the Annual Plan, (iii) Revision of the portfolio risk management regulations, (iv) Revision of the regulations of the restriction on re-employment of executives (Deliberation) Revision of the regulations of preparation and disclosure of the minutes of the Board of Governors
29th meeting	October 6, 2019	—
30th meeting	October 11, 2019	(Deliberation) Compliance issues
31st meeting	October 18, 2019	(Resolution) Compliance issues (2)
32nd meeting	October 24, 2019	(Deliberation) Formulation of the fourth Medium-term Plan (organization and staff size)
33rd meeting	November 18, 2019	(Resolution) Handling of stock lending investment (3) (Deliberation) (i) Formulation of the fourth Medium-term Plan (2), (ii) Change in the regulations of preparation and disclosure of the minutes of the Board of Governors

	Date of meeting	Main agenda items (only matters for resolution/deliberation are recorded)
34th meeting	December 2. 2019	(Resolution) (i) Office expansion, (ii) Change in the accounting regulations, (iii) Change in the regulations of preparation and disclosure of the minutes of the Board of Governors (Deliberation) (i) Formulation of the policy asset mix for the next term (10), (ii) The fourth Medium-term Plan (3), (iii) Matters for resolution at the Board of Governors
35th meeting	December 23, 2019	—
36th meeting	January 9, 2020	(Resolution) (i) Change in the standards for payment of remuneration, etc. and salaries, etc., (ii) Renewal of the office leasing contract (Deliberation) (i) Formulation of the policy asset mix for the next term, (11), (ii) The fourth Medium-term Plan (4), (iii) Matters for resolution at the Board of Governors (2)
37th meeting	February 6, 2020	(Resolution) Important matters related to organization and staff size (Deliberation) (i) Formulation of the policy asset mix for the next term (12), (ii) The fourth Medium-term Plan (5), (iii) Annual budget plan for fiscal 2020 (expenditures)
38th meeting	March 9, 2020	(Resolution) (i) Change in target portfolio allocation of reserve funds (the reference portfolio) (draft), (ii) The fourth Medium-term Plan (draft), (iii) Important matters related to organization and staff size, (iv) Change in the Management and Investment Policy (draft), (v) Change in the Investment Principles (draft), (vi) Change in the portfolio management regulations (draft) (Deliberation) (i) Annual Plan for fiscal 2020 (draft), (ii) Matters for resolution at the Board of Governors (2)
39th meeting	March 26, 2020	(Resolution) Annual Plan for fiscal 2020 (draft) (Deliberation) Assessment of pension reserve fund management

[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).

The Audit Committee held 21 meetings in fiscal 2019. The Committee performed audits primarily from five perspectives: the status of achievement of the 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 Audit Committee, as part of the monitoring operation entrusted by the Board of Governors, attends committee meetings organized by the Executive Office, including the Investment Committee, the Portfolio Risk Management Committee, the Management and Planning Committee, the Procurement Committee, etc. as needed. The Audit Committee also assesses and analyzes the status and appropriateness of GPIF's operations through interviews with the person in charge of each department, the President, and Executive Managing Directors as well as investigations at times. Then the Audit Committee reports and shares information obtained through these activities with the Board of Governors as appropriate, and gives opinions to the Board and the President on organizational management issues such as ways to further strengthen internal controls. In addition, in fiscal 2019, an auditor assigned by the Audit Committee investigated compliance matters related to executives and staff.

The results of these audits are published as the Audit Report on GPIF's website.

[4] Execution system

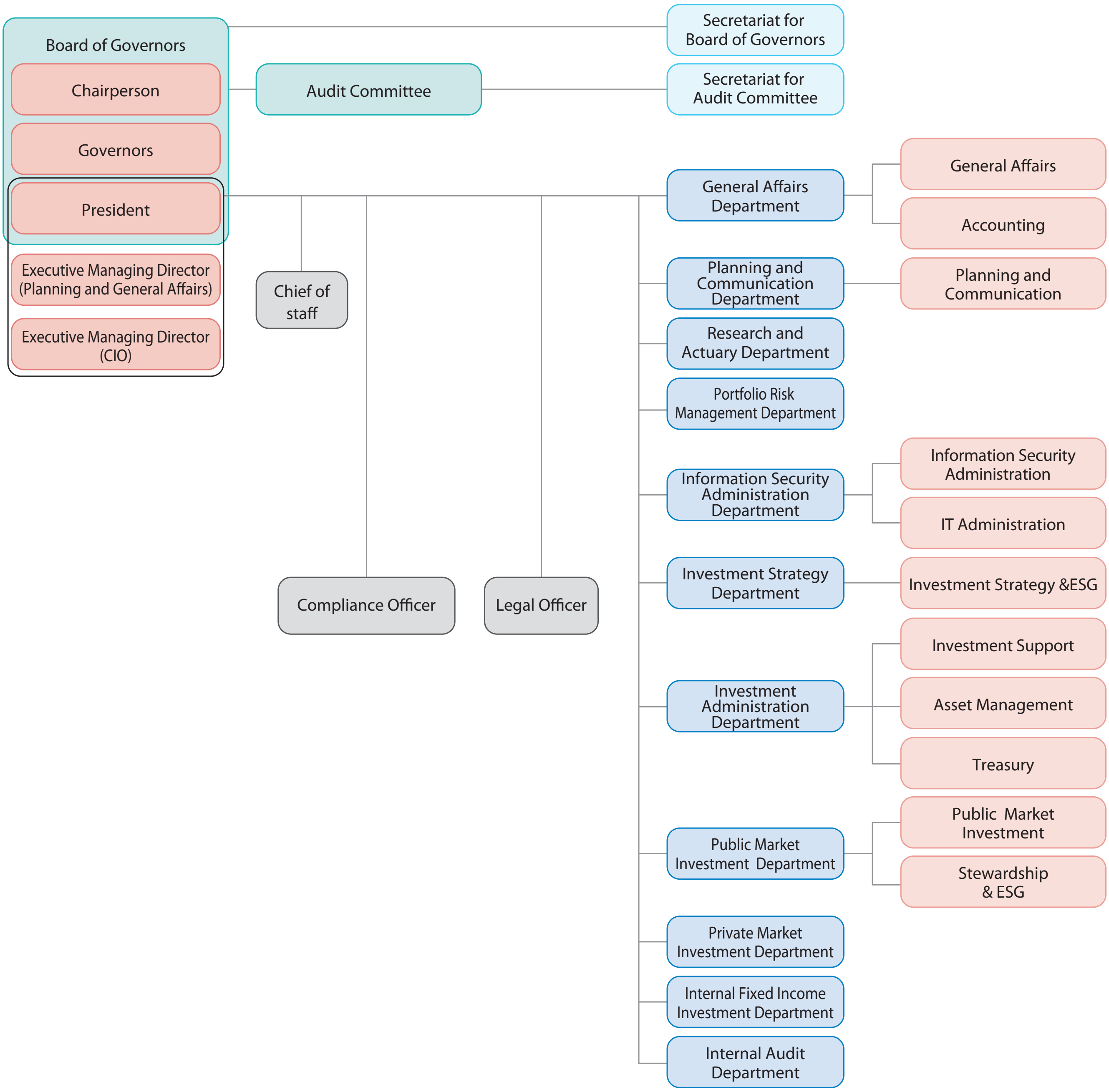
① Organization

As of April 1, 2020, 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 145 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), 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 (Investment Support Division, Asset Management Division, Treasury Division), 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, 2020)



Chapter 2

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.

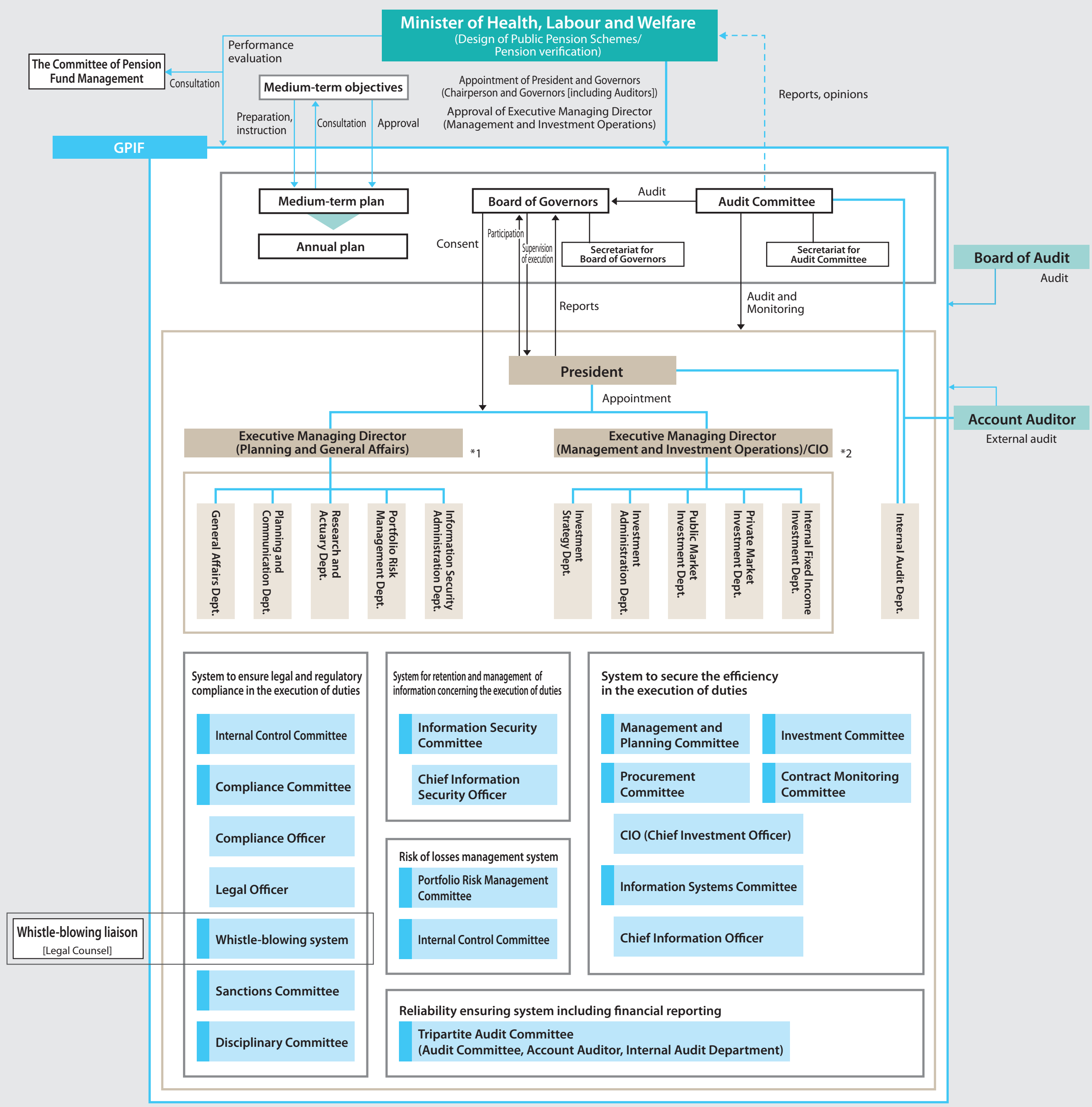
Specifically, regarding the system to ensure that the execution of duties by the President, Executive Managing Directors, and staff members complies with laws and regulations, the Internal Control Committee is established to promote internal control. In addition, the Compliance Committee is established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

Specifically, regarding the system to ensure the efficiency of the execution of duties, the Investment Committee has been established to carry out prior deliberation to make decisions on important matters related to the execution of management operations, and holds careful discussions from a multidimensional perspective under the supervision of the CIO.

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 Procurement Committee ensures the proper state of procurement and subcontracting processes (excluding contracts with external asset managers), and the Contract Monitoring Committee including external experts conducts procurement-related inspections. By these committees, GPIF is committed to establish its internal control system.

Concept of Internal Control



*1 The Executive Managing Director (Planning and General Affairs) is responsible for matters related to the General Affairs Department, the Planning and Communication Department, the Research and Actuary Department, the Portfolio 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.

Reference Data

1 | 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 2019)

		Market value (¥billion)	Portfolio allocation (%)
Total (Investment assets)		150,633.2	100.00
Market investments	Total	149,737.0	99.41
	Passive investments	118,602.6	78.74
	Active investments	31,134.4	20.67
FILP bonds		896.2	0.59

		Market value (¥billion)	Portfolio allocation (%)
Total (Investment assets)		150,633.2	100.00
Domestic bonds	Total	36,229.7	24.05
	Passive investments	25,884.7	17.18
	Active investments	10,345.1	6.87
Domestic equities	Total	35,563.0	23.61
	Passive investments	32,336.0	21.47
	Active investments	3,226.9	2.14
Foreign bonds	Total	36,408.7	24.17
	Passive investments	26,871.8	17.84
	Active investments	9,536.9	6.33
Foreign equities	Total	37,163.9	24.67
	Passive investments	33,510.0	22.25
	Active investments	3,653.9	2.43
Short-term assets (Active investments)		4,371.6	2.90
FILP bonds		896.2	0.59

(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)

(Unit: %)

		FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Domestic bonds	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	71.45
	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	28.55
Domestic equities	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	90.93
	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	9.07
Foreign bonds	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	73.81
	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	26.19
Foreign equities	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	90.17
	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	9.83
Total	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	79.21
	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	20.79

GPIF

[3] Investment assets by manager, etc. (market value at the end of fiscal 2019)

(Unit: ¥billion)

Investment method	Asset manager name (Subcontractor, etc.)	Manager benchmark	Market value
Domestic bonds passive investment	Asset Management One Co., Ltd. I (former Mizuho Trust & Banking)	BPI	1,156.4
	State Street Global Advisors (Japan) Co., Ltd. I	BPI	1,295.0
	Sumitomo Mitsui Trust Asset Management Co., Ltd. I	BPI	1,295.1
	Sumitomo Mitsui Trust Asset Management Co., Ltd. II	BPI-G	1,555.2
	Mitsubishi UFJ Trust and Banking Corporation I	BPI-G	1,205.0
	In-house investment I	BPI	1,365.7
	In-house investment II	BPI-G	9,332.4
	In-house investment III	BPI-C	8,679.9
Domestic bonds active investment	Asset Management One Co., Ltd. II (former DIAM)	BPI-TIPS	1,105.9
	Asset Management One Co., Ltd. III (former Mizuho Trust & Banking)	BPI-TIPS	952.0
	MU Investments Co., Ltd.	BPI-TIPS	710.9
	Tokio Marine Asset Management Co., Ltd.	BPI-TIPS	947.7
	PGIM Japan Co., Ltd. I	BPI-TIPS	638.5
	PIMCO Japan Ltd I (Pacific Investment Management Company LLC (PIMCO), etc.)	BPI-TIPS	549.9
	Manulife Asset Management (Japan) Limited I	BPI-TIPS	427.9
	Sumitomo Mitsui Trust Asset Management Co., Ltd. III	BPI-TIPS	955.5
	Mitsubishi UFJ Trust and Banking Corporation II	BPI-TIPS	949.3
	In-house investment IV	—	2,953.5
Domestic equities passive investment	Asset Management One Co., Ltd. IV (former DIAM)	TOPIX	8,239.7
	Asset Management One Co., Ltd. V (former DIAM)	JPX	292.2
	Asset Management One Co., Ltd. VI (former Mizuho Trust & Banking)	RN-P	1,420.7
	Asset Management One Co., Ltd. VII	FTSE-BL	547.7
	Goldman Sachs Asset Management Co., Ltd. I (Goldman Sachs Asset Management, L.P., etc.)	SP-G	1,696.9
	Nomura Asset Management Co., Ltd. I	RAFI	1,535.3
	FIL Investments (Japan) Limited I (Geode Capital Management, LLC)	TOPIX	88.9
	BlackRock Japan Co., Ltd. I	TOPIX	3,812.0
	BlackRock Japan Co., Ltd. II	FTSE-BL	383.7
	Sumitomo Mitsui Trust Asset Management Co., Ltd. IV	TOPIX	3,308.6
	Sumitomo Mitsui Trust Asset Management Co., Ltd. V	JPX	515.6
	Sumitomo Mitsui Trust Asset Management Co., Ltd. VI	SP-C	980.2
	Mitsubishi UFJ Trust and Banking Corporation III	TOPIX	4,210.9
	Mitsubishi UFJ Trust and Banking Corporation IV	JPX	380.1
	Mitsubishi UFJ Trust and Banking Corporation V	MSCI-ESG	1,306.1
	Mitsubishi UFJ Trust and Banking Corporation VI	MSCI-WIN	797.8
	Resona Asset Management Co., Ltd. I	TOPIX	2,819.5
Domestic equities active investment	Asset Management One Co., Ltd. VIII (former DIAM)	TOPIX	531.1
	Asset Management One Co., Ltd. IX (former Mizuho Asset Management)	RN-SG	82.1
	Eastspring Investments Limited (Eastspring Investments (Singapore) Limited)	TOPIX	138.0
	Invesco Asset Management (Japan) Limited	TOPIX	194.4
	Capital International K.K. (Capital International, Inc.)	TOPIX	434.1
	JPMorgan Asset Management (Japan) Limited	RN-V	319.4
	Schroder Investment Management (Japan) Limited I	TOPIX	245.3
	Nikko Asset Management Co., Ltd. I	TOPIX	186.4
	Nomura Asset Management Co., Ltd. II	RN-S	47.8
	Nomura Asset Management Co., Ltd. III (Dimensional Fund Advisors LP)	MSCI-JS	209.4
	FIL Investments (Japan) Limited II	TOPIX	337.3
	Sumitomo Mitsui DS Asset Management Company, Limited I	RN-V	314.5
	Russell Investments Japan Co., Ltd. I (Russell Investments Implementation Services, LLC.)	TOPIX	166.0

(Unit: ¥billion)

Investment method	Asset manager name (Subcontractor, etc.)	Manager benchmark	Market value
Foreign bonds passive investment	Asset Management One Co., Ltd. X (former Mizuho Trust & Banking)	WGBI	2,292.9
	State Street Global Advisors (Japan) Co., Ltd. II	WGBI	2,337.0
	Nomura Asset Management Co., Ltd. IV	WGBI	2,893.5
	BlackRock Japan Co., Ltd. III	WGBI	3,214.0
	BlackRock Japan Co., Ltd. IV	WGBI-O	30.1
	BlackRock Japan Co., Ltd. V	USGOV	3,254.5
	BlackRock Japan Co., Ltd. VI	USGOV-H	572.9
	BlackRock Japan Co., Ltd. VII	USGOV 1-3Y	262.6
	BlackRock Japan Co., Ltd. VIII	EGBI	847.5
	BlackRock Japan Co., Ltd. IX	EGBI-H	270.5
	Sumitomo Mitsui Trust Asset Management Co., Ltd. VII	WGBI	2,296.6
	Resona Asset Management Co., Ltd. II	WGBI	2,746.1
	Resona Asset Management Co., Ltd. III	WGBI-O	61.6
	Resona Asset Management Co., Ltd. IV	USGOV	3,201.3
	Resona Asset Management Co., Ltd. V	USGOV-H	553.0
	Resona Asset Management Co., Ltd. VI	USGOV 1-3Y	318.4
	Resona Asset Management Co., Ltd. VII	EGBI	1,256.7
	Resona Asset Management Co., Ltd. VIII	EGBI-H	462.5
Foreign bonds active investment	Asset Management One Co., Ltd. XI (former Mizuho Asset Management) (Loomis, Sayles & Company, L.P.)	G-AGG-EXC	580.3
	Ashmore Japan Co., Ltd (Ashmore Investment Management Limited)	GBI-EMGD-EXC	184.8
	AllianceBernstein Japan Ltd. (AllianceBernstein L.P., etc.)	EMBIGD	82.5
	Goldman Sachs Asset Management Co., Ltd. II (Goldman Sachs Asset Management, L.P., etc.)	G-AGG-EXC	276.9
	Schroder Investment Management (Japan) Limited II (Schroder Investment Management Limited, etc.)	G-AGG-EXC	522.5
	Sompo Japan Nipponkoa Asset Management Co., LTD. (Colchester Global Investors Limited)	G-AGG-EXC	735.1
	T. Rowe Price Japan, Inc. (T. Rowe Price International Ltd.)	EUROHY2%	43.8
	Nomura Asset Management Co., Ltd. V (Franklin Advisers, Inc.)	G-AGG-EXC	654.6
	Nomura Asset Management Co., Ltd. VI (Nomura Corporate Research & Asset Management Inc.)	USHY2%	125.9
	PineBridge Investments Japan Co., Ltd. (PineBridge Investments LLC)	USHY2%	45.2
	BNY Mellon Asset Management Japan Limited I (Insight Investment Management (Global) Limited)	EUROAGG	504.1
	PGIM Japan Co., Ltd II (PGIM, Inc. etc.)	G-AGG-EXC	931.0
	PIMCO Japan Ltd II (Pacific Investment Management Company LLC (PIMCO), etc.)	G-AGG-EXC	841.8
	FIL Investments (Japan) Limited III (Fidelity Institutional Asset Management)	USAGG	694.8
	BlackRock Japan Co., Ltd. X (BlackRock Financial Management, Inc., etc.)	G-AGG-EXC	444.0
	Barings Japan Limited (Barings LLC, etc.)	USHY2%	46.2
	Manulife Asset Management (Japan) Limited II (Manulife Asset Management (US) LLC)	G-AGG-EXC	701.2
	Morgan Stanley Investment Management (Japan) Co., Ltd. I (Morgan Stanley Investment Management Inc., etc.)	G-AGG-EXC	772.7
	Morgan Stanley Investment Management (Japan) Co., Ltd. II (Morgan Stanley Investment Management Inc.)	USHY2%	43.7
	UBS Asset Management (Japan) Ltd I (UBS Asset Management (UK) Ltd)	EUROHY 2%	136.7
	Legg Mason Asset Management Japan Co., Ltd. (Brandywine Global Investment Management, LLC)	G-AGG-EXC	563.3
Foreign equities passive investment	State Street Global Advisors (Japan) Co., Ltd. III	MSCI-A-EXC	14,696.8
	State Street Global Advisors (Japan) Co., Ltd. IV	MSCI - N	1,826.7
	State Street Global Advisors (Japan) Co., Ltd. V	MSCI - EU	345.3
	State Street Global Advisors (Japan) Co., Ltd. VI	MSCI - P	62.5
	State Street Global Advisors (Japan) Co., Ltd. VII	MSCI-EXC	35.5
	State Street Global Advisors (Japan) Co., Ltd. VIII	SP-GC	1,710.6
	BlackRock Japan Co., Ltd. XI	MSCI-A-EXC	2,350.2
	Sumitomo Mitsui Trust Asset Management Co., Ltd. VIII	MSCI-A-EXC	7,832.5
	Legal & General Investment Management Japan KK (Legal & General Investment Management Limited)	MSCI-A-EXC	4,647.8

(Unit: ¥billion)

Investment method	Asset manager name (Subcontractor, etc.)	Manager benchmark	Market value
Foreign equities active investment	Asset Management One Co., Ltd. Ⅻ (former Mizuho Asset Management) (Wells Capital Management, Inc.)	MSCI-E	84.6
	MFS Investment Management K.K. (Massachusetts Financial Services Company)	MSCI-K	541.0
	Nikko Asset Management Co., Ltd. Ⅱ (INTECH Investment Management LLC)	MSCI-K	760.1
	Nomura Asset Management Co., Ltd. Ⅶ	MSCI-E	83.9
	BNY Mellon Asset Management Japan Limited Ⅱ (Walter Scott & Partners Limited)	MSCI-K	466.4
	Mitsubishi UFJ Trust and Banking Corporation Ⅶ (Baillie Gifford Overseas Limited)	MSCI-A	684.5
	UBS Asset Management (Japan) Ltd Ⅱ (UBS Asset Management (UK) Ltd)	MSCI-K	818.7
	Lazard Japan Asset Management K.K. (Lazard Asset Management LLC)	MSCI-E	48.9
Alternative infrastructure	DBJ Asset Management Co., Ltd.	—	58.3
	Gatekeeper : Nomura Asset Management Co., Ltd. Ⅷ Fund of Funds Manager : Pantheon	—	101.3
	Gatekeeper : Sumitomo Mitsui DS Asset Management Company, Limited Ⅱ Fund of Funds Manager : StepStone Infrastructure & Real Assets	—	230.8
	In-house investment Ⅴ (Unit Trust Manager : Nissay Asset Management Corporation)	—	154.7
Alternative private equity	In-house investment Ⅵ (Unit Trust Manager : Nissay Asset Management Corporation)	—	18.5
Alternative real estate	Gatekeeper : Asset Management One Co., Ltd. XIII Fund of Funds Manager : CBRE Global Investment Partners Limited	—	240.9
	Mitsubishi UFJ Trust and Banking Corporation Ⅷ	—	139.9
Short-term assets	In-house investment Ⅶ	—	4,281.1
	In-house investment Ⅷ	—	90.4
Subtotal		—	149,732.5
FILP bonds	In-house investment Ⅸ	—	896.2
Total	36 asset managers, 114 Funds	—	150,628.7

(Unit: ¥billion)

Investment method	Custodian, etc. name	Market value
Custody	Trust & Custody Services Bank, Ltd. (Domestic bonds, Short-term assets)	41,253.2
	State Street Trust and Banking Co., Ltd. (Foreign bonds, Alternative assets, Short-term assets)	25,314.0
	Japan Trustee Services Bank, Ltd. (Domestic equities)	32,633.5
	The Master Trust Bank of Japan, Ltd. (Domestic equities, Foreign bonds, Foreign equities, Short-term assets)	51,429.3
Total		150,629.9

Transition management	Russell Investments Japan Co., Ltd. Ⅱ (Domestic equities) (Russell Investments Implementation Services, LLC.)	0.1
	BlackRock Japan Co., Ltd. Ⅻ (Foreign bonds) (BlackRock Asset Management North Asia Limited)	0.6
	BlackRock Japan Co., Ltd. XIII (Foreign equities) (BlackRock Asset Management North Asia Limited)	0.1
	Russell Investments Japan Co., Ltd. Ⅲ (Foreign equities) (Russell Investments Implementation Services, LLC.)	0.3
Total		1.1

(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 36 asset managers in the total column do not include in-house investment, the 114 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 (114 funds managed by 36 asset 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: ¥3.3 billion) from closed funds (statutory trust accounts).

(Note5) Manager benchmarks are shown in the following table and the sources of those benchmarks are as listed in the right-hand column of the following table.

	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.
Domestic equities	TOPIX	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.
	RN-SG	RUSSELL/NOMURA Small Cap Growth Index (incl. dividends)	Nomura Research Institute, Ltd.
	MSCI-JS	MSCI Japan Small (incl. dividends)	MSCI G.K.
	MSCI-ESG	MSCI Japan ESG Select Leaders Index	MSCI G.K.
	MSCI-WIN	MSCI Japan Empowering Women Index (WIN)	MSCI G.K.
	FTSE-BL	FTSE Blossom Japan Index	FTSE International Limited
	SP-C	S&P/JPX Carbon Efficient Index	S&P Opco, LLC
	SP-G	S&P GIVI Japan (Gross Total Return)	S&P Opco, LLC
	RAFI	Nomura RAFI Index	Nomura Asset Management Co., Ltd.
Foreign bonds	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
	EGBI-H	FTSE EMU Government Bond Index (JPY hedged/JPY basis)	FTSE Fixed Income LLC
	G-AGG-EXC	Bloomberg Barclays Global Aggregate Index (not incl. JPY, CNY, 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 US 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
	EMBIGD	J.P. Morgan EMBI Global Diversified (no hedge/JPY basis)	J.P.Morgan Securities LLC
	GBI-EMGD-EXC	J.P. Morgan Government Bond Index-Emerging Markets Global Diversified Index (not incl. China, no hedge/JPY basis)	J.P.Morgan Securities LLC
Foreign equities	MSCI-A	MSCI ACWI (not incl. JPY, JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.
	MSCI-A-EXC	MSCI ACWI (not incl. JPY,China A, JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.
	MSCI-K	MSCI KOKUSAI (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.
	MSCI-N	MSCI North America (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.
	MSCI - EU	MSCI Europe & Middle East (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.
	MSCI-P	MSCI Pacific (not incl. JPY, JPY basis, incl. dividends, after taking into account GPIF 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 2019 to March 2020)

Investment method	Asset manager name	Time-weighted return (A)	Benchmark return (B)	Excess rate of return (C)=(A)−(B)	Remarks column
Domestic bonds passive investment	Asset Management One Co., Ltd. Ⅰ (former Mizuho Trust & Banking)	−0.18%	−0.18%	+0.00%	
	State Street Global Advisors (Japan) Co., Ltd. Ⅰ	−0.14%	−0.18%	+0.03%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅰ	−0.16%	−0.18%	+0.02%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅱ	−0.18%	−0.17%	−0.01%	
	Mitsubishi UFJ Trust and Banking Corporation Ⅰ	−0.22%	−0.17%	−0.05%	
	In-house investment Ⅰ	−0.11%	−0.18%	+0.07%	
	In-house investment Ⅱ	−0.16%	−0.17%	+0.02%	
	In-house investment Ⅲ	−0.33%	−0.49%	+0.15%	
Domestic bonds active investment	Asset Management One Co., Ltd. Ⅱ (former DIAM)	0.07%	−0.21%	+0.28%	
	Asset Management One Co., Ltd. Ⅲ (former Mizuho Trust & Banking)	0.11%	−0.21%	+0.32%	
	MU Investments Co., Ltd.	0.15%	−0.21%	+0.36%	
	Tokio Marine Asset Management Co., Ltd.	−0.00%	−0.21%	+0.20%	
	PGIM Japan Co., Ltd. Ⅰ	−0.08%	−0.21%	+0.12%	
	PIMCO Japan Ltd Ⅰ	−0.25%	−0.21%	−0.04%	
	Manulife Asset Management (Japan) Limited Ⅰ	0.09%	−0.21%	+0.29%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅲ	0.01%	−0.21%	+0.22%	
	Mitsubishi UFJ Trust and Banking Corporation Ⅱ	0.00%	−0.21%	+0.21%	
	In-house investment Ⅳ	−2.60%	—	—	
Domestic equities passive investment	Asset Management One Co., Ltd. Ⅳ (former DIAM)	−9.45%	−9.50%	+0.06%	
	Asset Management One Co., Ltd. Ⅴ (former DIAM)	−8.94%	−8.96%	+0.02%	
	Asset Management One Co., Ltd. Ⅵ (former Mizuho Trust & Banking)	−9.21%	−9.26%	+0.05%	
	Asset Management One Co., Ltd. Ⅶ	−7.98%	−6.95%	−1.03%	
	Goldman Sachs Asset Management Co., Ltd. Ⅰ	−12.78%	−12.57%	−0.21%	
	Nomura Asset Management Co., Ltd. Ⅰ	−12.45%	−12.53%	+0.08%	
	FIL Investments (Japan) Limited Ⅰ	−9.46%	−9.50%	+0.04%	
	BlackRock Japan Co., Ltd. Ⅰ	−9.47%	−9.50%	+0.03%	
	BlackRock Japan Co., Ltd. Ⅱ	−6.98%	−6.95%	−0.02%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅳ	−9.50%	−9.50%	−0.00%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅴ	−8.97%	−8.96%	−0.01%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅵ	−9.46%	−9.21%	−0.25%	
	Mitsubishi UFJ Trust and Banking Corporation Ⅲ	−9.47%	−9.50%	+0.03%	
	Mitsubishi UFJ Trust and Banking Corporation Ⅳ	−8.94%	−8.96%	+0.03%	
	Mitsubishi UFJ Trust and Banking Corporation Ⅴ	−3.89%	−3.39%	−0.50%	
	Mitsubishi UFJ Trust and Banking Corporation Ⅵ	−5.16%	−4.78%	−0.38%	
	Resona Asset Management Co., Ltd. Ⅰ	−9.49%	−9.50%	+0.01%	
Domestic equities active investment	Asset Management One Co., Ltd. Ⅷ (former DIAM)	−10.82%	−9.50%	−1.32%	
	Asset Management One Co., Ltd. Ⅸ (former Mizuho Asset Management)	−19.37%	−13.61%	−5.76%	
	Eastspring Investments Limited	−19.08%	−9.50%	−9.57%	
	Invesco Asset Management (Japan) Limited	−12.30%	−9.50%	−2.79%	
	Capital International K.K.	−7.89%	−9.50%	+1.62%	
	JPMorgan Asset Management (Japan) Limited	−14.02%	−16.74%	+2.72%	
	Schroder Investment Management (Japan) Limited Ⅰ	−11.19%	−9.50%	−1.69%	
	Nikko Asset Management Co., Ltd. Ⅰ	−9.49%	−9.50%	+0.01%	
	Nomura Asset Management Co., Ltd. Ⅱ	−15.01%	−13.61%	−1.40%	
	Nomura Asset Management Co., Ltd. Ⅲ	−13.28%	−12.97%	−0.31%	
	FIL Investments (Japan) Limited Ⅱ	−4.22%	−9.50%	+5.28%	
	Sumitomo Mitsui DS Asset Management Company, Limited Ⅰ	−16.73%	−16.74%	+0.01%	
	Russell Investments Japan Co., Ltd. Ⅰ	−11.62%	−9.50%	−2.11%	
Foreign bonds passive investment	Asset Management One Co., Ltd. Ⅹ (former Mizuho Trust & Banking)	3.81%	3.65%	+0.16%	
	State Street Global Advisors (Japan) Co., Ltd. Ⅱ	4.55%	4.37%	+0.18%	
	Nomura Asset Management Co., Ltd. Ⅳ	4.59%	4.41%	+0.18%	
	BlackRock Japan Co., Ltd. Ⅲ	4.67%	4.53%	+0.14%	
	BlackRock Japan Co., Ltd. Ⅳ	−2.57%	−2.40%	−0.18%	
	BlackRock Japan Co., Ltd. Ⅴ	10.42%	10.27%	+0.14%	
	BlackRock Japan Co., Ltd. Ⅵ	9.99%	10.07%	−0.08%	
	BlackRock Japan Co., Ltd. Ⅶ	2.79%	2.68%	+0.11%	
	BlackRock Japan Co., Ltd. Ⅷ	−0.24%	−0.52%	+0.28%	
	BlackRock Japan Co., Ltd. Ⅸ	4.79%	4.78%	+0.01%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅶ	4.60%	4.37%	+0.23%	
	Resona Asset Management Co., Ltd. Ⅱ	4.52%	4.37%	+0.15%	
	Resona Asset Management Co., Ltd. Ⅲ	−2.55%	−2.40%	−0.15%	
	Resona Asset Management Co., Ltd. Ⅳ	10.47%	10.27%	+0.20%	
	Resona Asset Management Co., Ltd. Ⅴ	10.16%	10.07%	+0.09%	
	Resona Asset Management Co., Ltd. Ⅵ	2.78%	2.68%	+0.09%	
	Resona Asset Management Co., Ltd. Ⅶ	−0.41%	−0.52%	+0.11%	
	Resona Asset Management Co., Ltd. Ⅷ	5.75%	5.67%	+0.08%	

Investment method	Asset manager name	Time-weighted return (A)	Benchmark return (B)	Excess rate of return (C)=(A)−(B)	Remarks column
Foreign bonds active investment	Asset Management One Co., Ltd. Ⅺ (former Mizuho Asset Management)	−0.46%	1.86%	−2.33%	
	Ashmore Japan Co., Ltd	−17.30%	−8.95%	−8.35%	
	AllianceBernstein Japan Ltd.	−12.92%	−9.13%	−3.78%	
	Goldman Sachs Asset Management Co., Ltd. Ⅱ	0.27%	1.86%	−1.59%	
	Schroder Investment Management (Japan) Limited Ⅱ	−1.70%	1.86%	−3.57%	
	Sompo Japan Nipponkoa Asset Management Co., LTD.	0.62%	1.86%	−1.25%	
	Nomura Asset Management Co., Ltd. Ⅴ	−9.29%	1.86%	−11.15%	
	Nomura Asset Management Co., Ltd. Ⅵ	−9.78%	−9.23%	−0.55%	
	BNY Mellon Asset Management Japan Limited Ⅰ	−3.02%	−2.57%	−0.45%	
	PGIM Japan Co., Ltd. Ⅱ	−0.78%	1.86%	−2.65%	
	PIMCO Japan Ltd Ⅱ	−0.40%	1.86%	−2.26%	
	FIL Investments (Japan) Limited Ⅲ	0.57%	6.34%	−5.77%	
	BlackRock Japan Co., Ltd. Ⅹ	−0.79%	1.86%	−2.66%	
	Manulife Asset Management (Japan) Limited Ⅱ	−2.97%	1.86%	−4.83%	
	Morgan Stanley Investment Management (Japan) Co., Ltd. Ⅰ	−0.84%	1.86%	−2.70%	
	UBS Asset Management (Japan) Ltd Ⅰ	−13.88%	−14.35%	+0.47%	
	Legg Mason Asset Management (Japan) Co., Ltd.	−5.48%	1.86%	−7.34%	
Foreign equities passive investment	State Street Global Advisors (Japan) Co., Ltd. Ⅲ	−13.44%	−13.47%	+0.02%	
	State Street Global Advisors (Japan) Co., Ltd. Ⅳ	−10.57%	−10.08%	−0.49%	
	State Street Global Advisors (Japan) Co., Ltd. Ⅴ	−17.19%	−17.24%	+0.05%	
	State Street Global Advisors (Japan) Co., Ltd. Ⅵ	−25.47%	−25.48%	+0.01%	
	State Street Global Advisors (Japan) Co., Ltd. Ⅶ	−20.16%	−20.28%	+0.12%	
	State Street Global Advisors (Japan) Co., Ltd. Ⅷ	−12.89%	−12.81%	−0.08%	
	BlackRock Japan Co., Ltd. Ⅺ	−13.44%	−13.47%	+0.02%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅷ	−13.44%	−13.47%	+0.03%	
	Legal & General Investment Management Japan KK	−13.51%	−13.47%	−0.04%	
Foreign equities active investment	Asset Management One Co., Ltd. Ⅻ (former Mizuho Asset Management)	−13.88%	−19.72%	+5.84%	
	MFS Investment Management K.K.	−13.30%	−12.47%	−0.83%	
	Nikko Asset Management Co., Ltd. Ⅱ	−14.40%	−12.47%	−1.92%	
	Nomura Asset Management Co., Ltd. Ⅶ	−23.88%	−19.72%	−4.16%	
	BNY Mellon Asset Management Japan Limited Ⅱ	−4.67%	−12.47%	+7.80%	
	Mitsubishi UFJ Trust and Banking Corporation Ⅶ	−8.83%	−12.81%	+3.98%	
	UBS Asset Management (Japan) Ltd Ⅱ	−7.82%	−12.47%	+4.66%	
	Lazard Japan Asset Management K.K.	−21.27%	−19.72%	−1.56%	

② Investment performance (alternative assets)

Alternative assets	Investment style	Asset manager name	IRR (local currency)	IRR (JPY)	Local currency	Start of investment
Infrastructure	Global infrastructure mandate focusing mainly on opportunities in Japan (Note 8)	DBJ Asset Management Co., Ltd.	1.57%	1.57%	JPY	March 2018
			0.17%	0.00%	USD	April 2018
	Global-Core	Nomura Asset Management Co., Ltd. Ⅷ	2.75%	1.71%	USD	February 2018
	Global-Core	Sumitomo Mitsui DS Asset Management Company, Limited Ⅱ	2.75%	1.06%	USD	January 2018
	Global-Core	In-house investment Ⅴ	4.25%	2.76%	USD	February 2014
Private equity	Emerging markets-Diversified	In-house investment Ⅵ	4.03%	2.85%	USD	June 2015
Real estate	Global-Core	Asset Management One Co., Ltd. Ⅷ	4.88%	2.44%	USD	September 2018
	Japan-Core	Mitsubishi UFJ Trust and Banking Corporation Ⅷ	5.97%	5.97%	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 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 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) Alternative assets listed above are those that were established by the end of March 2020.

[5] Investment fees (3 year cumulative)

(Unit: ¥)

Investment method	Asset manager name	Investment fees	Remarks column
Domestic bonds passive investment	Asset Management One Co., Ltd. Ⅰ (former Mizuho Trust & Banking)	180,544,508	
	State Street Global Advisors (Japan) Co., Ltd. Ⅰ	147,738,838	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅰ	257,011,545	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅱ	26,902,081	
	Mitsubishi UFJ Trust and Banking Corporation Ⅰ	30,670,852	
Domestic bonds active investment	Asset Management One Co., Ltd. Ⅱ (former DIAM)	856,102,090	
	Asset Management One Co., Ltd. Ⅲ (former Mizuho Trust & Banking)	825,478,189	
	MU Investments Co., Ltd.	668,805,359	
	Tokio Marine Asset Management Co., Ltd.	698,376,143	
	PGIM Japan Co., Ltd. Ⅰ	507,688,081	
	PIMCO Japan Ltd Ⅰ	642,038,005	
	Manulife Asset Management (Japan) Limited Ⅰ	613,941,837	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅲ	802,425,412	
	Mitsubishi UFJ Trust and Banking Corporation Ⅱ	724,172,153	
Domestic equities passive investment	Asset Management One Co., Ltd. Ⅳ (former DIAM)	334,938,758	
	Asset Management One Co., Ltd. Ⅴ (former DIAM)	126,081,851	
	Asset Management One Co., Ltd. Ⅵ (former Mizuho Trust & Banking)	26,014,867	
	Asset Management One Co., Ltd. Ⅶ	40,955,228	
	Goldman Sachs Asset Management Co., Ltd. Ⅰ	2,486,520,937	
	Nomura Asset Management Co., Ltd. Ⅰ	5,028,599,333	
	BlackRock Japan Co., Ltd. Ⅰ	65,687,073	
	BlackRock Japan Co., Ltd. Ⅱ	81,584,947	
	BlackRock Japan Co., Ltd. ⅩⅤ	17,984,880	○
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅳ	28,020,686	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅴ	71,905,166	
	Mitsubishi UFJ Trust and Banking Corporation Ⅲ	158,340,406	
	Mitsubishi UFJ Trust and Banking Corporation Ⅳ	93,839,629	
	Mitsubishi UFJ Trust and Banking Corporation Ⅴ	314,798,117	
	Mitsubishi UFJ Trust and Banking Corporation Ⅵ	221,531,449	
Domestic equities active investment	Asset Management One Co., Ltd. Ⅷ (former DIAM)	792,276,731	
	Asset Management One Co., Ltd. Ⅸ (former Mizuho Asset Management)	522,756,627	
	Eastspring Investments Limited	977,841,419	
	Invesco Asset Management (Japan) Limited	1,499,740,745	
	Capital International K.K.	2,092,047,090	
	JPMorgan Asset Management (Japan) Limited	901,608,655	
	Schroder Investment Management (Japan) Limited Ⅰ	911,178,383	
	SEIRYU Asset Management Ltd.	442,098,825	
	Nikko Asset Management Co., Ltd. Ⅰ	594,095,042	
	Nomura Asset Management Co., Ltd. Ⅱ	806,303,926	
	Nomura Asset Management Co., Ltd. Ⅲ	1,316,505,145	
	FIL Investments (Japan) Limited Ⅱ	1,290,622,675	
	Sumitomo Mitsui DS Asset Management Company, Limited Ⅰ	637,131,292	
	Russell Investments Japan Co., Ltd. Ⅰ	2,034,360,839	

(Unit: ¥)

Investment method	Asset manager name	Investment fees	Remarks column
Foreign bonds passive investment	Asset Management One Co., Ltd. Ⅹ (former Mizuho Trust & Banking)	109,092,384	
	State Street Global Advisors (Japan) Co., Ltd. Ⅱ	130,094,923	
	Nomura Asset Management Co., Ltd. Ⅳ	63,384,990	
	BlackRock Japan Co., Ltd. Ⅲ	212,897,308	
	BlackRock Japan Co., Ltd. Ⅶ	14,606,419	
	BlackRock Japan Co., Ltd. Ⅷ	40,360,764	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅶ	28,261,085	
	Resona Asset Management Co., Ltd. Ⅱ	37,106,146	
	Resona Asset Management Co., Ltd. Ⅵ	7,639,301	
	Resona Asset Management Co., Ltd. Ⅶ	27,012,416	
Foreign bonds active investment	Asset Management One Co., Ltd. Ⅺ (former Mizuho Asset Management)	1,472,964,333	
	Asset Management One Co., Ltd. ⅩⅣ (former DIAM)	2,771,943,128	○
	Ashmore Japan Co., Ltd	1,410,162,041	
	AllianceBernstein Japan Ltd.	140,630,609	
	Goldman Sachs Asset Management Co., Ltd. Ⅱ	785,468,937	
	Schroder Investment Management (Japan) Limited Ⅱ	1,774,896,170	
	Sompo Japan Nipponkoa Asset Management Co., Ltd.	1,889,958,730	
	Nomura Asset Management Co., Ltd. Ⅴ	2,533,233,394	
	Nomura Asset Management Co., Ltd. Ⅵ	521,483,133	
	BNY Mellon Asset Management Japan Limited Ⅰ	1,446,727,174	
	PGIM Japan Co., Ltd. Ⅱ	2,103,478,942	
	PIMCO Japan Ltd Ⅱ	2,676,426,933	
	FIL Investments (Japan) Limited Ⅲ	1,888,262,059	
	BlackRock Japan Co., Ltd. Ⅹ	625,646,003	
	Manulife Asset Management (Japan) Limited Ⅱ	1,205,357,101	
	Morgan Stanley Investment Management (Japan) Co., Ltd. Ⅰ	1,976,392,794	
	UBS Asset Management (Japan) Ltd Ⅰ	628,594,104	
	Legg Mason Asset Management (Japan) Co., Ltd.	3,279,389,630	
Foreign equities passive investment	State Street Global Advisors (Japan) Co., Ltd. Ⅲ	512,256,995	
	State Street Global Advisors (Japan) Co., Ltd. Ⅴ	40,686,177	
	State Street Global Advisors (Japan) Co., Ltd. Ⅶ	12,114,446	
	BlackRock Japan Co., Ltd. Ⅺ	532,966,482	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. Ⅷ	360,573,678	
	Resona Asset Management Co., Ltd. Ⅸ	132,141,173	○
Foreign equities active investment	Asset Management One Co., Ltd. Ⅻ (former Mizuho Asset Management)	1,489,844,629	
	MFS Investment Management K.K.	2,710,840,008	
	Nikko Asset Management Co., Ltd. Ⅱ	3,354,500,219	
	Nomura Asset Management Co., Ltd. Ⅶ	517,466,171	
	BNY Mellon Asset Management Japan Limited Ⅱ	8,856,677,625	
	Mitsubishi UFJ Trust and Banking Corporation Ⅶ	3,708,139,212	
	UBS Asset Management (Japan) Ltd Ⅱ	10,572,723,454	
	Lazard Japan Asset Management K.K.	320,364,499	

(Unit: ¥)

Investment method	Custodian, etc. name	Investment fees
Custody	Trust & Custody Services Bank, Ltd. (Domestic bonds, Short-term assets)	265,812,325
	State Street Trust and Banking Co., Ltd. (Foreign bonds, Alternative assets, Short-term assets)	9,550,216,423
	Japan Trustee Services Bank, Ltd. (Domestic equities)	1,928,610,647
	The Master Trust Bank of Japan, Ltd. (Domestic equities, Foreign bonds, Foreign equities, Short-term assets)	23,832,657,692
Transition management	Nomura Asset Management Co., Ltd. Ⅸ (Domestic equities)	3,260,000
	BlackRock Japan Co., Ltd. ⅩⅣ (Domestic equities)	13,811,373
	Russell Investments Japan Co., Ltd. Ⅱ (Domestic equities)	162,000
	BlackRock Japan Co., Ltd. Ⅻ (Foreign bonds)	12,526,236
	BlackRock Japan Co., Ltd. ⅩⅢ (Foreign equities)	15,521,204
	Russell Investments Japan Co., Ltd. Ⅲ (Foreign equities)	54,000

(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) Fees include consumption tax.
(Note 4) A circle in the remarks column indicates an external asset manager closed in fiscal 2019 with less than three years of investment period since April 2017.
(Note 5) Fees paid to custodians include certain expenses that are deducted from the entrusted assets, such as custody fees and attorney fees.
(Note 6) The investment fees of State Street Trust and Banking Co., Ltd., related to alternative assets is ¥140,701,933.

Investment returns and fees by securities lending investment. (3 year cumulative)

(Unit: ¥)

Asset class	Investment returns	Investment fees
Domestic bonds	6,768,108,200	588,081,568
Foreign bonds	49,669,951,466	12,215,829,098
Foreign equities	35,559,040,974	7,482,954,186

(Note 1) Returns in the table represent premium charges excluding fees.
(Note 2) Fees indicate management fees and agent fees.

2 | Portfolio holdings by asset category as of Mar 31,2020

These are lists to summarize the GPIF's top 10 portfolio holdings as of March 31, 2020 (as of the end of fiscal 2019), either indirectly through external asset managers or directly with the GPIF's in-house capacity for bonds, by name for bonds and equities.

These do not purport to represent GPIF's evaluation of individual companies.

○Domestic bonds holdings in order of market value

No.	Security name	Market value (¥100 million)
1	10-year Inflation-Indexed Bonds JGB #20	10,440
2	10-year Inflation-Indexed Bonds JGB #21	6,261
3	10-year Inflation-Indexed Bonds JGB #19	5,392
4	Fixed-rate Bonds JGB #357	4,300
5	Fixed-rate Bonds JGB #170	4,126
6	Fixed-rate Bonds JGB #168	3,671
7	Fixed-rate Bonds JGB #169	3,559
8	10-year Inflation-Indexed Bonds JGB #22	3,501
9	Fixed-rate Bonds JGB #141	3,301
10	Fixed-rate Bonds JGB #356	3,226
Total	5,276 securities	374,963

○Domestic equities holdings in order of market value

No.	Security name	Shares	Market value (¥100 million)
1	TOYOTA MOTOR CORP.	206,102,800	13,646
2	SONY CORP.	106,333,700	6,854
3	NIPPON TELEGRAPH & TELEPHONE CORP.	248,027,900	6,506
4	KEYENCE CORP.	15,024,300	5,248
5	KDDI CORP.	152,841,300	4,967
6	MITSUBISHI UFJ FINANCIAL GROUP, INC.	1,183,808,400	4,920
7	NTT DOCOMO, INC.	137,149,000	4,714
8	SOFTBANK GROUP CORP.	122,740,300	4,676
9	TAKEDA PHARMACEUTICAL CO., LTD.	136,844,600	4,650
10	NINTENDO CO., LTD.	9,445,900	3,989
Total	2,389 securities		353,082

○Foreign bonds holdings in order of market value

No.	Security name	Market value (¥100 million)
1	US TREASURY N/B 1.875PCT 31JAN22	1,711
2	US TREASURY N/B 1.5PCT 15AUG26	1,620
3	US TREASURY N/B 2.75PCT 15FEB28	1,598
4	US TREASURY N/B 2.375PCT 15MAY29	1,466
5	US TREASURY N/B 2.375PCT 15AUG24	1,462
6	FRANCE (GOVT OF) FRTR 5 1/2 04/25/29	1,319
7	US TREASURY N/B 2.625PCT 15FEB29	1,311
8	FIDELITY US BANK LOAN FUND	1,300
9	US TREASURY N/B 3.125PCT 15NOV28	1,283
10	US TREASURY N/B 2.25PCT 15NOV25	1,268
Total	8,643 securities	349,878

○Foreign equities holdings in order of market value

No.	Security name	Shares	Market value (¥100 million)
1	MICROSOFT CORP	67,993,219	11,576
2	APPLE INC	39,309,014	10,791
3	AMAZON.COM INC	3,925,907	8,263
4	FACEBOOK INC-CLASS A	21,510,437	3,873
5	ALPHABET INC-CL C	2,945,117	3,697
6	ALPHABET INC-CL A	2,821,148	3,539
7	ALIBABA GROUP HOLDING-SP ADR	16,075,104	3,375
8	JOHNSON & JOHNSON	22,819,134	3,230
9	VISA INC-CLASS A SHARES	17,638,900	3,068
10	NESTLE SA-REG	26,625,324	2,954
Total	2,722 securities		366,829

○Alternative Assets holdings in order of market value

No.	Alternative Assets	Security name	Market value (¥100 million)
1	Infrastructure	STEPSTONE G INFRASTRUCTURE OPPORTUNITIES, L.P.	2,308
2	Infrastructure	GLOBAL ALTERNATIVE CO-INVESTMENT FUND I	1,547
3	Infrastructure	PANTHEON G INFRASTRUCTURE OPPORTUNITIES LP	1,013
4	Infrastructure	DG INFRASTRUCTURE, ILP	313
5	Infrastructure	DG INFRASTRUCTURE OPPORTUNITIES L.P.	270
1	Private Equity	GLOBAL ALTERNATIVE CO-INVESTMENT FUND II	185
1	Real Estate	CBRE GIP G REAL ESTATE INVESTMENTS, LP	2,409
2	Real Estate	MUTB G REAL ESTATE FUND	1,399

(Note 1) Security names are as of March 31, 2020.

(Note 2) Alternative assets listed above are those that were established by March 31, 2020.

Chapter 3

Memo

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.

【2】Fiduciary duty

- 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 assets

- 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 2019

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.

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