



ANNUAL REPORT

FISCAL YEAR 2023

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.

Table of Contents

Investment Result Summary and Topics in Fiscal 2023	3
Message from the Chairperson of the Board of Governors	5
Message from the President	6
Introduction of GPIF	7
Overview of Fiscal 2023	19
Review of Fiscal 2023 Investment Activities	21

Chapter 1 Investment Results in Fiscal 2023

1 Investment Results	23
2 Overview of the Policy Asset Mix	34
3 Basic Policy of Portfolio Risk Management	43
4 Status of Investment in Each Asset Class	48
5 Investment in Alternative Assets	54
6 Stewardship Responsibilities	70
7 ESG Activities	78
8 Other Major Initiatives	84

Chapter 2 Roles and Organizational Operation of Government Pension Investment Fund

1 GPIF's Roles in the Public Pension Scheme	91
2 Organization and Internal Control System	94

Chapter 3 Reference Data

1 Investment Assets by Investment Method and by Manager, Etc.	101
2 Portfolio Holdings by Asset Category as of Mar. 31, 2024	111

In principle, the figures from fiscal 2023 onward reflect changes in principal with the transaction date (execution date) as the record date. In addition, the notional amount of stock index futures transactions in in-house investment is reflected. (Figures prior to fiscal 2022 reflect changes in principal with the settlement date as the reference date. In addition, the notional principal amount, etc. of stock index futures transactions in in-house investment is not reflected, except for some cases.)

- ▶ Investment results of Government Pension Investment Fund, including this annual report, are available on the website: <https://www.gpif.go.jp/en/>
- ▶ Please contact the Fund's Planning and Communication Department (Tel: +81-3-3502-2486) prior to reproduction or reuse (except quotation) of the content of this annual report for commercial purposes. Please clearly cite the source when quoting, reproducing, or reusing any content of this report.



Investment Result Summary in Fiscal 2023

▶ For details, refer to pages 23-33.



Rate of return

Fiscal 2023
+22.67% [annual rate]

Since Fiscal 2001
+4.36% [annual rate]

Returns (Interest and dividend income)

+¥45,415.3 billion [annual returns]
(+¥4,137.4 billion) [annual returns]

+¥153,797.6 billion [cumulative returns]
(+¥51,190.1 billion) [cumulative returns]



The excess rate of return (over the compound benchmark)

Fiscal 2023
+0.04%

Since 2020 (the beginning of the 4th Medium-term Objectives (FY2020-FY2023)) [cumulative]
+0.27%



Asset size

As of the end of fiscal 2023
245,981.5 billion



Portfolio allocation

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

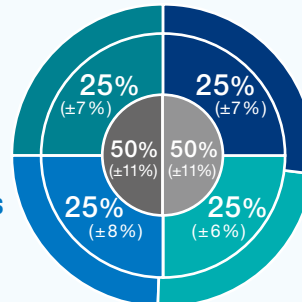
Inside: policy asset mix (figures in parentheses indicate deviation limits)
Outside: at the end of March 2024

Foreign equities

24.86%
¥62,898.9 billion

Domestic equities

24.33%
¥61,553.2 billion



Domestic bonds

26.95%
¥68,171.4 billion

Foreign bonds

23.86%
¥60,372.1 billion



Allocation changes for each asset class due to rebalancing

(Unit: ¥billion)

Domestic bonds	Foreign bonds	Domestic equities	Foreign equities
+12,478.0	+2,820.9	-7,987.2	-6,822.1

(Note 1) Each figure shows the net rebalancing amount.
(Note 2) The calculation of figures is based on transaction date.



Total fees

(The average fee rate on the total investment assets)

47.0 billion
(0.02%)



Topics in Fiscal 2023

1 | Stable portfolio management

In order to steadily implement management based on the policy asset mix, GPIF purchases and sells (that is, rebalances) assets in a timely and appropriate manner in response to changes in the economic and market environment so as not to deviate from the asset allocation policy specified in the policy asset mix.

In fiscal 2023, the market environment experienced significant changes, such as the shift in monetary policy. In addition to implementing detailed rebalancing through stock index futures, which reduces the risk of price fluctuations, we advanced risk management by managing alternative assets such as infrastructure and real estate separately from other assets.

2 | Sophistication and diversification of investment aimed at obtaining excess return

In addition to steady management assets based on the policy asset mix, GPIF also aims to capture excess returns.

In fiscal 2023, we made efforts to expand the sources of excess returns by selecting active funds for developed countries equities (excluding Japan) and Japanese equities driven by the latest data science, utilizing passive funds to manage active risks relative to policy benchmark, and promoting LPS investment in alternative assets.

As a result of these efforts, in the 4th Medium-term Objectives Period, the cumulative excess return over the 4 years since fiscal 2020 was +0.27%.

For the 18 years since the establishment of GPIF (from fiscal 2006 to fiscal 2023), the excess return was -0.03%.

3 | Building the foundation to support advanced investment and risk management

Huge volumes of transaction data and other data are accumulated daily in GPIF. By effectively utilizing such data, we can expect to further enhance investment and risk management.

In fiscal 2023, in order to make effective use of such data, we promoted the construction of Investment decision platform, which will serve as the foundation for data management. We also promoted the development of a framework for appropriately evaluating excess returns on alternative assets relative to traditional assets.

Message from the Chairperson of the Board of Governors



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

The mission of GPIF is to manage pension reserves stably and efficiently from a long-term perspective, solely for the benefit of the national, thereby contributing to the stability of pension finance.

The Board of Governors comprises ten members: the President of GPIF and nine outside experts with a broad range of pertinent knowledge and experience. The Board of Governors makes decisions on important policies related to the management and investment of pension reserves including the formulation of the policy asset mix, as well as the management of the organization. In addition, the Board of Governors supervises the Executive Office's business executions in cooperation with the Audit Committee.

Looking back on domestic and international developments over the past year, war risks and geopolitical risks have heightened, and nationalism have spread further. The tensions of international political situation have further been heightened. Economic developments in the United States have been relatively firm, while those in Europe and China have remained sluggish, and those in Japan have lacked strength. Meanwhile, in spite of monetary tightening measures in the

United States and Europe, it is difficult to predict a slowdown in prices in the near future. In Japan, relatively high inflation has continued unexpectedly. Under these circumstances, financial and capital markets have been highly volatile.

In this environment, GPIF has devoted itself to minimizing risks while seeking high returns. At the same time, GPIF has made further efforts to diversify and sophisticate our asset management, as well as to minimize risks. At the same time, on the organizational management side, we have streamlined systems and made efforts to establish a system that supports improvements in operational efficiency.

I believe that the Board of Governors and the Executive Office were able to firmly demonstrate governance that earned the trust of the public while maintaining a healthy degree of tension.

The situation at home and abroad is likely to remain unpredictable. GPIF will make every effort to meet the expectations of the public while responding flexibly to various changes. We would sincerely appreciate your continuous understanding and support.

Chairperson of the Board of Governors



- | | |
|-------------------|----------------------|
| ① ITABA Ken | ⑥ ARAI Tomio |
| ② KUBOTA Masakazu | ⑦ KOMIYAMA Sakae |
| ③ KATO Yasuyuki | ⑧ YAMAGUCHI Hirohide |
| ④ OHMI Naoto | ⑨ NEMOTO Naoko |
| ⑤ OZAKI Michiaki | ⑩ MIYAZONO Masataka |

山口 廣秀

YAMAGUCHI Hirohide

Government Pension Investment Fund, Japan

We will fulfill our mission to contribute to the financial stability of the pension system and ultimately to the stability of people's lives through the management and investment of pension reserve funds.



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

The investment result for fiscal 2023 was a positive return of 22.67% due to the rise in the Japanese and foreign stock markets and the depreciation of the yen.

As the U.S. Federal Reserve Board (FRB) and the European Central Bank (ECB) continued to raise interest rates, government bond yields in major economies rose. In Japan, domestic government bond yields rose as the Bank of Japan (BOJ) revised its monetary policy framework and ended its negative interest rate policy. However, as BOJ indicated that they would continue accommodative policy stance, the yen depreciated against the dollar and the euro due to differences in the direction of monetary policy. In addition, the U.S. stock market rose, led by tech stocks, and European stock markets rose as well. Japanese stock also rose, with the Nikkei Stock Average reaching a record high.

Our 4th Medium-term Objectives Period, which started in fiscal 2020, is entering its final year. The economic and financial environment in the world during this period has been characterized by a sharp recovery from the decline caused by the COVID-19, Russia's invasion of Ukraine, and the expansion of conflicts in the Middle East, followed by significant movements in

financial markets, with monetary tightening coming to a halt in mid-2023, mainly in Europe and the United States.

As a result of efforts to manage assets in a stable manner while striving to manage risks, assets under management of GPIF amounted to approximately ¥246 trillion at the end of fiscal 2023. There is no comparable investor in the world who manages assets of this scale as a single portfolio.

Based on the system generating stable returns that GPIF has cultivated over the years, we will advance the sophistication of investment capabilities commensurate with the scale of investment and strengthen the middle and back office structure to support this. In order to earn the trust of pension recipients and to contribute to the stability of the people's lives, all of our officers and employees, together with the Board of Governors, will continue to make efforts.

I would sincerely appreciate your continued understanding and support.

President

宮園 雅敬

MIYAZONO Masataka

Government Pension Investment Fund, Japan

1

| Introduction of GPIF |

About GPIF

Introduction

Public pension scheme is designed to support the future of Japan. Here, we would like to explain the activities of GPIF which is managing and investing a part of this public pension, in simple and easy manners.

What is a public pension?

A public pension scheme is a system in which all citizens pay premiums to support each other in order for each citizen to prepare for potential risks in our lives, such as “becoming unable to work due to age,” “living with disabilities resulting from illness or injury,” and “losing main income source of a family.” Particularly in Japan, the public pension scheme plays a very important role as life-long support for elderly people.

▶ [For details of GPIF’s roles in the public pension scheme, refer to pages 91-92.](#)

(Note) The information is partly simplified for easy understandings. All the images in this section are for illustrative purposes only.

Q1 Will I get my contributions back as pension benefits in the future?

A The public pension scheme in Japan adapts the concept of “intergenerational support,” whereby pension benefits for elderly generations are paid from pension premiums collected from contemporary working generations. Therefore, the scheme is not designed to cover your pension benefits by your own premiums accumulated in advance.

▶ [For details, refer to page 8.](#)

Q2 How will the pension system work as the declining birthrate and the aging population?

A Since there will be fewer contributions from the working generation to cover the pensions for the elderly generation, it will be necessary to make up the shortfall. The pension system reflects changes in the times, such as the growing number of working elderly people and women, in order to improve its sustainability. In addition, the system is designed to stabilize pension finance by utilizing pension reserves.

▶ [For details, refer to page 9.](#)

Q3 What does GPIF do?

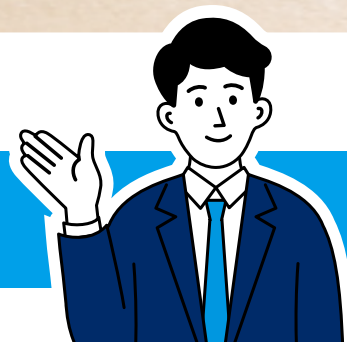
A GPIF is an organization managing and investing pension reserves to increase the source of pension benefits for future generations.

▶ [For details, refer to page 10.](#)

Q4 Can the amount of benefits to be paid in the next year be affected by this year’s investment performance?

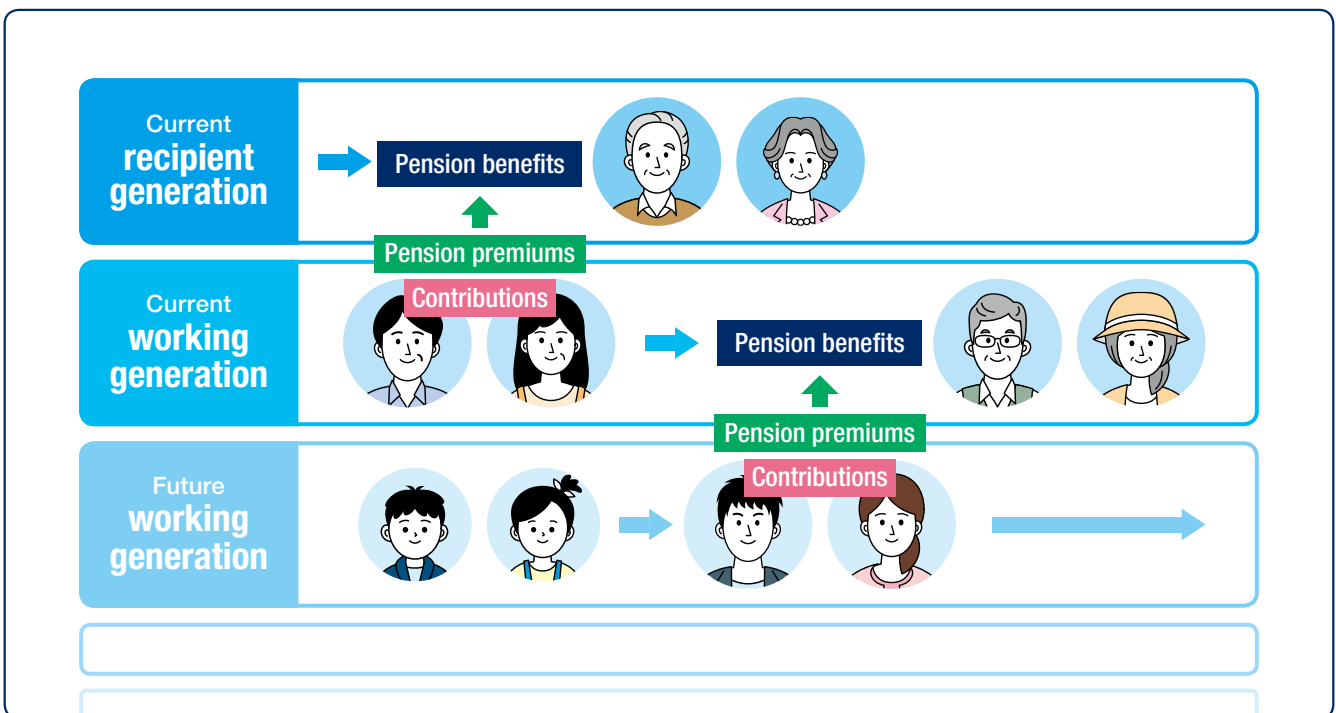
A What GPIF invests is the funds “reserved for future generations.” Therefore, the amount of benefits to be received in the next year will not be affected regardless of whether the investment performance in this year is positive or not.

▶ [For details, refer to page 10.](#)

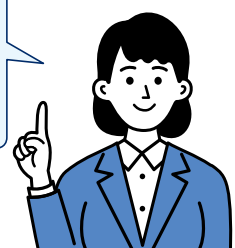


CHECK
1 First, let's walk through Japan's pension system.

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



Under the public pension scheme in Japan, pension benefits for the elderly generations are paid by pension premiums collected from the contemporary working generations. In other words, pension benefits to be received in the future by the current working generations will be covered by the pension premiums paid in the future by generations of their children and grandchildren. The scheme is not designed to cover your pension benefits by your own premiums accumulated in advance.

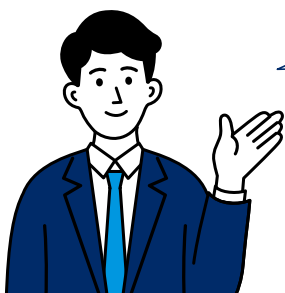
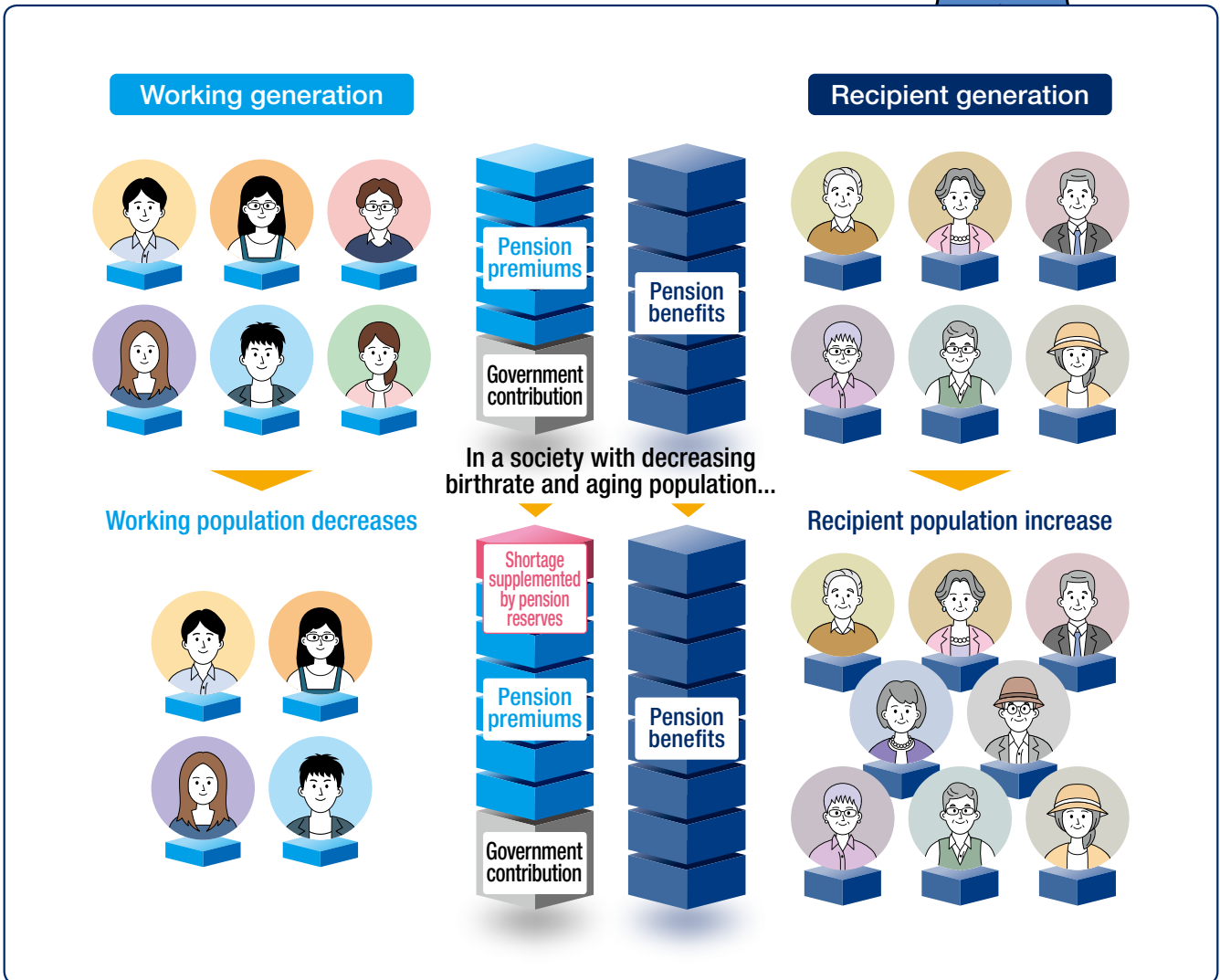
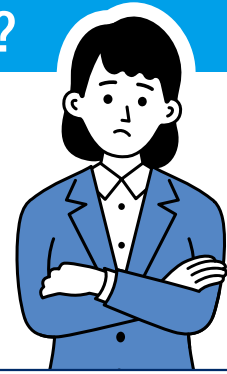


What concerns do we have in the age of shrinking population in Japan?

CHECK
2

What would happen to the pension scheme as the population of Japan decreases?

If the declining birthrate and aging population continue, the burden on future working generations would become too heavy.



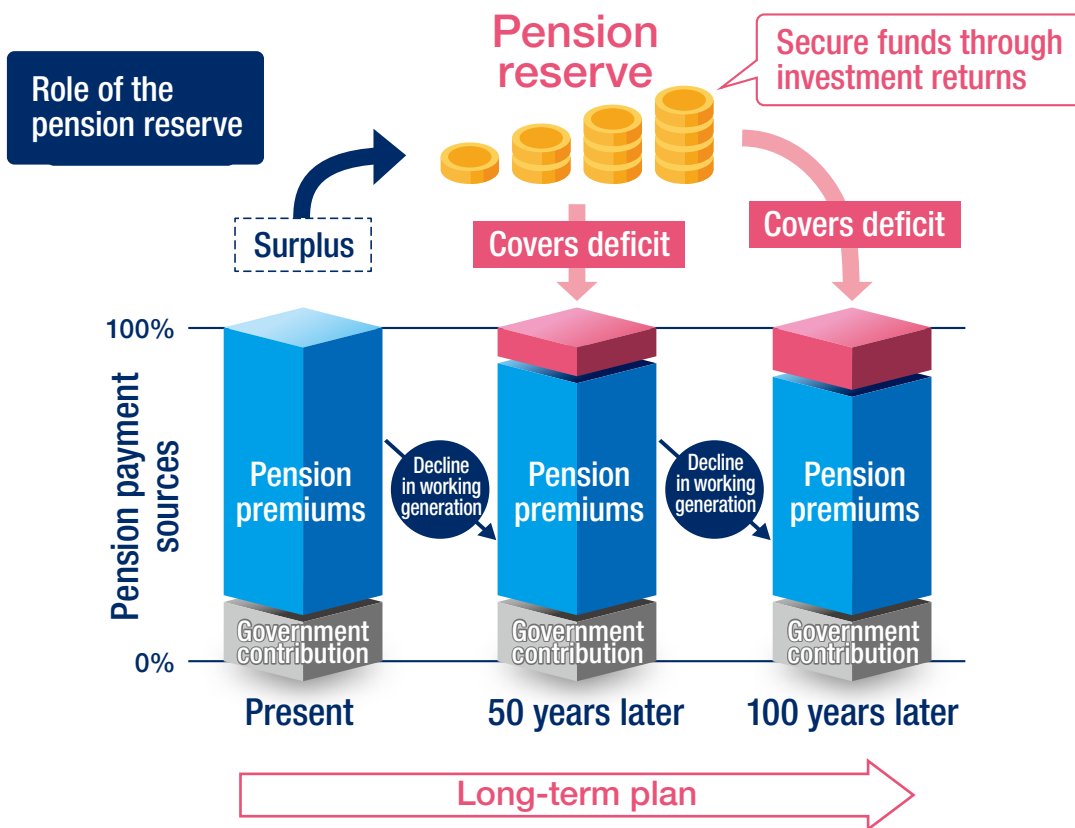
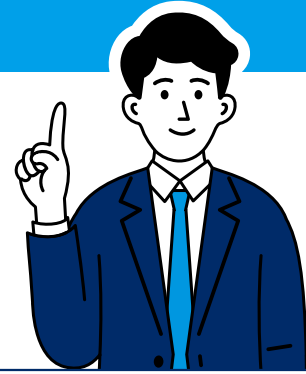
In recent years, while the population of the working generation has decreased, our society has changed as people work longer and in more diversified ways: e.g. the elderly workers have increased as people's healthy lifespan becomes longer and female employment rate has risen. By reflecting on these changes to the design of the scheme, the sustainability of the pension scheme has been improved. In addition, pension reserves are planned to be used to supplement the potential shortage of pension funds for future benefit payments when necessary, so that we can ensure the stability of pension finance over a period of time in the future.

We will go into the role of pension reserves in detail.

GPIF manages pension reserves for future generations.

What are pension reserves?

Out of pension premiums contributed by the working generation, those unused for current pension payments shall be reserved for future generations as pension reserves. In the long run, about 10 percent of the total pension funds are estimated to come from the pension reserves.



Will the next year's pension payment be affected by the investment result of this year?



Pension reserves managed by GPIF are money to ensure that the burden on future working generations will not be too great. Therefore, even if the investment result of this year is positive, the amount of pension benefit payment of the next year will not increase. Like, even if the investment result of this year is

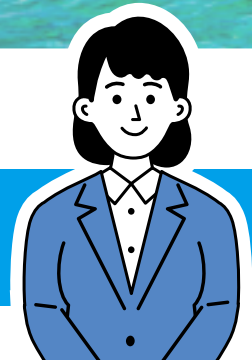
negative, the amount of pension benefit payment of the next year will not be reduced.

Pension reserves are used to stabilize pension finances for the future.

2

About investments of the pension reserves

To ensure stable earnings from its investments, GPIF keeps in mind as follows.



POINT
1

GPIF employs long-term investment and diversified investment as our principle investment strategies

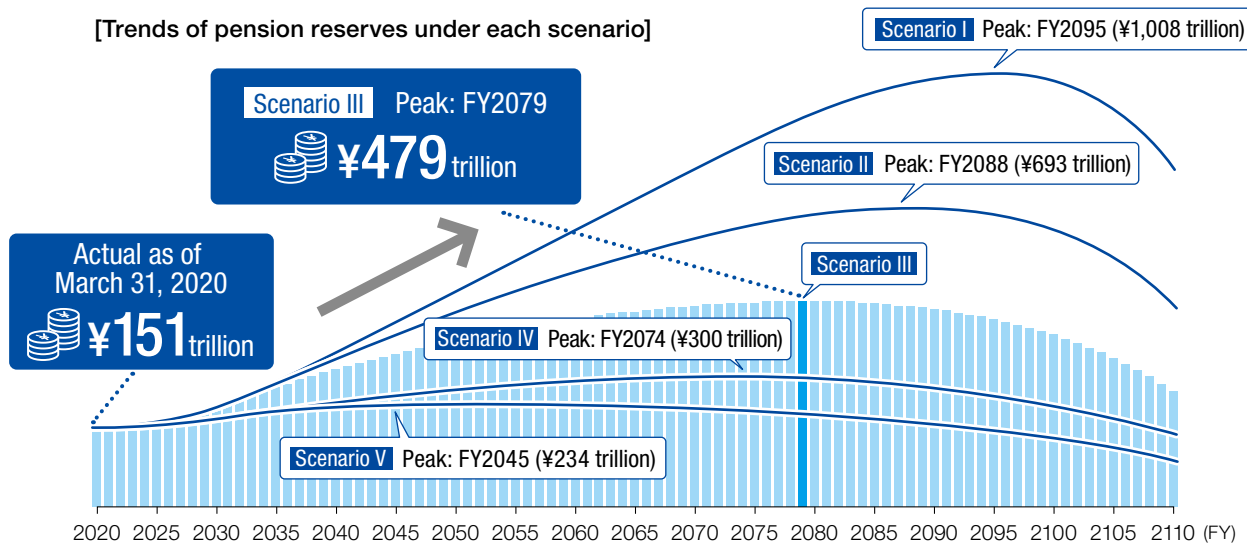
1 GPIF carries out long-term investment.

Although investment performance in the short term can fluctuate in a large scale in either positive or negative direction, as investment horizon becomes longer, the range of fluctuation is expected to be smaller, because positive results and negative results would be offset with each other in the long run.

Immediate withdrawal from pension reserves managed by GPIF will not be necessary. Therefore, GPIF adopts a long-term investment strategy that aims to gain stable returns by holding various types of assets over the long term without being too concerned with temporary market fluctuations.

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

[Trends of pension reserves under each scenario]



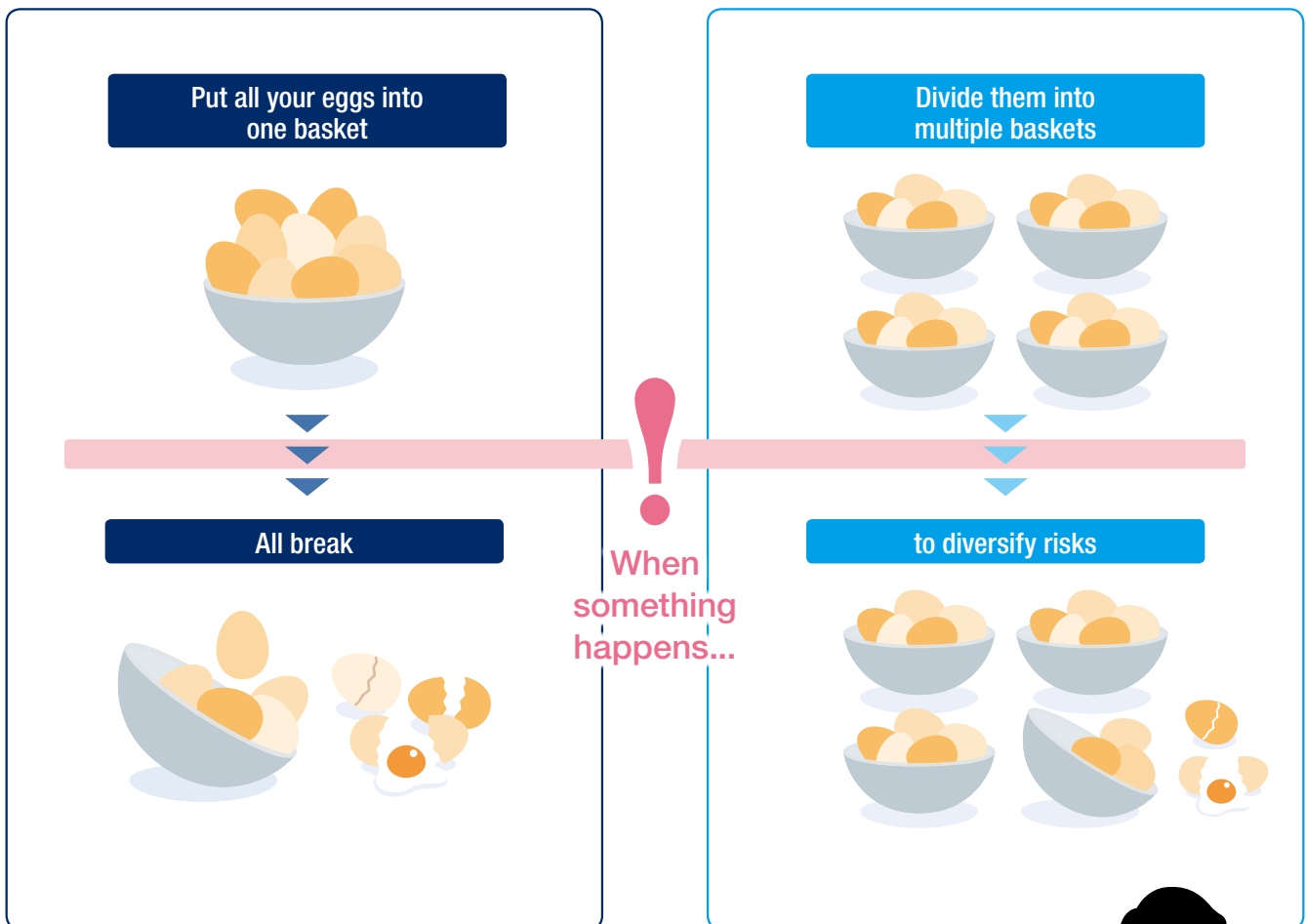
(Note) For details of Scenario I through Scenario V, refer to page 34.



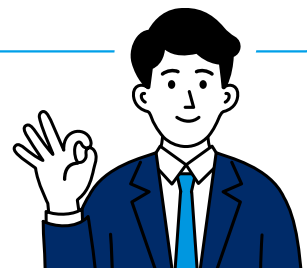
2 GPIF carries out diversified investment.

GPIF manages an enormous amount of assets, approximately 246 trillion yen. In the asset management industry, there is a saying “Don’t put all your eggs into one basket.” GPIF aims to achieve

stable investment returns by diversifying our investments in multiple types of assets in Japan and overseas, that have different characteristics and price movements.



We combine “long-term investment” and “diversified investment” to achieve stable returns.



POINT

2

GPIF makes investments based on the policy asset mix (the principle asset allocation policy)

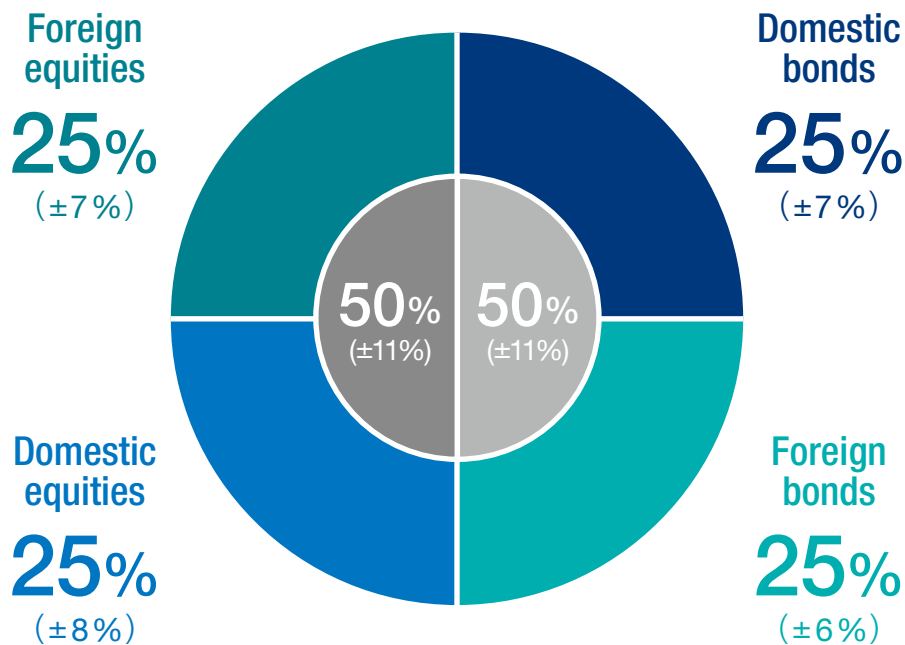
It is commonly known that, in a long-term investment, maintaining portfolio (a policy asset mix) over the long term yields a better result effectively, rather than changing the portfolio in response to short-term market fluctuations.

At GPIF, pension reserves shall be managed in line with the principle asset allocation policy (the policy asset mix) from a long-term perspective.



Current policy asset mix

(Since April 2020)



(Note 1) Figures in parentheses indicate deviation limits.

(Note 2) The upper limit for alternative assets is set as 5% of the total assets.

However, when it comes to actual investment management, because of the constant market fluctuation, it is essential to establish a framework that enables timely and flexible allocation adjustments within reasonably appropriate ranges, while principally following the policy asset mix.

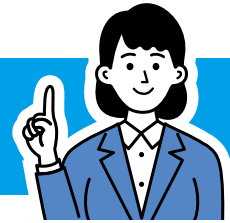
Therefore, GPIF defines the ranges of allowable deviations from the policy asset mix (deviation limits).

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 our pension reserve fund management and investment. When the asset allocation ratios of actual investments deviate from those of the policy asset mix, GPIF timely and flexibly executes rebalances in order to assure that the actual allocations are within the deviation limits.

POINT

3

GPIF allocates its investments appropriately, not only to bonds but also to equities

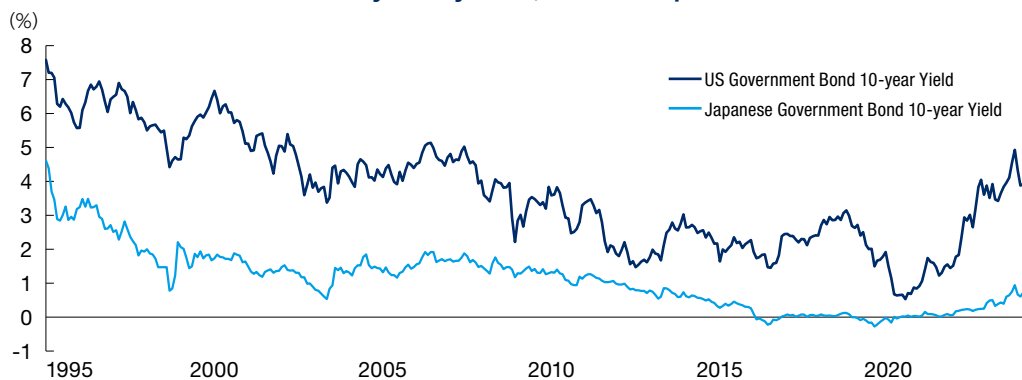


Interest rates on Japanese government bonds have been at low levels. Under the condition that the consumer price and wages are expected to rise with the changing economic and investment environment over the long term, it is difficult to secure the investment returns required for pension finance by investing mainly in domestic bonds.

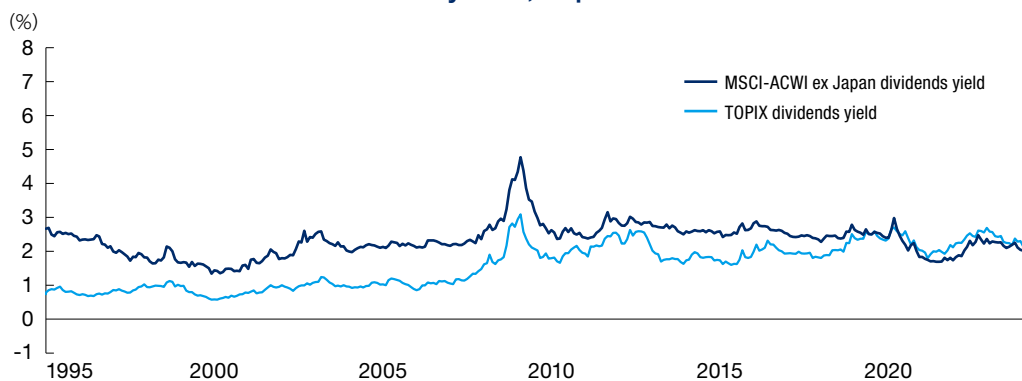
Equities are exposed to greater price fluctuation risks than

bonds in the short term, but could yield a higher return from a longer perspective. At GPIF, we appropriately incorporate equities in our portfolio, so that we aim to secure the investment returns required for pension finance with minimal risks by reaping the fruits of domestic and foreign corporations' activities and the resulting economic growths in the form of "dividends" and "capital gains."

10-years yields, U.S. & Japan



Dividends yields, Japan & Global



Would future withdrawals from the pension reserves (which leads to dispositions of its equity holdings in the portfolio) negatively affect stock prices, given the vast amount of GPIF's equity holdings?

?

Immediate withdrawal from pension reserves managed by GPIF will not be necessary. (However, part of the investment gains may be used for the payments of pension benefits). Even when withdrawals begin in earnest in the future, the pension reserves

will be drawn down gradually over several decades rather than all at once. GPIF shall pay adequately attention to minimize the potential market impacts of these dispositions associated with the withdrawals, while carefully assessing global market trends.

POINT
4

GPIF invests in various types of assets not only in Japan but also in foreign countries.

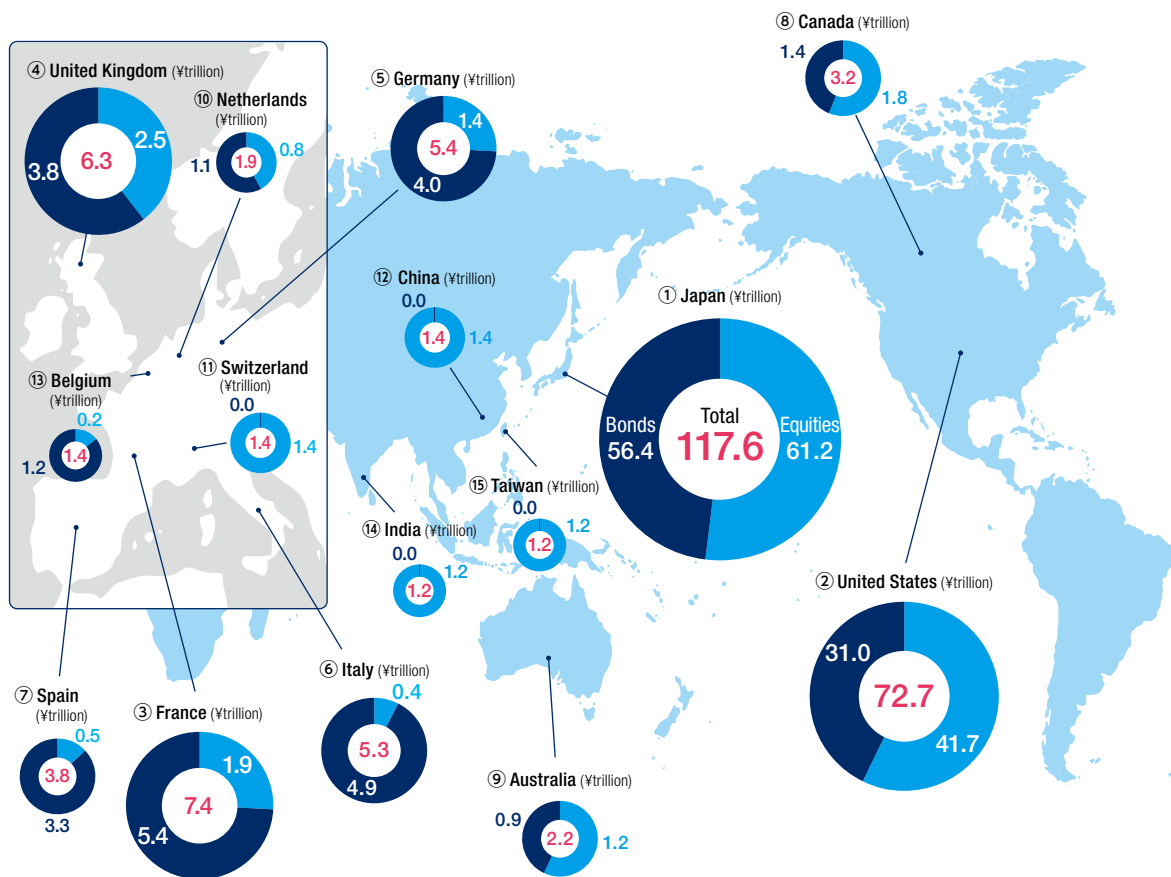


For instance, a temporary fall in asset prices due to market fluctuations could be offset by a subsequent rebound, leaving the value of a portfolio unaffected in the long run. However, in some cases, a downward trend of asset prices could continue longer than initially assumed. In other cases, on the 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.

By investing in various types of assets not only in Japan but also in foreign countries, GPIF has conducted its investment with an aim to increase opportunities for profits generated from global economic activities, and simultaneously to mitigate the risk of material losses by controlling fluctuations in the overall value of assets under management thanks to the diversification.

Investment amount by country / region

Top 15 countries/regions by amount invested as of the end of March 2024 are as follows.



(Note 1) Equities are compiled mainly based on the company's country of incorporation and the primary listing of its securities (Country Classification for MSCI indexes), while bonds are compiled mainly based on the country where the issuer or the parent company of the issuer is headquartered (Country Classification for Bloomberg indexes).

(Note 2) Cash, money market funds (MMFs), and other assets temporarily remaining in the fund are excluded.

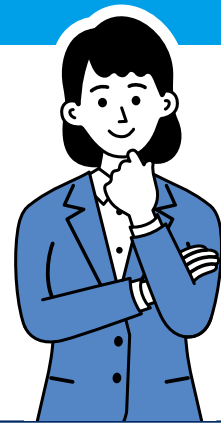
(Note 3) Investment amount includes alternative assets. Infrastructure and PE investments are classified into "countries where the portfolio company mainly operates," and real estate investments are classified into "countries where the portfolio property is registered."

(Note 4) Due to rounding off, the sum of each item does not necessarily match the total number.

POINT
5

In addition to equities and bonds, GPIF also invests in alternative assets.

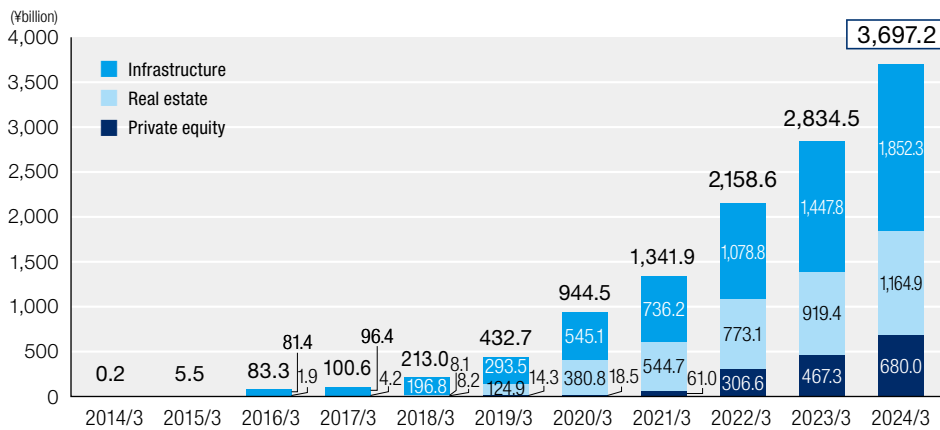
Alternative assets are the generic term for investment assets that are “alternatives” to traditional investment assets including listed equities and bonds. Among a variety of alternative assets, GPIF invests in infrastructure (investments in infrastructure projects, such as renewable energy), private equity (investments in equities of private companies), and real estate (investments in real estate such as logistics).



Since alternative assets have different risk-return profiles from equities and bonds, holding them alongside these traditional assets can be expected to reduce the volatility of the overall returns on assets. Unlike listed stocks, which are traded on a daily basis by many investors, it takes time for transactions of alternative assets to be completed, while they are said to provide high yields. Overseas pension funds have been promoting

diversification by investing in alternative assets for the aforementioned characteristics and effects. As a super-long-term investor, GPIF aims to improve investment efficiency by holding equities and bonds that can be bought and sold quickly, while steadily accumulating high-quality alternative assets with due attention to the market environment and investment risks.

Total value of alternative assets up until fiscal 2023



POINT

6

GPIF is undertaking stewardship activities and ESG investment.



From the perspective of increasing long-term investment returns, GPIF pursues activities to fulfill our stewardship responsibilities and promotes ESG initiatives.

In accordance with laws and regulations, GPIF's ESG investments

are not aimed at contributing to the solution of social problems, but are promoted based on the concept of ensuring the economic benefits of pension recipients from a long-term perspective by reducing the negative impact of environmental and social problems on capital markets.

Stewardship responsibility refers to the responsibility of institutional investors to seek to increase long-term investment returns by adopting a long-term orientation and looking for sustainable growth among the companies in their portfolios and markets on the whole. GPIF has been fully engaged in stewardship activities since adopting Japan's Stewardship Code in May 2014.

Since GPIF does not directly hold stocks but invests through external asset managers, as part of its stewardship activities, GPIF has established the Stewardship Principles and the Proxy Voting Principles, which require external asset managers to engage in "constructive dialogue" (engagement) with portfolio companies, in consideration of ESG factors that contributes to sustainable growth.

ESG is an acronym for Environmental, Social, and Governance.

ESG investment incorporates environmental, social, and corporate governance perspectives into investment decisions with the expectation of improving long-term returns.

GPIF, both as a "universal owner" (broadly diversified investor in capital markets worldwide) and a "cross-

generational investor" (a super-long-term investor), must ensure the sustainable and stable growth of capital markets as a whole to earn stable returns over the long term. Based on this idea, GPIF promotes ESG investment.

POINT 7

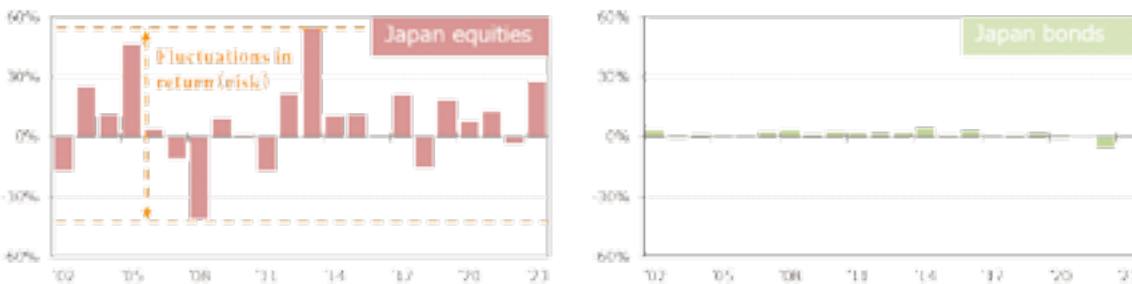
Risks are controlled appropriately to ensure a long-term profitability.



The word “risk” is used in the sense of “danger” or “possibility that an unfavorable situation will happen.” However, in the field of investment management, the word “risk” generally means “fluctuations in return,” or the “range of change in return.”

Future return on equities and bonds is not fixed and certain. The following diagrams show fluctuations in the return of both assets, suggesting that the greater the fluctuation, the higher the risk.

Annual return on Japan Equities and Japan Bonds from 2002 to 2023



* The average fee rates against externally managed assets (annual rates) for each asset class are assumed to have been charged throughout the entire simulation period.
 Japan Equities: 0.01%, Japan Bonds: 0.01%

* Past performance is no guarantee of future results.
 <Source> Japan Equities: Morningstar Japan GR JPY, Japan Bonds: Morningstar Japan Core Bond GR JPY

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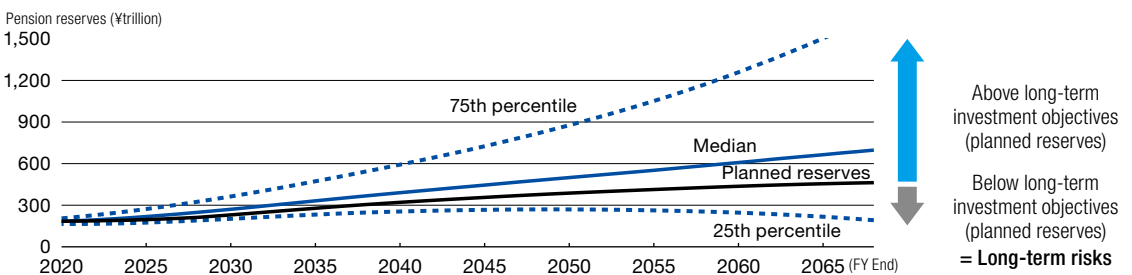
It is legally prescribed that the pension reserve shall be managed safely and efficiently from a long-term perspective. The Medium-term Objectives prescribed by the Minister of Health Labour and Welfare (“MHLW”) stipulate that a pension reserve fund must achieve a long-term real return (pension reserve’s nominal yield minus the nominal wage growth rate) of 1.7% with minimal risks.

A risk emphasized by GPIF is not “short-term fluctuations in returns due to temporary market fluctuations.” but “a risk of failing to achieve a long-term investment return required for the pension

finance.” In order to manage pension reserve fund safely and efficiently from a long-term perspective, GPIF is conducting its investment with an aim to mitigate the risk of failing to achieve the long-term investment return, by professionally analyzing various indicators, while taking into consideration short-term fluctuations in returns due to temporary market fluctuations.

(Note) Among the 6 economic assumptions set in the 2019 Fiscal verification, the long-term investment target is set at 1.7%, which has the highest long-term real yield (see page 34 for details).

Comparison with planned reserves (long-term risk)



Overview of Fiscal 2023



Investment Results

▶ For details, refer to pages 23-24.



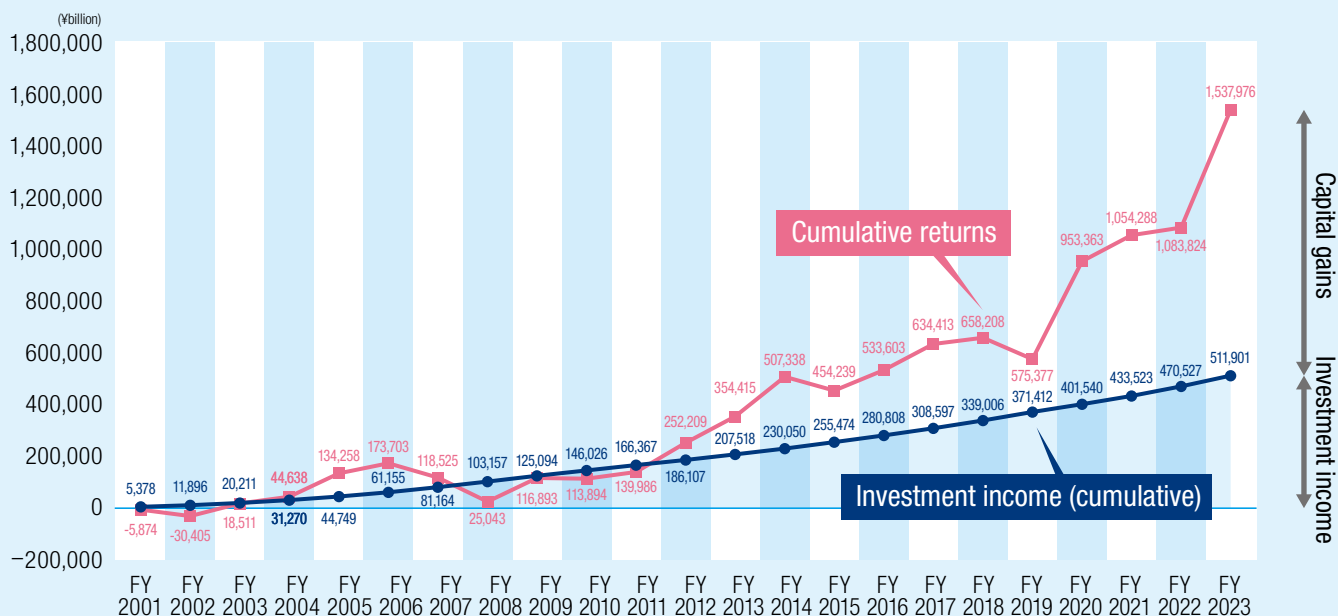
(Note 1) Rate of return and returns are marked to market as of the end of fiscal 2023, and include unrealized gains and losses.

(Note 2) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

GPIF manages pension reserve fund with a long-term perspective. While short-term portfolio returns are influenced by the current market trends, investment results should be monitored with a 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 has been generated steadily since fiscal 2001.

Cumulative returns since fiscal 2001





Contribution to Public Pension Finance

▶ For details, refer to page 25.



Real return on investment for the whole pension reserves

(cumulative)

4.24%

[annual rate]

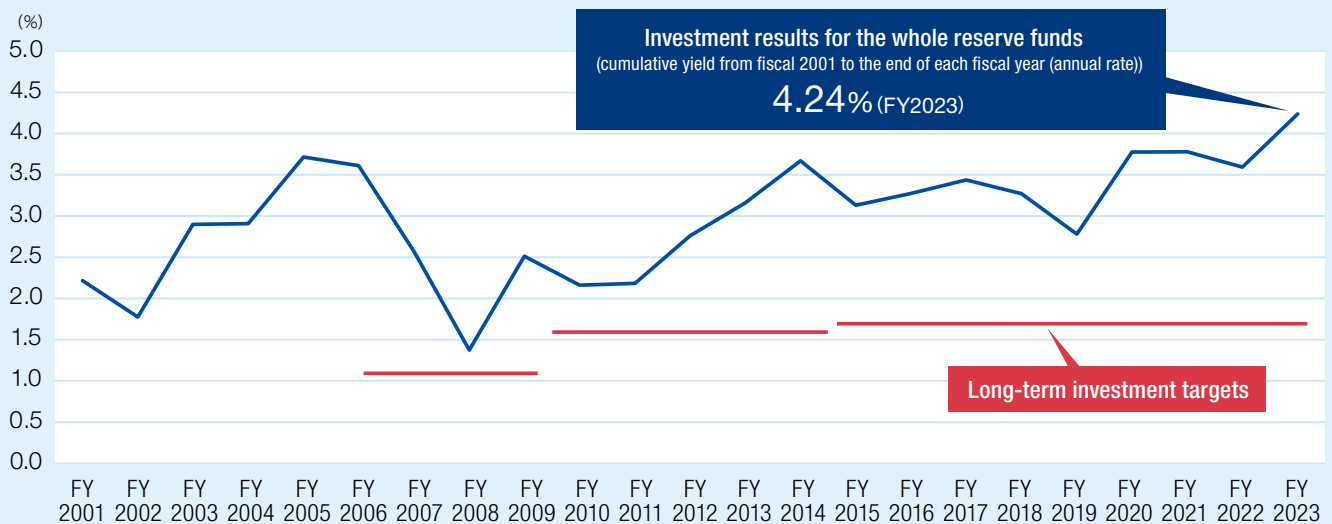
Under the Medium-term Objectives established by the Minister of Health, Labour and Welfare (MHLW), the investment target for the whole pension reserves^(Note1) is to secure a long-term real return (net investment yield on the pension reserve fund less the nominal wage growth rate) of 1.7% with minimal risks. (Please note that this investment target is on a long-term basis, so not required to be achieved each year in the period.)

(Note 1) The whole pension reserves include pension reserve fund managed by GPIF and fund managed by the Pension Special Account.

(Note 2) The amount of public pension benefits is designed to increase roughly in tandem with the nominal wage growth rate in the long run. Therefore, investment return for the whole pension reserves 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) for the whole pension reserves minus the nominal wage growth rate.

▶ For the roles of pension reserve fund in pension finance, refer to pages 91-92.

Real return for the whole pension reserves on investment (cumulative) since fiscal 2001



(Note 1) Real investment return is calculated as $\{(1 + \text{nominal investment return} / 100) / (1 + \text{nominal wage growth rate} / 100)\} \times 100 - 100$.

(Note 2) Nominal investment return, as stated in (Note 1), is the rate of return after deducting investment management fees, etc. (the figures include interest expenses on borrowings in the succeeded fund investment account up to fiscal 2010), calculated by the following formula: the amount of return for the whole pension reserves divided by the average balance of investment principals for the whole pension reserves “{Assets at the end of the previous fiscal year + (Assets minus return at the end of the current fiscal year)}/2.”

(Note 3) 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 4) Figures represent the geometric mean of cumulative yield from fiscal 2001 to the end of each fiscal year (annualized).

Review of Fiscal 2023 Investment Activities

In fiscal 2023, GPIF achieved a record return of ¥45.4 trillion, with a return rate of 22.67%, the second highest after fiscal 2020. Since fiscal 2001 (the start of GPIF's own discretionary investments), we have achieved a cumulative return of ¥153.8 trillion and assets under management of approximately ¥246 trillion. Since the beginning of the 4th Medium-term Plan in April 2020, GPIF has achieved a cumulative return of ¥96 trillion and maintained positive returns compared with the compound benchmark.

Fiscal 2023 started in an environment where it was difficult to predict a significant rise in risk asset prices, due to the bankruptcies of some financial institutions in the United States and Europe at the end of fiscal 2022 and the continued rise in U.S. government bond yields. However, for the full fiscal year both Japanese equities and Foreign equities (denominated in Yen) recorded returns exceeding 40%. In addition, as interest rates rose globally contributing to the yen's depreciation of 13.7% against the U.S. dollar and profit from Foreign bonds also reached a record high.

Since April 2020, GPIF has improved its investment methodology by focusing on investments in line with the policy asset mix and securing stable excess returns. In fiscal 2023, GPIF made efforts to (a) reduce risks that do not exist in the policy asset mix such as spread products (e.g. corporate bonds), (b) manage interest rate risk (duration risk) of domestic bond portfolio by utilizing GPIF's JGB trading capabilities, (c) establish a methodology to measure the performance of alternative assets by benchmarking against traditional assets, and (d) improve the performance of ESG indices by engaging with index

providers. As a result, it has become possible to reduce the tracking error against the benchmark and therefore to further strengthen efforts to secure excess stable returns.

GPIF selects external active fund managers based on quantitative and qualitative measures. Since April 2020, with the aim of generating stable excess returns without taking additional absolute market risk. We incorporated analysis based on the latest data science to quantitatively assess external active manager's skill sets. First, in fiscal 2022 we invested ¥3 trillion in 19 active funds in the North American equity market including a beta balancer (passive fund: see page 50). As a result, the accuracy of the evaluation model for selecting equity active funds was to some extent proven and therefore in fiscal 2023, we invested in 14 new funds in global developed markets and 23 new funds in the Japanese equity market. As of the end of fiscal 2023, the outstanding amount of investment through active equity managers, was approximately ¥10 trillion in total, and we have generated excess returns of approximately ¥130 billion since the beginning of the investment (see page 50 "Reconstruction of Active Equity Fund Portfolios"). Since the investment period is still short and the evaluation and selection methods need to be further proven on an ongoing basis, it is still too early to assess the stability of the excess return. However, the information ratio during the period was 1.93 for North America and developed markets, and we expect our active portfolio to generate excess stable returns in the future as well.

Due to the large scale of assets under management at GPIF, it is extremely difficult for us to achieve an excess return of 1% or higher with the same level of absolute

market risk as the policy asset mix. However, if we are able to consistently generate 0.1% or 0.2% of excess return every year, the compounding of even such small incremental returns will add up to significantly large amount of profit over the long run.

In fiscal 2023 the excess return of all assets under management was +4 basis points (0.04%), which was not significant. The breakdown is +25 basis points for traditional assets and private equity (private equity contributed -5 basis points.), and -21 basis points for infrastructure and real estate including currency hedging (see page 29). The main reason for the modest level of excess return is because the mark to market of alternative assets lags behind traditional assets (see page 66), and the return for infrastructure and real estate is not compared against a 100% bond benchmark but rather 50% bonds and 50% equities (see page 67).

Under the 4th Medium-term Plan, alternative assets should be risk managed by classifying them into 4 traditional asset classes according to their risk-return characteristics. Private equity is classified as 100% equity for risk management purpose and performance evaluation. GPIF hedges FX risk for foreign infrastructure and real estate investments that exceed 50% of the total, so that the yen-to-foreign currency ratio remains at the 50% policy asset mix level (see page 29). As for alternative assets we will continue to improve our risk management to obtain stable excess returns above traditional asset returns.

Interest rates have remained high, mainly in the United States, and we believe that high interest rates may reduce

the benefits of leverage in alternative asset investments. GPIF will make investment decisions within alternative assets by analyzing the extent to which returns come from either leverage or value added to the underlying assets. (see page 68, "Alternative investment and leverage").

There is only one year left in the 4th Medium-term Objectives period. I believe we have been able to produce good investment results over the past four years mainly due to favorable market conditions and we will continue to make efforts to contribute to pension finance over the long term.

Executive Managing Director
(Management and
Investment Operations) / CIO

UEDA Eiji



Chapter 1 Investment Results in Fiscal 2023

1 | Investment Results

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

① Rate of investment return / Amount of investment returns

The rate of investment return for fiscal 2023 is

The amount of investment returns for fiscal 2023 is

+22.67%

+¥45,415.3 billion.

	1Q	2Q	3Q	4Q	Total
Total	9.49%	-0.31%	2.62%	9.52%	22.67%
	¥18,983.4 billion	-¥683.2 billion	¥5,728.7 billion	¥21,386.3 billion	¥45,415.3 billion
Domestic bonds	0.36%	-2.71%	0.95%	-0.57%	-2.00%
	¥178.0 billion	-¥1,522.7 billion	¥531.3 billion	-¥328.7 billion	-¥1,142.1 billion
Foreign bonds	8.07%	-0.80%	2.55%	5.36%	15.83%
	¥3,899.1 billion	-¥403.7 billion	¥1,363.2 billion	¥3,010.8 billion	¥7,869.4 billion
Domestic equities	14.46%	2.46%	1.99%	18.24%	41.41%
	¥7,086.7 billion	¥1,334.3 billion	¥1,112.0 billion	¥9,859.8 billion	¥19,392.8 billion
Foreign equities	15.46%	-0.15%	4.91%	15.80%	40.06%
	¥7,819.6 billion	-¥91.1 billion	¥2,722.3 billion	¥8,844.5 billion	¥19,295.2 billion

(Note 1) GPIF manages and invests its assets at the market value. The rate of return within total assets and each asset class is time-weighted, and is gross of fees (the same shall apply hereinafter).

(Note 2) Investment returns are gross of fees (the same shall apply hereinafter).

(Note 3) JPY hedged foreign bonds and yen-denominated short-term assets are classified as Domestic bonds, and foreign currency-denominated short-term assets are classified as Foreign bonds.

(Note 4) Alternative asset funds are categorized into each asset in accordance with risk-return profiles. For details, please refer to page 67 (The same shall apply hereinafter).

(Note 5) For alternative assets, the time-weighted rate of return in yen for private equity in fiscal 2023 was 21.53%, and the time-weighted rate of return in yen for the "Infrastructure + Real Estate" portfolio in fiscal 2023 was 6.47% (Of which, foreign exchange adjustment factors contributed -7.86%). For details of the "Infrastructure + Real Estate" portfolio, please refer to page 67.

(Note 6) Due to rounding off, the sum of each item in individual quarters does not necessarily match the total number for the fiscal year.

(Note 7) Fiscal 2023 runs from April 1, 2023 to March 31, 2024.

(Note 8) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

(Note 9) The calculation of figures for Annual Report up to fiscal 2022 is based on settlement date and does not take notional amount of stock index futures and other factors into account, with some exceptions. The rate of return calculated by the same method as those for Annual Report up to fiscal 2022 are 22.67% for total assets, -2.04% for domestic bonds, 15.86% for foreign bonds, 41.29% for domestic equities, and 40.04% for foreign equities. The change in the calculation method does not affect the rate of return for total assets.

(Note 10) The rate of return and the amount of return for Investment results (update report) from the first quarter of fiscal 2023 to the third quarter of fiscal 2023 are calculated in the same manner as those for Annual Report up to fiscal 2022, and therefore do not match the figures in the table.

② Cumulative returns and asset size since fiscal 2001

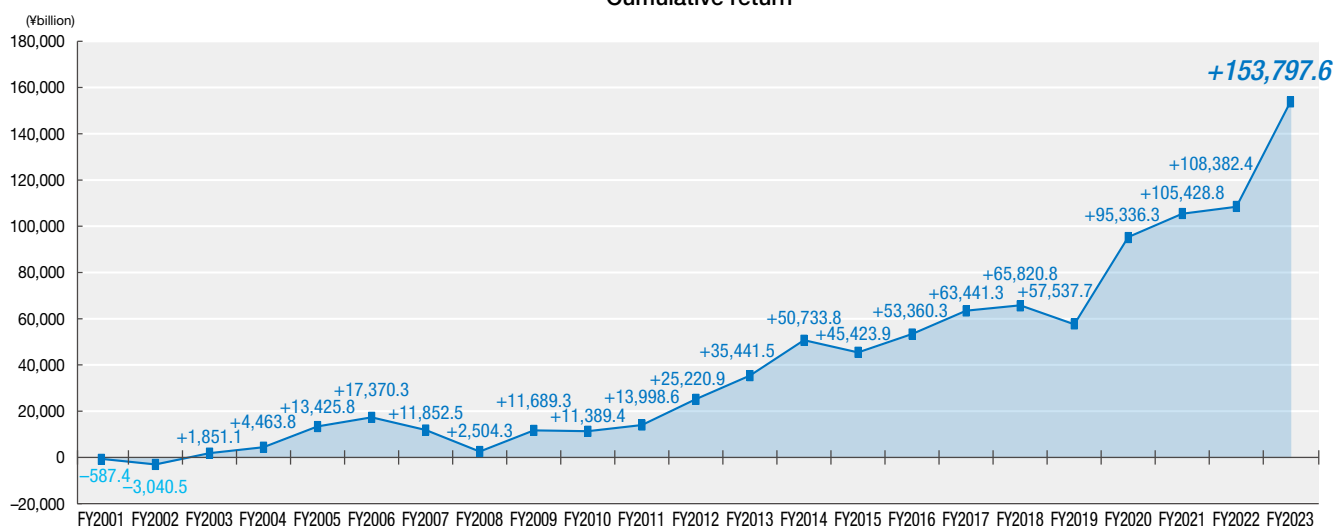
Cumulative returns from fiscal 2001 to fiscal 2023 are

+¥153,797.6 billion

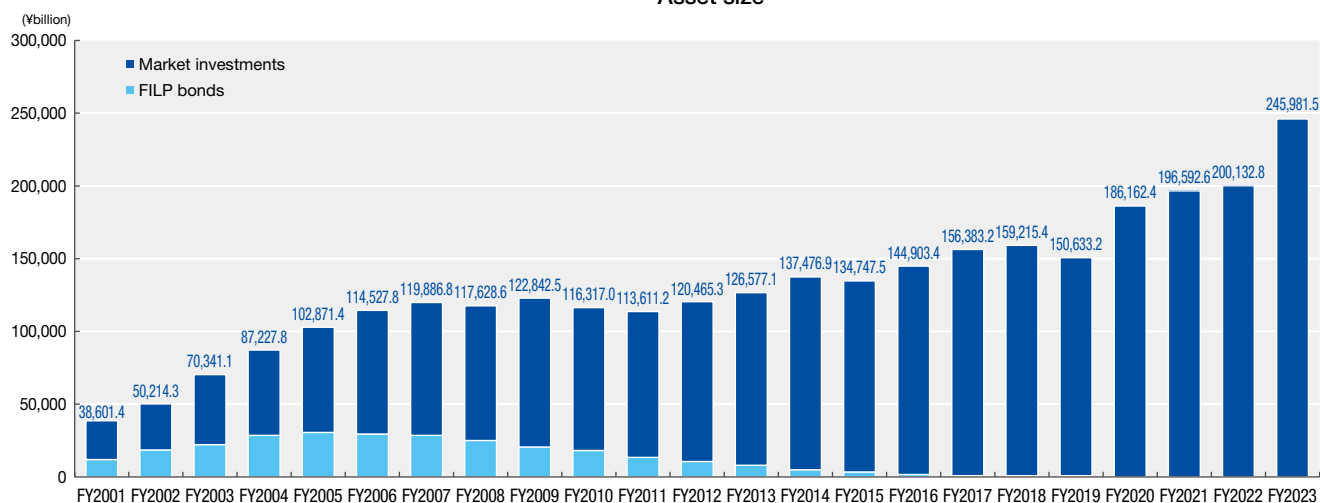
and the value of investment assets at the end of fiscal 2023 is

¥245,981.5 billion.

Cumulative return



Asset size



(Note) Investments using FILP bonds were terminated during fiscal 2020.

③ Comparison to long-term investment targets

“The average real investment return ^(Note2)” for the whole pension reserves ^(Note1) is

4.24%

for the 23 years since fiscal 2001.

Long-term investment target after fiscal 2015 is

+1.7%

above the nominal wage growth rate.

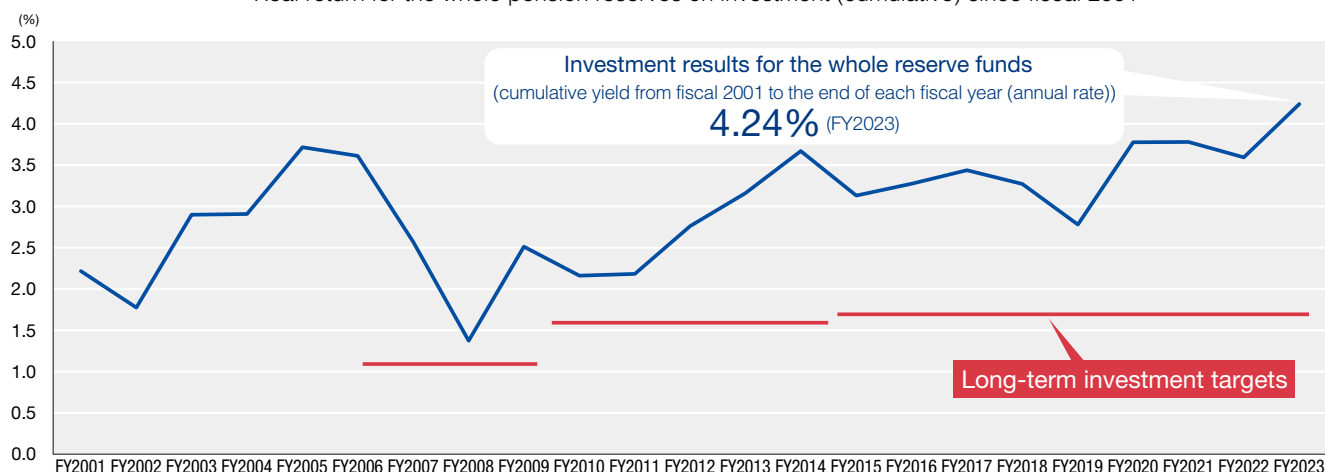
The average real investment return is higher than the long-term investment targets.

For the roles of pension reserve fund in pension finance, refer to pages 91·92.

(Note 1) The whole pension reserves include pension reserve fund managed by GPIF and fund managed by the Pension Special Account.

(Note 2) The amount of public pension benefits is designed to increase roughly in tandem with the nominal wage growth rate in the long run. Therefore, investment return for the whole pension reserves 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. The long-term investment objective is +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 for the whole pension reserves on investment (cumulative) since fiscal 2001



Investment performance for the whole pension reserves

(Unit:%)

	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Last 23 years (annualized)	
Performance	Nominal investment return	1.94	0.17	4.90	2.73	6.83	3.10	-3.53	-6.86	7.54	-0.26	2.17	9.56	8.23	11.62	-3.64	5.48	6.52	1.43	-5.00	23.98	5.17	1.42	21.70	4.33
	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	-0.51	1.26	1.67	1.84	0.09
	Real investment return	2.22	1.34	5.18	2.94	7.01	3.09	-3.46	-6.62	12.09	-0.93	2.39	9.33	8.09	10.53	-4.12	5.45	6.09	0.48	-5.66	24.62	3.86	-0.25	19.50	4.24

(Note 1) Real investment return is calculated as $\{(1 + \text{nominal investment return} / 100) / (1 + \text{nominal wage growth rate} / 100)\} \times 100 - 100$.

(Note 2) Nominal investment return is the rate of return after investment management fees, etc. (the figures include interest expenses on borrowings in the succeeded fund investment account up to fiscal 2010), calculated by the following formula: the amount of return for the whole pension reserves divided by the average balance of investment principals for the whole pension reserves “{Assets at the end of the previous fiscal year + (Assets minus return at the end of the current fiscal year)}/2.”

(Note 3) 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 4) Long-term investment targets are the geometric means of cumulative yield from fiscal 2001 to the end of each fiscal year (annualized).

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).

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. This is due to the following factors: (1) the yield of domestic bonds has fallen below the dividend yield of stocks in recent years, and (2) since fiscal 2014, due to the composition of the policy asset mix, the ratio of bonds has decreased while that of stocks has increased.

Because long-term investors are allowed to enjoy greater compounding effects over time by reinvesting investment income, GPIF reinvests investment income from the assets held, instead of holding them in cash.

In fiscal 2023, the total amount of investment income is

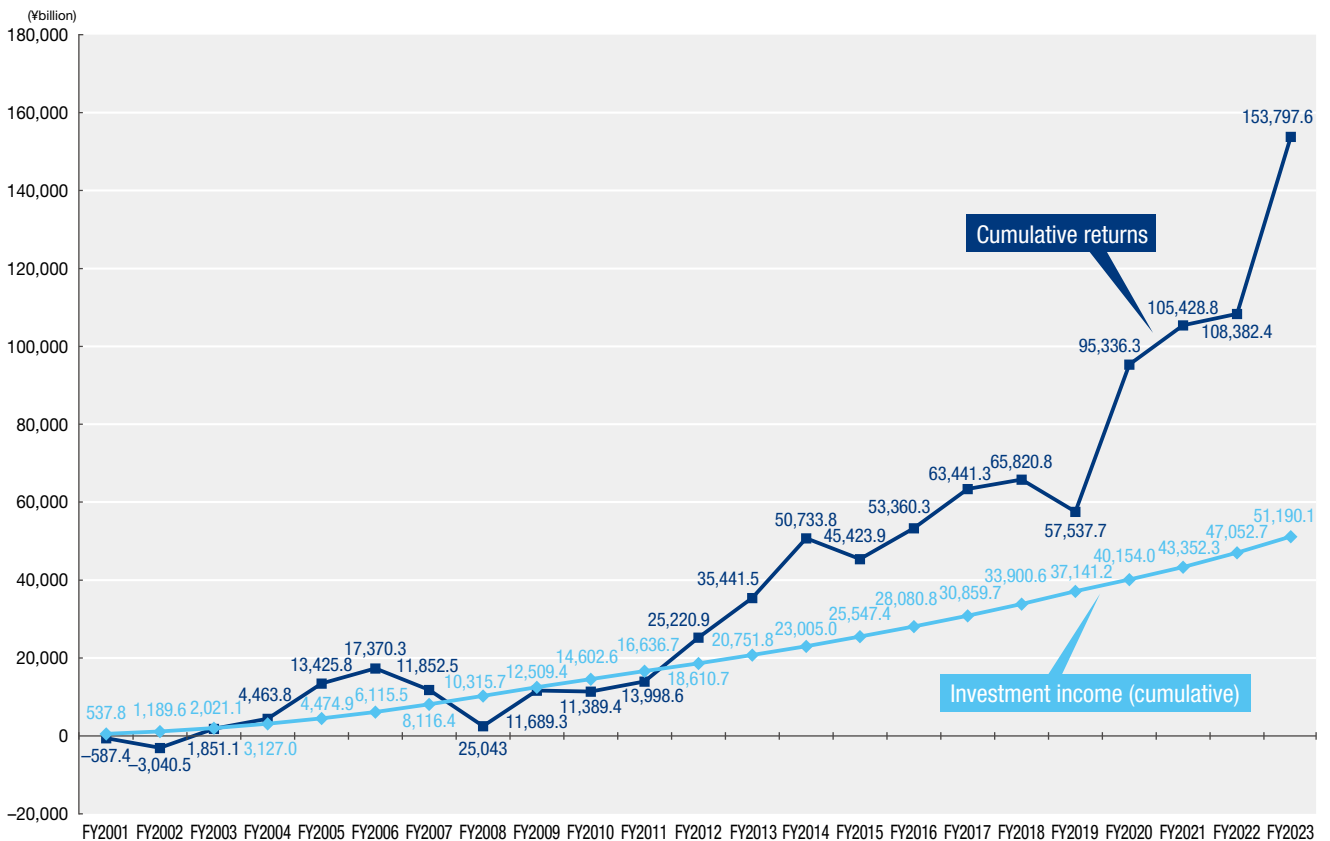
¥4,137.4 billion (rate of return: +1.68%),

and the cumulative amount of investment income for the 23 years since fiscal 2001, when GPIF started managing pension reserves, is

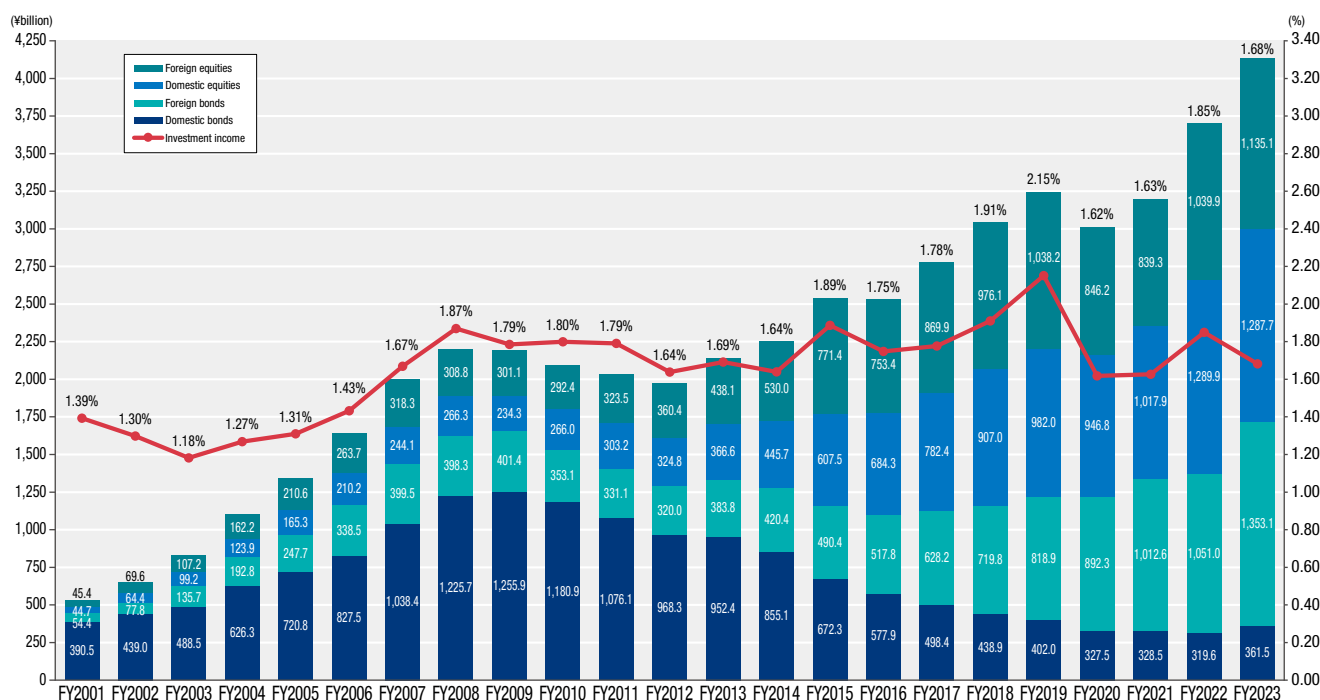
¥51,190.1 billion (rate of return: +1.65% [annual rate])

accounting more than 30% 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	FY2010	FY2011
Domestic bonds	15,972.0 (1.16%)	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%)	1,180.9 (1.52%)	1,076.1 (1.50%)
Foreign bonds	11,538.6 (2.99%)	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%)	353.1 (3.75%)	331.1 (3.33%)
Domestic equities	11,664.2 (1.73%)	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%)	266.0 (1.98%)	303.2 (2.14%)
Foreign equities	12,000.7 (2.16%)	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%)	292.4 (2.23%)	323.5 (2.48%)
Total	51,190.1 (1.65%)	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%)	2,093.2 (1.80%)	2,034.1 (1.79%)

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Domestic bonds	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 (1.08%)	327.5 (0.75%)	328.5 (0.69%)	319.6 (0.64%)	361.5 (0.59%)
Foreign bonds	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 (1.89%)	892.3 (2.08%)	1,012.6 (2.08%)	1,051.0 (2.10%)	1,353.1 (2.24%)
Domestic equities	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%)	946.8 (2.00%)	1,017.9 (2.06%)	1,289.9 (2.56%)	1,287.7 (2.09%)
Foreign equities	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%)	846.2 (1.77%)	839.3 (1.65%)	1,039.9 (2.08%)	1,135.1 (1.80%)
Total	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 (2.15%)	3,012.8 (1.62%)	3,198.3 (1.63%)	3,700.3 (1.85%)	4,137.4 (1.68%)

(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 amount of income earned on short-term assets (income gain) is included in the total by fiscal 2019; from fiscal 2020 onward, the yen-denominated portion is included in domestic bonds and the foreign currency-denominated portion in foreign bonds.

(Note 3) The amount of income earned on currency-hedged foreign bonds (income gain) is included in domestic bonds from fiscal 2020 onward.

(Note 4) The amount of income earned on FILP bonds (income gain) is included in domestic bonds by fiscal 2020, the year to which FILP bonds were held.

(Note 5) The amount of income earned on convertible bonds (income gain) is included in domestic bonds for fiscal 2001.

(Note 6) The rate of return for each fiscal year is calculated by dividing the amount of return (income gain) for each asset by the amount of that asset under management.

(Note 7) The annual rate of return (cumulative) represents the geometric mean of the rates of return for individual fiscal years (annualized).

(Note 8) The calculation of figures from fiscal 2023 onward is based on transaction date and does not take notional amount of stock index futures and other factors into account.

⑤ Factor analysis of difference from compound benchmark return

In fiscal 2023, the total rate of return on all investment assets was

22.67%

while the compound benchmark return was

22.63%

The excess rate of return was

+0.04%

The average of the annual rate of return for the 18 years since the GPIF's establishment in fiscal 2006 on all investment assets was

4.78%

while the compound benchmark return was

4.80%

The excess rate of return was

-0.03%

The cumulative rate of return for the 4 years since the beginning of the 4th Medium-term Plan in fiscal 2020 on all investment assets was

64.26%,

while the compound benchmark return was

63.99%

The excess rate of return was

+0.27%

The “compound benchmark return,” representing the benchmark return rate for the overall assets (including domestic bonds, foreign bonds, domestic equities, and foreign equities), is used as a standard to evaluate the investment performance of the overall assets managed by GPIF. The “compound benchmark return” is expressed in terms of an annualized rate calculated on the basis of the “compound benchmark 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: 25%; foreign bonds: 25%; domestic equities: 25%; foreign equities: 25%).

The 4th Medium-term Plan covering a five-year target period from fiscal 2020 to fiscal 2024 calls for securing the respective benchmark rates of return (average market rates of return) for all assets as well as for each asset.

Factor analysis of the difference from the compound benchmark return in fiscal 2023

(1) Total assets

(Unit: %)

	Rate of return		
	Return of GPIF ①	Benchmark return ②	Excess rate of return ①-②
Total	+22.67	+22.63	+0.04
Domestic bonds	-2.00	-2.20	+0.20
Foreign bonds	+15.83	+15.32	+0.51
Domestic equities	+41.41	+41.34	+0.07
Foreign equities	+40.06	+40.63	-0.57

(Note 1) Alternative asset funds are categorized into each asset in accordance with risk-return profiles.

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

(Note 3) While the rate of investment return of GPIF is after taxes on both interest payments on foreign bonds and dividends on foreign equities, the benchmark return is before taxes. Therefore, the excess rates of return are negatively affected by differences in taxes treatments in these two calculations.

(Note 4) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

Among alternative assets, infrastructure and real estate have been managed separately from other assets since fiscal 2023, considering their characteristics. For details, please refer to “(Column) Risk management according to asset characteristics” below. Therefore, (1) the excess rate of return on total assets (+0.04%) is divided into (2) the “Traditional Assets + Private Equity (PE)” portfolio (+0.25%) and (3) the “Infrastructure + Real Estate” portfolio (-0.21%) as follows. For alternative assets, the latest information available at the end of the fiscal year is reflected. For details, please refer to page 66.

(2) “Traditional Assets + Private Equity (PE)” portfolio

(Unit: %)

	Factor analysis of the excess rate of return of the “Traditional Assets + Private Equity (PE)” portfolio in Total assets				
	Asset allocation factor ^①	Benchmark factor ^②	Fund factor ^③	Other factors (including error) ^④	①+②+③+④
Total: +0.25%	+0.00	+0.24	-0.00	+0.01	+0.25
Domestic bonds	+0.00	+0.04	+0.03	+0.01	+0.08
Foreign bonds	+0.00	+0.09	+0.03	+0.00	+0.12
Domestic equities	+0.00	+0.10	-0.06	-0.01	+0.04
Foreign equities	-0.00	+0.01	-0.01 (PE:-0.05)	+0.00	+0.01

(3) “Infrastructure + Real Estate” portfolio

(Unit: %)

	Factor analysis of the excess rate of return of the “Infrastructure + Real Estate” Portfolio in Total assets				
	Infrastructure ^①	Real Estate ^②	Foreign Exchange Adjustment ^③	Short-term Assets ^④	①+②+③+④
Total: -0.21%	-0.02	-0.08	-0.10	-0.00	-0.21

(Note 1) “Asset allocation factor” refers to a factor resulting from differences between the actual asset mix and the policy asset mix. “Benchmark factor” refers to a factor resulting from differences in rates of return between the policy benchmark and the manager benchmarks for each asset class. “Fund factor” refers to a factor resulting from differences in rates of return between individual funds and manager benchmarks. For the policy benchmark on each asset class, refer to page 37.

(Note 2) Income from securities lending investment is classified into other factors.

(Note 3) “Foreign Exchange Adjustment” is the factor based on foreign exchange transactions to limit deviations from the policy asset mix. For details, please refer to “(Column) Risk management according to asset characteristics” below. “Short-term Assets” is the factor arising from fluctuations in the price of foreign currency-denominated short-term assets, which are always reserved for timely capital contribution to investment funds according to the progress of their investment.

(Note 4) As of the end of fiscal 2023, private equity funds are classified as 100% in domestic equities or foreign equities. Infrastructure and real estate funds are classified as 50% in domestic bonds and 50% in domestic equities for yen-denominated funds, and 50% in foreign bonds and 50% in foreign equities for foreign currency-denominated funds.

(Note 5) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

(Column) Risk management according to asset characteristics

Infrastructure and real estate have both risk characteristics as bonds and as equities. However, the degree of each characteristic fluctuates significantly depending on the period. Therefore, the management method of allocating fixed ratios of bonds and equities was not possible to accurately grasp the risk/return (For details, please refer to GPIF Working Paper “Analysis for the integrated risk management between J-REIT and traditional assets” (https://www.gpif.go.jp/investment/20211007_workingpaper_en.pdf)). Therefore, since fiscal 2023, we have been managing infrastructure and real estate separately from other assets in order to manage risk more accurately.

Specifically, the infrastructure and real estate market is larger in foreign countries than in Japan, and foreign assets account for a larger proportion of GPIF’s investment. On the other hand, the GPIF policy asset mix consists of 50% of both domestic and foreign assets. Therefore, in infrastructure and real estate, foreign assets are overweight and domestic assets are underweight, and there is the risk of deviating from the policy asset mix. To limit this risk, GPIF manages currency risk by foreign exchange transactions.

Factor analysis of the difference from the compound benchmark return [FY2006-FY2023]

(Unit: %)

	Rate of return			Factor analysis of excess rate of return				
	Return of GPIF ①	Benchmark return ②	Excess rate of return ①-②	Asset allocation factor ①	Benchmark factor ②	Fund factor ③	Other factors (including error) ④	①+②+③+④
FY2006-FY2023	4.78	4.80	-0.03	-0.03	+0.02		-0.01	-0.03
FY2006	4.56	4.64	-0.08	-0.06	-0.00		-0.02	-0.08
FY2007	-6.10	-6.23	+0.13	+0.17	-0.02		-0.02	+0.13
FY2008	-7.57	-8.45	+0.88	+0.90	-0.12		+0.11	+0.88
FY2009	7.91	8.54	-0.63	-0.70	+0.08		-0.01	-0.63
FY2010	-0.25	-0.02	-0.23	-0.26	+0.12		-0.09	-0.23
FY2011	2.32	2.59	-0.27	-0.19	-0.01		-0.07	-0.27
FY2012	10.23	9.00	+1.24	+1.40	+0.03		-0.19	+1.24
FY2013	8.64	7.74	+0.90	+0.92	-0.06		+0.04	+0.90
FY2014 from Apr.1 to Oct.30	3.97	3.50	+0.46	+0.47	-0.03		+0.02	+0.46
FY2014 from Oct.31 to Mar.31, 2015	8.19	9.98	-1.78	-1.99	+0.01		+0.19	-1.78
FY2015	-3.81	-3.81	+0.00	+0.21	-0.15		-0.06	+0.00
FY2016	5.86	6.22	-0.37	-0.66	+0.33		-0.04	-0.37
FY2017	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
FY2020	25.15	24.83	+0.32	+0.15	-0.17	+0.37	-0.03	+0.32
FY2021	5.42	5.47	-0.06	-0.05	+0.06	-0.07	-0.00	-0.06
FY2022	1.50	1.57	-0.06	-0.06	-0.11	+0.11	-0.00	-0.06
FY2023	22.67	22.63	+0.04	-0.04	+0.23	-0.16	+0.01	+0.04

(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, an analysis was conducted on the difference between the rate of return (time-weighted rate of return) on the funds invested in the markets (hereinafter "market investment") and the compound benchmark return rate. From fiscal 2008 to fiscal 2019, an analysis has been conducted on the difference between the rate of return on overall invested assets (market investment and investments in Fiscal Investment and Loan Program (FILP) Bonds) (modified total return rate) and the compound benchmark return rate. Since fiscal 2020, an analysis has been conducted on the difference between the rate of return on overall invested assets (market investment and investments in FILP bonds) (time-weighted rate of return) and the compound benchmark return rate. Investments in FILP bonds were terminated during fiscal 2020.

(Note 3) Income from securities lending investment is classified into fund factor from fiscal 2006 to fiscal 2022, and into other factors in fiscal 2023.

(Note 4) The calculation of figures in fiscal 2023 is based on transaction date and does not take notional amount of stock index futures and other factors into account.

(Column) Investment environment in fiscal 2023

Looking back at the investment environment in fiscal 2023, the year was highlighted by a stronger-than-expected U.S. economy, growing expectations of interest rate cuts by central banks in major economies, and a review of the monetary policy framework by the Bank of Japan (BOJ).

In the U.S., market participants had expected a slowdown in economic activity due to a rise in interest rates as the U.S. Federal Reserve Board (FRB) continued to raise interest rates with the aim of containing inflation. As a result, however, the preliminary estimate of the real GDP growth rate in the U.S. for 2023 was 2.5% on a year-on-year basis, accelerating from 1.9% in 2022. In such a situation, the year-on-year rate of increase in the consumer price index (CPI), an indicator of inflation, slowed to 3.5% in March 2024 from the latest peak of 9.1% in June 2022. Therefore, even with inflation contained, expectations increased that the economy would not experience a hard landing, but rather a soft landing with a moderate slowdown.

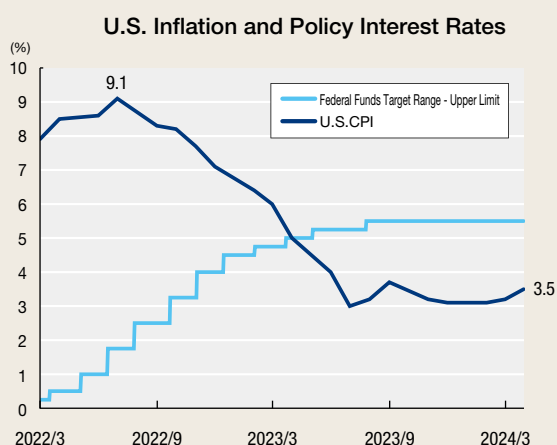
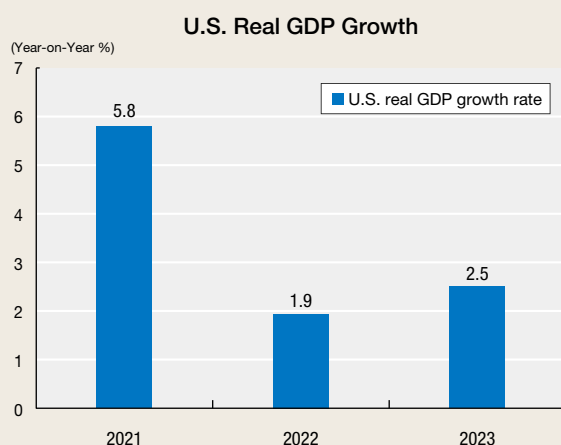
Turning to monetary policy, although the FRB raised interest rates in May and July 2023, the Federal Open Market Committee (FOMC) subsequently decided to leave the federal funds rate unchanged. At the December 2023 meeting of the FOMC, Chair Jerome Powell made remarks suggesting a future interest rate cut. A gradual change in direction from a tight monetary policy took place. Such trends were also seen at the European Central Bank (ECB). The consumer price index (HICP) in Europe slowed to 2.4% in March 2024 from its latest peak of 10.6% in October 2022. In such a situation, the ECB stopped raising interest rates after September 2023, and in January 2024, ECB President Christine Lagarde indicated that interest rates would be lowered.

In Japan, while the CPI has been exceeding the price stability target of 2%, the wage increase rate in the 2024 spring labor-management negotiations exceeded 5% as of March 2024 for the first time in 33 years since 1991. Reflecting such developments, at the Monetary Policy Meeting held in March 2024, the BOJ reviewed the framework of monetary policy that had been implemented since 2013, including abolition of the negative interest rate policy and the yield curve control. As a result, the BOJ raised interest rates for the first time in 17 years, since February 2007.

In addition, at the China's National People's Congress (NPC) held in March 2024, the growth rate target for 2024 was left unchanged from the previous year at "around +5%". On the other hand, not a few investors expected large-scale economic stimulus measures given the sluggish real estate market and continued sluggish private consumption. As Russia's invasion of Ukraine protracted, Israel, which was attacked by Hamas in the Middle East, began fighting in the Gaza Strip.

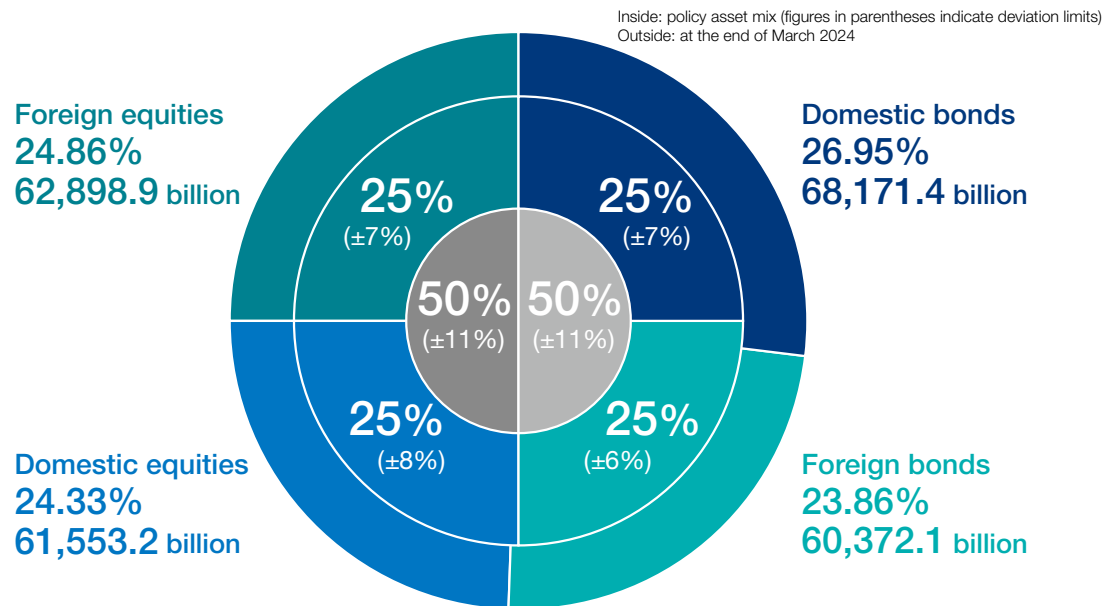
As described above, the investment environment for fiscal 2023 showed various changes, including the shift in monetary policy.

▶ For a review of fiscal 2023, please refer to pages 21-22.



(Note) Figures for real GDP growth in the U.S. are published as of January 25, 2024 (U.S. time).

⑥ Investment assets and portfolio allocation (Pension reserves managed by GPIF and the Pension Special Account)



	Market value (¥billion)	Allocation of Pension Reserve (1)	Allocation of Pension Reserve (2)
Domestic bonds	68,171.4	26.95%	50.81%
Foreign bonds	60,372.1	23.86%	
Domestic equities	61,553.2	24.33%	49.19%
Foreign equities	62,898.9	24.86%	
Total	252,995.5	100.00%	100.00%

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

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

(Note 3) While the pension reserve as a whole includes reserves managed under the pension special account as of the end of fiscal 2023 (about ¥7.0 trillion), this amount is prior to the adjustment for revenues and expenditures and differs from the amount in the final settlement of accounts.

(Note 4) JPY hedged foreign bonds and yen-denominated short-term assets are classified as Domestic bonds, and foreign currency-denominated short-term assets are classified as Foreign bonds.

(Note 5) The percentage of the alternative investments: 1.46% (within maximum 5% of total portfolio)

(Note 6) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

⑦ Allocation changes for each asset class due to rebalancing

(Unit: billion)

	Domestic bonds	Foreign bonds	Domestic equities	Foreign equities
Allocated/withdrawn	+12,478.0	+2,820.9	-7,987.2	-6,822.1

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

(Note 2) The calculation of figures is based on transaction date.

⑧ Management and custodian fees

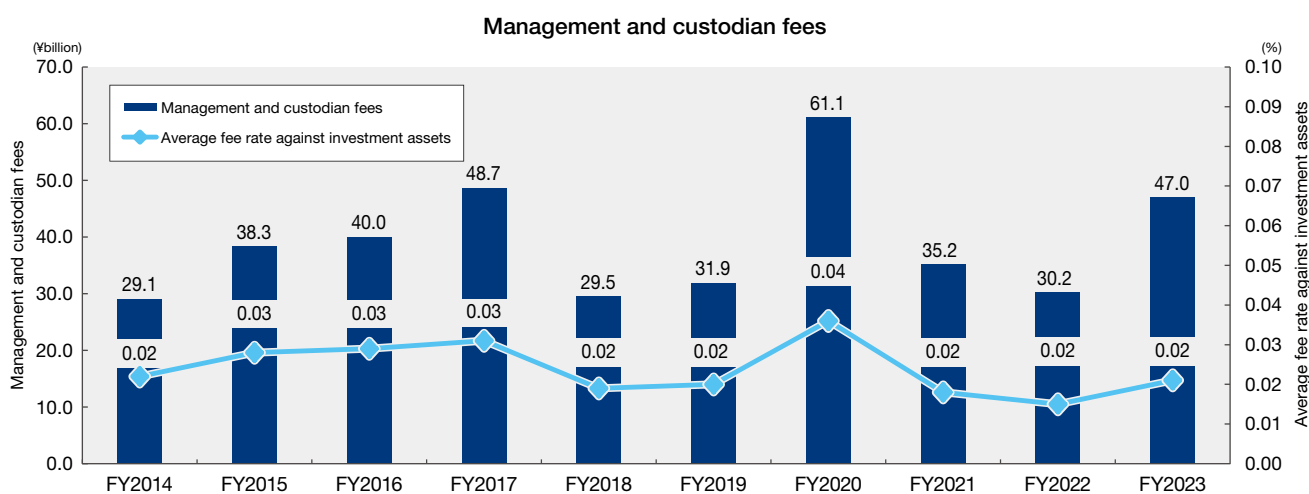
In fiscal 2023, total fees were

¥47.0 billion.

The average fee rate on the total investment assets for fiscal 2023 was

0.02%.

Management and custodian fees increased by ¥16.9 billion from the previous fiscal year. The increase was attributable to foreign equities active asset managers who earned an excess return.



Management and custodian fees by asset class

(Unit: ¥billion)

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Total	29.1	38.3	40.0	48.7	29.5	31.9	61.1	35.2	30.2	47.0
Domestic bonds	3.8	3.8	3.9	4.0	1.6	2.0	3.0	3.4	2.9	3.8
Foreign bonds	8.5	9.1	12.5	17.2	9.2	7.1	25.4	18.6	13.8	16.3
Domestic equities	5.7	8.3	8.8	10.6	7.5	6.5	12.7	6.0	5.2	5.7
Foreign equities	11.2	17.0	14.9	16.9	10.7	15.5	18.8	5.3	5.7	18.4
Alternative assets	—	—	0.0	0.0	0.3	0.7	1.0	1.4	1.8	2.0

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

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

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

(Note 4) Foreign bonds include JPY hedged foreign bonds.

Average fee rate against externally managed assets

(Unit: %)

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Total	0.02	0.03	0.03	0.03	0.02	0.02	0.04	0.02	0.02	0.02
Domestic bonds	0.01	0.02	0.03	0.03	0.01	0.01	0.02	0.01	0.01	0.01
Foreign bonds	0.05	0.05	0.07	0.08	0.04	0.02	0.06	0.04	0.03	0.03
Domestic equities	0.02	0.03	0.03	0.03	0.02	0.02	0.03	0.01	0.01	0.01
Foreign equities	0.05	0.05	0.05	0.04	0.03	0.04	0.04	0.01	0.01	0.03
Alternative assets	—	—	—	0.14	0.23	0.14	0.11	0.09	0.07	0.06
Average balance (¥trillion)	131.9	139.0	137.3	155.7	158.9	161.4	170.2	193.1	196.3	223.1

(Note 1) Total includes in-house investment assets and index licensing fees.

(Note 2) The average balance includes in-house investment assets. For investments in FILP funds held until fiscal 2020 and managed in-house, average monthly book values calculated by the amortized cost method are used.

(Note 3) Foreign bonds include JPY hedged foreign bonds.

2 | Overview of the Policy Asset Mix

[1] What is the policy asset mix?

In a long-term investment, it has been found that 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 this regard, most of the long-term investment results are determined by the policy asset mix.

GPIF manages assets based on a predetermined policy asset mix, with the aim of securing levels of yield required for pension finance with minimal risks over the long term. Since the market is constantly fluctuating, however, we have established a permissible range of deviation from the policy asset mix, as a mechanism to enable flexible investment within a reasonable range while still following the policy asset mix.

When establishing the policy asset mix, first, it is necessary to determine the asset classes that will meet our

investment objectives. It is common to categorize assets from perspectives such as different sources of returns, different risk characteristics, and low correlation between assets. The current GPIF policy asset mix consists of four asset classes: domestic bonds, foreign bonds, domestic equities, and foreign equities. After determining asset classes, it is common to use the expected returns and risks of each asset to define a policy asset mix that meets the investment objectives and risk constraints. After determining asset classes, GPIF estimates the expected return and risk of each asset based on generally accepted expertise related to asset management and investment, then sets investment objectives and risk constraints for a policy asset mix that “achieves the return on investment necessary for pension finance with minimal risks over the long term.”

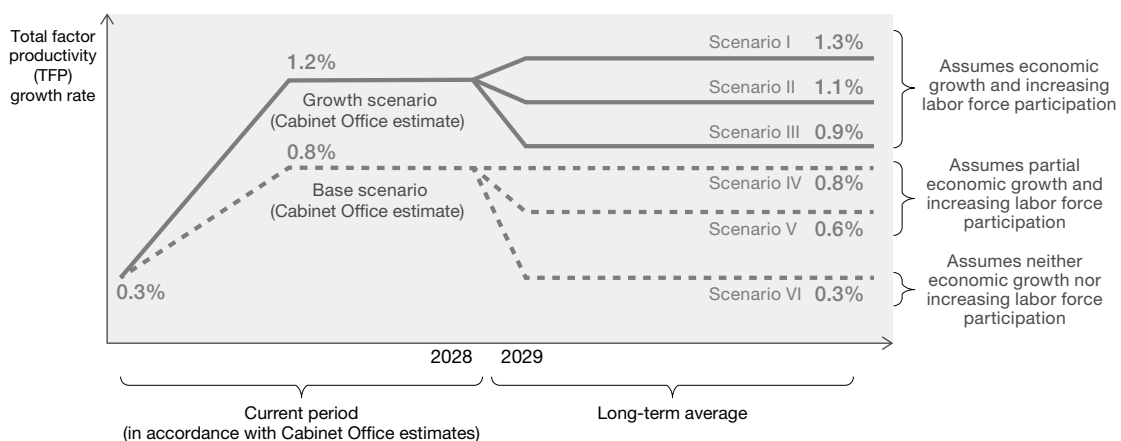
[2] Background of the formulation of the policy asset mix

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 declining 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 to future generations.

Under this framework, the Ministry of Health, Labour and

Welfare (MHLW) 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. Target return on investments of the reserve fund was built upon this result.

Economic assumptions in the financial verification



		Assumed future state of the economy		Economic assumptions				(Reference)
		Labor force participation rate	Total factor productivity (TFP) growth rate	CPI increase rate	Real wage growth rate (adjusted for CPI)	Rate of return on investment		Real economic growth rate from FY2029 20–30 years
						Real (adjusted for CPI)	Spread (adjusted for wages)	
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:
<https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/nenkin/nenkin/zaisei-kensyo/index.html>.

[3] Current policy asset mix (From April 2020)

GPIF establishes the policy asset mix formed by the target allocation to each asset class, and manages portfolio within deviation limits.

The current policy asset mix, which started in April 2020, shall meet the investment objective, 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 current policy asset mix and previous policy asset mix, refer to the website: <https://www.gpif.go.jp/gpif/portfolio.html>. (Japanese only)

【Current 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) are classified into domestic bonds, domestic equities, foreign bonds, and foreign equities based on their risk and return profiles, and are 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 within 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	—

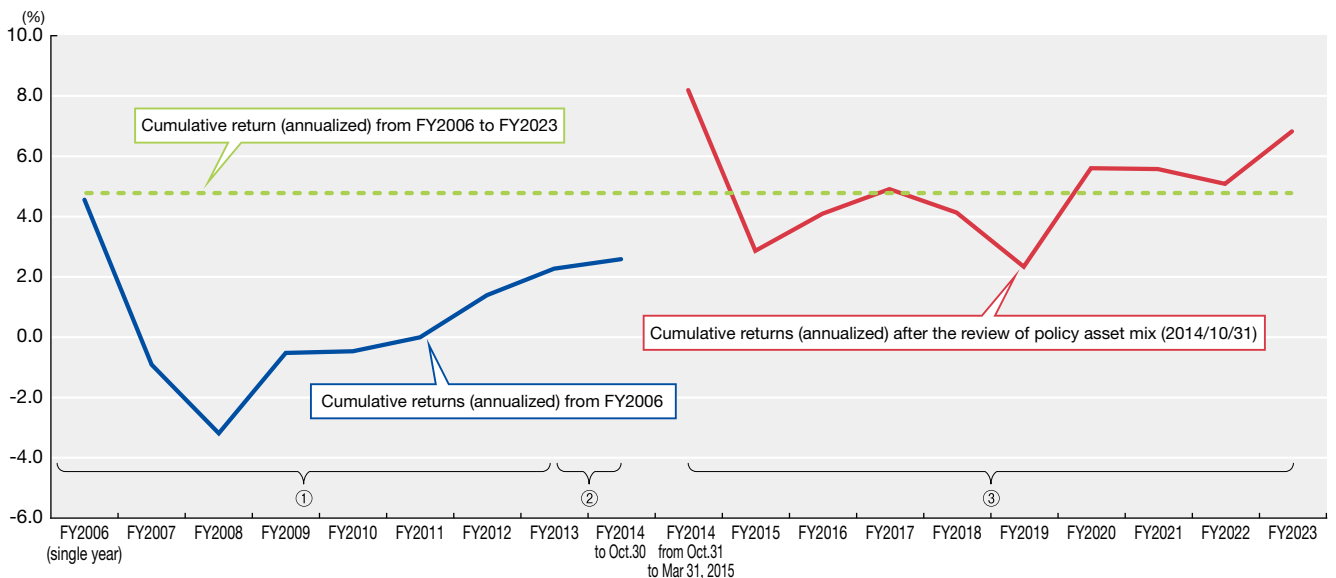


(October 2014–March 2020)

(Unit: %)

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

Comparison of cumulative returns (annualized)



(Note 1) In fiscal 2014, the allocation to bonds and equities was revised to 50% respectively after the review of the Policy Asset Mix. From the viewpoint of continuity, the average from fiscal 2006 and the average from October 31, 2014 are presented separately.

(Note 2) The numbers (① to ③) correspond to the following periods: ① 20% equities (April 2006 to June 2013); ② 24% equities (June 2013 to October 2014); and ③ 50% equities (October 2014 onward).

(Note 3) For a review of rates of investment return on a single fiscal year basis, refer to page 30.

[4] Details of policy asset mix formulation

① Considerations in the Medium-term Objectives

The 4th 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:

- Based on the results of the financial verification, GPIF formulates and manages 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 minimal risks.
- The policy asset mix must be formulated from a long-term perspective and it should incorporate generally recognized investment expertise as well as domestic and overseas economic trends, in light of forward-looking risk analysis.
- The downside risks of underperforming the nominal wage growth rate should not exceed that of 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 policy asset mix.

- 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 account the equilibrium return deemed intrinsic to market capitalization.
- Current policy benchmarks ^(Note) were used to estimate expected returns, risks and correlations. 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.
- 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.
- 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.
- The risk constraint used in the optimization included the requirement that the risks of the 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, just the same as before. GPIF also used the average short fall rate in case the return is below the nominal wage increase (conditional average shortfall rate) in order to measure the risks when optimizing the portfolio.
- Looking at the reserve 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 reserve 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 after the peak. Given that, GPIF analyzed reserve assets trends based on the policy asset mix over the next 50 years, and compared them with planned reserve assets within the financial verification.
- Furthermore, in light of the current low interest rates, 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.

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)

(Note) GPIF refers to a benchmark used for the policy asset mix formulation as a policy benchmark. The policy benchmarks used for each asset classes are as shown. Please note that, however, although the Chinese government bonds have been gradually included in the FTSE World Government Bond Index from October 2021, GPIF has decided not to invest in Chinese government bonds for the time being, based on reasons such as the fact that settlement with international settlement systems is not possible. Accordingly, GPIF currently uses the index that excludes Chinese government bonds as its policy benchmark for foreign bonds.

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

GPIF projected the expected return of domestic bonds by the average rate of return calculated from the simulation of bond investment (which assumes future long-term interest rates scenarios) combined with the equilibrium rate of return ^(Note1) deemed intrinsic to market capitalization. To estimate expected returns on domestic equities, foreign bonds, and foreign equities, GPIF used a building block method ^(Note2) 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 the 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 on the upper row indicate real returns, those in brackets on the lower row indicate nominal returns with wage growth rate.

④ Standard deviation and correlation of each asset class

GPIF estimated the risks and correlations of each asset class by using the annual data of the policy benchmarks for the 25 years after the bubble economy collapsed in Japan (i.e. the period from 1994 to 2018).

[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 in combining several different assets with different risk-return profiles is the weighted average of the expected returns of individual assets, while the 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 the website: <https://www.gpif.go.jp/gpif/> (Japanese only).

⑤ Selection of policy asset mix

We selected the 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 be 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 that meets the investment objective (nominal wage growth rate plus 1.7%) with ‘the lower partial probability’ smaller than that of all-domestic-bond portfolio, and the smallest “conditional average shortfall rate.”

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

[Current policy asset mix profile]

(Unit: %)

Real return	Nominal return	Standard deviation	Lower partial probability	Conditional average shortfall rate	
				Normal distribution	Empirical distribution <small>(Note)</small>
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
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(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 25-year period from 1994 to 2018.

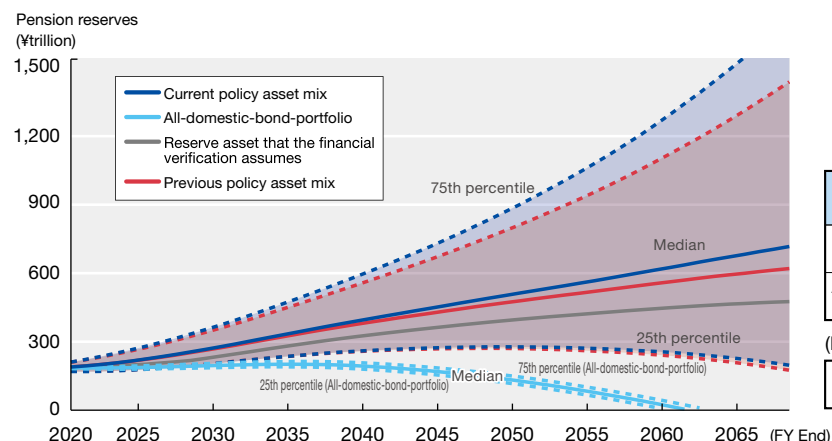
⑥ Risk verification for formulating the current policy asset mix

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 current policy asset mix.

Results indicate that the probability where fund size falls below the planned level has declined compared to the former policy asset mix. Meanwhile, a simulation shows that the amount of pension reserves with an all-domestic-bond portfolio resulted in always smaller than the amount of the planned reserve assets.

From the above-mentioned overall perspectives with the aspects of lower partial probability and conditional average shortfall rate, this policy asset mix is the most efficient portfolio to meet the investment objective while minimizing downside risk.

Comparison with planned reserve



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)
Current policy asset mix	38.1	39.8
All-domestic-bond-portfolio	100.0	100.0

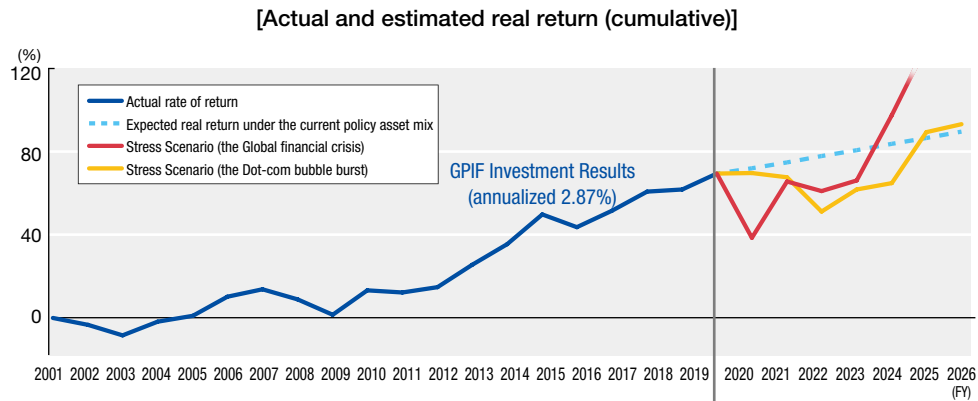
(Reference) (Unit: %)

Previous policy asset mix	40.0	43.0
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⑦ Implementation of stress tests in fiscal 2019 for formulating the current policy asset mix.

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 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.



- 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 global financial crisis would occur once every 70 years, while that similar to 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 December 31, 2019.

(Column) Reference asset mix

Since the integration 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, 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

[5] Policy asset mix verification

① Verification policy stipulated in the Medium-term Plan

Verification of the policy asset mix at GPIF will be conducted in a timely and appropriate manner during the period of the 4th Medium-Term Objectives and, when deemed necessary by the Board of Governors (e.g., if there

is possibility of significant changes in the investment environment), a review will be considered and revisions will be promptly implemented as necessary.

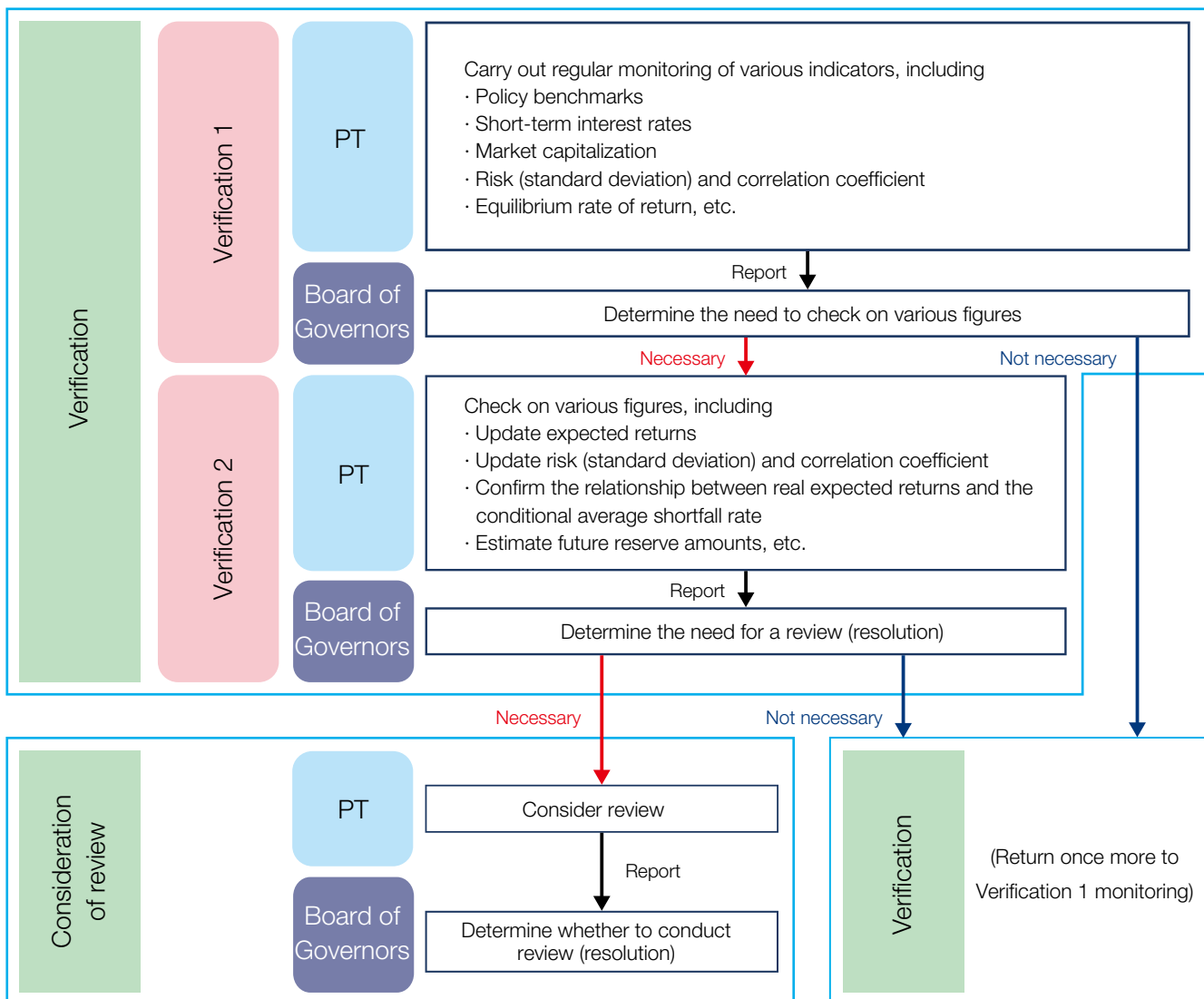
② Verification system

To verify the policy asset mix at GPIF in a timely and appropriate manner, a Project Team (PT) for Policy Asset Mix Verification has been established under the Board of Governors to carry out practical tasks pertaining to

policy asset mix verification. The PT comprises members of the Board of Governors who have expertise in finance and economics.

③ Verification method

Verification is performed in two stages: Verification 1 and Verification 2, as illustrated below.



*The PT in the figure above is the "Project Team for Policy Asset Mix Verification"

a. Verification 1

- GPIF's policy asset mix is formulated from a long-term perspective and is based on the twenty five years of data including (1) policy benchmark return, (2) short-term interest rates, (3) the most recent market capitalization at the time the policy asset mix was formulated, and (4) the risk (standard deviation), correlation, and the equilibrium rate of return, all of which are calculated from these (1) (2) (3). The PT regularly monitors these various indicators that were used as the basis for formulating this policy asset mix.
- If changes are observed in these indicators in the course of periodic monitoring and it appears the investment environment may have changed significantly from which has been presumed when the portfolio was formulated, the PT will report such changes to the Board of Governors.

b. Verification 2

- If the PT reports the changes in various indicators and that the investment environment may have changed significantly from which has been presumed when the portfolio was formulated, the Board of Governors shall determine whether to conduct a Verification 2 with checking the updated expected return, the risk (standard deviation) and correlation coefficient, confirming the relationship between real expected return and the conditional average shortfall rate, and estimating future reserves, etc.
- If it is determined that a Verification 2 should be conducted, the PT will carry out the Verification 2 tasks and report the results to the Board of Governors.
- The Board of Governors will determine whether to consider a review of the policy asset mix based on the report by the PT.
- Based on the Board of Governors' determination, if determined to be necessary, the PT will consider whether to review the policy asset mix, and the PT reports the outcome of its consideration to the Board of Governors.
- The Board of Governors will promptly revise the policy asset mix as necessary based on the results of the review consideration by the PT.
- Even if the regular monitoring (Verification 1) does not reveal any significant changes in the investment environment from which has been presumed when the policy asset mix was formulated, the PT will report the status of monitoring to the Board of Governors at least once a year.

④ Outcome of Verification in fiscal 2023

Verification 1 conducted in fiscal 2023 concluded that the investment environment had not necessarily changed significantly from which had been presumed when the policy asset mix was formulated, so it was determined that

neither Verification 2 (checking various figures such as updating expected returns), nor a review of the policy asset mix were necessary.

3 | 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 by safe 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 the minimal risk.

Amid heightened uncertainties about the recent market and economic environments, 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.”

In a long-term investment, it has been found that 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. GPIF adopted the new policy asset mix in fiscal 2020. 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 the entire portfolio, individual asset classes, and individual asset managers, respectively. At the same time, we ensure the achievements of the benchmark rates of return for the entire portfolio as well as for each asset class by monitoring various indicators 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.

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 economic trends, financial market conditions, 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 be reported to the Board of Governors. As such, we implement appropriate measures considering 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 the level of the entire portfolio, individual asset classes, and individual asset managers, respectively, 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 considering the 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 portfolio risk]

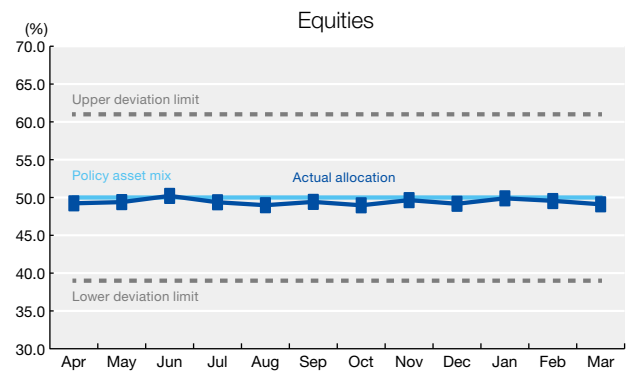
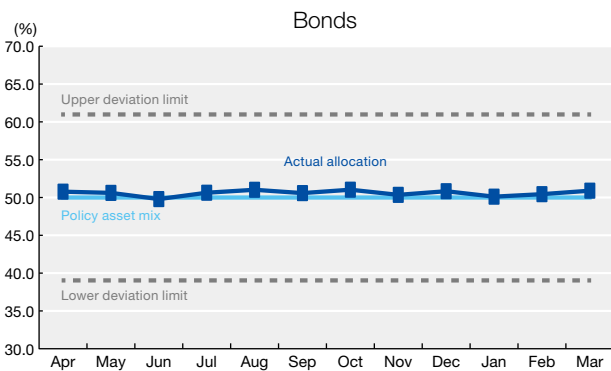
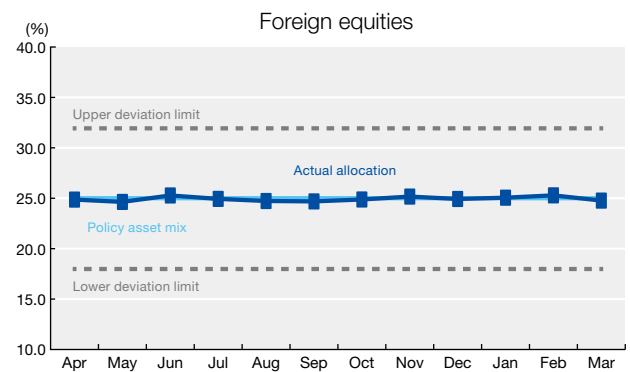
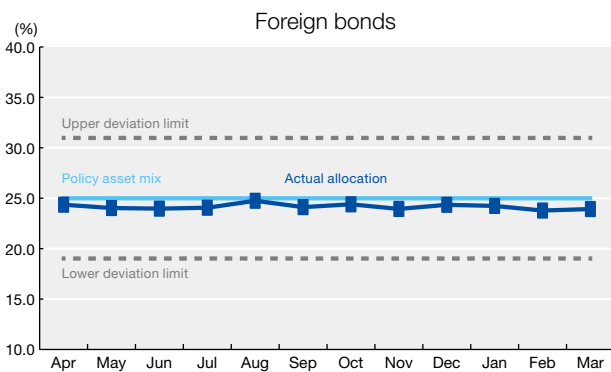
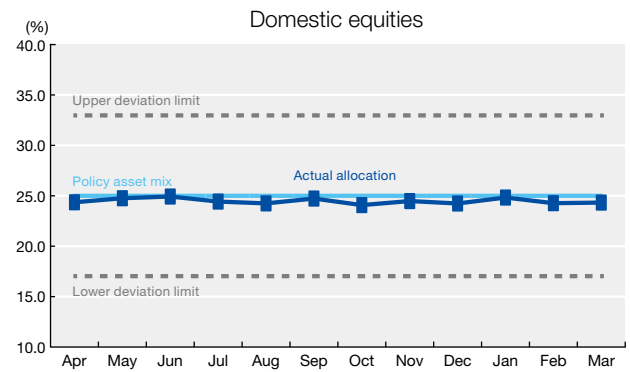
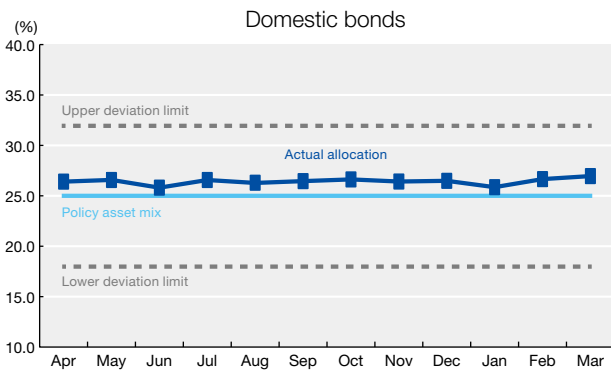
Market risk	The risk of changes in the value of portfolio assets, including derivatives, due to fluctuations in various market risk factors such as interest rates, foreign exchange rates, equities, and alternative assets
Liquidity risk	The risk of facing a difficulty in securing the necessary funds or 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, caused by factors such as deterioration in the financial position of issuers of the portfolio assets, institutions entrusted with asset management 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

GPIF believes that the most important aspect of portfolio risk management 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 following the policy asset mix. Accordingly, GPIF flexibly manages the policy asset mix within deviation limits defined for each of four types of assets—domestic bonds, foreign bonds, domestic equities, and foreign equities—as well as overall bonds and

overall equities. At the same time, GPIF establishes alarm points within deviation limits in order to smoothly and appropriately manage its asset allocations, and stipulates a responsive process in the event of exceeding the deviation limits or alarm points. While the upper limit for alternative assets is set as 5% of the total assets, we have also established alarm points for these assets and expressly specify a process for responding in the event that these limits are exceeded. During the fiscal 2023, no assets exceeded the deviation limits or alarm points.

[Management of deviation limits]



(Note 1) Asset allocation is calculated by monthly average balance and includes reserves managed in the Pension Special Account.
 (Note 2) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.
 (Note 3) The deviation limits under the 4th Medium-term Plan are $\pm 7\%$ for domestic bonds, $\pm 6\%$ for foreign bonds, $\pm 8\%$ for domestic equities, $\pm 7\%$ for foreign equities, $\pm 11\%$ for overall bonds, and $\pm 11\%$ for overall equities.

In addition to risk management with the above-mentioned deviation limits and upper limit established for alternative investment, we continue to monitor estimated tracking errors (Note1) of the overall assets and VaR ratio as indicators from a multitiered risk management perspective.

In fiscal 2023, the vulnerability of the financial system due to the side effects of monetary tightening was recognized. On the other hand, expectations for a soft landing of the economy rose even amid high inflation, and stock markets in Europe and the United States remained firm. In such circumstances, we maintained a low rate of estimated tracking errors of the overall assets at 14-29bp (1bp refers to 0.01%), as a result of careful measures to ensure that we do not deviate from the compound benchmark return of the policy asset mix.

VaR ratio is obtained by dividing VaR (Note2) for the actual

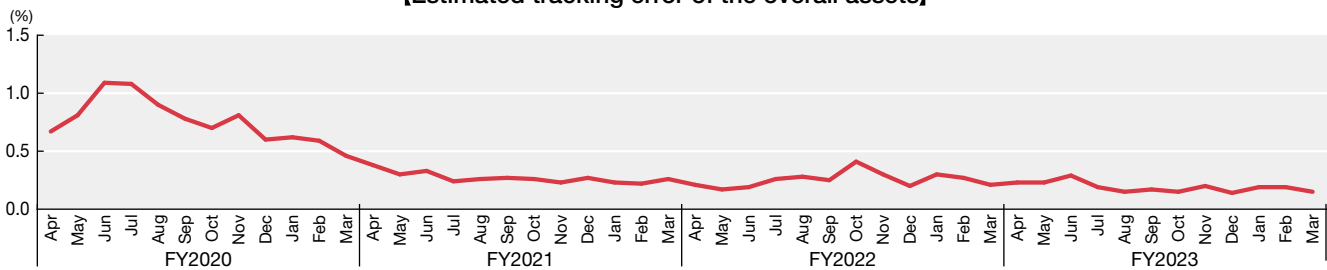
asset mix by VaR for the policy asset mix, an indicator for monitoring as to what extent the risk amount of the actual portfolio deviates from that of the policy asset mix.

In fiscal 2023, GPIF managed its asset allocation to ensure that the actual amount of risk in the portfolio did not deviate from the amount of risk that would have been taken had it been investing in the policy asset mix, regarding the amount of stock price risk and foreign exchange risk, which are the major market risks. In addition, with credit spread of corporate bonds and other assets approaching a tighter level than in the past, we reduced risk by decreasing the amount of passive corporate bond funds in preparation for future spread widening, and kept alternative risk at a relatively low level. As a result, the VaR ratio ranged between 1.00 and 1.02.

(Note 1) The estimated tracking errors are the ranges of returns that could be earned in the future at a given probability. These ranges are calculated with analysis tools, estimated by using statistically estimated mutual dependencies between securities in the portfolio.

(Note 2) VaR indicates the largest loss likely to be suffered for individual assets assuming a certain holding period with a given probability (confidence level).

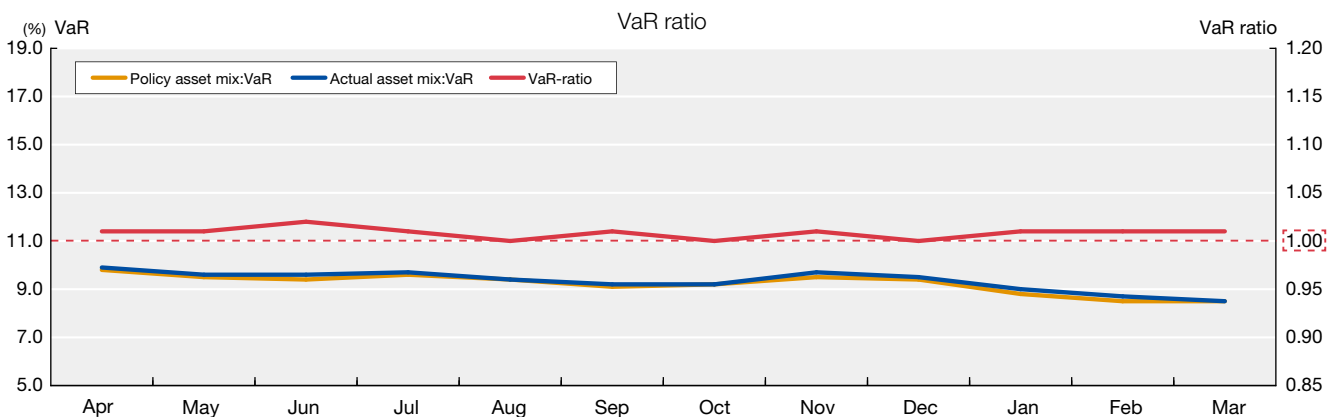
[Estimated tracking error of the overall assets]



(Note 1) The figures of each month are calculated by monthly average.

(Note 2) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

[VaR ratio and VaR]

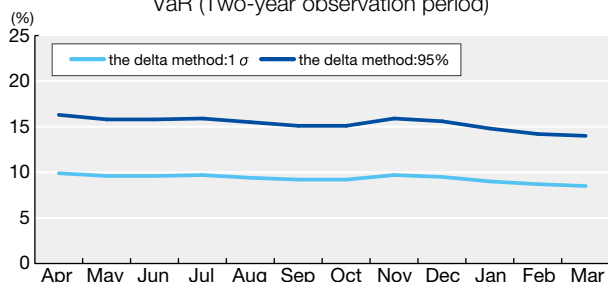


(Note 1) VaR is calculated using the delta method based on the 1σ confidence level over a one-year holding period and two-year observation period.

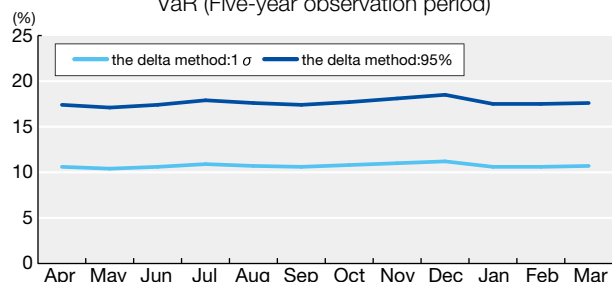
(Note 2) The figures of each month are calculated by monthly average.

(Note 3) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

VaR (Two-year observation period)



VaR (Five-year observation period)



(Note 1) 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).

(Note 2) The figures of each month are calculated by monthly average.

(Note 3) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

[3] 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. Considering these profiles, the inclusion of alternative assets in GPIF’s portfolio is expected to generate diversification effects and capture excess returns.

Accordingly, GPIF has increased investments in alternative assets since fiscal 2017. To fulfill the need for

target asset-specific expertise, risk management in alternative assets covers assessment items specifically required for in alternative investments, in addition to those common to traditional assets.

GPIF has established the necessary systems and is promoting initiatives aimed at comprehensive and detailed risk management. For details of these initiatives, refer to page 66.

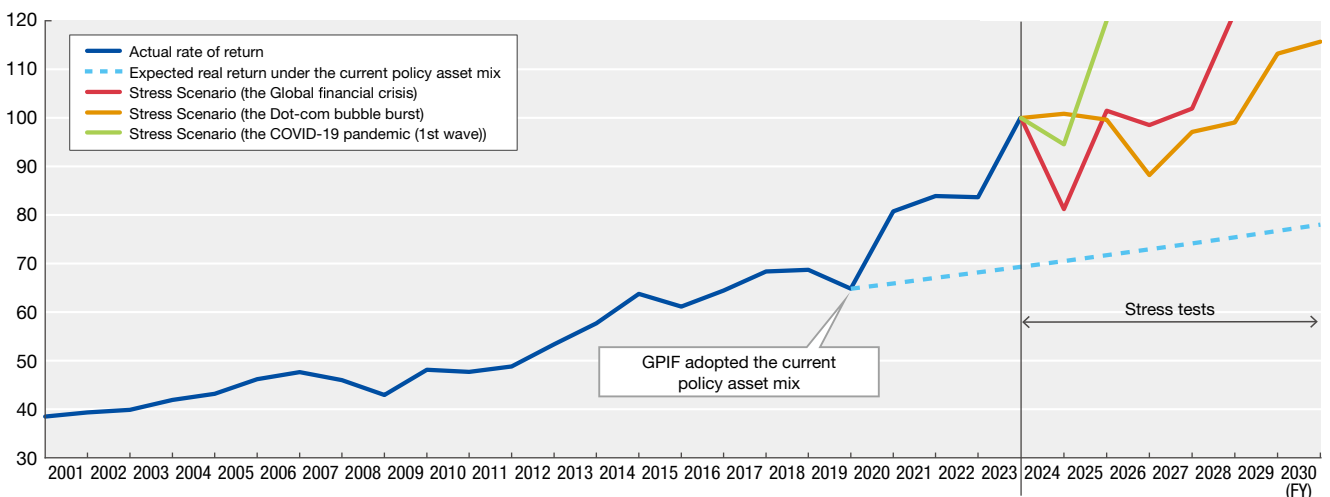
[4] Risk management from a long-term perspective

① Stress tests

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.

It is essential that pension fund shall be managed safely and efficiently from a long-term perspective, and GPIF analyzes the impacts that might arise over the medium-to-long term. For a number of scenarios—the Global financial

crisis scenario (2008-2009) in which the market fell sharply, the Dot-com bubble burst scenario (2001) in which the market was slow to recover, or a market decline scenario due to the COVID-19 pandemic (the first wave)—there were temporary impacts on the real investment yield obtained since the start of market investments, but the markets recovered thereafter and the expected level of investment yield was secured.

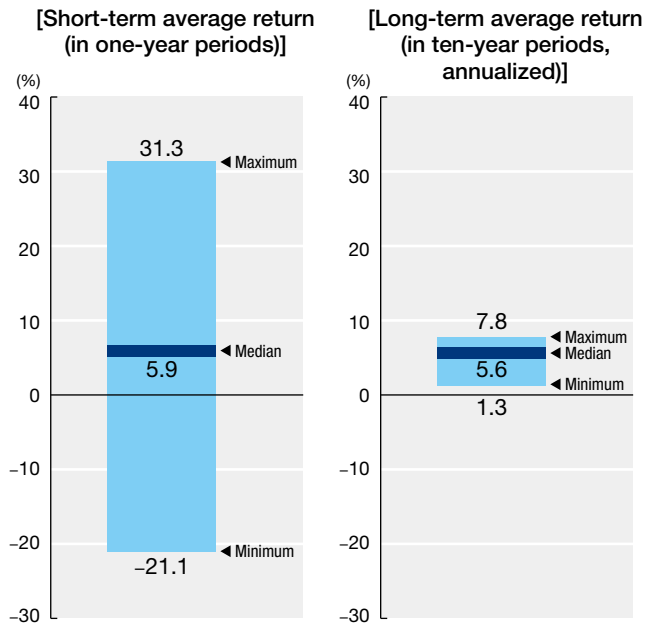


(Note 1) The investment results in the figure show a cumulative rate of investment return since 2001 (real return (net investment yield on the pension reserve fund less the nominal wage growth rate)).

(Note 2) The vertical axis represents indexed numbers of a cumulative rate of return based on the starting point of the stress test (the actual rate of investment return as of Mar. 31, 2024) as 100.

② Verification of risk reduction through long-term investment

In analyzing portfolio returns based on historical data, GPIF analyzed the distribution of returns by the current policy asset mix using the market's actual performance over the past 34 years. We found that, in the short term, there was a maximum single-year gain of over +30% and a maximum single-year loss of over -20%, suggesting the possibility of a temporary loss equivalent to the record-high earnings of fiscal 2023. However, returns are stable over the long term, and not a single ten-year period over the past 34 years has been negative. The policy asset mix was created to ensure 1.7% real return over the long term. We should not be overly preoccupied with market fluctuations. Nevertheless, GPIF envisions a variety of stresses that could occur in the near future and gives due consideration to such short-term risks in order to manage investment risks over the long term.



(Note 1) Average returns are calculated on the presumption of a rebalancing to the current policy asset mix at the end of each fiscal year.
 (Note 2) The analyzed period spans 34 years from April 1985 to March 2019.

③ ESG investment expected to reduce risks from a long-term perspective

Given the fact that the law requires pension reserve fund should to be managed safely and efficiently from the long-term perspective, risk management based on the long-term perspective is further important for GPIF.

GPIF engages in ESG investment in order to reduce the negative externalities of environmental and social issues, etc., on capital markets, and thus improve the sustainable

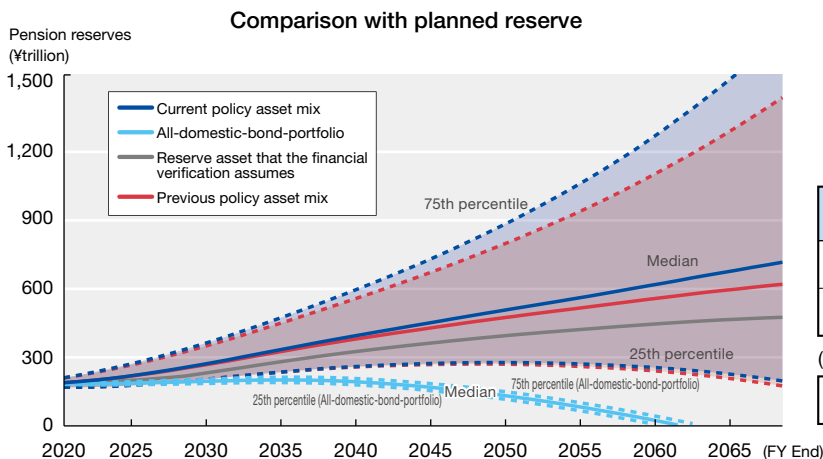
return from the whole assets, as GPIF is a “Universal owner” and “Cross-generational investor.” We recognize that the longer the investment period, the more likely it is that ESG risks, such as climate change risks, will materialize. Accordingly, we believe that GPIF’s focus on investment that takes ESG into consideration is highly meaningful.

④ 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 current 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 downside risks, while meeting investment objectives.

(Note) For details of the current policy asset mix, refer to pages 34-42.



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)
Current 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
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4 | Status of Investment in Each Asset Class

[1] Domestic bonds

Excess rate of return

Concerning domestic bond investment in fiscal 2023, the excess rate of return over the benchmark ^(Note1) was

+0.20%. The yen interest rate factor, inflation-indexed government bonds, and other factors contributed positively.

(Unit: %)

Time-weighted rate of return ①	Benchmark ②	Excess rate of return ①—②	Benchmark factors	Fund factors	Other factors
-2.00	-2.20	+0.20	+0.05	+0.11	+0.04

(Note 1) The benchmark of domestic bonds is NOMURA-BPI (excluding ABS).

(Note 2) Benchmark factors refer to those resulting from differences in the rates of return between manager benchmarks and the benchmark (NOMURA-BPI (excluding ABS)).

(Note 3) Fund factors refer to those resulting from differences in rates of return between individual funds and manager benchmarks.

(Note 4) Other factors refer to calculation errors and such.

(Note 5) Income from securities lending investment is classified into other factors.

(Note 6) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

[2] Foreign bonds

Excess rate of return

Concerning foreign bond investment in fiscal 2023, the excess rate of return over the benchmark ^(Note1) was

+0.51%. Credit factors of foreign bonds and other factors contributed positively.

(Unit: %)

Time-weighted rate of return ①	Benchmark ②	Excess rate of return ①—②	Benchmark factors	Fund factors	Other factors
+15.83	+15.32	+0.51	+0.38	+0.11	+0.02

(Note 1) The benchmark of foreign bonds is FTSE World Government Bond Index (not incl. JPY, CNY, no hedge/JPY basis).

(Note 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, CNY, no hedge/JPY basis)).

(Note 3) Fund factors refer to those resulting from differences in rates of return between individual funds and manager benchmarks.

(Note 4) Other factors refer to calculation errors and such.

(Note 5) Income from securities lending investment is classified into other factors.

(Note 6) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

[3] Domestic equities

Excess rate of return

Concerning domestic equity investment in fiscal 2023, the excess rate of return over the benchmark ^(Note1) was +0.07%. ESG passive investment contributed positively,

while existing active investment and alternative assets contributed negatively.

(Unit: %)

Time-weighted rate of return ①	Benchmark ②	Excess rate of return ①—②	Benchmark factors	Fund factors	Other factors
+41.41	+41.34	+0.07	+0.46	-0.35	-0.04

(Note 1) The benchmark of domestic equities is TOPIX (incl. dividends).

(Note 2) Benchmark factors refer to those resulting from differences in rates of return between manager benchmarks and the benchmark (TOPIX (incl. dividends)).

(Note 3) Fund factors refer to those resulting from differences in rates of return between individual funds and manager benchmarks.

(Note 4) Other factors refer to calculation errors and such.

(Note 5) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

[4] Foreign equities

Excess rate of return

Concerning foreign equity investment in fiscal 2023, the excess rate of return over the benchmark ^(Note1) was -0.57%.

The new active portfolio contributed positively, while alternative assets contributed negatively.

(Unit: %)

Time-weighted rate of return ①	Benchmark ②	Excess rate of return ①—②	Benchmark factors	Fund factors	Other factors
+40.06	+40.63	-0.57	+0.06	-0.63	+0.00

(Note 1) The benchmark of foreign equities is MSCI ACWI (not incl. JPY, JPY basis, incl. dividends, before taking into account GPIF dividend tax factors).

(Note 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, before taking into account GPIF dividend tax factors)).

(Note 3) Fund factors refer to those resulting from differences in rates of return between individual funds and manager benchmarks.

(Note 4) Other factors refer to calculation errors and such.

(Note 5) Income from securities lending investment is classified into other factors.

(Note 6) The calculation of figures is based on transaction date and does not take notional amount of stock index futures and other factors into account.

[5] Investment Initiatives by Fiscal 2023

① Reconstruction of Active Equity Fund Portfolios

In the selection of asset managers (funds) for active equity management, a new scientific framework focusing on the consistency and stability of excess returns has been introduced, in addition to the existing qualitative selection method. Specifically, in fiscal 2021, GPIF began restructuring the manager structure for active funds in both Japanese and foreign equity assets, thereby rebuilding the active equity fund portfolios.

This investment process, which utilizes the new

framework, has two main features. First, it selects funds with strong consistent skills that are not dependent on specific styles (e.g., Value/Growth, Large Cap/Small Cap) or market beta (overall stock market trends). The second is to utilize a completion portfolio called a “Beta Balancer”, which stabilizes the overall active equity fund portfolios while capturing the added value derived from the skill of the active managers.

A. Active Fund Selection Methodology and Process

When constructing active fund portfolios, it is crucial to identify which funds will deliver superior risk-adjusted returns after being selected. This is because past success does not guarantee future performance.

In selecting active funds, GPIF places a strong emphasis on the stability and consistency of excess returns. The traditional analysis of excess returns relative to benchmarks is heavily influenced by various factors and market fluctuations. As a result, when evaluating a fund, not only the effects of stock selection by the portfolio manager (pure alpha) are considered, but also the influence of market beta, which poses a challenge.

To address this, GPIF has introduced a methodology to extract style-adjusted alpha, which aims to minimize the influence of market beta, and utilizes a quantitative analysis approach to assess the stability and consistency of a fund's style adjusted excess returns. Advanced statistical methods are adopted to estimate the potential future return that the fund is likely to generate.

For instance, in recent years, large-cap stocks have dominated the U.S. market. As a result, if a fund focused on small- to mid-cap stocks is evaluated using a typical benchmark that includes large-cap stocks, the portfolio manager's skills may be underestimated due to the recent strong performance of large-cap stocks. However, in reality, the portfolio manager might have generated sufficient excess returns within its intended investment universe, which can be captured through skill evaluation after adjusting for style. On the other hand, large-cap stocks that are not the primary investment focus of the fund can be complemented by a “Beta Balancer (passive fund)”, allowing the portfolio managers to concentrate on their area of expertise.

This methodology is not limited to the final stage of fund selection, but is also used for initial screening of a broad range of funds. In order to comprehensively examine as many funds as possible and identify outstanding funds, GPIF analyzes hundreds to thousands of names of funds' holdings, followed by a more detailed quantitative evaluation of the shortlisted funds. Given the enormous computational requirements, GPIF is also enhancing the IT infrastructure that supports this process.

B. Portfolio Construction

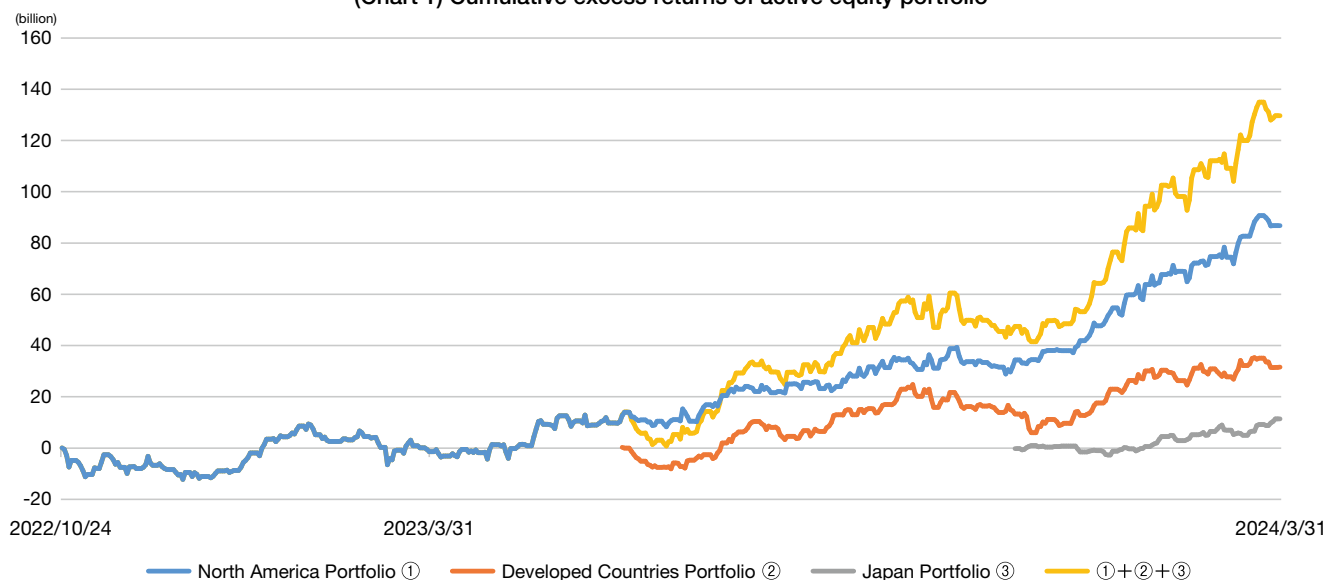
In fund-of-funds management, it is common to manage the overall exposure of the fund group. However, in the construction of GPIF's active equity portfolios, the exposure is managed based on the investment universe targeted by each fund.

When constructing an active portfolio, in addition to the qualitative analysis of the selected active funds, an optimization process is conducted that considers portfolio managers' skill evaluation and the intended investment universe, and the exposure of the Beta Balancer. This approach removes various beta influences and continuously adjusts any portfolio imbalances without sacrificing the portfolio managers' ability to generate excess returns.

Moreover, GPIF's active investing portfolio aims to incorporate as many capable funds as possible. While there is a dilemma that increasing the number of funds might lead the portfolio closer to an index portfolio, it is expected that this dilemma can be mitigated to some extent through the framework of skill evaluation after style adjustments and the utilization of the Beta Balancer. The goal is to combine numerous active funds to sufficiently diversify the sources of excess returns (active return) while maintaining a low level of active risk, which is the risk amount relative to the policy benchmark that constitutes the policy asset mix.

Through these efforts, by the end of March 2024, GPIF constructed an active equity and balancer portfolio exceeding 10 trillion yen across three regions: North America, Developed Market, and Japan. These portfolios generated approximately 130 billion yen in excess returns total (see Chart 1). Risk levels were also managed conservatively, with the tracking error in each region remaining below 1% (see Chart 2). It is still too early to assess the stability of returns relative to risk, as the investment period is still short and the assessment and selection methodology need to be confirmed and verified on an ongoing basis. However, the information ratio (excess return per unit of risk) for the period was 1.93 for the two regions combined (North America and Developed Market), excluding the Japan portfolio.

(Chart 1) Cumulative excess returns of active equity portfolio



(Note 1) Excess returns are calculated as “actual market value of the portfolio minus the market value assuming that the portfolio is managed according to the benchmark.”

(Note 2) Benchmarks for each portfolio are as follows:

- ① North America Portfolio: MSCI North America (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)
- ② Developed Countries Portfolio: MSCI KOKUSAI (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)
- ③ Japan Portfolio: TOPIX (incl. dividends)

Chart 2 [Risk management for each portfolio]

North America and Developed Countries Portfolio (① and ②))			North America Portfolio ①			Developed Countries Portfolio ②		
Excess rate of return	Historical tracking error	Historical information ratio	Excess rate of return	Historical tracking error	Historical information ratio	Excess rate of return	Historical tracking error	Historical information ratio
1.41%	0.73%	1.93	1.81%	0.78%	2.32	1.42%	0.69%	2.06

(Note 1) Historical information ratio is calculated as excess rate of return (geometric mean, annualized)/historical tracking error (annualized).

C. Dialogues in the investment process of active equity funds

We believe that it is essential to conduct more multifaceted analysis on active equity funds in the future. As part of this, we are also investigating how dialogues and interviews are conducted by active equity fund managers with investee companies. Some asset managers make investment decisions solely based on published information, and, in principle, they do not conduct dialogue with investee companies. Dialogues and interviews, when conducted, are for various purposes; collecting information, expressing opinions for improving business management of investee companies, or both. The themes are also diverse, such as

corporate performance, business strategy, and ESG. In some cases, the procedures for dialogues are left to the discretion of analysts and portfolio managers, while in others, asset managers systematically monitor and control the progress of dialogues.

At GPIF, we would like to objectively investigate and analyze how dialogues are utilized in the investment processes from the perspective of obtaining excess returns, while taking into account the fact that the role of dialogues in the investment process of active equity funds varies depending on the investment styles.

② Enhancing the bond portfolio

During the 4th Medium-term Objectives Period, GPIF has been working to enhance the sophistication of investment management in both domestic bonds and foreign bonds so that risks in the overall portfolio can be more precisely

managed and linked to investment decision. Specifically, we have devised measures to directly control market risks related to currencies and interest rates in GPIF's portfolio and to improve risk adjusted return.

A. Domestic bonds

GPIF has reviewed the role of in-house funds for risk management in the perspective on domestic bond portfolio as a whole, which is difficult only by composition of external funds. In addition, we have improved risk adjusted return by reducing yen hedged foreign bonds and changing the composition of active funds.

(i) Managing interest rate risk in line with the policy asset mix

For domestic bonds portfolio, it is necessary to devise the duration management because we hold inflation-linked government bonds and yen cash with a duration shorter than that of policy benchmark, which is a component of the policy asset mix. In particular, fiscal 2023 was a year in which more difficult control was required because the allocation to domestic bonds increased significantly due to rebalancing in line with an increase in assets under management in GPIF as a whole. In order to proactively manage the interest rate risk of domestic bonds portfolio, which includes both external and in-house investment, we lowered the interest rate risk against the policy benchmark by conducting frequent transactions.

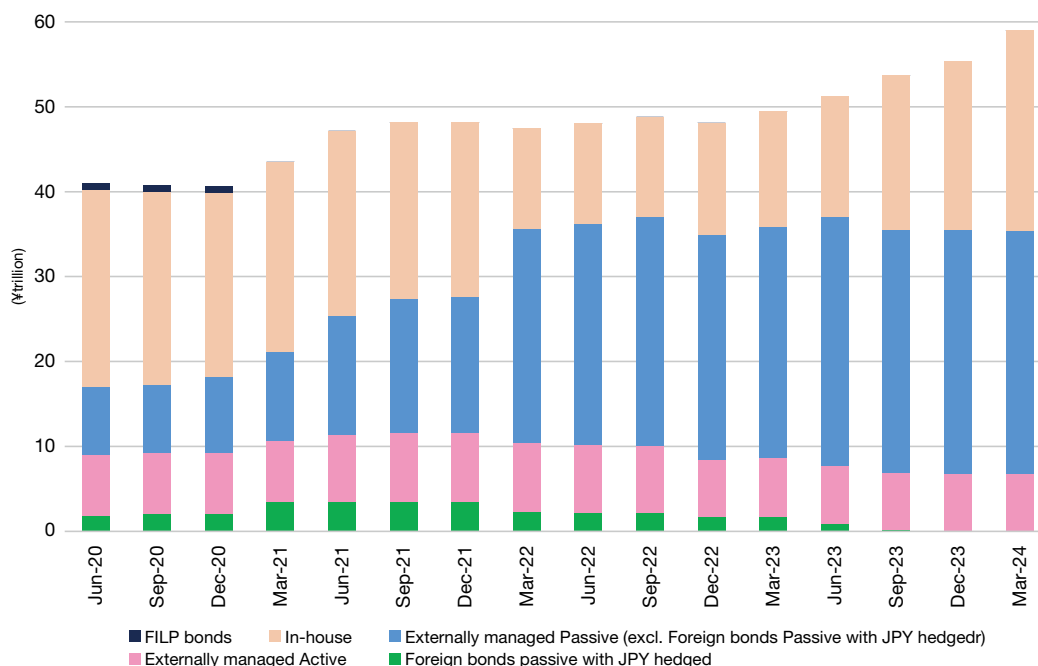
(ii) Reducing yen hedged foreign bonds

In GPIF, we managed yen hedged foreign bonds by classifying it as domestic bonds. However, in fiscal 2023, we reduced our investments to yen hedged foreign bond due to higher currency hedging costs and negative expected yields. In GPIF, we use yen hedged foreign bonds for currency hedging of alternative assets, so we continue to hold them to a certain extent.

(iii) Changes in active fund composition

Based on the risk-to-return characteristics of the entire active funds and the investment constraints of each fund, GPIF changed the active fund composition and realized an improvement in returns while keeping the amount of risk of the entire active fund at roughly the same level as before.

Balance by investment style (Domestic bonds)



(Note) It differs from "Investment Assets by Investment Method and by Manager, Etc." because it includes internal transactions for controlling currency risk of alternative assets.

B. Foreign bonds

GPIF took various measures to more precisely manage the amount of major risks and improve risk adjusted return. Specifically, we enhanced its passive fund lineup, terminated comprehensive active funds (investment in a wide range of regions and securities types) and selected specialized active funds (investment in a limited range of regions and securities types), reduced off-benchmark bonds in passive funds and reduced credit exposure of the entire portfolio. We also expanded its bond lending operations.

(i) Enhancing the passive fund lineup

In order to more precisely manage the risk of the entire portfolio, GPIF enhanced its passive fund lineup, including region-specific and maturity-specific government bonds, US inflation-linked government bonds and corporate bonds. As an example of risk management through these passive funds, we utilize them as receiver funds from comprehensive active funds, which were terminated (see (ii) below), enabling smooth transition under careful risk management.

(ii) Termination of comprehensive active funds

Comprehensive active funds were terminated because it became difficult for GPIF to control the risk amount of the entire portfolio due to the characteristics of investing in a wide range of regions and securities types at the discretion of managers.

(iii) Reduction of off-benchmark bonds in passive funds

With the aim of strengthening risk management, GPIF reduced investments in off-benchmark bonds (non-government bonds), which were limited to 10% of the outstanding balance of passive funds that benchmark government bonds.

(iv) Reduction of credit exposure

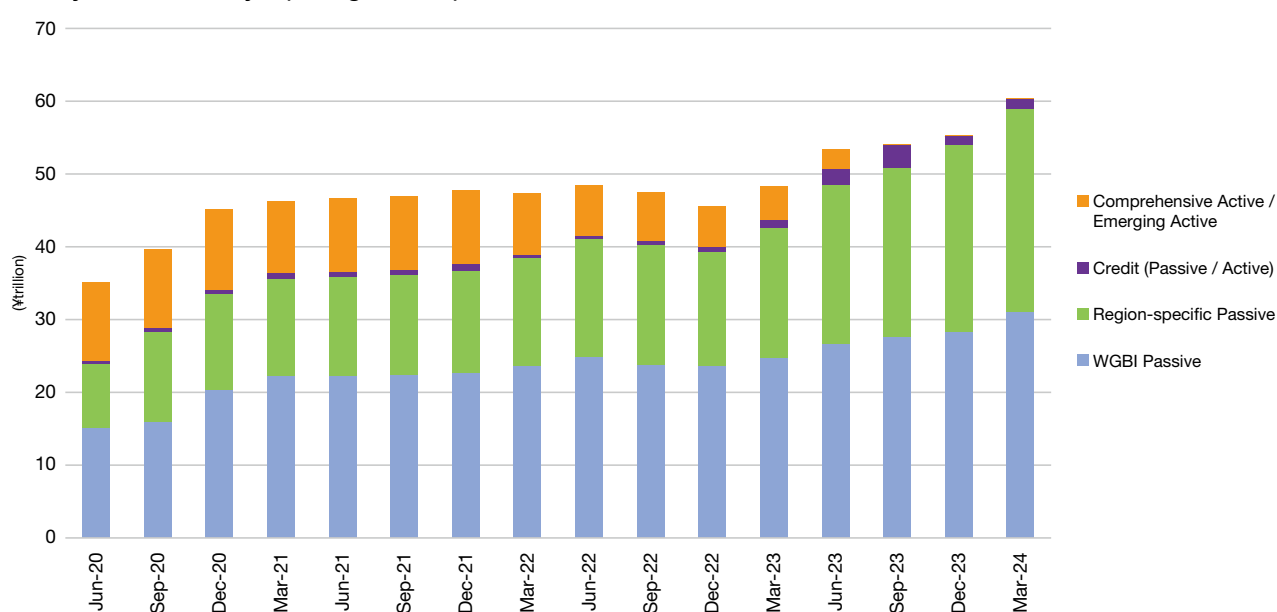
In fiscal 2023, due to heightened uncertainty in investment environment where major central banks had tightened monetary policies, GPIF reduced investment in corporate bond passive funds to lower the tracking error to policy benchmark consisting of government bonds.

(v) Changes in the composition of active funds and securities lending

In order to strengthen active fund portfolio management, GPIF selected new U.S. investment-grade corporate bond active funds using quantitative assessment (actual investment is scheduled to start in fiscal 2024). From the perspective of managing the risk of the entire portfolio, we selected funds that are expected to generate excess returns with a low correlation between (1) credit beta (the level observed in the market as the yield difference between investment-grade corporate bonds and government bonds) and (2) actual excess returns. In addition, by combining multiple funds, we have designed the active fund portfolio as a whole to generate a favorable risk adjusted return.

In the bond lending operations, in fiscal 2021, we reviewed the collateral received and lending term for risk management purposes. In fiscal 2023, we improved the risk adjusted return on securities lending by expanding the amount lent while assessing borrowers and lending term.

Balance by investment style (Foreign bonds)



(Note) Transition management and alternative assets are not included.

This figure differs from the figures for "Investment Assets by Investment Method and by Manager, Etc." because it includes internal transactions for controlling exchange rate risks of alternative assets.

Credits are the total of active and passive funds of U.S. investment-grade corporate bonds, U.S. high-yield corporate bonds, Euro investment-grade corporate bonds, and Euro high-yield corporate bonds.

5 | Investment in Alternative Assets

[1] Overview

Alternative assets are the generic term for investment assets that are “alternative” to traditional assets including listed equities and bonds. Among a variety of alternative assets, GPIF invests in infrastructure, private equity, and real estate. The 4th Medium-term Plan (from fiscal 2020 to fiscal 2024) stipulates alternative assets to be categorized

into domestic bonds, foreign bonds, domestic equities, and foreign equities in accordance with risk-return profiles, and to be invested up to a cap of 5% of the total portfolio.

(Note) See P.67 “Portfolio management based on the characteristics of infrastructure and real estate” for the classification of alternative assets.

① Investment purpose

Alternative assets have different risk-return characteristics from traditional investment targets such as listed stocks and bonds, and incorporating them into portfolios is expected to contribute to obtaining excess returns and stabilizing pension finances.

Unlike listed stocks and other securities, which many investors buy and sell on a daily basis, alternative assets require more time to close, while providing higher yields. As a long-term investor managing significant liquid assets, GPIF now strategically holds alternative assets with lower liquidity in the portfolio and aims to earn excess return with

improving the investment efficiency of its 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 the investment premium for illiquidity and improve the efficiency of investment through diversification.

Alternative Assets



② Investment history

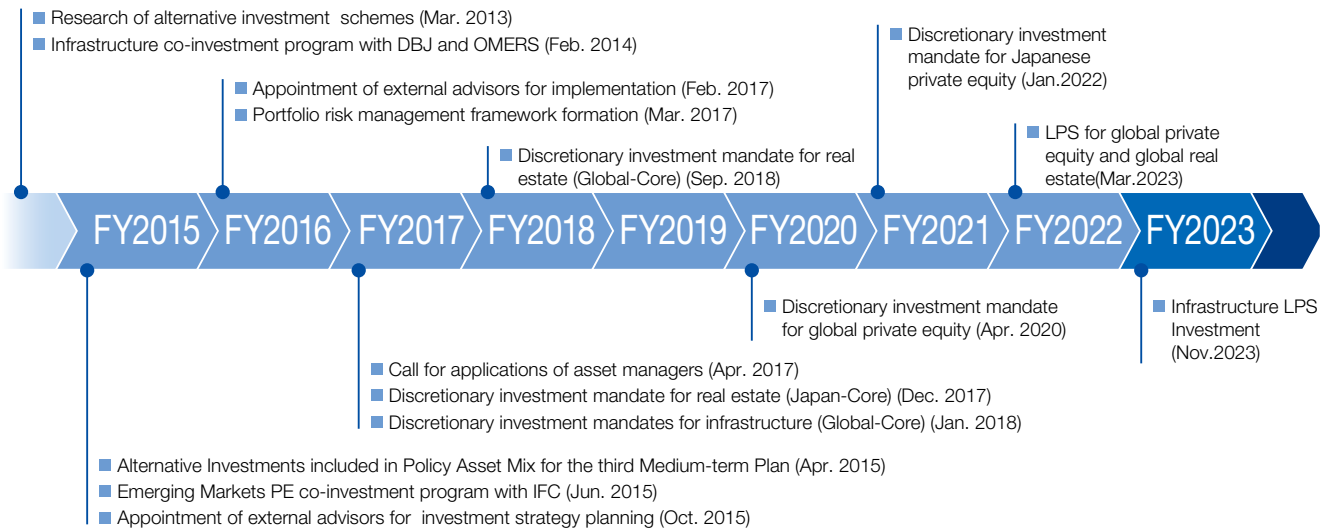
Based on the results of the above-mentioned commissioned research projects, GPIF has been investing in alternative assets through a co-investment platform with institutional investors since fiscal 2013 (in infrastructure since fiscal 2013 and in private equity since fiscal 2015).

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 (fund of funds managers who select multi-managers and gatekeepers who evaluate fund of funds managers' investment capabilities) for executing customized multimanager strategies* for GPIF. GPIF started investing in Investment Limited Partnerships/Limited Partnerships (LPS) in fiscal 2022 to enhance alternative asset management.

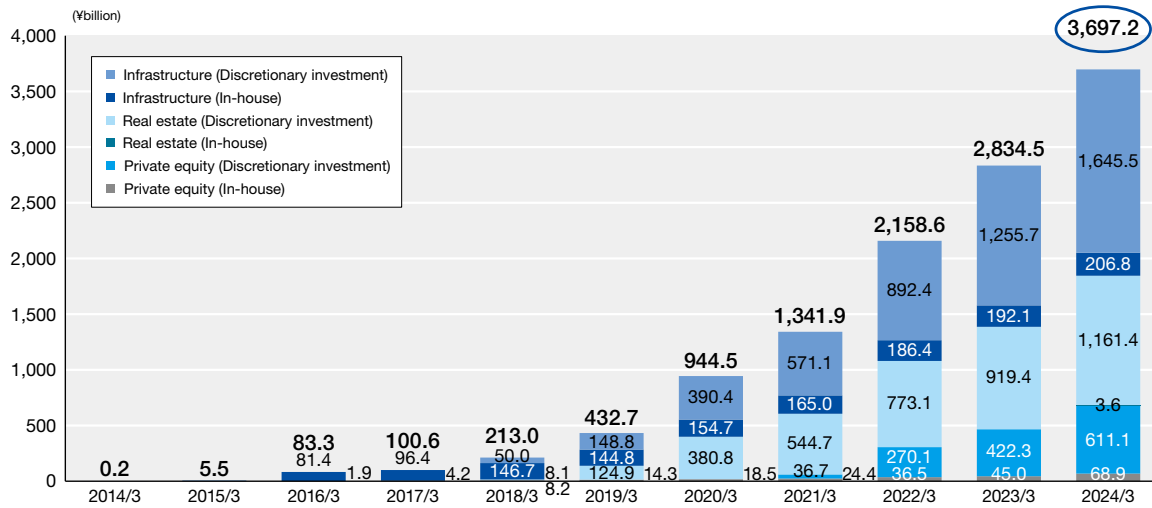
GPIF has worked continuously to develop the organization for investing in alternative assets by various

measures, such as 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.

* A multi-manager strategy is an investment approach to diversify the investment into multiple funds. A multi-manager strategy also called as a fund-of-funds, an investment vehicle where a fund invests in a portfolio composed of multiple other funds. GPIF selects external asset managers that execute multi-manager strategies for each investment style of alternative assets of GPIF, and gives discretion to the appointed external asset managers to make individual investment decisions.



Total value of alternative assets up until fiscal 2023



(Note) Please refer to the website (<https://www.gpif.go.jp/investment/alternative/>) for specific examples of investments in alternative assets (Japanese only).

Since we began investing in alternative assets, GPIF has been steadily building up our assets under management while developing our investment capabilities. The total

value of GPIF's investment in alternative assets as of the end of March 2024 is ¥3,697.2 billion (1.46% of the total value of the pension reserve fund).

③ Activities in fiscal 2023

A. Commencement of investment in limited partnerships (LPS)

By revising Ordinance for Enforcement of GPIF Act in September 2017, interests in limited partnerships (LPS) as limited partners were added to the securities in which GPIF may invest directly. LPS can be utilized to reduce intermediaries between investment targets and to simplify investment schemes. As a result, information on investment targets can be acquired more quickly, and substantial improvements in returns can be expected due to the reduction of management fees paid to discretionary investment business operators as well as the enhancement of risk management.

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 began developing a system for the commencement of investment using the LPS method in fiscal 2017, and commenced investment in fiscal 2022. In fiscal 2023, we concluded investment contracts for 3 infrastructure projects, 2 private equity projects, and 1 real estate project.

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

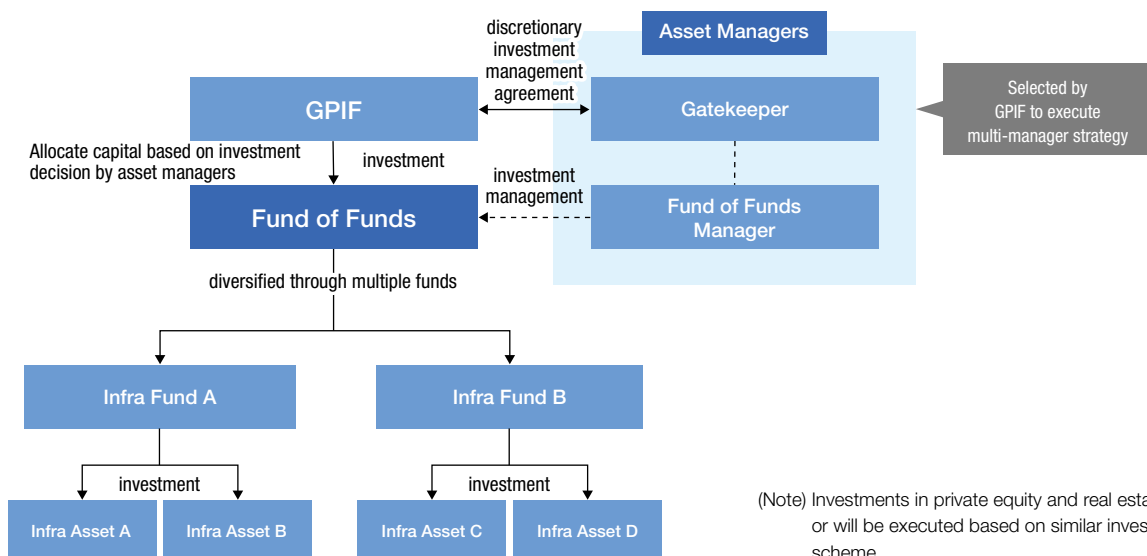
We continued public offerings for alternative asset management using the manager entry system and selected external asset managers, which implements a multi-manager strategy tailored for GPIF.

In fiscal 2023, we invested in an existing external asset manager's fund of funds in the infrastructure sector, and started investment with a newly selected one external asset manager in the real estate sector.

To select asset managers, a GPIF team conducts several rounds of screening, including application documents check and interviews with external advisors to carefully examine the capabilities, investment strategies, investment track record, and risk management system, etc. of the prospective managers.

As application requirements for the selection of asset managers, quantitative criteria were set previously, such as ¥100 billion or more in overall assets under management, ¥30 billion or more in assets under management for investment products, and 5 years or more of investment performance record, etc. However, as of December 20, 2023, the criteria were changed to "an asset manager must have sufficient experiences in managing clients' assets" because of the enhancement of GPIF itself, which now makes it possible to analyze and evaluate the asset managers' capabilities in greater detail and with the aim of encouraging more asset managers to apply.

(Example) Infrastructure investment scheme



The fund of funds is managed using discretionary investment management agreement method. Appointed asset managers set up a fund-of-funds solely for GPIF and invest in funds in accordance with the pre-agreed guidelines that define investment objectives, strategies, and certain restrictions, etc.

Each fund will then invest in individual alternative assets. However, it takes a certain amount of time from identifying investment opportunities to the completion of various investigations (due diligence). It is also important to diversify

the timing of investment over multiple years for optimal portfolio time diversification. Therefore, it takes a long time to invest in alternative assets.

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.

C. Further promotion of management risk of alternative assets

With regard to management risk of alternative assets, in fiscal 2023, we further promoted the following initiatives.

- (i) Portfolio management according to the characteristics of infrastructure and real estate
- (ii) Development of a method for measuring the excess returns of alternative assets relative to the listed market
- (iii) Start of studies on building a database on alternative assets
- (iv) Clarification of LPS selection process as internal control

For details of each item, please refer to page 67.

D. Investment status of alternative assets

Investment status as of the end of March 2024

	Total of alternative assets	Infrastructure	Real estate	Private equity
Commitment amount (¥billion) ^(Note2)	6,971.9	2,995.2	2,519.1	1,457.6
Total value (¥billion)	3,697.2	1,852.3	1,164.9	680.0
Internal rate of return (IRR) up until fiscal 2023 (in JPY terms)	11.37%	10.95%	9.82%	18.08%
Domestic assets (in JPY terms) ^(Note3)	6.81%	5.35%	7.27%	-5.26%
Foreign assets (in USD terms) ^(Note4)	4.17%	4.34%	2.14%	7.32%
(in JPY terms) ^(Note5)	11.98%	11.18%	10.93%	18.40%

(Note 1) Figures are aggregated by Fund of Funds, investment trusts and LPS.

(Note 2) The capital commitment refers to the sum of the amounts agreed on as the maximum amount of capital to be contributed by GPIF to individual external asset managers at the start of investment.

(Note 3) Figures are for assets under management in Japan (denominated in yen, the main operating currency) and for which more than one year has passed since the start of management.

(Note 4) Figures are for assets under management overseas (denominated in U.S. dollars, the main operating currency) and for which more than one year has passed since the start of management.

(Note 5) Figures are calculated by converting the above U.S. dollar-denominated assets into yen.

(Column) Analysis on changes in market value in fiscal 2023

During the year beginning from the end of March 2023, the market value of GPIF's alternative assets increased by ¥862.7 billion. The increase can be mainly divided into five factors:

① **Capital contribution to new investments (+¥541.4 billion):**

A fund makes a capital call (request making capital contribution) to investors for executing a new investment. An investor makes a capital contribution to the fund, which increases the market value of alternative assets of the investor. In fiscal 2023, investments have been executed in all three asset categories of alternative assets.

② **Distributions received (-¥144.9 billion):**

When a fund receives the returns from investees and paid out the income and capital realized to an investor, this decreases the market value of alternative assets of the investor. In fiscal 2023, GPIF received distributions, mainly dividends from its investees in infrastructure.

③ **Fees and expenses (-¥20.1 billion):**

The amount includes fees and expenses for acquisition and disposition incurred by fund-of-funds and investment trusts (equivalent to 0.60% of the average of outstanding amount of alternative assets in fiscal 2023).

(Note) Payments paid by unit trust and LPS, the fund of funds in which we invest, are aggregated in GPIF. The amount of investment trusts is a rough estimate.

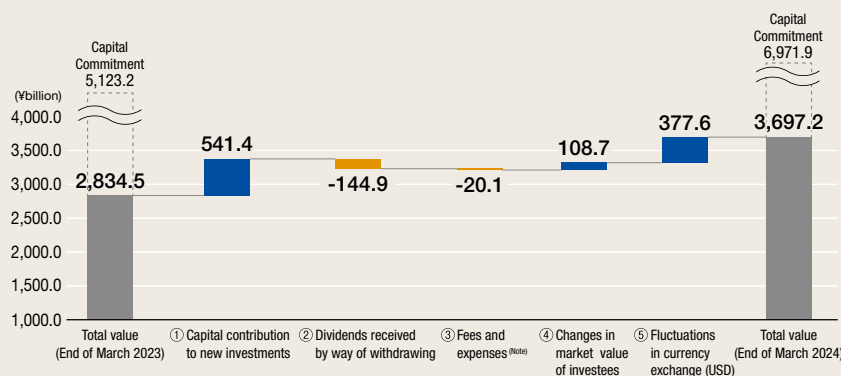
④ **Changes in market value of investees (+¥108.7 billion):**

After a fund invested in alternative assets, the market value increases/decreases in accordance with unrealized gains or losses based on the valuation of the investee and realized gains or losses from the disposition of investees. Market value increased mainly in the infrastructure sector in fiscal 2023.

⑤ **Fluctuations in currency exchange (USD) (+¥377.6 billion):**

In the event of foreign investment (currency: USD), the yen-equivalent market value may appreciate/depreciate due to a currency fluctuation between USD and JPY. Market value increased due to the depreciation of the yen in fiscal 2023.

Analysis on changes in the market value of alternative investments (from April 2023 to March 2024)



(Column) Method of measuring the rate of investment return on alternative assets

While the investment performance of listed assets such as equities and bonds instruments is often measured in the form of time-weighted rate of return, the investment performance of alternative assets is generally measured in the form of internal rate of return (IRR) since inception. The internal rate of return (IRR), also known as money-weighted rate of return, is a rate of investment return calculated with consideration of the timing and size of cash flow (including capital contribution and distributions) between investors and funds.

While traditional asset investment allows investors to specify the allocation of capital and the timing of withdrawals, alternative asset investment allows asset managers of the funds to specify the timing of acquisition and disposition of assets, request investors to contribute capital accordingly, and distribute the realized capital and income. Therefore, internal rate of return (IRR) is used based on the understanding that decision-making on the timing and the size of cash flows is part of the asset managers' investment capabilities. In GPIF's Annual Report, investment results of GPIF's overall assets including alternative assets are presented as time-weighted rate of return, while investment results of alternative assets are also presented as internal rate of return (IRR).

[2] Infrastructure

① Overview

GPIF's infrastructure investment invests in assets such as power generation plants, electricity transmission grids, renewable energy, transportation infrastructure (ports, railways, roads, etc.), public utilities, and telecommunication infrastructure. For global pension funds, infrastructure investment is one of the effective investment methods to earn stable returns for the long term.

GPIF mainly focuses on investing in infrastructure funds targeting infrastructure projects or companies, which are essential for social and economic activities, under a well-established regulatory environment, and expects to generate stable revenues based on long-term contracts. The invested capital will be recovered through dividends based on stable revenue and when eventually sold to other investors, along with capital gains.

② GPIF's investment

A. Investment approach

Through a diversified portfolio invested in assets such as power generation, electricity transmission, renewable energy, transportations (ports, railways, roads, etc.), utilities and telecommunications, our infrastructure investment aims to contribute to excess return for GPIF's whole portfolio.

B. Investment objectives and schemes

GPIF mainly invests in infrastructure funds which have equity stakes of infrastructure assets.

(i) Discretionary investment

In fiscal 2023, our Fund of Funds programs progressed investment to achieve a diversified portfolio.

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

(Note) Investment style "Global Core" mainly acquires infrastructure assets that are global, essential for social and economic activities, under a well-established regulatory environment, and expected to generate stable revenue based on long-term contracts.

(ii) Investing in in-house management

(Investments in LPS)

In fiscal 2023, we committed to 3 new LPS as shown in the table below.

LPS name	Investment period ^(Note)	Start of investment
Brookfield Infrastructure Fund V-C, L.P.	12 years	November 2023
Brookfield Infrastructure Co-Invest (G), L.P.	12 years	March 2024
APG Infrastructure Asset Owner Fund II C.V.	15 years	March 2024

(Note) The period during which LPS is managed. It might be extended in some cases.

(Investment in unit trust)

GPIF has held foreign currency-denominated unit trust since February 2014.

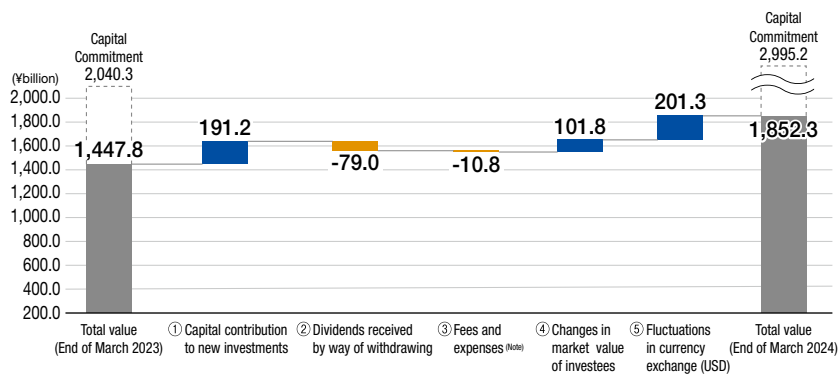
Unit trust name	Start of investment
Global Alternative Co-investment Fund I ^(Note)	February 2014

(Note) Unit trust, based on the joint co-investment agreement with the Ontario Municipal Employees Retirement System (OMERS) and the Development Bank of Japan (DBJ), focuses on investment in infrastructure projects or companies currently in operation in developed countries.

C. Investment status

The total value of GPIF's infrastructure investment as of the end of March 2024 was ¥1,852.3 billion, which increased by ¥404.5 billion from the end of March 2023. The total market capitalization of infrastructure assets increased

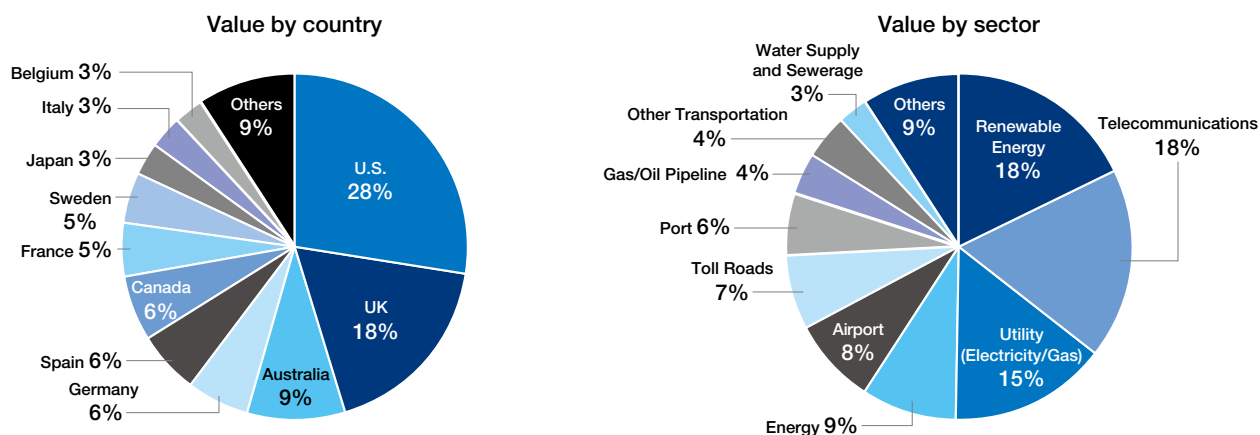
mainly as a result of progress in new investments made through discretionary asset managers, as well as foreign exchange fluctuations.

Analysis on changes in the market value of infrastructure (From April 2023 to March 2024)

(Note) The amounts paid by investees in fund of funds, unit trust and LPS, are aggregated by GPIF. The amount of unit trust is an estimate.

The breakdown of our infrastructure portfolio by country shows the U.S. with the largest share at 28%, followed by the UK at 18% and Australia at 9%. As for the breakdown by sector, the largest share went to renewable energy at 18%, followed by telecommunications at 18% and utility (electricity/gas) at 15%. Internal rate of return (IRR) from foreign infrastructure investment stood at 4.34% in USD

terms (11.18% in JPY terms), and IRR from domestic infrastructure investment stood at 5.35% in JPY terms since its inception in February 2014. The total dividend (excluding repayment of principal) received from the unit trust and fund of funds, etc. during fiscal 2023 was ¥50.9 billion.



[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), and Turnaround funds (seeking opportunities to turn around companies facing financial challenges through balance sheet restructuring, etc.). 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) of private companies.

(i) Discretionary investment

In fiscal 2023, the following asset managers continue to invest in diversified portfolio of multiple PE funds, mainly in developed countries.

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
Gatekeeper: Mitsubishi UFJ Trust and Banking Corporation Fund of Funds Manager: Hamilton Lane Advisors, L.L.C.	Global-Diversified Strategy	January 2021
Gatekeeper and Fund of Funds Manager: Mitsubishi UFJ Trust and Banking Corporation Investment Advisor to FoF Manager: Alternative Investment Capital Limited	Japan-Focused Strategy	January 2022

(ii) Investing in in-house investment

(Investments in LPS)

In fiscal 2023, we committed to 2 new LPS as shown in the table below.

LPS name	Investment period ^(Note)	Start of investment
TA XV-B, L.P.	10 years	March 2023
Hellman & Friedman Capital Partners XI (Parallel), L.P.	10 years	March 2023
CVC Capital Partners IX (A) L.P.	10 years	July 2023
EQT X (No.1) EUR SCSp	10 years	July 2023

(Note) The period during which LPS is managed. It might be extended in some cases.

(Investment in unit trust)

GPIF has held a foreign currency-denominated unit trust since June 2015.

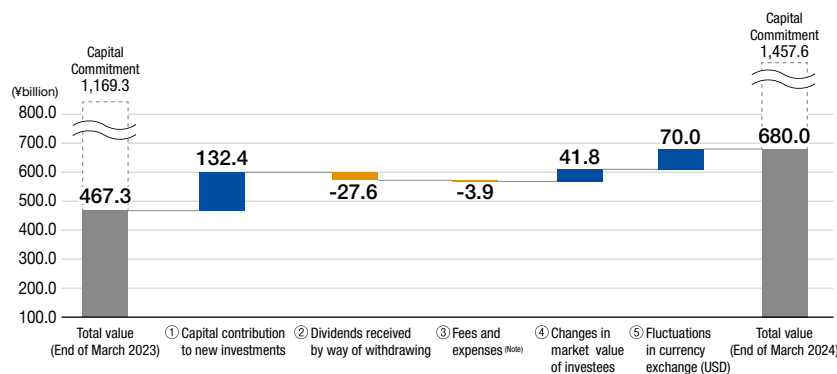
Unit trust name	Start of investment
Global Alternative Co-investment Fund II ^(Note)	June 2015

(Note) The unit trust invests in PE in emerging markets under the co-investment agreement with the International Finance Corporation (IFC) and the Development Bank of Japan (DBJ).

C. Investment status

The total value of GPIF's private equity investment as of the end of March 2024 was ¥680.0 billion. Those increased by ¥212.6 billion from the end of March 2023. The market value of the entire private equity portfolio increased due to

new investments made mainly through discretionary asset managers as well as market value appreciation of portfolio companies and foreign exchange fluctuations.

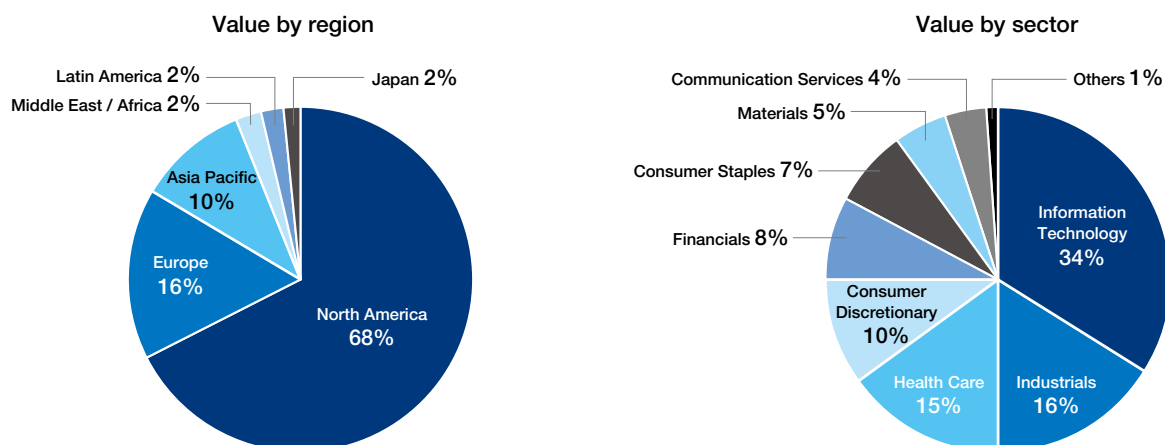
Analysis on changes in the market value of private equity (From April 2023 to March 2024)

(Note) The amounts paid by investees in fund of funds unit trust and LPS, are aggregated by GPIF. The amount of investment trusts is a rough estimate.

The breakdown of portfolio by region shows North America with the largest share at 68%, followed by Europe and Asia Pacific. By sector, information technology accounted for the largest share (34%), while other investments were diversified across a wide range of industries, including industrials and health care.

Since June 2015, when we began in-house investment

in investment trusts, the internal rate of investment return (IRR, as of March 31, 2024) across all non-Japanese PE investments has been +7.32% in USD terms (+18.40% in yen), and the internal rate of investment return (IRR, as of March 31, 2024) across all Japanese PE investments has been -5.26% in yen terms.



(Note) The data is broken down by region, as PE investments span a wide range of countries.

[4] Real estate

① Overview

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

GPIF mainly implements "core-style" investment strategy, which is expected to generate stable rental income from tenants, and this strategy has been adopted as the major investment strategy by pension funds in other countries as well. 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

We will contribute to enhancing the return of the entire GPIF's portfolio through timely and efficient diversification of core real estate funds in light of market conditions.

B. Investment objectives and scheme

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

(i) Discretionary investment

(fund of funds format)

With an investment manager for domestic market appointed in 2017 and investment managers for foreign markets appointed in 2018 and after, GPIF has been building a global and diversified investment portfolio focused on its core-style investment strategy throughout fiscal 2023.

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 Investment Management Indirect Limited	Global-Core Commingled Fund Investments	September 2018
Gatekeeper: Asset Management One Co., Ltd. Fund of Funds Manager: CBRE Investment Management Indirect Limited	Global-Core JV/Club Type Investments	February 2021
Gatekeeper: Mizuho Trust & Banking Co., Ltd. Fund of Funds Manager: LaSalle Investment Management, Inc.	Global-Core JV/Club Type Investments	September 2022

(Single fund format)

In fiscal 2023, we entered into an agreement to invest in a domestic real estate fund with the method of conducting build-to-core type investment in a single fund type discretionary investment management.

Asset manager name	Investment style	Start of investment
Tokyu Land Capital Management Inc.	Japan Build-to-Core	April 2023

(Note 1) Build-to-Core is an investment program to commit investing into the projects under development in order to acquire income producing assets after completion.

(Note 2) Although this is discretionary investment, it invests in a single fund instead of fund-of-funds. It is expected that opportunities for investment in high-quality projects will be expanded and advanced risk management will be achieved.

(ii) Investing in in-house investment

(Investments in LPS)

In fiscal 2023, we committed to 1 new LPS as shown in the table below.

LPS name	Investment period ^(Note)	Start of investment
Blackstone Real Estate Partners X.F L.P.	10 years	March 2023
Brookfield Strategic Real Estate Partners V-A L.P.	10 years	September 2023

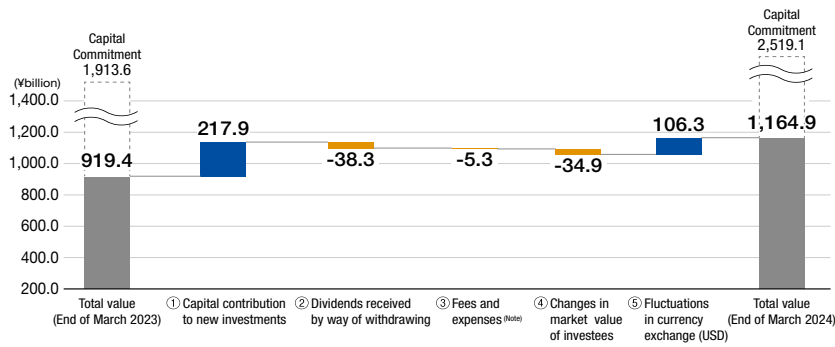
(Note) The period during which LPS is managed. It might be extended in some cases.

C. Investment status

The total value of real estate investment as of the end of March 2024 was ¥1,164.9 billion. It increased by ¥245.6 billion from the end of March 2023. The market capitalization of real estate assets as a whole increased due

to the progress of new investments through discretionary asset managers and foreign exchange fluctuations, although the market value of investees decreased.

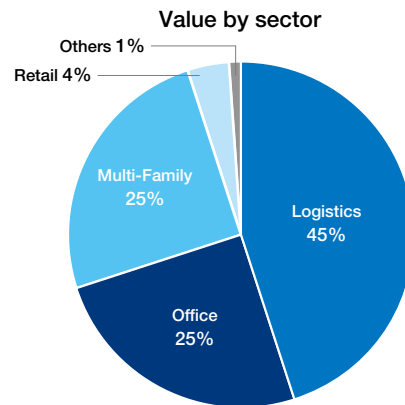
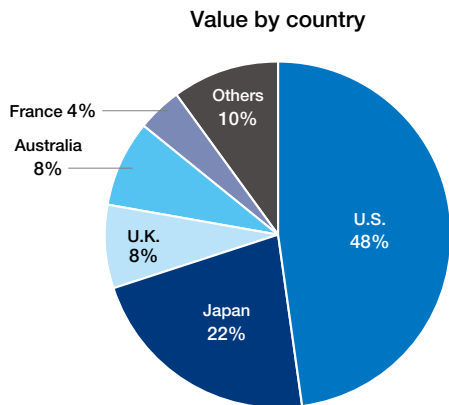
Analysis on changes in the market value of real estate (From April 2023 to March 2024)



(Note) The amount paid by investees in discretionary investment management (fund-of-funds and single-fund formats) and LPS is aggregated by GPIF.

The breakdown of portfolio by country shows the U.S. with the largest share at 48%, followed by Japan (22%), UK (8%), and Australia (8%). As for the breakdown of the sector, logistics sector comprised the largest share at 45% of the total portfolio, followed by office at 25%, residential properties at 25%, and retail at 4%. The investment is diversified and focused on core-style real estate funds in advanced countries. Internal Rate of Return (IRR) of domestic real estate investment since December 2017

inception is 7.27% (yen-denominated), while that of foreign real estate investment since September 2018 inception is 2.14% (USD-denominated) (10.93% (yen-denominated)). Dividend received from the fund of funds in fiscal 2023 (excluding repayment of principal) was ¥25.7 billion in total. We will continue investing in real estate funds, while paying attention to the market circumstances, advised by external consultants.



[5] Portfolio risk management of alternative assets

① Approach to investment risk of alternative assets

A. Fair value calculation of alternative assets

Fair value calculation is important both for performance evaluation and risk management of financial assets. In the case of traditional assets (listed stocks and bonds), market value is calculated using market prices, which change with each trade. However, since alternative assets have several characteristics that differ from those of traditional assets (see the table below), the market value is calculated using different methods.

Differences in asset characteristics between alternative assets and traditional assets

Alternative assets Trading based on appraisal prices	Traditional assets (listed stocks and bonds) Trading based on market prices
<ul style="list-style-type: none"> • Low liquidity ⇒Trading opportunities are limited by bilateral basis, making such opportunities difficult to realize • Information asymmetry ⇒Less public information makes it difficult for investors to evaluate companies and projects. Risk increases significantly depending on economic conditions • Restrictions on public information ⇒Less public information disclosure and less risk of strategic information leakage to competitors • Difficulty in pricing ⇒Difficulty in pricing due to lack of market prices • Mitigation of market price fluctuations ⇒Less sensitive to market prices of traditional assets, resulting in less rapid fluctuations during normal times • Management flexibility ⇒Less disclosure requirements for investors, making it easier to change business operations 	<ul style="list-style-type: none"> • High liquidity ⇒Relatively easy to trade on public exchanges and over-the-counter markets • Easy to obtain information ⇒Relatively easy to make investment decisions because there is a lot of public information about companies and projects • Pricing based on market evaluation ⇒Pricing that reflects market supply-demand relationships and the expectations of many investors • Speed of price adjustment ⇒Speed of adjustment as market influences and information are quickly reflected in prices

Under accounting standards (Accounting principles in Japan, US GAAP in the U.S. and IFRS in Europe) in each country, alternative assets are classified as "Level 3 assets" for which there is no market price, and fund managers calculate their fair values using internal models and third-party valuation models. To ensure the transparency and reliability of fair values, valuation methods, major assumptions, and valuation uncertainties are periodically reviewed by external auditors. Therefore, the fair values of alternative assets require time to be calculated and verified, and investors are usually notified 2 to 5 months after the end of the fund fiscal period.

In the risk management of alternative investments, it is necessary to consider making appropriate adjustments based on the current fair value calculation process and various assumptions regarding recent conditions.

B. Points to consider in fund selection

In alternative investments in GPIF, while there are many funds in the markets, it is crucial for GPIF to select funds that produce reproducible excess returns, by selecting individual investment projects that are reliably generating excess returns and constructing portfolios that combine them. Having said so, dialogues between GPIF and fund managers are important in selecting funds. In alternative investments, information asymmetry between buyers and sellers is generally considered to be one of the causes of excess returns, and GPIF believes that excess returns can be achieved by building good relationships with fund managers that align their interests as investors, rather than relationships between buyers and sellers.

C. Sources of return on alternative assets

Sources of return on alternative investments are income growth, leverage, and changes in asset valuation indicators. Fund managers seek income growth as well as stability and raise asset values by increasing sales or reducing costs. In addition, risk management has to focus on leverages (borrowing) used by funds to expand investments and to increase returns (see "Alternative investment and leverage" column on page 68). Asset valuation varies depending on the economic environment and is evaluated by such measures as EV/EBITDA, PER and Cap-rate. Among the sources of excess returns of funds, the degree of involvement of fund managers in the growth of profits is considered to be the most important source.

D. Risk management methods for alternative assets

Alternative assets are characterized by the low frequency of price fluctuations and limited information disclosures, therefore it is difficult to use statistical analysis and they are less susceptible to market influences of traditional assets. For those reasons, it is common to select funds based on IRR and TVPI with absolute returns as the target. In the past, reproducibility of excess returns was assessed by qualitative analysis, but there was also the issue that the assessment became subjective. In the future, the importance of quantitative data analysis of unlisted assets is expected to increase due to the increase in transactions of listed alternative assets and advances in IT technology. Therefore, in addition to conventional qualitative analysis, objective quantitative data analysis will become important, and the possibility of obtaining excess returns over traditional assets will also be emphasized (see "About Spread Based Direct Alpha" in the P69 column).

② Main initiatives in fiscal 2023

In fiscal 2023, we made further efforts to manage the investment risk of alternative assets.

A. Portfolio management based on the characteristics of infrastructure and real estate

Infrastructure and real estate have both risk characteristics as bonds and as stocks. However, since the strength of these characteristics changes according to economic conditions and other factors, it has been difficult to accurately grasp the risks by managing them together with traditional assets.

For this reason, in fiscal 2023, we started to manage infrastructure and real estate separately from traditional assets as an internal management method based on their asset characteristics. At this time, from the viewpoint of managing assets in line with the policy asset mix, the investment ratio for infrastructure and real estate funds is 50% in domestic bonds and 50% in domestic equities for funds managed in yen currency, and 50% in foreign bonds and 50% in foreign equities for funds managed in foreign currency (this ratio is called the proxy ratio *). Private equity is managed together with traditional assets as domestic equities or foreign equities 100%.

*The proxy ratio is a ratio that indicates the rate at which movements in a particular asset are substituted for movements in other assets in the portfolio. It indicates the rate at which movements in infrastructure and real estate assets are substituted for movements in domestic bonds, domestic equities, foreign bonds or foreign equities in the portfolio.

B. Development of a method for measuring the excess returns of alternative assets relative to the listed market (Development of Spread Based Direct Alpha (SBDA))

As a measurement method that enables a more accurate comparison of the investment performance of alternative assets and traditional assets, we have begun calculating excess returns using Spread Based Direct Alpha (SBDA) (see "About Spread Based Direct Alpha" on page 69).

C. Start of Studies on Building a Database on Alternative Assets

In general, the selection and evaluation of each fund for alternative assets has focused on qualitative evaluation, while quantitative evaluation has focused on comparing funds of the same type using a limited number of items (IRR, TVPI, etc.). GPIF believes that detailed quantitative analysis will become more important in order to increase the certainty of obtaining excess returns on alternative assets over the listed market. In order to obtain and analyze detailed quantitative data such as investment performance data of each fund periodically and efficiently, we have started to study the establishment of a new database of alternative assets.

D. Clarification of LPS selection process as internal control

Investment using the LPS method for alternative investments started in fiscal 2022 following revisions in the Statement of Operational Procedure, Operation Policy, etc. Given that the number of investments using LPS method is expected to increase further, from the perspective of internal control, we have newly clarified the rules for the selection process, etc., taking into account LPS-specific considerations.

Alternative investment and leverage

In alternative investments, the use of leverage (borrowing) is a common method to increase returns, but it should be noted that it also increases risks. From the perspective of appropriate risk management, GPIF pays close attention to the following points regarding leverage in alternative investments.

① Monetary policy of central banks and its impact on financial markets and the real economy

As central banks in the United States and Europe raised interest rates since 2022, corporate and investment activities that had previously benefited from low interest rates have begun to change. Although future developments in interest rates are difficult to predict, they are likely to have a significant impact on financial markets and the real economy.

② Considerations for borrowing at the fund level

Short-term borrowings (less than three months) are necessary for bridge financing for asset acquisitions and temporary advances for fund expenses. On the other hand, some funds attempt to increase IRR of investment projects by delaying the timing of capital calls by borrowing with a relatively long term (approximately one year). Moreover, in recent years, there have been an increasing number of cases in which borrowings are secured by other investment projects (assets) of the fund, and this approach may increase the risk of the fund as a whole in the future.

③ Borrowing from private credit funds at the investment project level

Borrowing from private credit funds (A fund whose source of income is the interest on loans obtained by making multiple loans to companies and commercial real estate, etc.) has been increasing recently, whereas borrowing from traditional banks has been the mainstream. Diversification of borrowers and borrowing under favorable conditions contribute to higher returns. However, excessive easing of borrowing conditions may lead to excessive borrowing and loosening of financial discipline in project management, which may increase the risk of investment projects. In particular, since many investors have been increasing their investment in private credit funds in recent years, competition among private credit funds to acquire loan projects may accelerate the increase of risks mentioned above.

About Spread Based Direct Alpha

While it is standard to evaluate the performance of alternative investments mainly from the perspective of absolute returns such as IRR and TVPI, GPIF's investment management aims to capture excess returns on policy benchmark, which is comprised of listed indicators, in addition to diversification effects, so a similar perspective is required for alternative investments.

Various approaches such as "Public Market Equivalent (PME) method" have been proposed in order to measure investment performance relative to listed indicators, but the selection of methods differs depending on the investors.

In examining various PME methods proposed to date, GPIF has developed "Spread Based Direct Alpha (SBDA)" as a method to more appropriately measure excess returns of alternative investments over listed markets. In quantitative evaluation such as monitoring of existing funds and selection of new funds, in addition to absolute evaluations such as IRR and TVPI, SBDA is used to manage and to evaluate from multiple perspectives through relative evaluation.

For details on the calculation method of SBDA, please refer to the "GPIF Working Paper" page on GPIF website.

Spread-based direct alpha (SBDA) as a performance measure for PE funds

<https://www.gpif.go.jp/en/investment/research/working-paper.html>

6 | Stewardship Responsibilities

[1] Objectives and significance of stewardship activities

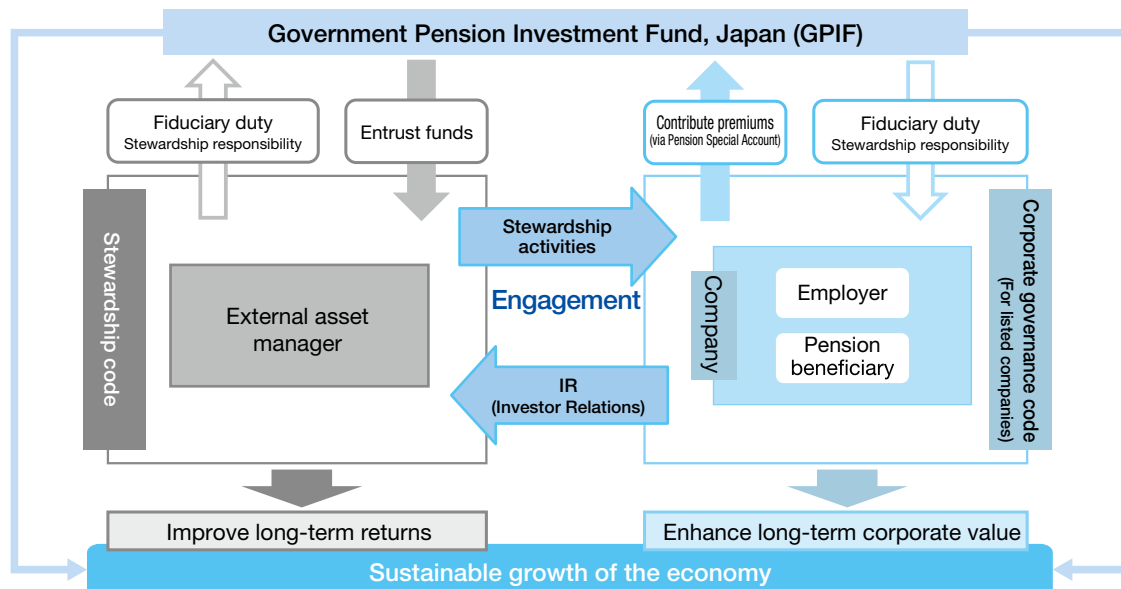
In the Investment Principles and the Code of Conduct, GPIF stipulates that we promote activities to fulfill our stewardship responsibilities^(Note) (hereinafter “stewardship activities”) with the objectives of appropriately fulfilling our responsibilities to pension beneficiaries as their fiduciary, 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 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 assets, GPIF makes daily transactions and investments, and exercises voting rights, via external asset managers. For this reason, GPIF encourages external asset managers to engage in “constructive dialogue” (engagement) with portfolio companies and issuers that also takes into account ESG, a non-financial factor. Through these efforts, we aim to build a virtuous cycle that will lead to the “growth of the overall economy” and “enhancement of investment returns over the long term” by promoting the “long-term enhancement of corporate value.” In this way, GPIF shall continue to fulfill our stewardship responsibilities.

(Note) Institutional investors have stewardship responsibilities to enhance the medium- to long-term return on investments for their clients and beneficiaries by improving and fostering investee companies’ corporate value and sustainable growth. They can do this through constructive engagement, or purposeful dialogue, based on in-depth knowledge of the companies and their business environment and consideration of sustainability (medium- to long-term sustainability including ESG factors) consistent with their investment management strategies.



[2] Stewardship activities fundamentals and progress

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.

① Policy to Fulfill Stewardship Responsibilities

On March 24, 2020, Japan's Stewardship Code was re-revised (hereinafter referred to as "re-revised Code"). The revision adds consideration of sustainability issues (medium- to long-term sustainability including ESG factors) in accordance with investment strategies to the definitions of stewardship responsibilities, while allowing application to a wider range of assets in addition to domestic listed equities. Following the revision, GPIF expressed our support for the re-revised Code, and

② 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 to clarify the requirements and principles that external asset managers should observe in conducting stewardship activities, including the exercising of voting rights, which is a responsibility of a super long-term asset owner. 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

Following the revision of "the basic policy meant to ensure that the reserves are managed and invested safely and efficiently from a long-term perspective" ("Basic Policy of Reserves") and the 4th Medium-term Plan, the Investment Principles were revised again in April 2020. GPIF's stewardship activities are conducted in line with the Investment Principles and the Policy to Fulfill Stewardship Responsibilities, and they require external asset managers to comply with Stewardship Principles and Proxy Voting Principles.

partially revised the Policy to Fulfill Stewardship Responsibilities in June 2020. As a major change in the Policy in line with the Investment Principles, GPIF expanded the scope of investment target from equities to all types of assets. In addition, as a response to individual principles of the re-revised Code, GPIF clarified ESG considerations. GPIF will continue to fulfill responsibilities as an asset owner in line with the Stewardship Code in all asset classes.

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, covering all asset classes, as it had been focused on the 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 in various ESG

initiatives. Meanwhile, the Proxy Voting Principles made a reminder that an exercise of voting rights shall be made as part of a constructive dialogue throughout the year.

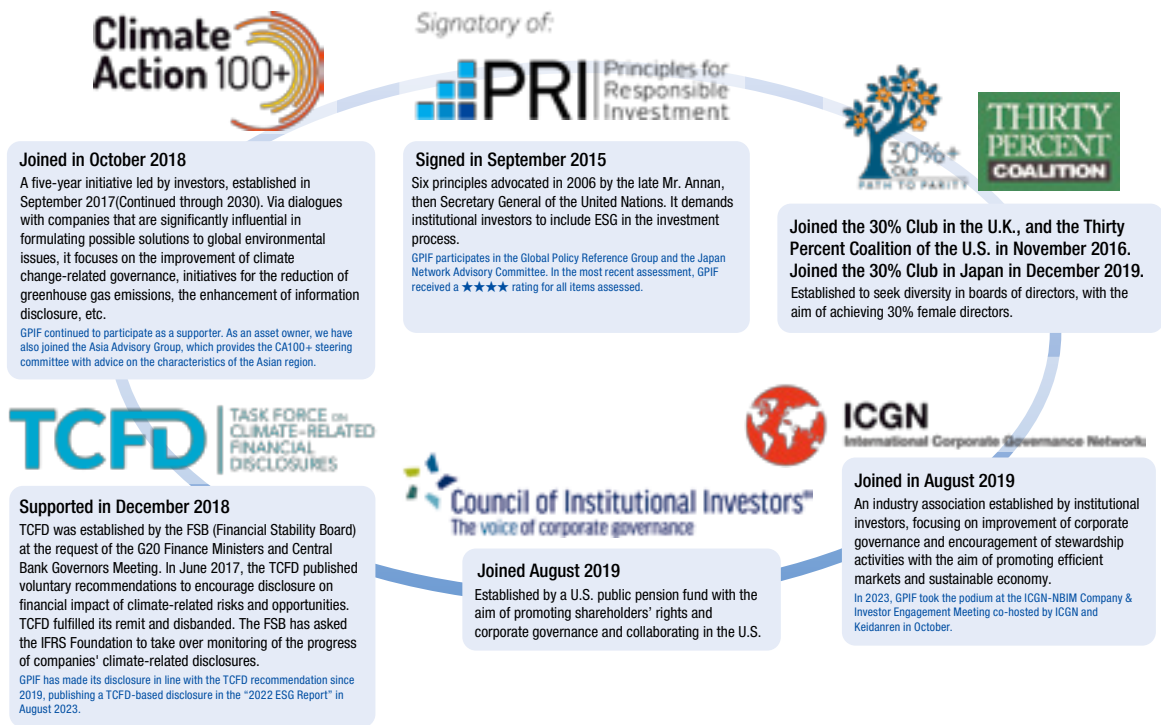
GPIF is founded on the Investment Principles, the Policy to Fulfill Stewardship Responsibilities, the abovementioned Stewardship Principles, and the Proxy Voting Principles. We will continuously examine appropriate stewardship responsibilities as a public pension fund and promote

activities to fulfill our stewardship responsibilities.

③ 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 these initiatives, we broaden

our knowledge on ESG issues and utilize such expertise for evaluating the stewardship activities of external asset managers.



[3] Promotion of activities aimed at fulfilling stewardship responsibilities

① Initiatives through external asset managers

GPIF requires and evaluates stewardship activities with all external asset managers. GPIF started with equity stewardship evaluations with acceptance of Stewardship Code in May 2014. Since fiscal 2017, GPIF has started

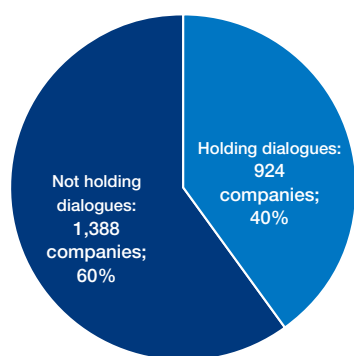
conducting stewardship evaluations in alternative investments, and fiscal 2022 in fixed income investments. The following describes the status of engagement by Equity external asset managers as part of stewardship activities.

A. Engagement by external asset managers for domestic equities

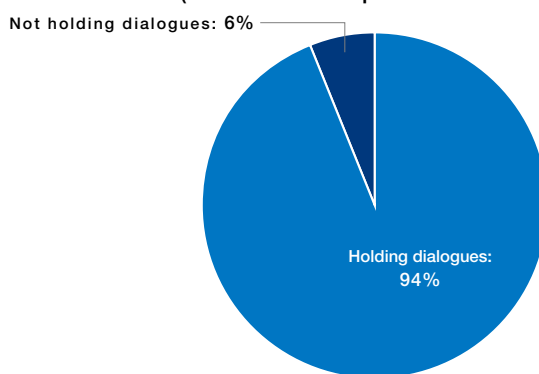
GPIF emphasizes “constructive dialogue” (engagement) between external asset managers and portfolio companies/issuers, taking into account ESG, which are non-financial factors. The charts below show the status of engagement in relation to domestic equities by external asset managers for domestic equities (January to December 2023). GPIF’s external asset managers for domestic equities conducted engagement with 924 companies between January and December 2023. In terms of the number of companies, engagement activities were performed with 40% of portfolio companies, and in terms of market capitalization, with companies equivalent

to 94% of the total market capitalization. The chart on the bottom left represents the trend in the number of dialogues held from January to December every year in the past seven years. While a temporary drop in the number of dialogues was recorded in 2020, in which the COVID-19 pandemic first broke out, the number of engagements increased compared with the past years. The chart on the bottom right represents the status of engagement conducted with executives. The number of dialogues held with outside directors is small yet it increased significantly during the past year.

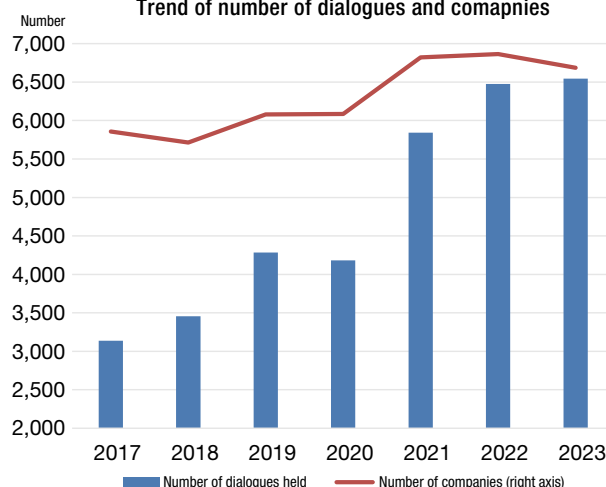
Number of companies that held dialogues



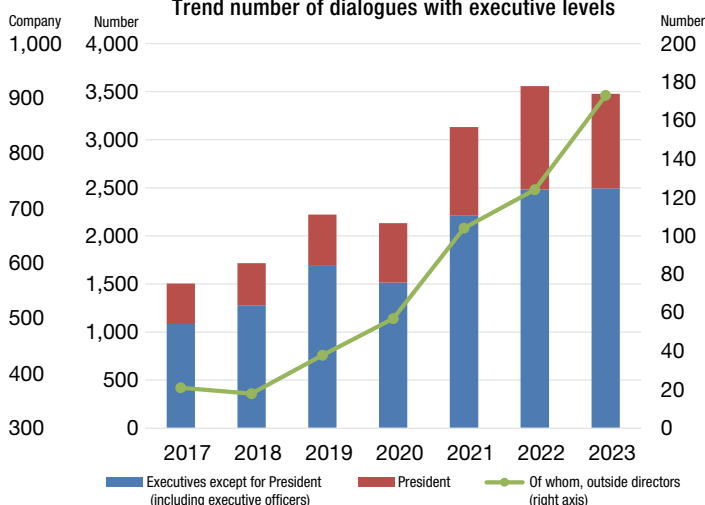
Ratio of companies that held dialogues (on a market capitalization basis)



Trend of number of dialogues and companies



Trend number of dialogues with executive levels



B. Engagement-enhanced passive investment funds

(i) Status of adoption

GPIF has adopted “engagement-enhanced passive investment” funds as one of our passive investment models focusing on stewardship, and we have outsourced asset management to the four managers below. While changing the themes and target companies for engagement, we are making steady progress on engagement that utilizes the unique characteristics of each manager.

Asset Management One Co., Ltd. (since fiscal 2018)

FIL Investments (Japan) Limited (since fiscal 2018)

Sumitomo Mitsui Trust Asset Management Co., Ltd. (since fiscal 2021)

Resona Asset Management Co., Ltd. (since fiscal 2021)

(ii) Purpose

About 90% of GPIF’s equity is passively invested in a wide range of listed companies. Since long-term growth of the overall capital market is essential for GPIF to secure further investment returns, we believe that, in passive management, it is important to increase long-term corporate value of investee companies and, in particular, to

conduct engagement in order to promote sustainable growth of the overall capital market from a long-term perspective. GPIF itself is not allowed to engage with investee companies, and needs equity passive managers to conduct the engagement, taking the above purpose into account. GPIF has come to the conclusion that domestic equity passive managers need to have an environment that allows them to continue conducting stewardship activities and conducting engagement with companies in a deeper and more sophisticated way. For this reason, GPIF has introduced a passive management model that focuses on stewardship. When appointing asset managers, we assess the extent to which their business models unify the investment process and a policy of stewardship activities, together with their organizational structure and fee levels employed to put these principles into practice. Since the fee level for these asset managers is different from that for a general passive manager, GPIF monitors the status of their achievement of KPIs to measure the success of engagement plans and verify and evaluate their milestones

for the next fiscal year in order to determine whether to renew their asset management contract on an annual basis.

The re-revised Stewardship Code points out that both institutional investors and clients/beneficiaries should share the view that reasonable costs associated with the implementation of stewardship activities are a necessary cost of investment. It indicates that passive managers

should implement engagement more actively from a medium-to long-term perspective as it is critical for them to encourage investee companies to improve their corporate value given their limited options for selling shares. GPIF fulfills its responsibilities as an asset owner, including the adoption of these funds.

② Other activities for enhancing investment chain

To further invigorate the investment chain, GPIF started conducting a survey of listed companies on external asset managers' stewardship activities. As part of efforts to promote dialogues between asset managers and investee companies, GPIF also publishes "excellent disclosures"

selected by GPIF's external asset managers, and we held the Global Asset Owners Forum, which is a venue for the continuous exchange of opinions with overseas asset owners, in 2023.

A. Conducting a Survey of Listed Companies regarding Institutional Investors' Stewardship Activities

<Objective of the survey>

As GPIF entrusts domestic equity investment to external asset managers, we request 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 fiscal 2015, 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 by directly surveying listed companies that are the target of external asset managers' stewardship activities and to strengthen the investment chain

by publishing the survey results. In fiscal 2023, GPIF conducted the ninth survey, by sending questionnaires to the First Section of the TOPIX constituent companies (2,154 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. 717 companies responded (accounting for 33.3%): 93.0% of Prime Market companies and 7.0% of Standard Market companies.

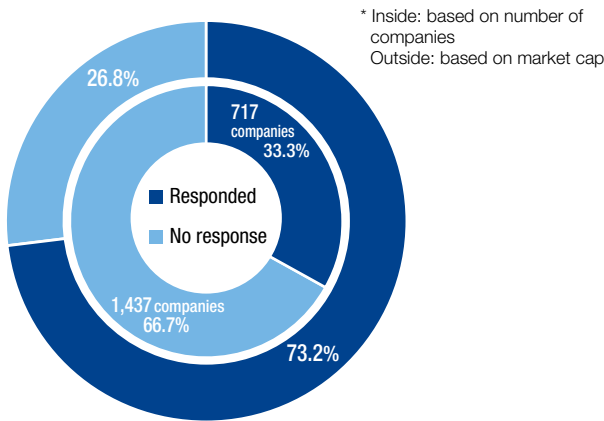
* The number of companies is as of December 18, 2023.

<Summary of the results of the survey>

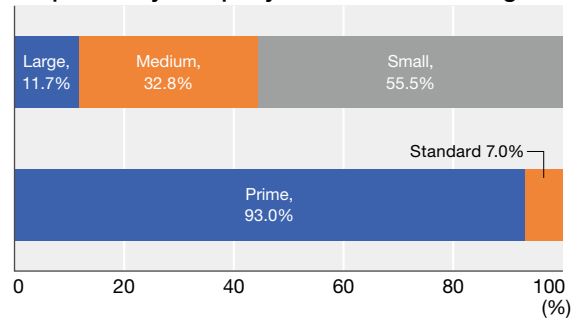
In this survey, a new question was added regarding the Tokyo Stock Exchange's request for "the Action to Implement Management That Is Conscious of Cost of Capital and Stock Price." Since nearly one year had passed since the request, almost all the companies had discussed the request internally, and about 80% of the companies had already discussed or planned to discuss the request at the board of directors meeting. In addition, "to Implement Management That Is Conscious of Cost of Capital and Stock Price" was cited as a theme for collaborative engagement, suggesting that it is an important theme for engagement. On the other hand, when considering measures, companies cited (1) internal penetration, (2) calculation of capital costs, (3)

content of disclosure, (4) specific measures, and (5) gaps with investors; as major issues, and many investors have high expectations for dialogue on this theme. GPIF will continue to request external asset managers to engage in dialogue based on the challenges faced by the companies in which it invests and the expectations of investors. Many respondents stated that their expectation for GPIF included: (1) promotion of dialogue toward medium- to long-term enhancement of corporate value, (2) leadership and information dissemination to upgrade the investment chains, and (3) strengthening and improving ESG initiatives. For details of the results, refer to GPIF website (<https://www.gpif.go.jp/en/investment/stewardship-activities.html>).

Reponse coverage rate



Percentage of the number of respondent companies by company size and market segment



B. Global Asset Owners Forum

After suspension of the Forum due to the COVID-19 pandemic, the Global Asset Owners’ Forum was re-held in 2023 for the first time in four and a half years. Global Asset Owners’ Forum members had a meeting with the Keidanren and its corporate members during the “Japan Weeks,” in which the annual general meeting of PRI was held in Tokyo. At the meeting, we exchanged views on corporate governance, sustainability issues such as climate change, and the exercise of voting rights. In addition, separately from the above-mentioned meeting with Keidanren, the asset owners also exchanged views on disclosures and other issues. The members of the Forum discussed various topics including expectations for Japanese companies such as timely disclosures and timely English translations,

support for the ISSB standard, and support for the TSE’s request on cost of capital, etc., and these opinions were summarized and published on January 11, 2024.



[4] Material ESG issues recognized by external asset managers

In the Stewardship Principles, GPIF requires that our external asset managers should proactively engage with investee companies on material ESG issues. For this reason, each year GPIF asks our external asset managers to identify what they consider to be significant ESG issues. The results for fiscal 2023 were as follows. “Information disclosure” and “climate change” were recognized as a critical ESG issues by all asset managers, both passive and active, for domestic equities. On the other hand, other than “information disclosure” and “climate change”, the issues considered critical by passive and active asset managers are differ. Domestic equities passive managers have been recognizing long-term issues including E (environmental) and S (social),

such as “diversity,” “supply chain,” and “human rights and local communities” as critical ESG issues. This time, “biodiversity” was newly cited as a critical ESG issue by all passive managers. The issues cited as critical issues by all domestic equities active managers were unchanged from last year. We continue to recognize G (governance) issues, such as “board structure and evaluation,” “protection of minority shareholders (e.g., cross-share holdings),” and “capital efficiency,” as more critical ESG issues. With regard to capital efficiency, the TSE issued “the Action to Implement Management That Is Conscious of Cost of Capital and Stock Price,” in March 2023. Dialogue with companies on this issue is expected to progress, and GPIF will monitor the situation.

(Unit: %)

ESG issues		Domestic Equity Passive	Domestic Equity Active	Foreign Equity Passive	Foreign Equity Active	Domestic Fixed-income	Foreign Fixed-income
E (Environmental)	Climate Change	100	100	100	92	93	78
	Deforestation	83	29	75	33	36	33
	Water Stress, Water Security	83	43	75	42	43	44
	Biodiversity	100	71	50	54	71	33
S (Social)	Human Rights & Community	100	71	75	54	86	67
	Health & Safety	67	57	75	33	43	44
	Others (Social)	67	43	75	46	50	33
G (Governance)	Board Structure, Self-evaluation	83	100	75	54	71	33
	Capital Efficiency	83	100	50	17	29	22
	Minority Shareholder Rights	83	100	50	21	29	22
	Corporate Governance	83	86	75	54	79	56
	Others (Governance)	50	71	75	13	21	44
ESG Multiple Topics	Supply Chain	100	71	75	33	64	56
	Diversity	100	86	100	46	79	44
	Disclosure	100	100	100	58	93	44
	Misconduct	100	86	50	8	57	11

(Note 1) A survey on external asset managers for equities and bonds was conducted in December 2023.

(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 75% of the respondents are listed above. When an asset manager is entrusted to both active and passive mandates, its answer is counted as one with larger amount of mandate by GPIF.

[5] Exercise of voting rights

① Concept of the 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 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 2023

GPIF held meetings based on the reports on the status of exercise of voting rights from April to June 2023. Based on these findings, we conducted an assessment 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 2023 to March 2024)

Number of external asset managers who exercised voting rights: 52 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	167,517	70,829	18,073	12,233	475	5,476	823	460	556	13,223	342	398	6,455	575	0	214	214,587	
Management proposals	Total	166,689 (100.0%)	70,270 (100.0%)	18,036 (100.0%)	12,197 (100.0%)	475 (100.0%)	5,275 (100.0%)	823 (100.0%)	460 (100.0%)	556 (100.0%)	12,970 (100.0%)	18 (100.0%)	398 (100.0%)	3,795 (100.0%)	575 (100.0%)	0 (0.0%)	179 (100.0%)	210,249 (100.0%)
	Approved	145,988 (87.6%)	61,749 (87.9%)	15,905 (88.2%)	10,165 (83.3%)	472 (99.4%)	4,976 (94.3%)	727 (88.3%)	56 (12.2%)	435 (78.2%)	12,671 (97.7%)	17 (94.4%)	386 (97.0%)	3,675 (96.8%)	23 (4.0%)	0 (0.0%)	158 (88.3%)	185,489 (88.2%)
	Opposed	20,701 (12.4%)	8,521 (12.1%)	2,131 (11.8%)	2,032 (16.7%)	3 (0.6%)	299 (5.7%)	96 (11.7%)	404 (87.8%)	121 (21.8%)	299 (2.3%)	1 (5.6%)	12 (3.0%)	120 (3.2%)	552 (96.0%)	0 (0.0%)	21 (11.7%)	24,760 (11.8%)
Shareholder proposals	Total	828 (100.0%)	559 (100.0%)	37 (100.0%)	36 (100.0%)	0 (0.0%)	201 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	253 (100.0%)	324 (100.0%)	0 (0.0%)	2,660 (100.0%)	0 (0.0%)	0 (0.0%)	35 (100.0%)	4,338 (100.0%)
	Approved	95 (11.5%)	74 (13.2%)	7 (18.9%)	6 (16.7%)	0 (0.0%)	20 (10.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	51 (20.2%)	70 (21.6%)	0 (0.0%)	274 (10.3%)	0 (0.0%)	0 (0.0%)	11 (31.4%)	528 (12.2%)
	Opposed	733 (88.5%)	485 (86.8%)	30 (81.1%)	30 (83.3%)	0 (0.0%)	181 (90.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	202 (79.8%)	254 (78.4%)	0 (0.0%)	2,386 (89.7%)	0 (0.0%)	0 (0.0%)	24 (68.6%)	3,810 (87.8%)

(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 1 abstention.

The status of exercise of voting rights by external asset managers for foreign equities (from April 2023 to March 2024)

Number of external asset managers who exercised voting rights: 70 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.	Warning type	Approval of financial statement, etc.	Other proposals			
Number of voting rights exercised	165,916	5,492	17,383	41,560	309	364	7,722	11,524	6,970	12,023	11,184	268	14,753	70,952	366,420	
Management proposals	Total	164,608 (100.0%)	4,836 (100.0%)	17,318 (100.0%)	41,305 (100.0%)	298 (100.0%)	210 (100.0%)	7,636 (100.0%)	11,510 (100.0%)	6,970 (100.0%)	12,019 (100.0%)	10,411 (100.0%)	260 (100.0%)	14,729 (100.0%)	60,234 (100.0%)	352,344 (100.0%)
	Approved	141,229 (85.8%)	4,401 (91.0%)	15,030 (86.8%)	32,525 (78.7%)	257 (86.2%)	189 (90.0%)	4,760 (62.3%)	11,255 (97.8%)	6,644 (95.3%)	9,970 (83.0%)	9,223 (88.6%)	218 (83.8%)	13,990 (95.0%)	51,111 (84.9%)	300,802 (85.4%)
	Opposed	23,379 (14.2%)	435 (9.0%)	2,288 (13.2%)	8,780 (21.3%)	41 (13.8%)	21 (10.0%)	2,876 (37.7%)	255 (2.2%)	326 (4.7%)	2,049 (17.0%)	1,188 (11.4%)	42 (16.2%)	739 (5.0%)	9,123 (15.1%)	51,542 (14.6%)
Shareholder proposals	Total	1,308 (100.0%)	656 (100.0%)	65 (100.0%)	255 (100.0%)	11 (100.0%)	154 (100.0%)	86 (100.0%)	14 (100.0%)	0 (0.0%)	4 (100.0%)	773 (100.0%)	8 (100.0%)	24 (100.0%)	10,718 (100.0%)	14,076 (100.0%)
	Approved	634 (63.8%)	514 (78.4%)	47 (72.3%)	59 (23.1%)	6 (54.5%)	0 (0.0%)	2 (2.3%)	13 (92.9%)	0 (0.0%)	2 (50.0%)	210 (27.2%)	1 (12.5%)	11 (45.8%)	3,708 (34.6%)	5,407 (38.4%)
	Opposed	474 (36.2%)	142 (21.6%)	18 (27.7%)	196 (76.9%)	5 (45.5%)	154 (100.0%)	84 (97.7%)	1 (7.1%)	0 (0.0%)	2 (50.0%)	563 (72.8%)	7 (87.5%)	13 (54.2%)	7,010 (65.4%)	8,669 (61.6%)

(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 3,247 abstentions.

7 | ESG Activities

[1] Basic approach

Universal owner

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

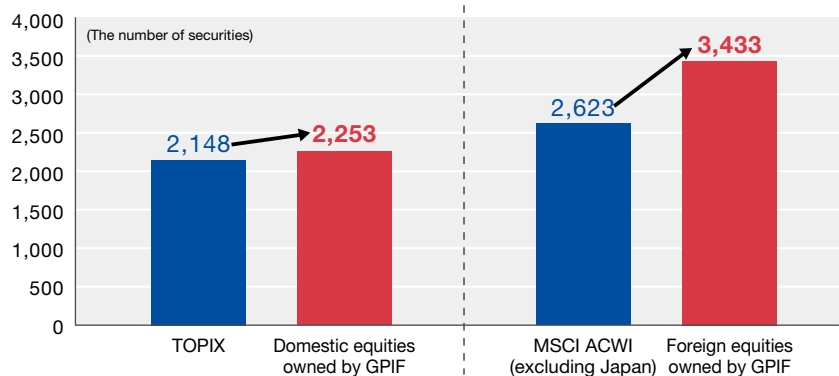
Cross-generational investor

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

As a “Universal owner” and “Cross-generational investor,” GPIF is committed to promoting ESG investment in order to reduce negative externalities such as environmental and social issues, to improve the long term return of the portfolio across all assets. “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 2024)



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. In other words,

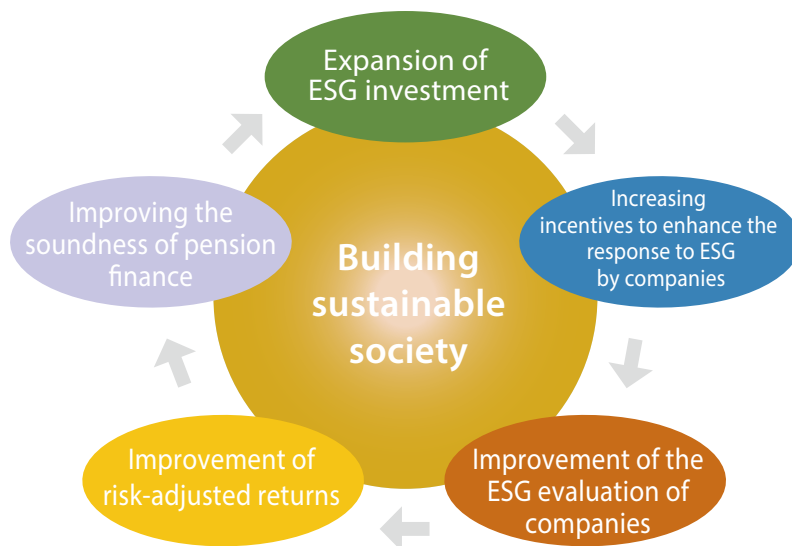
conducting ESG activities that is expected to improve risk-adjusted returns of the portfolio over the long term by reducing the impact of negative externalities such as environmental and social issues in capital markets is consistent with the objective of the Employees’ Pension Insurance Act and the National Pension Act to “manage pension reserves safely and efficiently from a long-term perspective solely for the pension beneficiaries.” GPIF will continue to promote ESG in its investment.

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 nonfinancial factors in addition to financial factors, from the viewpoint of securing long-term investment returns for the interest of pension beneficiaries, adding provisions on specific ESG considerations (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 fiscal 2018. GPIF expressed our support for the declaration of the Task Force on Climate-Related Financial Disclosures (TCFD) in 2018, and has published the disclosure in line with the TCFD recommendations, starting from ESG Report following year. In fiscal 2023, we published ESG

Report 2022, the 6th issue. ESG Report 2022 presents not only the performance of ESG indexes and other direct investment results, but also quantitative analyses of trends in ESG ratings of portfolios and Japanese companies, etc.

In addition to the efforts to verify the effects introduced in the annual ESG Activity Report, GPIF implemented the project on “Measuring the Effects of ESG and Stewardship Activities” to conduct a more detailed analysis from FY2023 to FY2024. The project analyzes the following 4 themes and the results of the “Evaluation of the Effects of Engagement” conducted in FY2023 are published on GPIF’s website.

“Evaluation Project on the effects of engagement”



“Measuring the Effects of Stewardship Activities and ESG Investment Project”

	Project theme	Specific content
Measuring the effects of stewardship activities	(1) Evaluation of the effects of engagement	Study on the causation between the engagement and improvement of ESG performance / corporate value
	(2) Analysis of the exercise of voting rights by investment managers	Trend analysis in voting behavior differences for companies with which they have a potential conflict of interest and other investee companies
Measuring the effects of ESG investment	(1) Study on ESG factors contributing to the improvement of corporate value and investment return	Study on causation between ESG factors and improvement in corporate value/ investment return
	(2) Evaluation of the effects of passive equity investment based on ESG indexes	Analysis of the effects of ESG investment on corporate behavior

*The specific analysis content may change as a result of further consideration.

[2] Passive investment based on ESG indexes

In fiscal 2017, GPIF selected two comprehensive indexes and one thematic index focused on gender diversity for domestic equities, and commenced passive investment tracking those indexes. The selection criteria for the ESG indexes included risk return profile of each index and the possibility of these indexes to boost the equity market in Japan through improvement of ESG evaluation.

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

Moreover, in fiscal 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.

In fiscal 2020, the Board of Governors passed a resolution on “Practical Guidelines for the Selection of ESG indexes” setting forth basic policies for selecting ESG indexes and, in accordance with these guidelines, GPIF began passive investment in foreign stocks tracking the MSCI ACWI ESG Universal Index (not incl. JPY, China A) and the Morningstar Developed Markets ex-Japan Gender Diversity Index (“GenDi”, not incl. Japan). In fiscal 2021, we began passive investment in domestic equities based on the FTSE Blossom Japan Sector Relative Index, a comprehensive ESG index for domestic equities.

In fiscal 2022, after a review of thematic indexes for domestic equities, we selected the Morningstar Japan

ex-REIT Gender Diversity Tilt Index and began passive investment of domestic equities based on this index, while also rebalancing within passive investment tracking the ESG indexes.

In fiscal 2023, following the review of the MSCI Japan Empowering Women Index (WIN) in fiscal 2022, we made efforts to improve the adopted ESG indexes and reviewed the MSCI Japan ESG Select Leaders Index. As a result of repeated discussions with MSCI, MSCI submitted a proposal regarding a review of the inclusion criteria, and GPIF decided to change its benchmark to the MSCI Nihonkabu ESG Select Leaders Index and started operation.

As of the end of fiscal 2023, total ESG index-based investments have grown to approximately ¥17.8 trillion.

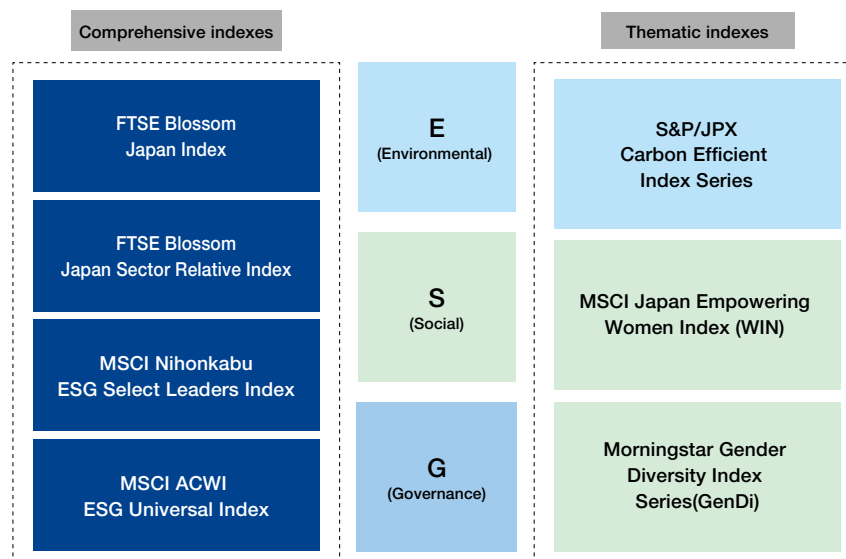
Theme	Index Name
Comprehensive	MSCI Nihonkabu ESG Select Leaders Index

<Change from previous index>




- Excluded REITs which are not included in TOPIX; the Policy benchmark of GPIF
- Changed inclusion criteria to include the top 50% of ESG-rated stocks within a given industry, rather than the previous criteria of including stocks with the highest ESG ratings through 50% of market capitalization in a given industry
- The above two points are expected to reduce the risk (tracking error) associated with TOPIX, which is our policy benchmark

We hope that these ESG indexes will serve as an incentive for various companies to introduce ESG into corporate management, and eventually improve corporate value in the long run.




List of selected ESG indexes



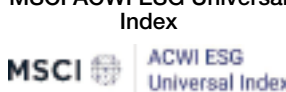
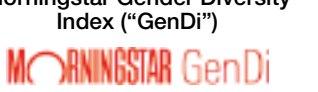

Domestic Equities : Comprehensive Indexes

	 FTSE Blossom Japan Index	 FTSE Blossom Japan Sector Relative Index	 MSCI Nihonkabu ESG Select Leaders Index 2024 CONSTITUENT MSCI NIHONKABU ESG SELECT LEADERS INDEX
Concept and characteristics of index	<ul style="list-style-type: none"> This index uses the ESG assessment scheme used in the FTSE4Good Japan Index Series, which has one of the longest track records globally for ESG Russell indexes. It is a comprehensive ESG index that selects stocks with high absolute ESG scores and adjusts industry weights to neutral at the industry level. 	<ul style="list-style-type: none"> Assessments are performed based on FTSE Russell's ESG rating which FTSE Blossom Japan Index also uses. For the companies with high carbon intensity (greenhouse gas emissions/sales), management attitude toward climate-change risks/opportunities is also assessed. The index selects stocks with relatively high ESG ratings within each industry, and adjusts industry weights to neutral. 	<ul style="list-style-type: none"> The MSCI Japan ESG Select Leaders Index is a comprehensive ESG index that integrates various ESG risks into today's portfolio. The index is based on MSCI ESG Research used globally by more than 1,000 clients. The index is comprised of stocks with relatively high ESG scores in each industry.
Index Construction	Best-in-class	Best-in-class	Best-in-class
Constituent universe (parent index)	FTSE JAPAN ALL CAP INDEX [1,434 stocks]	FTSE JAPAN ALL CAP INDEX [1,434 stocks]	MSCI JAPAN IMI [1,043 stocks]
Number of index constituents	311	632	516
Assets under management	¥1,522.3 billion	¥1,441.7 billion	¥2,972.1 billion

Domestic Equities : ESG Thematic Indexes (women's advancement/climate change)

	 MSCI Japan Empowering Women Index (Win)	 Morningstar Japan ex-REIT Gender Diversity Tilt Index ("GenDi J")	 S&P/JPX Carbon Efficient Index
Concept and characteristics of index	<ul style="list-style-type: none"> MSCI calculates the gender-diversity scores based on 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. 	<ul style="list-style-type: none"> Domestic equities index that determines investment weighting based on assessment of companies' commitment to gender equality, using the Equileap Gender Equality Scorecard. Ratings are conducted in four categories: (1) gender balance in leadership and workforce; (2) equal compensation and work-life balance; (3) policies promoting gender equality; and (4) commitment, transparency, and accountability. 	<ul style="list-style-type: none"> Constructed by S&P Dow Jones Indices based on carbon data provided by Trucost, a pioneer in environmental assessment. This index is designed to overweight companies that have lower carbon footprints (annual greenhouse gas emissions divided by annual revenues) and that actively disclose their carbon emission information.
Index Construction	Best-in-class	Tilted	Tilted
Constituent universe (parent index)	MSCI JAPAN IMI TOP 700 [697 stocks]	Morningstar Japan ex-REIT Index [963 stocks]	TOPIX [2,148 stocks]
Number of index constituents	369	963	1,845
Assets under management	¥940.3 billion	¥736.4 billion	¥2,311.7 billion

Foreign Equities : Comprehensive Indexes and ESG Thematic Indexes (women's advancement/climate change)

	 MSCI ACWI ESG Universal Index	 Morningstar Gender Diversity Index ("GenDi")	 S&P Global Carbon Efficient Index
Concept and characteristics of index	<ul style="list-style-type: none"> One of MSCI's flagship ESG indexes, this comprehensive index adjusts the weight of constituents based on each issuer's current ESG rating and ESG trends to elevate the ESG metrics of the index overall. The index was developed for large investors seeking to enhance ESG integration while achieving the same level of investment opportunity and risk exposure as the parent index. 	<ul style="list-style-type: none"> Foreign equities index that determines investment weighting based on assessment of companies' commitment to gender equality, using the Equileap Gender Equality Scorecard. Ratings are conducted in four categories: (1) gender balance in leadership and workforce; (2) equal compensation and work-life balance; (3) policies promoting gender equality; and (4) commitment, transparency, and accountability. 	<ul style="list-style-type: none"> Constructed by S&P Dow Jones Indices based on carbon data provided by Trucost, a pioneer in environmental assessment. This index is designed to overweight companies that have lower carbon footprints (annual greenhouse gas emissions divided by annual revenues) and that actively disclose their carbon emission information.
Index Construction	Tilted	Tilted	Tilted
Constituent universe (parent index)	MSCI ACWI ex Japan ex China A ESG Universal with Special Taxes Index [2,104 stocks]	Morningstar® Developed Markets Ex-Japan Large-Mid[1,745 stocks]	S&P Global ex-Japan LargeMidCap [3,156 stocks]
Number of index constituents	2,053	1,725	2,183
Assets under management	¥2,346.3 billion	¥684.9 billion	¥4,876.9 billion

(Source) Prepared by GPIF based on FactSet, etc.

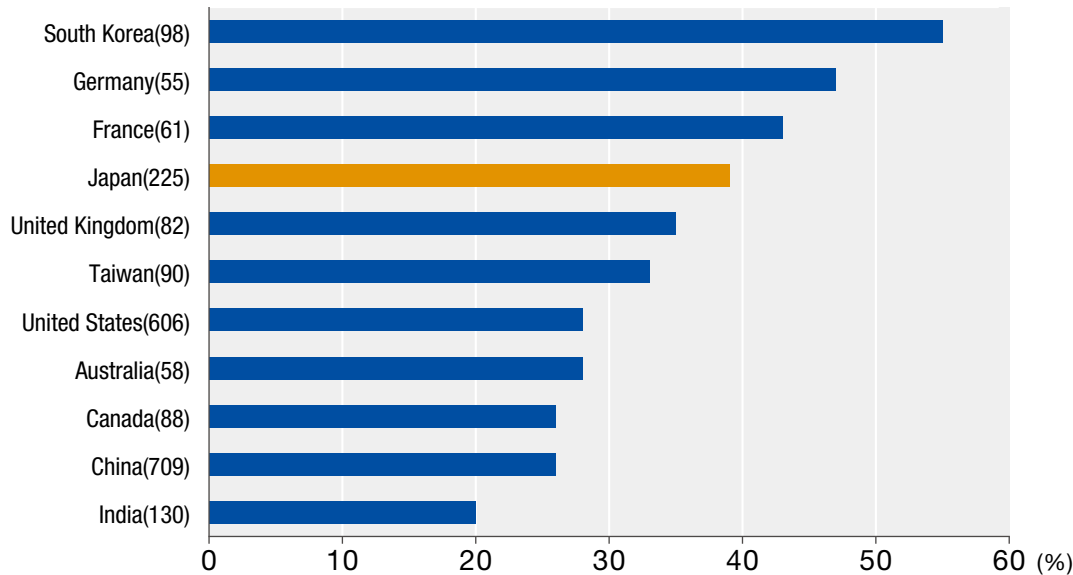
(Note) Number of index constituents and assets under management are as of March 31, 2024.

Changed from MSCI Japan ESG Select Leaders Index to MSCI Nihonkabu ESG Select Leaders Index in February 2024.

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 ways in which they conduct ESG evaluation and construction of indexes, and to proactively engage with companies. It is hoped that this will lead to improvement in responses to ESG issues and information disclosure by Japanese companies.

Data Verification Rate of Companies by Countries in the ESG Evaluation Process



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(Note) Universe is MSCI ACWI constituent companies. The above graph shows only the major countries with 50 or more MSCI ACWI constituent companies. The percentages are calculated using the number of companies that submitted data for verification on the Issuer Communication Portal (ICP) in 2023 and the number of constituents in the index as of the end of December 2023. The number of constituents is shown in parentheses.

[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. 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 major multilateral development banks including the European Investment Bank (EIB) and the Asian Development Bank (ADB). In addition to this, in 2019, GPIF also established partnerships with government finance agencies. As of March 31, 2024, we have built investment platforms with ten multilateral development banks and six government finance agencies. The investment in green bonds, social ICMA bonds and sustainability bonds, etc. through these platforms reached

¥1.6 trillion as of the end GPIF of March 2024. (calculated by GPIF based on data for bonds in compliance with principles of International Capital Market Association (ICMA), etc.)

GPIF is also investing in the Climate Transition Bonds issued by the Japanese government. The bonds were issued in accordance with the “Act for Promoting a Smooth Transition to a Decarbonized Growth Economic Structure (GX Promotion Act)” The proceeds will be allocated to projects to achieve carbon neutrality by 2050 and a 46% reduction by GHG emissions by fiscal 2030 (compared to fiscal 2013), which are international commitments consistent with the Paris Agreement. In the course of investing in Japan Climate Transition Bonds, GPIF engaged with the Japanese government (Ministry of Economy, Trade and Industry) and the external evaluation agencies for these bonds (DNV BUSINESS ASSURANCE JAPAN K.K. and Japan Credit Rating Agency, Ltd. (JCR)), and checked for consistency with global standards such as Climate Transition Finance Handbook, Green Bond Principles, and the like.

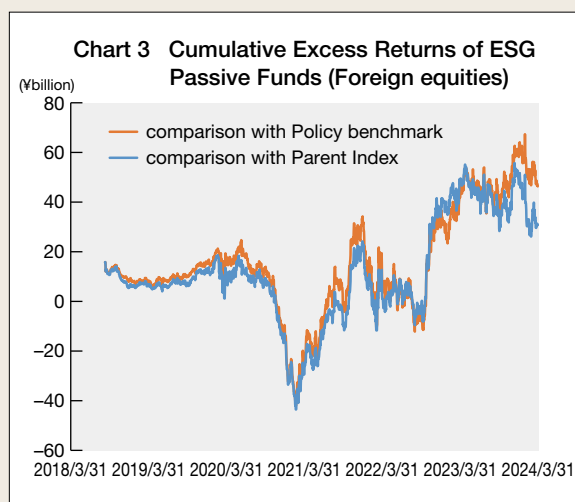
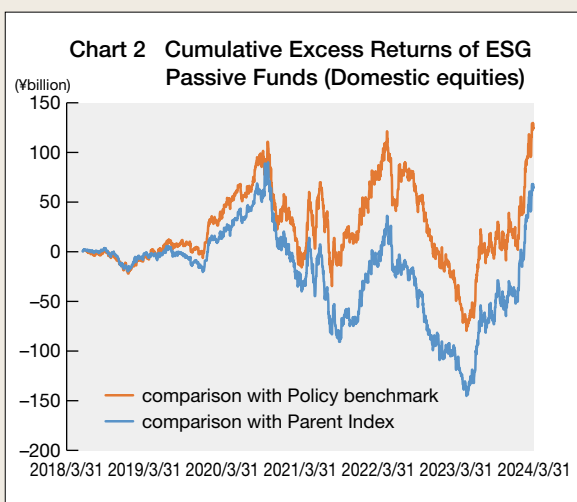
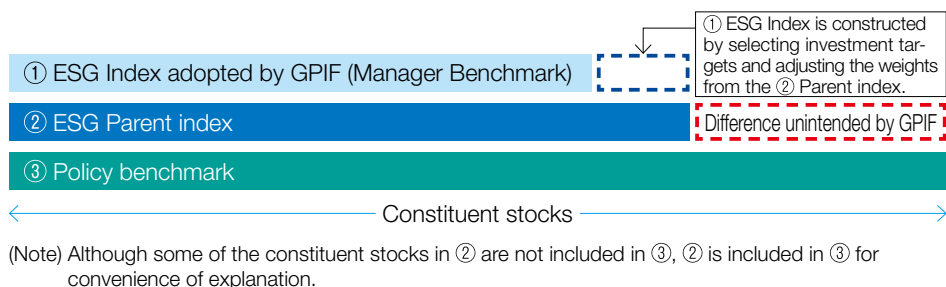
(Column) Perspective on ESG index performance

About 7 years have passed since passive investment based on ESG indexes started in fiscal 2017. The cumulative excess returns from the ESG passive funds managed by GPIF’s asset managers from the start of investment to the end of March 2024 relative to our Policy benchmark (Note 1) are ¥124.2 billion and ¥46.2 billion in domestic equities and foreign equities, respectively (Orange line in Chart 2 and 3). Although the excess returns are calculated based on the performance difference between the Policy benchmark and each ESG passive fund, it should be noted that the excess returns are broken down into factors associated with ESG consideration and other factors.

As shown in Chart 1 below, ① (ESG index) is constructed by selecting target stocks from the stocks included in ② (ESG parent index) according to ESG ratings and adjusting weights. Therefore, the difference in the composition of stocks between ② and ③ (policy benchmark) is one of the reasons for the performance difference between ① and ③. Since the difference between ② and ③ is not due to the consideration of ESG and is unintended by GPIF, we eliminate this difference, focus only on the difference between ① and ② (Note 2), and calculate the cumulative excess return relative to parent index from the start of investment to the end of March 2024. The figures are 64.3 billion yen and 30.6 billion yen for Domestic equities and Foreign equities, respectively (blue lines in Chart 2 and 3). While it can be concluded that the consideration of ESG factors contributes to excess returns, it can be confirmed that performance fluctuates significantly depending on timing.

GPIF will continue to examine effective risk management and investment methods in order to ensure stable excess returns relative to the parent index by continuously examining effects of ESG Evaluation on investment returns.

Chart 1 Image of ESG Index, ESG parent index and Policy benchmark



(Note 1) While the Policy benchmark and assessment benchmark are same with domestic equities, the Policy benchmark of foreign equities in the 3rd Mid-term Objectives Period is MSCI ACWI (excluding Japan, yen basis, including dividends, before tax factors for dividends for GPIF), and assessment benchmark is MSCI ACWI (excluding Japan, yen basis, including dividends, after accounting for dividend tax factors for GPIF), therefore they are slightly different. However, they are collectively referred to as the Policy benchmark here.

(Note 2) Precisely, the fund factor, which is the difference between ESG passive fund performance and ESG index, is also included.

8 | Other Major Initiatives

[1] Call for applications for external asset managers and their management

① Call for applications through the Asset Manager Registration System

A. Status of registration from the Asset Manager Registration System

GPIF has been calling for applications for asset managers through the Asset Manager Registration System to quickly collect information on various investment strategies and introduce more flexibility into manager selection. The status of registration of four traditional asset classes as of the end of fiscal 2023 is as listed in the table.

	The number of entries	The number of information provided
Domestic bonds	9	1
Foreign bonds	327	24
Domestic equities	105	4
Foreign equities	470	69
Public REITs	18	3

B. Change in Qualification of Asset Managers for Application

As application requirements for the selection of asset managers, quantitative criteria were set previously, such as ¥100 billion or more in overall assets under management, ¥30 billion or more in assets under management for investment products, and 5 years or more of investment performance record, etc. However, as of December 20, 2023, the criteria were changed to “an asset manager must have sufficient experiences in managing clients’ assets” because of the enhancement of GPIF itself, which now makes it possible to analyze and evaluate the asset managers’ capabilities in greater detail and with the aim of encouraging more asset managers to apply.

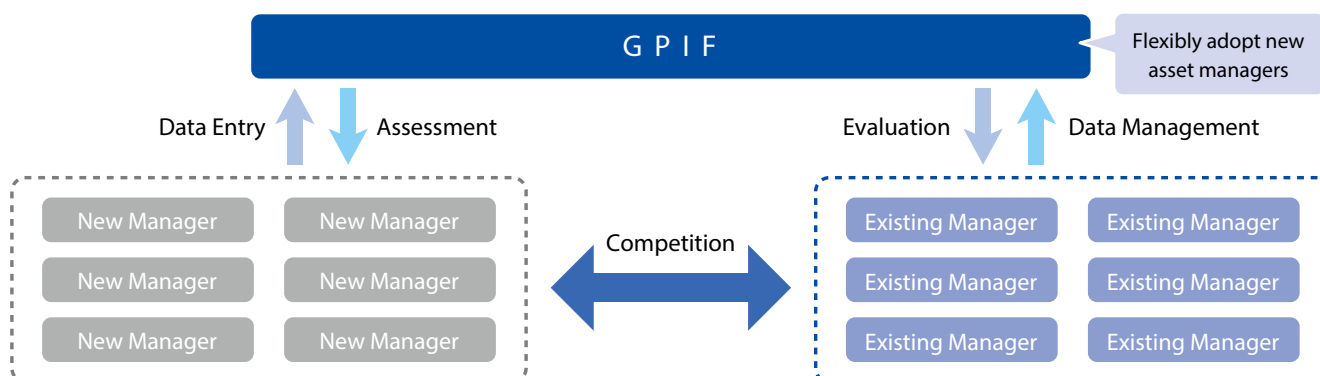
C. Selection of asset managers for four traditional asset classes

With the aim to improve the long-term return from the overall assets under management, we selected 14 active foreign equity funds and 23 active domestic equity funds, in fiscal 2023.

D. Call for applications for managers of alternative assets

GPIF has been calling for applications for asset managers 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 estate 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

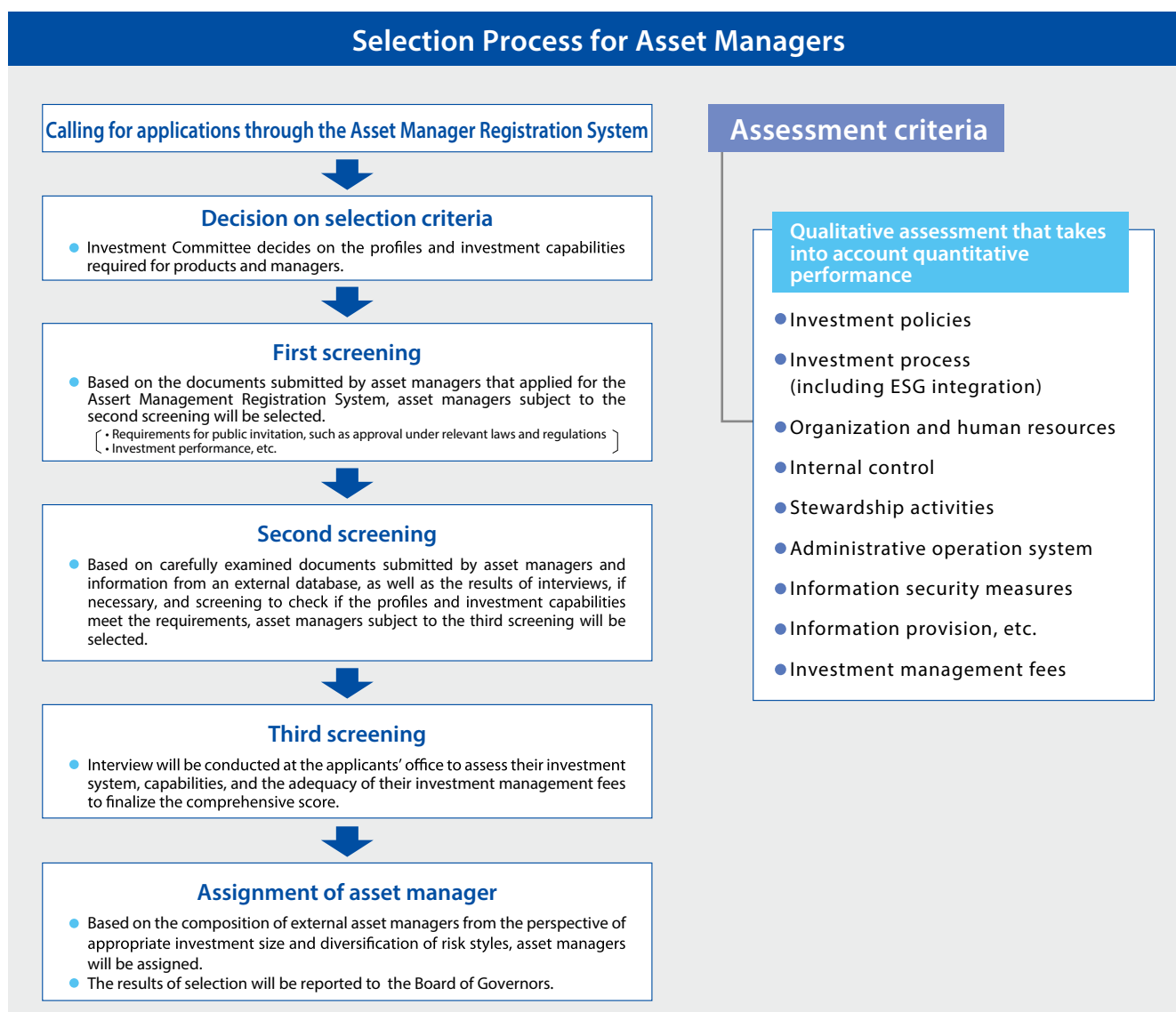
manager for a global PE mandate in fiscal 2019, one external asset manager for a global PE mandate and one external asset manager for a foreign real estate mandate in fiscal 2020, one external asset manager for a domestic PE mandate in fiscal 2021, one external asset manager for a foreign real estate mandate in fiscal 2022, and one external asset manager for a real estate mandate in fiscal 2023. We have started investing in those assets.



② The selection process and screening criteria for external asset managers

A. In order to conduct each selection quickly and effectively, GPIF shall specify the profiles and investment capabilities of products and managers to select. In the first screening process, we check necessary qualification conditions of the applying managers. Then, in the second screening process, we examine the content of the application materials. Then, candidates are narrowed down to the third screening process, where we do thorough investigation for the final decision of selection. We have started to finalize only an assessment in the third screening process,

and then make a final decision by considering 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 whether they integrate ESG in investment analysis and investment decisions explicitly and systematically on “Investment process,” which is one of assessment criteria.



③ Management and assessment of external asset managers, etc.

A. Management and assessment of external asset managers

For the management of external asset managers, GPIF requires the periodic submission of reports on the status of investment results and risks, confirms the status of compliance with investment guidelines and others, and holds meetings and receives explanations as necessary.

We conduct annual overall assessments as well. In fiscal 2023, we took appropriate measures, including requesting improvements to two active funds for domestic equities and one active fund for domestic bonds whose assessment was below a certain level.

In addition to the overall assessment, we also cancelled seven active funds for foreign bonds, one passive fund for domestic equities, one active fund for domestic equities, and four active funds for foreign equities, owing to

management and investment reasons, and cancelled one active fund for foreign equities owing to contractual reasons.

Oversight of transition managers among the external asset managers is carried out by requesting submission of reports related to transactions when carrying out transitions, checking on transaction costs and compliance with investment guidelines, holding meetings as necessary to receive explanations, and so forth.

The remuneration system for active managers is based on a remuneration rate proportional to excess return (i.e., performance-linked remuneration), and remuneration is on par with that for passive managers (i.e., base remuneration) if excess return is not earned.

B. Management and assessment of custody service providers

GPIF manages custody service providers by conducting regular meetings, including online meetings, at which explanations are received on the progress of operations and such topics, and holding other meetings as needed to address specific issues. In addition, GPIF requests the submission of materials pertinent to custody services once a year to ascertain the custody service providers'

organizations, human resources, operational structures, internal controls, asset management systems, global custody, and information security measures. Based on the information received, we conduct comprehensive evaluations of each custody service provider based on operational policies with an understanding of each custody service provider's strengths and issues.

C. Reviewing our asset management activities

In recent years, as GPIF's investment activities has become more diversified and sophisticated, the approaches taken by custody service providers has become more complicated. Facing this trend, GPIF has been optimizing our use of custody service providers (including the ones for global custody services) to accommodate further diversification and sophistication in our investments, based on comprehensive evaluations of the custody service providers and other factors including management costs and business continuity plans (BCP).

To precisely manage risks associated with the further diversification and sophistication of our investments and to enhance the effectiveness of our communications with external asset managers, it is necessary to collect transaction data more promptly than ever for risk analysis and other purposes. For this reason, we have established systems to collect data for investment decision, aside from accounting data collected from custody services providers, and we will continue studying how to approach operations related to the acquisition of data.

(Note) For the list of external asset managers, refer to pages 102-104.

[2] Securities lending operations

Decision to resume foreign equities lending operations

Foreign equities lending, which commenced in 2014, was suspended in December 2019 in light of concerns that it was inconsistent with its stewardship responsibilities as ownership would be transferred to the borrower, creating a substantial vacuum in GPIF's holdings, and that transparency was not ensured as the ultimate borrower and use of the borrowed equities could not be identified. In addition, it was decided to reconsider the equity lending scheme if transparency was ensured and issues could be

resolved.

According to the "Research on the Impact on the Market of the Suspension of Equity Lending" conducted in fiscal 2022,

- GPIF's suspension of Foreign equities lending had no impact on the equity market or the equity lending market.
- Many overseas pension funds are striving to balance equity lending and stewardship responsibilities by implementing measures to avoid equity borrowing for the sole purpose of exercising voting rights without holding ownership (Empty

Voting) and to maintain the effect of engagement while securing profits through equity lending.

- Regarding applications of equity lending in the market, the types of applications, including short selling, have been clarified, and countermeasures exist for problematic applications (such as Empty Voting).
- Although it is not yet possible to fully confirm the ultimate borrower, progress has been made in ensuring transparency, including requests from asset owners in equity lending transactions to external asset managers

and lending agents to establish an information sharing system, and the requirement to report transactions to regulatory authorities in Europe and the United States. Based on the results of this research and deliberations in the Board of Governors, it was decided to resume foreign equity lending, which had previously been suspended. For details, please refer to GPIF website (https://www.gpif.go.jp/topics/lending_202403.pdf).
(Japanese only)

[3] Promoting research and study

① GPIF Finance Awards

Amid the increasing sophistication of investment methods and diversification of financial products, GPIF believes that, for pension reserves to ensure safe and efficient pension management, it is necessary to create an environment where academic research on pension management is continuously strengthened. As part of this effort, GPIF Finance Awards were established in fiscal 2016 to recognize young researchers who have made outstanding achievements in the field of pension

management. The awards also widely disseminate information about their achievements and their social significance, and promote the activities of excellent researchers.

In fiscal 2023, the winners of the 6th GPIF Finance Awards were presented. The winners were selected by the selection committee consisting of prominent researchers in the fields of finance.



Winner: YANASE Noriyoshi Professor, Keio University

Career summary: Graduated from Hitotsubashi University. Worked at Tokyo Keizai University, the University of South Carolina, the Tokyo University of Science, and Tokyo Keizai University TKU Institute of Finance (Fellow, Visiting Fellow) before assuming his current position in 2019.

Reason for receiving the award: His research focuses on how retirement benefits and corporate pension systems are related to corporate finance and corporate behavior. His research focuses on a unique area that, although important in practice in Japan, has few researchers around the world.

Winner: SUZUKI Katsushi Professor, Hitotsubashi University (Until March 2024. In April of the same year, he became a professor at Gakushuin University.)

Career summary: Graduated from Hitotsubashi University. After working at Tokyo University of Science and Kobe University, joined Hitotsubashi University in 2019.

Reason for receiving the award: His thought-provoking research on important topics in finance, such as the relationship between shareholder benefits and corporate value peculiar to Japan and the selection of CEOs, has been conducted both academically and practically. He has achieved remarkable results and is expected to do well in the future.

(Selection Committee Member)

Josh Lerner	Jacob H. Schiff Professor of Investment Banking, Harvard Business School
David Chambers	Invesco Professor of Financial History, Judge Business School, The University of Cambridge
OKINA Yuri	Chairperson of the Institute, The Japan Research Institute, Ltd. (Member of Financial System Council)
OKIMOTO Tatsuyoshi	Professor, Faculty of Economics, Keio University
KATO Yasuyuki	Professor, Business School, Kyoto University of Advanced Science (Member of Board of Governors)
FUKUDA Shinichi	Professor, Graduate School of Economics, The University of Tokyo
YONEZAWA Yasuhiro	Professor Emeritus, Graduate School of Business and Finance, Waseda University (Former Chair of Investment Advisory Committee)

GPIF is hosting GPIF Finance Awards for Students for university and graduate school students nationwide to broaden the base of researchers who will be engaged in research related to pension reserves investment in the future.

GPIF Finance Awards for Students provide an opportunity for students and groups of students who are conducting research related to the field of pension reserves investment and its surrounding fields to present their research and deepen their understanding through

interaction with each other. In addition, GPIF recognizes those who have conducted useful research, widely publicizes the content of the research, and encourages further research.

In fiscal 2023, there were 5 applicants, and judging was conducted based on submitted materials and reports at the research presentation meeting. 3 excellent research awards and 2 research incentive awards were selected and presented.

(Note) For more information about GPIF Finance Awards, please visit GPIF website (<https://www.gpif.go.jp/en/investment/research/awards/>).

② Research

GPIF believes it necessary to conduct research and amass the know-how gained for safely and efficiently managing and investing pension reserves for the future.

(Note) For the details of researches, refer to the website: <https://www.gpif.go.jp/en/investment/research/>.

A. Research related to quantitative analysis of the market impact of stock lending

There are concerns that foreign equities lending, which commenced in 2014, is inconsistent with its stewardship responsibilities because it would transfer ownership to the borrower and create a substantial holding lapse in GPIF.

There are also issues that transparency is not ensured because the “ultimate borrower” and “use” of the lent equities cannot be confirmed.

In December 2019, GPIF suspended the foreign equities lending scheme. In addition, we decided to reconsider the equity lending scheme if transparency is ensured and issues are considered to be resolved.

Against this background, in fiscal 2022, we conducted a research to quantitatively analyze the market impact of the suspension of equity lending and to qualitatively analyze the consistency between equity lending and ESG/stewardship responsibilities. The results of this research were also utilized to resume foreign equities lending, which had been suspended until now (see page 86).

Commissioned to: EY Strategy and Consulting Co., Ltd.

B. Research on the views of experts on Government Pension Investment Fund

GPIF will define its own 5th Medium-term Plan in line with the 5th Medium-term Objectives set by the Minister of Health, Labour and Welfare for a period of 5 years from April 2025. Our aim is “securing the investment returns that it requires with minimal risk and from a long-term perspective, to the sole benefit of pension recipients.” Therefore, in formulating the 5th Medium-term Plan, it is important for GPIF to consider from a long-term perspective. Therefore, when GPIF decides on the Medium-term Plan, we have been conducting

necessary research since fiscal 2023 in order to grasp the objective views and expectations of experts and others about GPIF and use them as a reference for incorporating GPIF's direction and initiatives into the Medium-term Plan. Specifically, GPIF communicates with experts and others by questionnaires and interviews, collects newspaper articles that mention GPIF, and performs a text analysis.

Commissioned to: Mizuho Research & Technologies, Ltd.

C. Research on Fair Value Estimation of Infrastructure Assets

GPIF invests in unlisted infrastructure assets as part of its alternative investments. Infrastructure assets have a relatively short market history among alternative assets, and knowledge on fair value estimation techniques and understanding of risk/return characteristics is limited. However, in order to further enhance the management of the entire portfolio of GPIF, we believe that more advanced performance and risk analysis is required for

unlisted infrastructure assets as well. This research systematically collects and accumulates data on unlisted infrastructure assets and examines quantitative analysis of risk/return characteristics. It has been conducted since fiscal 2023 with the aim of further improving the quality of alternative asset management in the future. Commissioned to: Scientific Infra and Private Assets Ltd.

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 support, 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 funds, aside from a payment reserve. However, to respond to changes in the population and economy appropriately, and to prepare for further declining birthrate and aging population expected in the future, GPIF 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 funds to stabilize pension finance.

Japan's declining 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 ^(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 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 (repayment of trust money or payment to national treasury) accounts for about 10 percent. The reserve fund may not be reduced immediately. 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.

[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 the pension reserve fund, part of the premium collected from the pension beneficiaries, is 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 fund on the markets and activities by other private sectors. 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 4th 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 specific policies on the management and investment of its pension reserve fund (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 4th Medium-term Objectives for the period from fiscal 2020 to fiscal 2024 stipulate that the 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 4th 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 4th Medium-term Objectives stipulate 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. Accordingly, GPIF shall promote investments that consider ESG (environmental, social, and governance) as non-financial factors, while paying attention to the fundamental policies on the management and investment of its pension reserve fund mentioning that the pension reserve shall be managed and invested for the purpose of securing long-term returns for the pension beneficiaries.

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.

An outline of the deliberations at the Board of Governors is promptly published upon obtaining approval of the Board, so as to help ensure the transparency of GPIF's organizational operation.

③ Other important matters for pension reserve management

The 4th 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 revenue and expenditure. 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 4th Medium-term Objectives, GPIF is expected to clarify the area of operations requiring highly skilled professionals, while developing an environment for attracting such talent, to provide training by highly skilled professionals to improve the operational capabilities of our staff, and to formulate a policy to secure and foster human resources strategically. Regarding the validity of the remuneration level for highly skilled professionals, it also stipulates that GPIF shall explain clearly to the public the appropriateness 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 as well as 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 compared to the previous fiscal year, 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

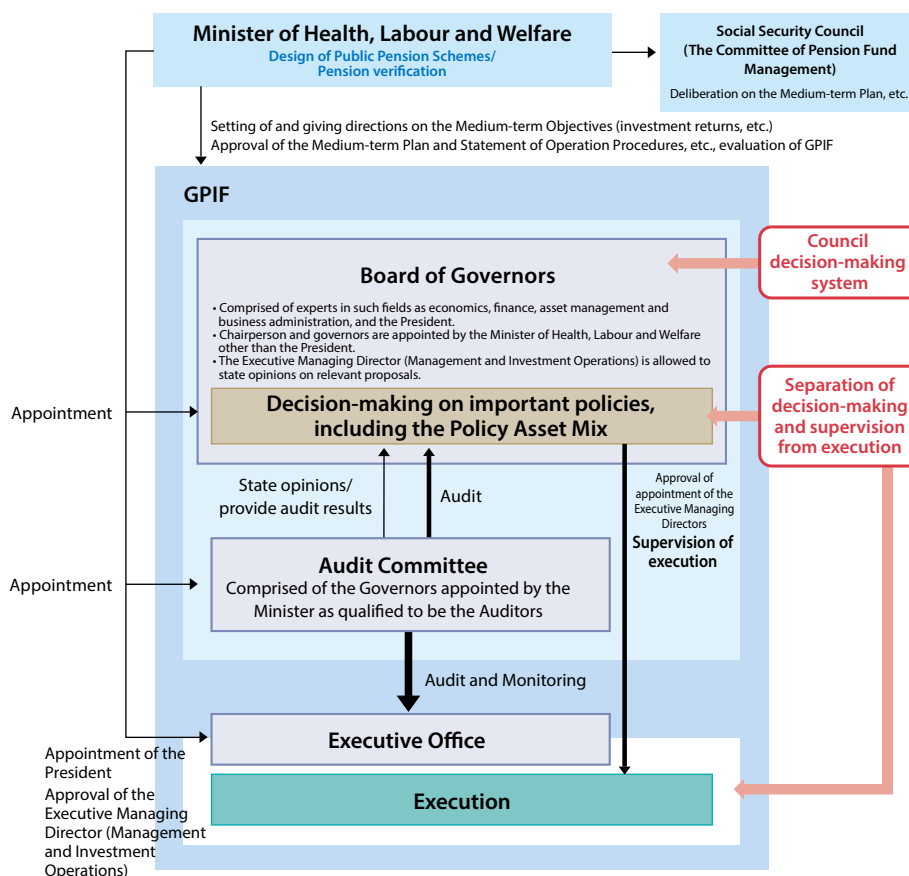
[1] Governance framework

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 important matters relevant to the operation of GPIF, such as the formulation of basic policies of portfolio risk management and internal control, the establishment of organization rules, as well as the appointment of the executive directors.

It has been six 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 14 meetings in fiscal 2023. An outline of the meetings is as described in the following table.

At the Board of Governors meeting in fiscal 2023, a resolution was passed on the verification of the policy asset mix and equities lending. The Board also received reports from the President or other executives on the asset allocation ratio and the status of portfolio risk management for active discussion. The details of discussion by the Board of Governors are published later on the GPIF website of as a summary of agenda items.

Outline of meetings of the Board of Governors

(fiscal 2023)

	Date of meeting	Main agenda items (only matters for resolution/deliberation are recorded)
80th meeting	April 20, 2023	—
81st meeting	May 19, 2023	(Resolution) Verification of the policy asset mix in fiscal 2022
82nd meeting	June 13, 2023	(Deliberation) (i) Annual Report fiscal year 2022 (draft), (ii) Review of operations in fiscal 2022 (draft), (iii) Preparation of the financial statements, business report, and financial report for fiscal 2022, appropriation of profit and loss and other important matters related to accounting (draft)
83rd meeting	June 29, 2023	(Resolution) Annual Report fiscal year 2022(draft), (ii) Disclosure of portfolio holdings by asset category as of the end of March 2023, (iii) Review of operations in fiscal 2022 (draft), (iv) Preparation of the financial statements, business report, and financial report for fiscal 2022, appropriation of profit and loss and other important matters related to accounting (draft)
84th meeting	July 28, 2023	(Resolution) Expansion of the 10th floor office
85th meeting	September 14, 2023	—
86th meeting	October 24, 2023	—
87th meeting	November 30, 2023	(Resolution) Revision of Salary Regulations for Officers and Salary Regulations for Employees
88th meeting	December 14, 2023	(Deliberation) Equities Lending
89th meeting	January 23, 2024	(Deliberation) (i) Equities Lending (2), (ii) Next Risk/Return Analysis Tool
90th meeting	February 8, 2024	—
91st meeting	March 7, 2024	(Deliberation · Resolution) (i) Equities Lending (3), (ii) Annual Plan for fiscal 2024 (draft)
92nd meeting	March 25, 2024	—
93rd meeting	March 26, 2024	(Resolution) (i) Consent to the appointment of the Executive Managing Director in charge of Management and Operation and the Executive Managing Director (Planning and General Affairs), (ii) Revision of the Board of Governors Statute

[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 14 meetings in fiscal 2023. 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, other executives, and staff members; the status of the internal control system; 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 in order to further strengthen internal controls.

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

[4] Execution system

① Organization

As of April 1, 2024, 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 167 staff members (including 34 female staff members (excepting part-time staffs)).

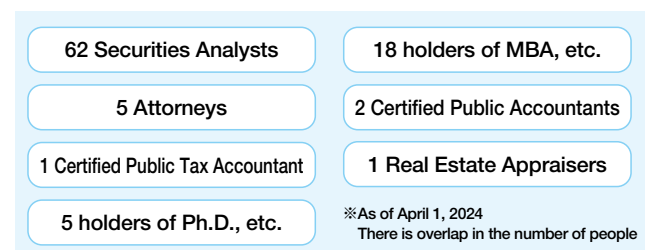
To diversify our investment and improve risk management, GPIF strives to secure and train highly qualified and specialized personnel. We have promoted the recruitment of qualified experts in various fields, including securities analysts, attorneys, MBAs, and real estate appraisers.

GPIF manages a very large amount of assets, at approximately ¥246 trillion, which is expected to continue to increase gradually in the future. The investment environment is constantly changing, and advances in areas such as data science and financial engineering continue to result in enhancements to asset management techniques. In order for GPIF to continue investing in a long-term and stable manner, we believe that further diversification and sophistication to our asset management are necessary. To support these efforts, we are further recruiting specialist personnel. At the same time, we have also appointed a senior IT advisor who is well-versed in asset management operations and also has technical knowledge and experiences related to information systems. With this appointment, we are considering the development of an information processing platform.

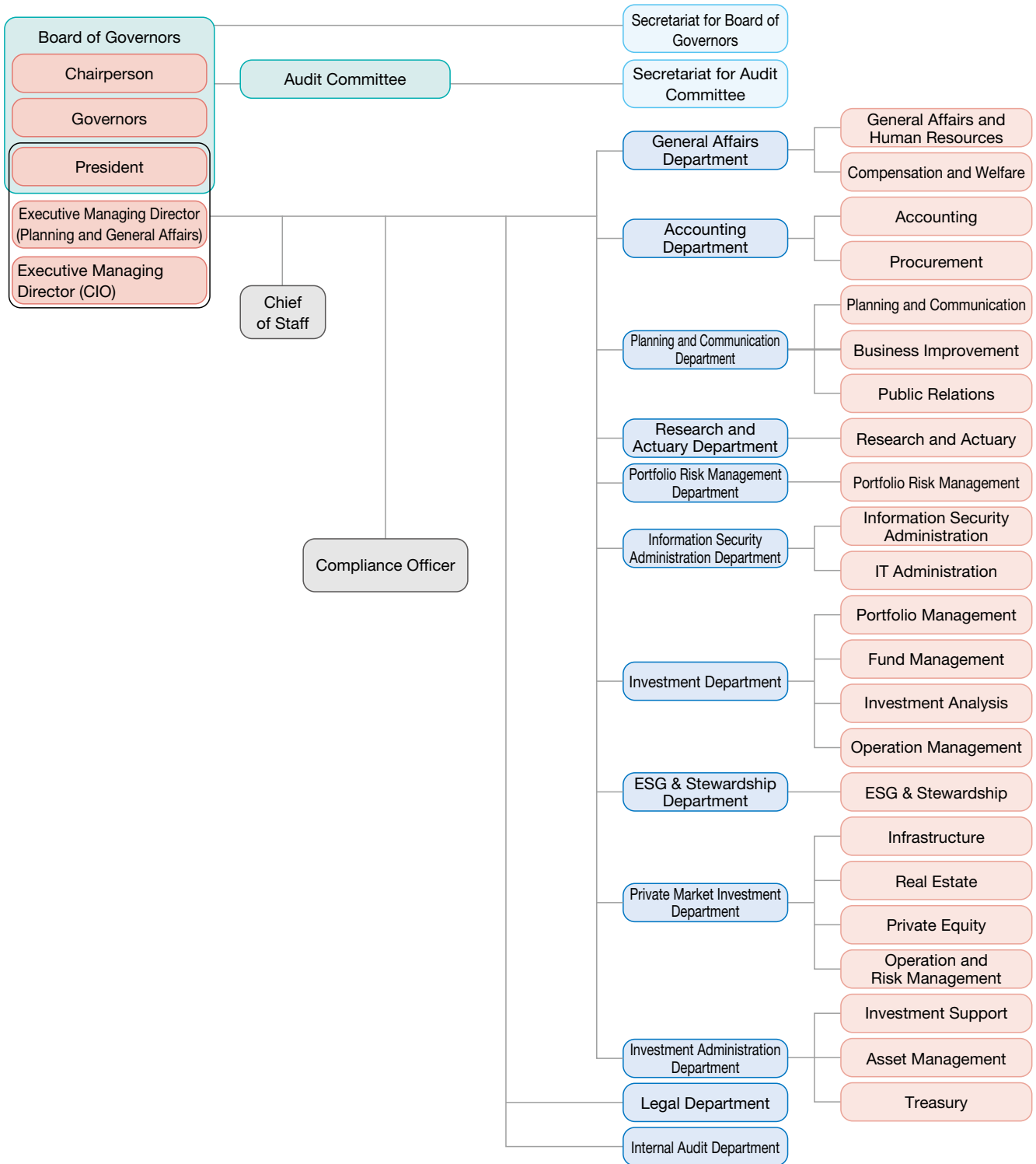
GPIF is also working to improve the working environment to enable a diverse range of human resources to work with a sense of job satisfaction. We promote the active take-up of childcare leave and enable the flexible use of early and late-start work systems as well

as telecommuting systems, as part of efforts to create a work-friendly environment for employees in childcare or nursing care.

The organization consists of the Secretariat for Board of Governors, the Secretariat for Audit Committee, the General Affairs Department (General Affairs and Human Resources Division, Compensation and Welfare Division), Accounting Department (Accounting Division, Procurement Division), the Planning and Communication Department (Planning and Communication Division, Business Improvement Division, Public Relations Division), the Research and Actuary Department (Research and Actuary Division), the Portfolio Risk Management Department (Portfolio Risk Management Division), the Information Security Administration Department (Information Security Administration Division, IT Administration Division), the Investment Department (Portfolio Management Group, Fund Management Group, Investment Analysis Group, Operation Management Division), the ESG & Stewardship Department (ESG & Stewardship Division), the Private Market Investment Department (Infrastructure Group, Real Estate Group, Private Equity Group, Operation and Risk Management Division), the Investment Administration Department (Investment Support Division, Asset Management Division, Treasury Division), the Legal Department, and the Internal Audit Department (the last two Departments report directly to the President).



Organization chart (as of April 1, 2024)



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 comply 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 is 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.

GPIF's 4th Medium-term Plan provides for the expansion and strengthening of GPIF's legal function. To address this requirement, on March 1, 2021, GPIF established the Legal Department. With this establishment, GPIF has become able to better manage its highly individualized alternative investments in a timely manner, further strengthen internal control and ensure stricter compliance with applicable laws and regulations.

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 (include reputation 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

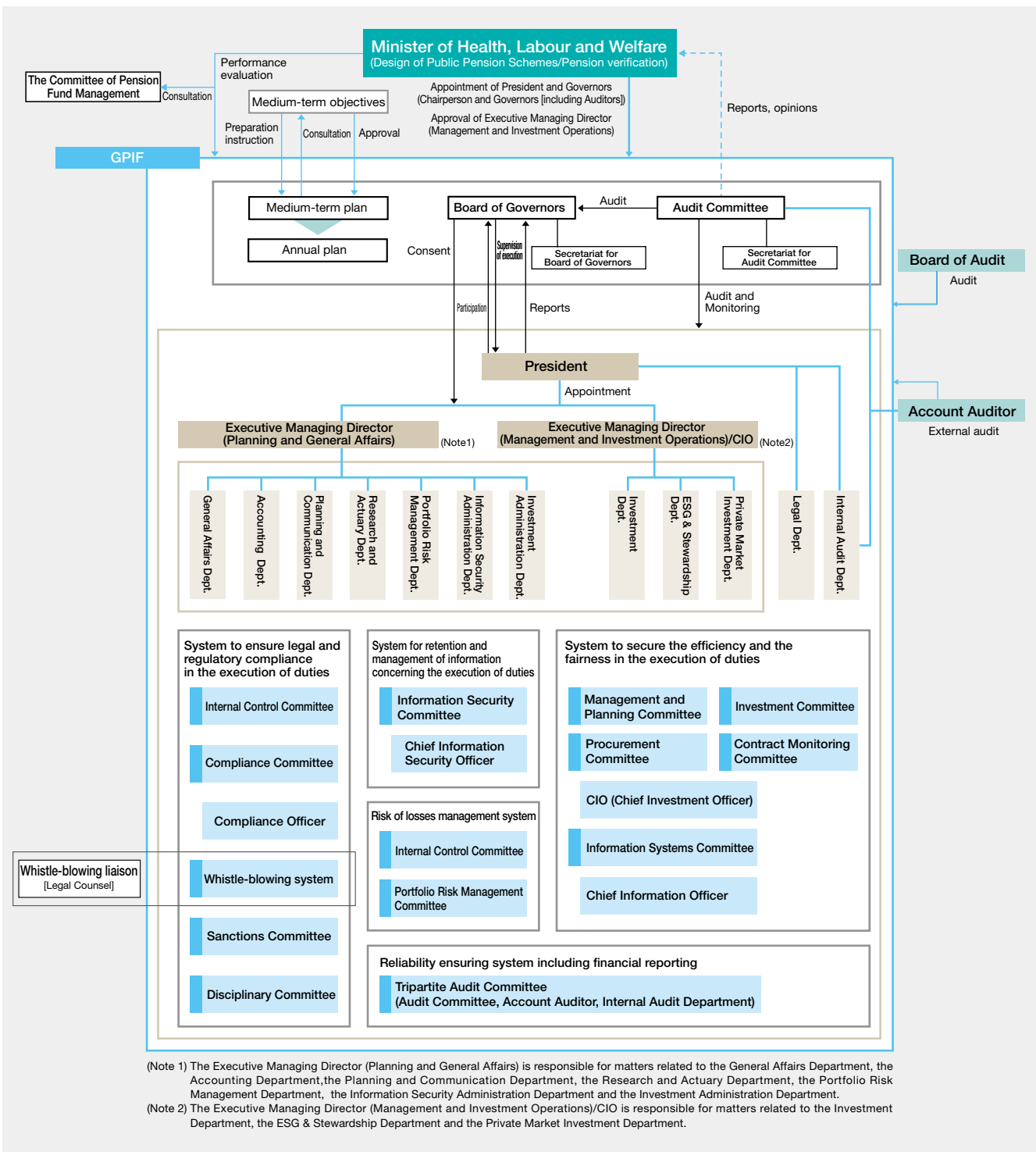
in the event of risk occurrence.

With regard to operational and other risk, the new rules and regulations relating to operational and other risk management were established, including the rules for operational and other risk management established by the Board of Governors held in July 2019. Based on the new operational and other risk management process set forth by the above new rules and regulations, GPIF goes through a potential risk identification, analysis, and assessment process on an annual basis. In addition, these rules and regulations stipulate that each department is required to promptly take appropriate measures to deal with any risks that occur, and to report on an identified risk to the department responsible for supervising operational and other risk management and Internal Audit Department for each time of risk occurrence. The operational and other risk management execution status of GPIF is reported to the Board of Governors once a year. In addition, the occurrence of a significant operational and other risk is to be promptly reported to the Board of Governors.

As a system to ensure the efficiency and fairness of the execution of duties, the Investment Committee has been established under the supervision of the Chief Investment Officer to deliberate and make decisions in advance when making decisions on important matters (including matters related to ensuring fairness in contracts with external asset managers, custodians, business partners for in-house investment, business partners for short-term borrowing, etc.) related to the execution of management operations.

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



Chapter 3 Reference Data

1 | Investment Assets by Investment Method and by Manager, Etc.

[1] Investment assets by investment method and by asset class (the market value at the end of fiscal 2023)

	Market value (¥billion)	Portfolio allocation (%)
Total (Investment assets)	245,981.5	100.00
Passive investments	202,471.4	82.31
Active investments	42,116.0	17.12
Others	1,394.1	0.57

		Market value (¥billion)	Portfolio allocation (%)
Total (Investment assets)		245,981.5	100.00
Domestic bonds	Total	61,157.3	24.86
	Passive investments	29,915.4	12.16
	Active investments	29,962.4	12.18
	Others	1,279.5	0.52
Foreign bonds	Total	60,372.1	24.54
	Passive investments	58,436.2	23.76
	Active investments	1,821.3	0.74
	Others	114.6	0.05
Domestic equities	Total	61,553.2	25.02
	Passive investments	58,788.9	23.90
	Active investments	2,764.3	1.12
Foreign equities	Total	62,898.9	25.57
	Passive investments	55,330.8	22.49
	Active investments	7,568.0	3.08

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

(Note 2) Others in domestic bonds refer to yen-denominated short-term assets. Others in foreign bonds refer to foreign currency-denominated short-term assets.

(Note 3) The calculation of figures in fiscal 2023 is based on transaction date and does not take notional amount of stock index futures and other factors into account.

[2] Changes in the ratios of passive and active investment

(Unit: %)

		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Domestic bonds	Passive	86.10	82.50	79.38	77.03	75.54	71.45	72.93	76.60	58.12	48.92
	Active	13.90	17.50	20.62	22.97	24.46	28.55	27.07	23.40	41.88	51.08
Foreign bonds	Passive	69.85	64.94	60.89	61.98	66.24	73.81	76.12	79.22	86.28	96.79
	Active	30.15	35.06	39.11	38.02	33.76	26.19	23.88	20.78	13.72	3.21
Domestic equities	Passive	86.71	81.52	90.62	90.44	90.58	90.93	92.97	93.65	93.06	95.51
	Active	13.29	18.48	9.38	9.56	9.42	9.07	7.03	6.35	6.94	4.49
Foreign equities	Passive	88.05	84.15	86.45	86.32	90.50	90.17	87.99	90.82	93.57	87.97
	Active	11.95	15.85	13.55	13.68	9.50	9.83	12.01	9.18	6.43	12.03
Total	Passive	83.91	79.28	77.31	76.28	77.87	79.21	82.69	85.21	82.82	82.31
	Active	16.09	20.72	22.69	23.72	22.13	20.79	17.31	14.79	17.18	17.69

(Note 1) The amount until fiscal 2019 does not include short-term assets and FILP bonds. There are no FILP bonds outstanding since fiscal 2020.

(Note 2) The amount of domestic bonds (active) and total (active) since fiscal 2020 includes yen-denominated short-term assets. The amount of foreign bonds (active) and total (active) since fiscal 2020 includes foreign currency denominated short-term assets.

(Note 3) JPY hedged foreign bonds are classified as foreign bonds (passive) until fiscal 2019 and as domestic bonds (passive) since fiscal 2020.

(Note 4) The calculation of figures in fiscal 2023 is based on transaction date and does not take notional amount of stock index futures and other factors into account.

[3] Investment assets by manager, etc. (the market value at the end of fiscal 2023)

(Unit: ¥billion)

Investment method	Asset manager name (Subcontractor, etc.)	Custodians	Manager benchmark	Market value
Domestic bonds passive investment	Asset Management One Co., Ltd. (1) (former Mizuho Trust & Banking)	MTBJ	BPI	1,091.7
	Asset Management One Co., Ltd. (2)	MTBJ	BPI-G	6,290.5
	BlackRock Japan Co., Ltd. (1)	MTBJ	USGOV-H	794.3
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (1)	MTBJ	BPI	1,222.4
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (2)	MTBJ	BPI-G	6,221.8
	Mitsubishi UFJ Trust and Banking Corporation (1)	MTBJ	BPI	611.3
	Mitsubishi UFJ Trust and Banking Corporation (2)	MTBJ	BPI-G	6,633.8
	Resona Asset Management Co., Ltd. (1)	MTBJ	BPI	610.8
	Resona Asset Management Co., Ltd. (2)	MTBJ	BPI-G	5,883.5
Resona Asset Management Co., Ltd. (3)	MTBJ	USGOV-H	555.4	
Domestic bonds active investment	Asset Management One Co., Ltd. (3) (former Mizuho Trust & Banking)	MTBJ	BPI	576.8
	Amundi Japan Ltd (1)	MTBJ	BPI	532.5
	Tokio Marine Asset Management Co., Ltd. (1)	MTBJ	BPI	260.7
	Nikko Asset Management Co., Ltd. (1)	MTBJ	BPI	434.0
	Nissay Asset Management Corporation (1)	MTBJ	BPI	690.1
	Nomura Asset Management Co., Ltd. (1)	MTBJ	BPI	484.6
	PGIM Japan Co., Ltd. (1)	MTBJ	BPI	905.1
	PIMCO Japan Ltd (1) (Pacific Investment Management Company LLC (PIMCO), etc.)	MTBJ	BPI	901.7
	Manulife Investment Management (Japan) Limited (1)	MTBJ	BPI	412.6
	Sumitomo Mitsui DS Asset Management Company, Limited (1)	MTBJ	BPI	532.3
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (3)	MTBJ	BPI	269.0
	Mitsubishi UFJ Asset Management Co., Ltd.	MTBJ	BPI	266.4
	Mitsubishi UFJ Trust and Banking Corporation (3)	MTBJ	BPI	499.5
	In-house investment (1)	MTBJ	BPI	6,726.2
In-house investment (2)	MTBJ	-	13,302.0	
In-house investment (3)	MTBJ	-	2,710.6	
Domestic bonds others	In-house investment (4)	MTBJ	-	679.5
Foreign bonds passive investment	Asset Management One Co., Ltd. (4) (former Mizuho Trust & Banking)	MTBJ	WGBI-EXC	4,336.2
	State Street Global Advisors (Japan) Co., Ltd. (1) (State Street Global Advisors Limited)	MTBJ	WGBI-EXC	6,188.9
	State Street Global Advisors (Japan) Co., Ltd. (2) (State Street Global Advisors Trust Company, etc.)	MTBJ	USIG	314.3
	State Street Global Advisors (Japan) Co., Ltd. (3) (State Street Global Advisors Limited, etc.)	MTBJ	EUROIG	119.7
	Nomura Asset Management Co., Ltd. (2)	MTBJ	WGBI-EXC	3,863.7
	BlackRock Japan Co., Ltd. (4)	MTBJ	WGBI-EXC	6,142.5
	BlackRock Japan Co., Ltd. (5)	MTBJ	WGBI-O-EXC	2,373.1
	BlackRock Japan Co., Ltd. (6)	MTBJ	USGOV	6,197.8
	BlackRock Japan Co., Ltd. (7)	MTBJ	USGOV 1-3Y	127.4
	BlackRock Japan Co., Ltd. (8)	MTBJ	USGOV 10+Y	190.3
	BlackRock Japan Co., Ltd. (9)	MTBJ	EGBI	4,946.8
	BlackRock Japan Co., Ltd. (10)	MTBJ	EGBI 1-3Y	182.9
	BlackRock Japan Co., Ltd. (11)	MTBJ	EGBI 10+Y	151.3
	BlackRock Japan Co., Ltd. (12) (BlackRock Financial Management, Inc., etc.)	MTBJ	USIG	257.8
	BlackRock Japan Co., Ltd. (13) (BlackRock Financial Management, Inc., etc.)	MTBJ	EUROIG	224.9
	BlackRock Japan Co., Ltd. (14) (BlackRock Financial Management, Inc., etc.)	MTBJ	USHY2%	1.1
	BlackRock Japan Co., Ltd. (15) (BlackRock Financial Management, Inc., etc.)	MTBJ	EUROHY2%	0.3
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (4)	MTBJ	WGBI-EXC	5,039.2
	Resona Asset Management Co., Ltd. (5)	MTBJ	WGBI-EXC	5,432.0
	Resona Asset Management Co., Ltd. (6)	MTBJ	WGBI-O-EXC	1,692.4
	Resona Asset Management Co., Ltd. (7)	MTBJ	USGOV	5,403.7
	Resona Asset Management Co., Ltd. (8)	MTBJ	USGOV 1-3Y	484.9
	Resona Asset Management Co., Ltd. (9)	MTBJ	USGOV 10+Y	196.9
	Resona Asset Management Co., Ltd. (10)	MTBJ	EGBI	4,185.8
	Resona Asset Management Co., Ltd. (11)	MTBJ	EGBI 1-3Y	151.3
	Resona Asset Management Co., Ltd. (12)	MTBJ	EGBI 10+Y	230.3
	Foreign bonds active investment	T.Rowe Price Japan, Inc. (1) (T.Rowe Price International Ltd.)	MTBJ	EUROHY2%
PineBridge Investments Japan Co., Ltd. (PineBridge Investments LLC)		MTBJ	USHY2%	85.0
Franklin Templeton Japan Co., Ltd. (1) (Brandywine Global Investment Management, LLC)		SSTB	G-AGG-EXC	1.0
Barings Japan Limited (Barings LLC, etc.)		MTBJ	USHY2%	86.4
Morgan Stanley Investment Management (Japan) Co., Ltd. (1) (Morgan Stanley Investment Management Inc., etc.)		SSTB	G-AGG-EXC	0.6
Morgan Stanley Investment Management (Japan) Co., Ltd. (2) (Morgan Stanley Investment Management Inc.)		MTBJ	USHY2%	82.8
UBS Asset Management (Japan) Ltd (1) (UBS Asset Management (UK) Ltd)		MTBJ	EUROHY2%	126.9
Foreign bonds others	In-house investment (5)	SSTB	-	114.6

(Unit: ¥billion)

Investment method	Asset manager name (Subcontractor, etc.)	Custodians	Manager benchmark	Market value
Domestic equities passive investment	Asset Management One Co., Ltd. (5) (former DIAM)	MTBJ	TOPIX	8,587.1
	Asset Management One Co., Ltd. (6) (former Mizuho Trust & Banking)	MTBJ	RN-P	3,063.3
	Asset Management One Co., Ltd. (7)	MTBJ	FTSE-BL	1,522.3
	Nomura Asset Management Co., Ltd. (4)	MTBJ	RAFI	179.9
	FIL Investments (Japan) Limited (1) (Geode Capital Management, LLC)	MTBJ	TOPIX	346.1
	BlackRock Japan Co., Ltd. (16)	MTBJ	TOPIX	10,713.4
	BlackRock Japan Co., Ltd. (17)	MTBJ	FTSE-BLSR	1,441.7
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (5)	MTBJ	TOPIX	8,388.6
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (6)	MTBJ	SP-C	2,311.7
	Mitsubishi UFJ Trust and Banking Corporation (4)	MTBJ	TOPIX	6,399.6
	Mitsubishi UFJ Trust and Banking Corporation (5)	MTBJ	MSCI-N-ESG	2,972.1
	Mitsubishi UFJ Trust and Banking Corporation (6)	MTBJ	MSCI-WIN	940.3
	Resona Asset Management Co., Ltd. (13)	MTBJ	TOPIX	10,752.7
	Resona Asset Management Co., Ltd. (14)	MTBJ	TOPIX-30G	210.4
	Resona Asset Management Co., Ltd. (15)	MTBJ	TOPIX-30V	206.0
	Resona Asset Management Co., Ltd. (16)	MTBJ	TOPIX-70G	101.5
	Resona Asset Management Co., Ltd. (17)	MTBJ	TOPIX-70V	122.8
	Resona Asset Management Co., Ltd. (18)	MTBJ	TOPIX-400G	46.7
	Resona Asset Management Co., Ltd. (19)	MTBJ	TOPIX-400V	96.1
	Resona Asset Management Co., Ltd. (20)	MTBJ	MO-GD-J	736.4
Domestic equities active investment	Asset Management One Co., Ltd. (8)	MTBJ	TOPIX	183.1
	Asset Management One Co., Ltd. (9)	MTBJ	TOPIX	52.7
	Asset Management One Co., Ltd. (10)	MTBJ	TOPIX	23.0
	Asset Management One Co., Ltd. (11)	MTBJ	TOPIX	62.0
	Asset Management One Co., Ltd. (12) (former Mizuho Asset Management)	MTBJ	RN-SG	40.0
	Invesco Asset Management (Japan) Limited (1)	MTBJ	TOPIX	127.4
	Invesco Asset Management (Japan) Limited (2)	MTBJ	TOPIX	47.1
	Wellington Management Japan Pte Ltd. (1) (Wellington Management Company LLP)	MTBJ	TOPIX	23.0
	Capital International K.K. (Capital International, Inc., etc.)	MTBJ	TOPIX	120.9
	Goldman Sachs Asset Management Co., Ltd. (Goldman Sachs Asset Management (Singapore) Pte.Ltd.)	MTBJ	TOPIX	39.6
	JPMorgan Asset Management (Japan) Limited (1)	MTBJ	TOPIX	23.1
	JPMorgan Asset Management (Japan) Limited (2)	MTBJ	MSCI-J	144.9
	Schroder Investment Management (Japan) Limited	MTBJ	TOPIX	132.8
	Sompo Asset Management Co.,Ltd. (1) (GLG Partners LP)	MTBJ	TOPIX	39.7
	Tokio Marine Asset Management Co., Ltd. (2)	MTBJ	TOPIX	23.7
	Nikko Asset Management Co., Ltd. (2)	MTBJ	TOPIX	33.8
	Nikko Asset Management Co., Ltd. (3)	MTBJ	TOPIX	30.7
	Nomura Asset Management Co., Ltd. (5)	MTBJ	TOPIX	92.2
	Nomura Asset Management Co., Ltd. (6)	MTBJ	RN-S	18.8
	Nomura Asset Management Co., Ltd. (7) (Columbia Management Investment Advisers, LLC)	MTBJ	MSCI-J	23.5
	Pictet Asset Management (Japan) Ltd. (Pictet Asset Management Ltd.)	MTBJ	MSCI-J	23.0
	FIL Investments (Japan) Limited (2)	MTBJ	RN-TG	179.4
	BlackRock Japan Co., Ltd. (18) (BlackRock Institutional Trust Company, etc.)	MTBJ	TOPIX	187.3
Manulife Investment Management (Japan) Limited (2) (Manulife Investment Management (Europe) Limited)	MTBJ	TOPIX	82.8	
Sumitomo Mitsui DS Asset Management Company, Limited (2)	MTBJ	TOPIX	41.6	
Sumitomo Mitsui DS Asset Management Company, Limited (3)	MTBJ	TOPIX	38.0	
Sumitomo Mitsui DS Asset Management Company, Limited (4)	MTBJ	TOPIX	24.1	
Sumitomo Mitsui DS Asset Management Company, Limited (5)	MTBJ	TOPIX	87.3	
Sumitomo Mitsui DS Asset Management Company, Limited (6)	MTBJ	RN-V	190.3	
Sumitomo Mitsui Trust Asset Management Co., Ltd. (7)	MTBJ	TOPIX	39.1	
Mitsubishi UFJ Trust and Banking Corporation (7)	MTBJ	TOPIX	185.6	
Lazard Japan Asset Management K.K. (1)	MTBJ	TOPIX	172.0	
Russell Investments Japan Co., Ltd. (1) (Russell Investments Implementation Services, LLC.)	MTBJ	TOPIX	45.1	
Russell Investments Japan Co., Ltd. (2) (M&G Investment management Limited)	MTBJ	MSCI-J	120.7	
Foreign equities passive investment	State Street Global Advisors (Japan) Co., Ltd. (4)	MTBJ	MSCI-A-EXC	6,057.5
	State Street Global Advisors (Japan) Co., Ltd. (5)	MTBJ	MSCI-N	1,430.9
	State Street Global Advisors (Japan) Co., Ltd. (6)	MTBJ	MSCI-EU	267.5
	State Street Global Advisors (Japan) Co., Ltd. (7)	MTBJ	MSCI-P	56.3
	State Street Global Advisors (Japan) Co., Ltd. (8)	MTBJ	MSCI-EXC	911.2
	State Street Global Advisors (Japan) Co., Ltd. (9)	MTBJ	SP-GC	4,876.9
	BlackRock Japan Co., Ltd. (19)	MTBJ	MSCI-A-EXC	10,312.2
	BlackRock Japan Co., Ltd. (20)	MTBJ	MSCI-K	2,517.5
	BlackRock Japan Co., Ltd. (21)	MTBJ	MSCI-N	592.7
	BlackRock Japan Co., Ltd. (22)	MTBJ	MSCI-US100	1,216.9
BlackRock Japan Co., Ltd. (23)	MTBJ	MSCI-USLG	140.5	

(Unit: ¥billion)

Investment method	Asset manager name (Subcontractor, etc.)	Custodians	Manager benchmark	Market value
Foreign equities passive investment	BlackRock Japan Co., Ltd. (24)	MTBJ	MSCI-USLV	88.9
	BlackRock Japan Co., Ltd. (25)	MTBJ	MSCI-CA	75.3
	BlackRock Japan Co., Ltd. (26)	MTBJ	MSCI-EU	274.0
	BlackRock Japan Co., Ltd. (27)	MTBJ	MSCI-EXC	249.4
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (8)	MTBJ	MSCI-K	8,160.7
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (9)	MTBJ	MSCI-EXC	1,375.9
	Legal & General Investment Management Japan KK (1) (Legal & General Investment Management Limited)	MTBJ	MSCI-A-EXC	10,025.3
	Legal & General Investment Management Japan KK (2) (Legal & General Investment Management Limited)	MTBJ	MSCI-N	940.5
	Legal & General Investment Management Japan KK (3) (Legal & General Investment Management Limited)	MTBJ	MSCI-US30	403.1
	Legal & General Investment Management Japan KK (4) (Legal & General Investment Management Limited)	MTBJ	MSCI-US100	112.4
	Legal & General Investment Management Japan KK (5) (Legal & General Investment Management Limited)	MTBJ	MSCI-USLG	130.3
	Legal & General Investment Management Japan KK (6) (Legal & General Investment Management Limited)	MTBJ	MSCI-USLV	371.3
	Legal & General Investment Management Japan KK (7) (Legal & General Investment Management Limited)	MTBJ	MSCI-CA	41.8
	Legal & General Investment Management Japan KK (8) (Legal & General Investment Management Limited)	MTBJ	MSCI-EU	902.3
Foreign equities active investment	Legal & General Investment Management Japan KK (9) (Legal & General Investment Management Limited)	MTBJ	MSCI-P	190.3
	Legal & General Investment Management Japan KK (10) (Legal & General Investment Management Limited)	MTBJ	MSCI-EASEALG	107.9
	Legal & General Investment Management Japan KK (11) (Legal & General Investment Management Limited)	MTBJ	MSCI-EASEALV	149.0
	Legal & General Investment Management Japan KK (12) (Legal & General Investment Management Limited)	MTBJ	MSCI-EXC	571.2
	Legal & General Investment Management Japan KK (13) (Legal & General Investment Management Limited)	MTBJ	MSCI-A-ESG	2,346.3
	Legal & General Investment Management Japan KK (14) (Legal & General Investment Management Limited)	MTBJ	MO-GD	684.9
	Asset Management One Co., Ltd. (13) (former Mizuho Asset Management) (Allspring Global Investments, LLC.)	MTBJ	MSCI-E	0.3
	Amundi Japan Ltd (2) (Amundi Asset Management US, Inc)	MTBJ	SP-500	308.3
	Wellington Management Japan Pte Ltd. (2) (Wellington Management Company LLP)	MTBJ	SP-500	133.7
	JPMorgan Asset Management (Japan) Limited (3) (JPMorgan Asset Management (UK) Limited)	MTBJ	MSCI-K	190.9
	JPMorgan Asset Management (Japan) Limited (4) (J.P. Morgan Investment Management Inc.)	MTBJ	SP-500	47.0
	JPMorgan Asset Management (Japan) Limited (5) (J.P. Morgan Investment Management Inc.)	MTBJ	FR-3000G	180.4
	Sompo Asset Management Co., Ltd. (2) (Numeric Investors LLC)	MTBJ	MSCI-K	41.2
	Sompo Asset Management Co., Ltd. (3) (Monrusco Bolton Investments Inc.)	MTBJ	MSCI-K	264.3
	T.Rowe Price Japan, Inc. (2) (T.Rowe Price Associates, Inc.)	MTBJ	SP-500	430.1
	T.Rowe Price Japan, Inc. (3) (T.Rowe Price Associates, Inc.)	MTBJ	FR-3000	160.1
	Tokio Marine Asset Management Co., Ltd. (3) (Epoch Investment Partners, Inc.)	MTBJ	MSCI-K	41.2
	Tokio Marine Asset Management Co., Ltd. (4) (Applied Finance Capital Management, LLC)	MTBJ	FR-1000V	131.9
	Tokio Marine Asset Management Co., Ltd. (5) (Jacobs Levy Equity Management, Inc.)	MTBJ	FR-T200	311.6
	Tokio Marine Asset Management Co., Ltd. (6) (Columbia Management Investment Advisors, LLC)	MTBJ	FR-MV	120.4
	Nikko Asset Management Co., Ltd. (4) (Osmosis Investment Management UK Limited)	MTBJ	MSCI-K	387.9
	Nissay Asset Management Corporation (2) (Jupiter Asset Management Limited)	MTBJ	MSCI-K-IMI	369.5
	Nissay Asset Management Corporation (3) (The Putnam Advisory Company, LLC)	MTBJ	FR-1000V	211.2
	Neuberger Berman East Asia Limited (1) (Neuberger Berman Investment Advisers LLC)	MTBJ	FR-1000G	86.5
	Nomura Asset Management Co., Ltd. (8)	MTBJ	MSCI-K	131.3
	Nomura Asset Management Co., Ltd. (9)	MTBJ	MSCI-K	111.7
Nomura Asset Management Co., Ltd. (10) (Hotchkis and Wiley Capital Management, LLC)	MTBJ	MSCI-K	41.8	
Nomura Asset Management Co., Ltd. (11) (Royal London Asset Management Limited)	MTBJ	MSCI-K	337.6	
Nomura Asset Management Co., Ltd. (12) (CIBC Asset Management Inc.)	MTBJ	MSCI-CA	109.8	
BNP Paribas Asset Management Japan Limited (1) (BNP Paribas Asset Management Europe)	MTBJ	MSCI-K	156.8	
BNP Paribas Asset Management Japan Limited (2) (Impax Asset Management LLC)	MTBJ	SP-500	140.2	
FIL Investments (Japan) Limited (3) (Fidelity Institutional Asset Management (FIAM))	MTBJ	MSCI-K-IMI	67.5	
FIL Investments (Japan) Limited (4) (Fidelity Institutional Asset Management (FIAM))	MTBJ	FR-1000G	34.8	
BlackRock Japan Co., Ltd. (28) (BlackRock Institutional Trust Company, etc.)	MTBJ	MSCI-K	399.3	

(Unit: ¥billion)

Investment method	Asset manager name (Subcontractor, etc.)	Custodians	Manager benchmark	Market value
Foreign equities active investment	BlackRock Japan Co., Ltd. (29) (BlackRock Institutional Trust Company, N.A., etc.)	MTBJ	FR-1000	227.7
	BlackRock Japan Co., Ltd. (30) (BlackRock Financial Management, Inc.)	MTBJ	FR-1000V	25.3
	Franklin Templeton Japan Co., Ltd. (2) (Brandywine Global Investment Management, LLC.)	MTBJ	FR-1000V	164.2
	Manulife Investment Management (Japan) Limited (3) (Manulife Investment Management (US) LLC)	MTBJ	FR-3000	46.5
	Sumitomo Mitsui DS Asset Management Company, Limited (7) (Edmond de Rothschild Asset Management(France))	MTBJ	MSCI-K-IMI	121.1
	Mitsubishi UFJ Trust and Banking Corporation (8) (Baillie Gifford Overseas Limited)	MTBJ	MSCI-AG-EXC	0.9
	Alternative infrastructure	DBJ Asset Management Co., Ltd. (1)	SSTB	-
DBJ Asset Management Co., Ltd. (2)		SSTB	-	81.8
DBJ Asset Management Co., Ltd. (3)		SSTB	-	0.1
Gatekeeper : Nomura Asset Management Co., Ltd. (13) Fund of Funds Manager : Pantheon		SSTB	-	406.1
Gatekeeper : Nomura Asset Management Co., Ltd. (14) Fund of Funds Manager : Pantheon		SSTB	-	168.5
Gatekeeper : Sumitomo Mitsui DS Asset Management Company, Limited (8) Fund of Funds Manager : StepStone Infrastructure & Real Assets		SSTB	-	614.1
Gatekeeper : Sumitomo Mitsui DS Asset Management Company, Limited (9) Fund of Funds Manager : StepStone Infrastructure & Real Assets		SSTB	-	310.3
In-house investment (6) (Unit Trust Manager : Nissay Asset Management Corporation)		SSTB	-	191.1
In-house investment (9)		SSTB	-	15.7
Alternative private equity		Gatekeeper : Neuberger Berman East Asia Limited (2) Fund of Funds Manager : NB Alternatives Advisers LLC	SSTB	-
	Gatekeeper : Mitsubishi UFJ Trust and Banking Corporation (9) Fund of Funds Manager : Hamilton Lane Advisors, LLC.	SSTB	-	272.0
	Gatekeeper and Fund of Funds Manager : Mitsubishi UFJ Trust and Banking Corporation (10) Investment Advisor : Alternative Investment Capital Limited	SSTB	-	8.3
	In-house investment (10) (Unit Trust Manager : Nissay Asset Management Corporation)	SSTB	-	57.0
	In-house investment (12)	SSTB	-	11.9
Alternative real estate	Gatekeeper : Asset Management One Co., Ltd. (14) Fund of Funds Manager : CBRE Investment Management Indirect Limited	SSTB	-	743.3
	Gatekeeper : Asset Management One Co., Ltd. (15) Fund of Funds Manager : CBRE Investment Management Indirect Limited	SSTB	-	86.8
	Tokyu Land Capital Management Inc.	SSTB	-	6.0
	Gatekeeper : Mizuho Trust & Banking Co., Ltd. Fund of Funds Manager : LaSalle Investment Management, Inc.	SSTB	-	95.7
	Gatekeeper : Mitsubishi UFJ Trust and Banking Corporation (11)	SSTB	-	229.6
In-house investment (15)	SSTB	-	3.6	
Total	39 asset managers, 200 Funds			245,758.5

(Unit: ¥billion)

Investment method	Custodian, etc. name	Market value
Custody	State Street Trust and Banking Co., Ltd.	SSTB 3,813.4
	The Master Trust Bank of Japan, Ltd.	MTBJ 242,161.8
Total		245,975.2

(Unit: ¥billion)

Investment method	Fund name	Custodians	Market value
Stock Index Futures	Domestic Stock Index Futures	MTBJ	166.0
	Foreign Stock Index Futures	MTBJ	50.7
Total			216.7

(Note 1) While the 39 asset managers in the total column do not include in-house investment, the 200 funds in the total column include 10 in-house investment funds.

(Note 2) The figure in the total market value column for funds managed by asset managers (200 funds managed by 39 asset managers) does not include accrued dividend income from closed funds (statutory trust accounts).

(Note 3) Figures in the market value column for custodians do not include accrued dividend income (foreign equities: ¥6.2 billion) from closed funds (statutory trust accounts).

(Note 4) Returns from stock index futures transactions are treated as reference data because they are offset with the lost returns from the corresponding funds. In fiscal 2023, the amount of returns was ¥6.9 billion for domestic stock index futures funds and negative ¥0.6 billion for foreign stock index futures funds.

(Note 5) 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.	
	USGOV-H	FTSE US Government Bond Index (JPY hedged/JPY basis)	FTSE Fixed Income LLC	
Foreign bonds	WGBI-EXC	FTSE World Government Bond Index (not incl. JPY, CNY, no hedge/JPY basis)	FTSE Fixed Income LLC	
	WGBI-O-EXC	FTSE World Government Bond Index (not incl. JPY, USD, EMU, CNY, no hedge/JPY basis)	FTSE Fixed Income LLC	
	USGOV	FTSE US Government Bond Index (no hedge/JPY basis)	FTSE Fixed Income LLC	
	USGOV 1-3Y	FTSE US Government Bond Index 1-3years (no hedge/JPY basis)	FTSE Fixed Income LLC	
	USGOV 10+Y	FTSE US Government Bond 10+Years Index(no hedge/JPY basis)	FTSE Fixed Income LLC	
	EGBI	FTSE EMU Government Bond Index (no hedge/JPY basis)	FTSE Fixed Income LLC	
	EGBI 1-3Y	FTSE EMU Government Bond Index 1-3years (no hedge/JPY basis)	FTSE Fixed Income LLC	
	EGBI 10+Y	FTSE EMU Government Bond 10+Years Index (no hedge/JPY basis)	FTSE Fixed Income LLC	
	G-AGG-EXC	Bloomberg Global Aggregate Index (not incl. JPY, CNY, no hedge/JPY basis)	Bloomberg Index Services Limited	
	USIG	Bloomberg US Corporate Bond Index (no hedge/JPY basis)	Bloomberg Index Services Limited	
	EUROIG	Bloomberg EURO Corporate Bond Index (no hedge/JPY basis)	Bloomberg Index Services Limited	
	USHY2%	Bloomberg US Corporate High Yield 2% Issuer Capped Bond Index (no hedge/JPY basis)	Bloomberg Index Services Limited	
	EUROHY2%	Bloomberg EURO Corporate High Yield 2% Issuer Capped Bond Index (no hedge/JPY basis)	Bloomberg Index Services Limited	
	Domestic equities	TOPIX	TOPIX (incl. dividends)	JPX Market Innovation & Research, Inc.
		TOPIX-30G	TOPIX Core 30 Growth (incl. dividends)	JPX Market Innovation & Research, Inc.
TOPIX-30V		TOPIX Core 30 Value (incl. dividends)	JPX Market Innovation & Research, Inc.	
TOPIX-70G		TOPIX Large 70 Growth (incl. dividends)	JPX Market Innovation & Research, Inc.	
TOPIX-70V		TOPIX Large 70 Value (incl. dividends)	JPX Market Innovation & Research, Inc.	
TOPIX-400G		TOPIX Mid 400 Growth (incl. dividends)	JPX Market Innovation & Research, Inc.	
TOPIX-400V		TOPIX Mid 400 Value (incl. dividends)	JPX Market Innovation & Research, Inc.	
RN-P		RUSSELL/NOMURA Prime Index (incl. dividends)	Nomura Research Institute, Ltd.	
RN-TG		RUSSELL/NOMURA Total Market Growth 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-N-ESG		MSCI Nihonkabu ESG Select Leaders Index	MSCI G.K.	
MSCI-WIN		MSCI Japan Empowering Women Index (WIN)	MSCI G.K.	
MSCI-J		MSCI Japan (incl. dividends)	MSCI G.K.	
FTSE-BL		FTSE Blossom Japan Index	FTSE International Limited	
FTSE-BLSR		FTSE Blossom Japan Sector Relative Index	FTSE International Limited	
MO-GD-J		Morningstar Japan ex-REIT Gender Diversity Tilt Index	Morningstar Japan, Inc.	
SP-C		S&P/JPX Carbon Efficient Index	S&P Opco, LLC	
RAFI		Nomura RAFI Index	Nomura Asset Management Co., Ltd.	
Foreign equities	MSCI-A-EXC	MSCI ACWI (not incl. Japan, China A, JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.	
	MSCI-AG-EXC	MSCI ACWI Growth (not incl. Japan, 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-K-IMI	MSCI KOKUSAI IMI (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-US30	MSCI USA30 (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.	
	MSCI-US100	MSCI USA100 (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.	
	MSCI-USLG	MSCI USA Large Cap Growth (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.	
	MSCI-USLV	MSCI USA Large Cap Value (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.	
	MSCI-CA	MSCI Canada (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-EASEALG	MSCI EASEA Large Cap Growth (JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.	
	MSCI-EASEALV	MSCI EASEA Large Cap Value (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.	
	MSCI-A-ESG	MSCI ACWI ESG Universal Index (not incl. China A, JPY basis, incl. dividends, after taking into account GPIF dividend tax factors)	MSCI G.K.	
	MO-GD	Morningstar Developed Markets (ex Japan) Gender Diversity Index (JPY basis, incl. dividends, after deducting taxes)	Morningstar Japan, Inc.	
	SP-GC	S&P Global Ex-Japan LargeMidCap Carbon Efficient Index	S&P Opco, LLC	
	SP-500	S&P500 (JPY basis, incl. dividends)	S&P Opco, LLC	
	FR-1000	RUSSELL 1000 Index (JPY basis, incl. dividends)	FRANK RUSSELL COMPANY	
	FR-1000G	RUSSELL 1000 Growth Index (JPY basis, incl. dividends)	FRANK RUSSELL COMPANY	
	FR-1000V	RUSSELL 1000 Value Index (JPY basis, incl. dividends)	FRANK RUSSELL COMPANY	
	FR-3000	RUSSELL 3000 Index (JPY basis, incl. dividends)	FRANK RUSSELL COMPANY	
	FR-3000G	RUSSELL 3000 Growth Index (JPY basis, incl. dividends)	FRANK RUSSELL COMPANY	
	FR-T200	Russell Top 200 Index (JPY basis, incl. dividends)	FRANK RUSSELL COMPANY	
	FR-MV	RUSSELL Midcap Value Index (JPY basis, incl. dividends)	FRANK RUSSELL COMPANY	

[4] Investment performance by manager, etc.

① Investment performance (over the last year) (from April 2023 to March 2024)

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. (1) (former Mizuho Trust & Banking)	-2.20%	-2.20%	+0.01%	
	Asset Management One Co., Ltd. (2)	-2.43%	-2.47%	+0.03%	
	AllianceBernstein Japan Ltd.	-6.60%	-8.18%	+1.59%	
	BlackRock Japan Co., Ltd. (1)	-5.97%	-5.96%	-0.01%	
	BlackRock Japan Co., Ltd. (2)	-2.62%	-2.73%	+0.11%	
	BlackRock Japan Co., Ltd. (3)	-7.26%	-8.60%	+1.35%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (1)	-2.18%	-2.20%	+0.02%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (2)	-2.43%	-2.47%	+0.03%	
	Mitsubishi UFJ Trust and Banking Corporation (1)	-2.15%	-2.20%	+0.05%	
	Mitsubishi UFJ Trust and Banking Corporation (2)	-2.41%	-2.47%	+0.05%	
	Resona Asset Management Co., Ltd. (1)	-2.19%	-2.20%	+0.01%	
	Resona Asset Management Co., Ltd. (2)	-2.45%	-2.47%	+0.02%	
	Resona Asset Management Co., Ltd. (3)	-5.95%	-5.96%	+0.01%	
Resona Asset Management Co., Ltd. (4)	-3.44%	-3.43%	-0.01%		
Domestic bonds active investment	Asset Management One Co., Ltd. (3) (former Mizuho Trust & Banking)	-2.03%	-2.20%	+0.17%	
	Amundi Japan Ltd (1)	-1.85%	-2.20%	+0.35%	
	Tokio Marine Asset Management Co., Ltd. (1)	-1.67%	-2.20%	+0.53%	
	Nikko Asset Management Co., Ltd. (1)	-1.69%	-2.20%	+0.51%	
	Nissay Asset Management Corporation (1)	-1.79%	-2.20%	+0.41%	
	Nomura Asset Management Co., Ltd. (1)	-1.38%	-2.20%	+0.82%	
	PGIM Japan Co., Ltd. (1)	-1.43%	-2.20%	+0.77%	
	PIMCO Japan Ltd (1)	-1.34%	-2.20%	+0.86%	
	Manulife Investment Management (Japan) Limited (1)	-1.37%	-2.20%	+0.84%	
	Sumitomo Mitsui DS Asset Management Company, Limited (1)	-1.71%	-2.20%	+0.49%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (3)	-2.06%	-2.20%	+0.14%	
	Mitsubishi UFJ Asset Management Co., Ltd.	-2.35%	-2.20%	-0.15%	
	Mitsubishi UFJ Trust and Banking Corporation (3)	-1.76%	-2.20%	+0.45%	
In-house investment (1)	-1.99%	-2.20%	+0.21%		
In-house investment (2)	-2.08%	-	-	○	
In-house investment (3)	1.45%	-	-		
Foreign bonds passive investment	Asset Management One Co., Ltd. (4) (former Mizuho Trust & Banking)	15.42%	15.32%	+0.09%	
	State Street Global Advisors (Japan) Co., Ltd. (1)	15.39%	15.32%	+0.06%	
	State Street Global Advisors (Japan) Co., Ltd. (2)	18.14%	18.75%	-0.61%	
	State Street Global Advisors (Japan) Co., Ltd. (3)	20.08%	20.75%	-0.67%	
	Nomura Asset Management Co., Ltd. (2)	15.59%	15.32%	+0.26%	
	BlackRock Japan Co., Ltd. (4)	15.58%	15.32%	+0.26%	
	BlackRock Japan Co., Ltd. (5)	16.29%	16.11%	+0.18%	
	BlackRock Japan Co., Ltd. (6)	13.84%	13.73%	+0.11%	
	BlackRock Japan Co., Ltd. (7)	17.29%	17.10%	+0.19%	
	BlackRock Japan Co., Ltd. (8)	-2.73%	6.24%	-8.98%	○
	BlackRock Japan Co., Ltd. (9)	17.56%	17.41%	+0.15%	
	BlackRock Japan Co., Ltd. (10)	16.41%	15.97%	+0.44%	
	BlackRock Japan Co., Ltd. (11)	14.82%	14.58%	+0.24%	○
	BlackRock Japan Co., Ltd. (12)	18.28%	18.75%	-0.47%	
	BlackRock Japan Co., Ltd. (13)	20.71%	20.75%	-0.04%	
	BlackRock Japan Co., Ltd. (14)	14.10%	14.13%	-0.03%	
	BlackRock Japan Co., Ltd. (15)	13.72%	13.15%	+0.57%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (4)	15.43%	15.32%	+0.11%	
	Resona Asset Management Co., Ltd. (5)	15.41%	15.32%	+0.08%	
	Resona Asset Management Co., Ltd. (6)	16.05%	16.11%	-0.06%	
Resona Asset Management Co., Ltd. (7)	13.72%	13.73%	+0.00%		
Resona Asset Management Co., Ltd. (8)	17.07%	17.10%	-0.03%		
Resona Asset Management Co., Ltd. (9)	13.40%	11.00%	+2.41%	○	
Resona Asset Management Co., Ltd. (10)	17.52%	17.41%	+0.11%		
Resona Asset Management Co., Ltd. (11)	16.60%	15.97%	+0.62%		
Resona Asset Management Co., Ltd. (12)	6.02%	7.94%	-1.92%	○	
Foreign bonds active investment	T.Rowe Price Japan, Inc. (1)	27.25%	25.32%	+1.93%	
	PineBridge Investments Japan Co., Ltd.	27.01%	26.40%	+0.61%	
	Franklin Templeton Japan Co., Ltd. (1)	6.28%	8.30%	-2.02%	
	Barings Japan Limited	26.62%	26.40%	+0.23%	
	Morgan Stanley Investment Management (Japan) Co., Ltd. (1)	7.94%	8.30%	-0.36%	
	Morgan Stanley Investment Management (Japan) Co., Ltd. (2)	27.63%	26.40%	+1.24%	
UBS Asset Management (Japan) Ltd (1)	27.09%	25.32%	+1.78%		

Investment method	Asset manager name	Time-weighted return (A)	Benchmark return (B)	Excess rate of return (C) = (A) - (B)	Remarks column
Domestic equities passive investment	Asset Management One Co., Ltd. (5) (former DIAM)	41.40%	41.34%	+0.06%	
	Asset Management One Co., Ltd. (6) (former Mizuho Trust & Banking)	41.25%	41.24%	+0.00%	
	Asset Management One Co., Ltd. (7)	47.72%	47.82%	-0.09%	
	Nomura Asset Management Co., Ltd. (3)	6.38%	7.05%	-0.67%	
	Nomura Asset Management Co., Ltd. (4)	48.97%	49.09%	-0.12%	
	FIL Investments (Japan) Limited (1)	41.35%	41.34%	+0.01%	
	BlackRock Japan Co., Ltd. (16)	41.22%	41.34%	-0.12%	
	BlackRock Japan Co., Ltd. (17)	43.94%	43.99%	-0.05%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (5)	41.41%	41.34%	+0.07%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (6)	41.91%	41.92%	-0.00%	
	Mitsubishi UFJ Trust and Banking Corporation (4)	40.87%	41.34%	-0.47%	
	Mitsubishi UFJ Trust and Banking Corporation (5)	44.75%	44.88%	-0.14%	
	Mitsubishi UFJ Trust and Banking Corporation (6)	44.84%	44.91%	-0.07%	
	Resona Asset Management Co., Ltd. (13)	41.16%	41.34%	-0.18%	
	Resona Asset Management Co., Ltd. (14)	21.56%	21.59%	-0.04%	○
	Resona Asset Management Co., Ltd. (15)	26.47%	26.54%	-0.06%	○
	Resona Asset Management Co., Ltd. (16)	16.72%	16.75%	-0.03%	○
	Resona Asset Management Co., Ltd. (17)	19.86%	19.90%	-0.04%	○
	Resona Asset Management Co., Ltd. (18)	9.18%	9.16%	+0.03%	○
	Resona Asset Management Co., Ltd. (19)	15.66%	15.66%	-0.00%	○
Resona Asset Management Co., Ltd. (20)	42.60%	42.64%	-0.04%		
Domestic equities active investment	Asset Management One Co., Ltd. (8)	52.32%	41.34%	+10.98%	
	Asset Management One Co., Ltd. (9)	17.50%	18.62%	-1.12%	○
	Asset Management One Co., Ltd. (10)	14.74%	18.62%	-3.88%	○
	Asset Management One Co., Ltd. (11)	22.08%	18.62%	+3.45%	○
	Asset Management One Co., Ltd. (12) (former Mizuho Asset Management)	-1.71%	15.65%	-17.36%	
	Invesco Asset Management (Japan) Limited (1)	23.72%	41.34%	-17.62%	
	Invesco Asset Management (Japan) Limited (2)	34.94%	41.34%	-6.40%	
	Wellington Management Japan Pte Ltd. (1)	16.52%	18.62%	-2.10%	○
	Capital International K.K.	30.29%	41.34%	-11.05%	
	Goldman Sachs Asset Management Co., Ltd.	18.81%	18.62%	+0.18%	○
	JPMorgan Asset Management (Japan) Limited (1)	17.38%	18.62%	-1.25%	○
	JPMorgan Asset Management (Japan) Limited (2)	20.23%	19.70%	+0.53%	○
	Schroder Investment Management (Japan) Limited	28.69%	41.34%	-12.65%	
	Sompo Asset Management Co.,Ltd. (1)	20.68%	18.62%	+2.05%	○
	Tokio Marine Asset Management Co., Ltd. (2)	20.46%	18.62%	+1.84%	○
	Nikko Asset Management Co., Ltd. (2)	6.32%	18.62%	-12.30%	○
	Nikko Asset Management Co., Ltd. (3)	21.93%	18.62%	+3.31%	○
	Nomura Asset Management Co., Ltd. (5)	15.53%	18.62%	-3.10%	○
	Nomura Asset Management Co., Ltd. (6)	12.48%	30.79%	-18.31%	
	Nomura Asset Management Co., Ltd. (7)	19.63%	19.70%	-0.07%	○
	Pictet Asset Management (Japan) Ltd.	17.34%	19.70%	-2.36%	○
	FIL Investments (Japan) Limited (2)	28.54%	28.82%	-0.28%	
	BlackRock Japan Co., Ltd. (18)	18.78%	18.62%	+0.15%	○
	Manulife Investment Management (Japan) Limited (2)	20.04%	18.62%	+1.42%	○
	Sumitomo Mitsui DS Asset Management Company, Limited (2)	24.16%	18.62%	+5.53%	○
	Sumitomo Mitsui DS Asset Management Company, Limited (3)	13.99%	18.62%	-4.63%	○
	Sumitomo Mitsui DS Asset Management Company, Limited (4)	21.15%	18.62%	+2.53%	○
	Sumitomo Mitsui DS Asset Management Company, Limited (5)	21.90%	18.62%	+3.28%	○
	Sumitomo Mitsui DS Asset Management Company, Limited (6)	63.26%	58.14%	+5.13%	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (7)	19.00%	18.62%	+0.38%	○
Mitsubishi UFJ Trust and Banking Corporation (7)	18.08%	18.62%	-0.54%	○	
Lazard Japan Asset Management K.K. (1)	51.39%	41.34%	+10.05%		
Russell Investments Japan Co., Ltd. (1)	30.58%	41.34%	-10.76%		
Russell Investments Japan Co., Ltd. (2)	23.36%	19.70%	+3.66%	○	
Foreign equities passive investment	State Street Global Advisors (Japan) Co., Ltd. (4)	40.48%	40.79%	-0.31%	
	State Street Global Advisors (Japan) Co., Ltd. (5)	47.40%	47.35%	+0.05%	
	State Street Global Advisors (Japan) Co., Ltd. (6)	30.33%	30.44%	-0.11%	
	State Street Global Advisors (Japan) Co., Ltd. (7)	17.48%	16.50%	+0.97%	
	State Street Global Advisors (Japan) Co., Ltd. (8)	25.09%	24.61%	+0.48%	
	State Street Global Advisors (Japan) Co., Ltd. (9)	40.27%	40.40%	-0.13%	
	BlackRock Japan Co., Ltd. (19)	40.72%	40.79%	-0.07%	
	BlackRock Japan Co., Ltd. (20)	42.83%	42.84%	-0.01%	
	BlackRock Japan Co., Ltd. (21)	48.89%	47.35%	+1.54%	
	BlackRock Japan Co., Ltd. (22)	52.93%	52.97%	-0.04%	
	BlackRock Japan Co., Ltd. (23)	60.68%	60.62%	+0.06%	
	BlackRock Japan Co., Ltd. (24)	36.68%	36.71%	-0.03%	
	BlackRock Japan Co., Ltd. (25)	31.25%	31.29%	-0.04%	
	BlackRock Japan Co., Ltd. (26)	30.89%	30.44%	+0.45%	
	BlackRock Japan Co., Ltd. (27)	16.40%	16.88%	-0.49%	○
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (8)	27.10%	27.08%	+0.02%	○
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (9)	13.59%	13.55%	+0.04%	○
	Legal & General Investment Management Japan KK (1)	40.88%	40.79%	+0.09%	
	Legal & General Investment Management Japan KK (2)	47.39%	47.35%	+0.04%	

Investment method	Asset manager name	Time-weighted return (A)	Benchmark return (B)	Excess rate of return (C) = (A) – (B)	Remarks column
Foreign equities passive investment	Legal & General Investment Management Japan KK (3)	30.85%	30.70%	+0.14%	○
	Legal & General Investment Management Japan KK (4)	29.53%	29.75%	-0.22%	○
	Legal & General Investment Management Japan KK (5)	33.97%	32.11%	+1.86%	○
	Legal & General Investment Management Japan KK (6)	25.38%	25.69%	-0.32%	○
	Legal & General Investment Management Japan KK (7)	20.63%	20.96%	-0.33%	○
	Legal & General Investment Management Japan KK (8)	30.46%	30.44%	+0.02%	
	Legal & General Investment Management Japan KK (9)	16.79%	16.50%	+0.29%	
	Legal & General Investment Management Japan KK (10)	17.27%	17.62%	-0.36%	○
	Legal & General Investment Management Japan KK (11)	17.99%	18.40%	-0.41%	○
	Legal & General Investment Management Japan KK (12)	24.72%	24.61%	+0.11%	
	Legal & General Investment Management Japan KK (13)	41.78%	41.74%	+0.03%	
	Legal & General Investment Management Japan KK (14)	40.24%	40.39%	-0.15%	
	Asset Management One Co., Ltd. (13) (former Mizuho Asset Management)	4.07%	5.83%	-1.76%	
	Foreign equities active investment	Amundi Japan Ltd (2)	56.72%	47.70%	+9.02%
Wellington Management Japan Pte Ltd. (2)		50.52%	47.70%	+2.83%	
JPMorgan Asset Management (Japan) Limited (3)		30.97%	26.23%	+4.73%	○
JPMorgan Asset Management (Japan) Limited (4)		57.13%	47.70%	+9.43%	
JPMorgan Asset Management (Japan) Limited (5)		62.88%	56.88%	+6.00%	
Sompo Asset Management Co.,Ltd. (2)		31.63%	26.23%	+5.40%	○
Sompo Asset Management Co.,Ltd. (3)		27.64%	26.23%	+1.40%	○
T.Rowe Price Japan, Inc. (2)		52.75%	47.70%	+5.05%	
T.Rowe Price Japan, Inc. (3)		57.67%	47.03%	+10.64%	
Tokio Marine Asset Management Co., Ltd. (3)		32.69%	26.23%	+6.46%	○
Tokio Marine Asset Management Co., Ltd. (4)		44.58%	36.76%	+7.82%	
Tokio Marine Asset Management Co., Ltd. (5)		50.21%	50.60%	-0.39%	
Tokio Marine Asset Management Co., Ltd. (6)		37.34%	36.91%	+0.43%	
Nikko Asset Management Co., Ltd. (4)		24.59%	26.23%	-1.64%	○
Nissay Asset Management Corporation (2)		30.02%	25.76%	+4.26%	○
Nissay Asset Management Corporation (3)		49.30%	36.76%	+12.54%	
Neuberger Berman East Asia Limited (1)		61.52%	58.06%	+3.46%	
Nomura Asset Management Co., Ltd. (8)		25.84%	26.23%	-0.39%	○
Nomura Asset Management Co., Ltd. (9)		19.54%	26.23%	-6.69%	○
Nomura Asset Management Co., Ltd. (10)		35.45%	26.23%	+9.21%	○
Nomura Asset Management Co., Ltd. (11)		29.78%	26.23%	+3.54%	○
Nomura Asset Management Co., Ltd. (12)		30.47%	31.29%	-0.81%	
BNP Paribas Asset Management Japan Limited (1)		25.73%	26.23%	-0.50%	○
BNP Paribas Asset Management Japan Limited (2)		42.57%	47.70%	-5.13%	
FIL Investments (Japan) Limited (3)		31.17%	25.76%	+5.41%	○
FIL Investments (Japan) Limited (4)		74.34%	58.06%	+16.28%	
BlackRock Japan Co., Ltd. (28)		27.38%	26.23%	+1.15%	○
BlackRock Japan Co., Ltd. (29)		49.38%	47.68%	+1.70%	
BlackRock Japan Co., Ltd. (30)		32.14%	36.76%	-4.63%	
Franklin Templeton Japan Co., Ltd. (2)		37.97%	36.76%	+1.20%	
Manulife Investment Management (Japan) Limited (3)	49.78%	47.03%	+2.76%		
Sumitomo Mitsui DS Asset Management Company, Limited (7)	29.83%	25.76%	+4.07%	○	

② Investment performance (alternative assets)

Alternative assets	Investment style	Asset manager name	IRR (local currency)	IRR (JPY)	Local currency	Start of investment	Remarks column
Infrastructure	Specializing in domestic infrastructure	DBJ Asset Management Co., Ltd. (1)	5.35%	5.35%	JPY	March 2018	
	Specializing in foreign infrastructure	DBJ Asset Management Co., Ltd. (2)	0.60%	9.17%	USD	April 2018	
	Specializing in domestic infrastructure	DBJ Asset Management Co., Ltd. (3)	-	-	JPY	July 2023	○
	Global-Core	Nomura Asset Management Co., Ltd. (8)	6.34%	15.15%	USD	February 2018	
	Global-Core	Nomura Asset Management Co., Ltd. (14)	3.46%	14.32%	USD	December 2021	
	Global-Core	Sumitomo Mitsui DS Asset Management Company, Limited (8)	4.09%	11.85%	USD	January 2018	
	Global-Core	Sumitomo Mitsui DS Asset Management Company, Limited (9)	7.67%	18.42%	USD	September 2021	
	Global-Core	In-house investment (6)	3.01%	6.24%	USD	February 2014	
	Global-Infrastructure	In-house investment (7)	-	-	EUR	March 2024	○
	Global-Infrastructure	In-house investment (8)	-	-	USD	March 2024	○
Global-Infrastructure	In-house investment (9)	-	-	USD	November 2023	○	
Private equity	Global-Diversified Strategy	Neuberger Berman East Asia Limited (2)	7.15%	19.55%	USD	April 2020	
	Global-Diversified Strategy	Mitsubishi UFJ Trust and Banking Corporation (9)	7.70%	20.12%	USD	January 2021	
	Japan-Focused Strategy	Mitsubishi UFJ Trust and Banking Corporation (10)	-5.26%	-5.26%	JPY	January 2022	
	Emerging markets-Diversified	In-house investment (10)	7.13%	13.57%	USD	June 2015	
	Global-Buyout	In-house investment (11)	-	-	EUR	July 2023	○
	Global-Buyout	In-house investment (12)	-	-	EUR	July 2023	○
	Global-Buyout	In-house investment (13)	-	-	USD	March 2023	○
Global-Buyout	In-house investment (14)	-	-	USD	March 2023	○	
Real estate	Global-Core Commingled Fund Investments	Asset Management One Co., Ltd. (15)	2.30%	10.99%	USD	September 2018	
	Global-Core JV/Club Type Investments	Asset Management One Co., Ltd. (16)	-1.25%	9.80%	USD	February 2021	
	Japan-Build to Core	Tokyu Land Capital Management Inc.	-	-	JPY	April 2023	○
	Global-Core JV/Club Type Investments	Mizuho Trust & Banking Co., Ltd.	-0.58%	10.29%	USD	September 2022	
	Japan-Core	Mitsubishi UFJ Trust and Banking Corporation (11)	7.27%	7.27%	JPY	December 2017	
	Global-Opportunistic	In-house investment (15)	-13.49%	-4.45%	USD	March 2023	
	Global-Opportunistic	In-house investment (16)	-	-	USD	September 2023	○

(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 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 as of the occurrence of the cash flow and is subject to exchange rate fluctuations throughout the investment period.

(Note 8) A circle in the remarks column indicates an external asset manager whose investment period is less than one year. The rates of return for external asset managers with investment periods of less than one year are those for the investment periods. For alternative assets, however, rates of return are shown only for investments underway for at least one year for which investments in the portfolio companies have already been executed.

[5] Investment fees (3 year cumulative)

(Unit: ¥)

Investment method	Asset manager name	Custodians	Investment fees	Remarks column
Domestic bonds passive investment	Asset Management One Co., Ltd. (1) (former Mizuho Trust & Banking)	MTBJ	139,633,121	
	AllianceBernstein Japan Ltd.	MTBJ	260,832,400	
	BlackRock Japan Co., Ltd. (1)	MTBJ	49,993,960	
	BlackRock Japan Co., Ltd. (2)	MTBJ	6,444,417	
	BlackRock Japan Co., Ltd. (3)	MTBJ	129,710,700	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (1)	MTBJ	262,381,944	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (2)	MTBJ	47,252,902	
	Mitsubishi UFJ Trust and Banking Corporation (2)	MTBJ	66,560,025	
	Resona Asset Management Co., Ltd. (3)	MTBJ	57,621,058	
	Resona Asset Management Co., Ltd. (4)	MTBJ	13,581,046	
Domestic bonds active investment	Asset Management One Co., Ltd. (3) (former Mizuho Trust & Banking)	MTBJ	956,253,223	
	Amundi Japan Ltd (1)	MTBJ	267,602,929	
	Tokio Marine Asset Management Co., Ltd. (1)	MTBJ	318,799,269	
	Nikko Asset Management Co., Ltd. (1)	MTBJ	154,441,459	
	Nissay Asset Management Corporation (1)	MTBJ	394,596,025	
	Nomura Asset Management Co., Ltd. (1)	MTBJ	281,995,918	
	PGIM Japan Co., Ltd. (1)	MTBJ	991,892,940	
	PIMCO Japan Ltd (1)	MTBJ	1,681,156,215	
	Manulife Investment Management (Japan) Limited (1)	MTBJ	988,590,028	
	Sumitomo Mitsui DS Asset Management Company, Limited (1)	MTBJ	245,317,635	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (3)	MTBJ	409,977,711	
	Mitsubishi UFJ Asset Management Co., Ltd.	MTBJ	355,390,710	
	Mitsubishi UFJ Trust and Banking Corporation (3)	MTBJ	930,762,448	
	Foreign bonds passive investment	Asset Management One Co., Ltd. (4) (former Mizuho Trust & Banking)	MTBJ	143,924,985
State Street Global Advisors (Japan) Co., Ltd. (1)		MTBJ	200,554,401	
Nomura Asset Management Co., Ltd. (2)		MTBJ	67,133,442	
BlackRock Japan Co., Ltd. (4)		MTBJ	357,514,648	
BlackRock Japan Co., Ltd. (5)		MTBJ	110,994,547	
BlackRock Japan Co., Ltd. (6)		MTBJ	264,984,742	
BlackRock Japan Co., Ltd. (7)		MTBJ	4,101,819	
BlackRock Japan Co., Ltd. (9)		MTBJ	256,943,093	
BlackRock Japan Co., Ltd. (12)		MTBJ	180,341,239	
BlackRock Japan Co., Ltd. (13)		MTBJ	142,876,232	
BlackRock Japan Co., Ltd. (14)		MTBJ	198,666,461	
BlackRock Japan Co., Ltd. (15)		MTBJ	84,969,433	
Sumitomo Mitsui Trust Asset Management Co., Ltd. (4)		MTBJ	33,511,353	
Resona Asset Management Co., Ltd. (5)		MTBJ	56,621,774	
Resona Asset Management Co., Ltd. (6)		MTBJ	23,173,991	
Resona Asset Management Co., Ltd. (7)		MTBJ	82,015,920	
Resona Asset Management Co., Ltd. (8)		MTBJ	4,159,409	
Resona Asset Management Co., Ltd. (10)		MTBJ	72,729,893	
Foreign bonds active investment		Asset Management One Co., Ltd. (16) (former Mizuho Asset Management)	SSTB	2,724,630,636
	Ashmore Japan Co., Ltd	SSTB	389,277,979	○
	Sompo Asset Management Co.,Ltd. (4)	SSTB	6,125,020,459	○

(Unit: ¥)

Investment method	Asset manager name	Custodians	Investment fees	Remarks column	
Foreign bonds active investment	T.Rowe Price Japan, Inc. (1)	MTBJ	299,029,205		
	PineBridge Investments Japan Co., Ltd.	MTBJ	255,630,857		
	BNY Mellon Investment Management Japan Limited (1)	SSTB	4,039,672,558	○	
	PGIM Japan Co., Ltd. (2)	SSTB	689,482,324	○	
	PIMCO Japan Ltd (2)	SSTB	3,844,107,456	○	
	FIL Investments (Japan) Limited (5)	SSTB	12,733,585,008	○	
	Franklin Templeton Japan Co., Ltd. (1)	SSTB	2,479,765,765		
	Barings Japan Limited	MTBJ	237,453,492		
	Morgan Stanley Investment Management (Japan) Co., Ltd. (1)	SSTB	2,832,770,410		
	Morgan Stanley Investment Management (Japan) Co., Ltd. (2)	MTBJ	276,550,663		
	UBS Asset Management (Japan) Ltd (1)	MTBJ	917,822,891		
	Domestic equities passive investment	Asset Management One Co., Ltd. (5) (former DIAM)	MTBJ	569,619,145	
Asset Management One Co., Ltd. (6) (former Mizuho Trust & Banking)		MTBJ	37,001,208		
Asset Management One Co., Ltd. (7)		MTBJ	82,232,372		
Nomura Asset Management Co., Ltd. (3)		MTBJ	209,012,775		
Nomura Asset Management Co., Ltd. (4)		MTBJ	228,242,622		
FIL Investments (Japan) Limited (1)		MTBJ	282,912,960		
BlackRock Japan Co., Ltd. (16)		MTBJ	71,490,726		
BlackRock Japan Co., Ltd. (17)		MTBJ	61,471,366		
Sumitomo Mitsui Trust Asset Management Co., Ltd. (5)		MTBJ	365,158,580		
Sumitomo Mitsui Trust Asset Management Co., Ltd. (6)		MTBJ	187,944,160		
Mitsubishi UFJ Trust and Banking Corporation (4)		MTBJ	145,064,986		
Mitsubishi UFJ Trust and Banking Corporation (5)		MTBJ	77,283,302		
Mitsubishi UFJ Trust and Banking Corporation (6)		MTBJ	53,700,314		
Resona Asset Management Co., Ltd. (13)		MTBJ	317,849,404		
Domestic equities active investment		Asset Management One Co., Ltd. (8)	MTBJ	1,492,203,918	
		Asset Management One Co., Ltd. (12) (former Mizuho Asset Management)	MTBJ	422,378,947	
		Invesco Asset Management (Japan) Limited (1)	MTBJ	506,212,993	
	Invesco Asset Management (Japan) Limited (2)	MTBJ	110,653,802		
	Capital International K.K.	MTBJ	2,888,300,293		
	Schroder Investment Management (Japan) Limited	MTBJ	408,500,541		
	Nomura Asset Management Co., Ltd. (6)	MTBJ	150,635,405		
	FIL Investments (Japan) Limited (2)	MTBJ	1,264,142,977		
	Sumitomo Mitsui DS Asset Management Company, Limited (6)	MTBJ	601,579,382		
	Lazard Japan Asset Management K.K. (1)	MTBJ	2,329,340,826		
	Russell Investments Japan Co., Ltd. (1)	MTBJ	2,490,309,770		
	Foreign equities passive investment	State Street Global Advisors (Japan) Co., Ltd. (4)	MTBJ	300,075,658	
State Street Global Advisors (Japan) Co., Ltd. (5)		MTBJ	106,526,564		
State Street Global Advisors (Japan) Co., Ltd. (6)		MTBJ	23,018,748		
State Street Global Advisors (Japan) Co., Ltd. (7)		MTBJ	5,741,567		
State Street Global Advisors (Japan) Co., Ltd. (8)		MTBJ	66,818,170		
State Street Global Advisors (Japan) Co., Ltd. (9)	MTBJ	679,956,869			

(Unit: ¥)

Investment method	Asset manager name	Custodians	Investment fees	Remarks column
Foreign equities passive investment	BlackRock Japan Co., Ltd. (19)	MTBJ	623,922,874	
	Sumitomo Mitsui Trust Asset Management Co., Ltd. (10)	MTBJ	242,378,030	○
	Legal & General Investment Management Japan KK (1)	MTBJ	710,566,070	
	Legal & General Investment Management Japan KK (2)	MTBJ	130,161,776	
	Legal & General Investment Management Japan KK (8)	MTBJ	60,014,430	
	Legal & General Investment Management Japan KK (9)	MTBJ	15,878,510	
	Legal & General Investment Management Japan KK (12)	MTBJ	34,180,224	
	Legal & General Investment Management Japan KK (13)	MTBJ	157,887,816	
	Legal & General Investment Management Japan KK (14)	MTBJ	190,311,964	
	Foreign equities active investment	Asset Management One Co., Ltd. (13) (former Mizuho Asset Management)	MTBJ	225,254,489
Nikko Asset Management Co., Ltd. (5)		MTBJ	639,701,299	○
BNY Mellon Investment Management Japan Limited (2)		MTBJ	385,956,065	○
Mitsubishi UFJ Trust and Banking Corporation (8)		MTBJ	1,162,337,691	
UBS Asset Management (Japan) Ltd (2)		MTBJ	593,258,940	○
Lazard Japan Asset Management K.K. (2)		MTBJ	133,596,498	○
Alternative infrastructure	DBJ Asset Management Co., Ltd. (2)	SSTB	15,677,255	
	Nomura Asset Management Co., Ltd. (13)	SSTB	650,486,375	

(Unit: ¥)

Investment method	Asset manager name	Custodians	Investment fees	Remarks column
Alternative infrastructure	Nomura Asset Management Co., Ltd. (14)	SSTB	216,467,928	
	Sumitomo Mitsui DS Asset Management Company, Limited (8)	SSTB	684,661,834	
	Sumitomo Mitsui DS Asset Management Company, Limited (9)	SSTB	266,555,990	
Alternative private equity	Neuberger Berman East Asia Limited (2)	SSTB	115,336,527	
	Mitsubishi UFJ Trust and Banking Corporation (9)	SSTB	559,130,665	
	Mitsubishi UFJ Trust and Banking Corporation (10)	SSTB	2,441,095	
Alternative real estate	Asset Management One Co., Ltd. (14)	SSTB	840,085,629	
	Asset Management One Co., Ltd. (15)	SSTB	173,459,171	
	Mitsubishi UFJ Trust and Banking Corporation (11)	SSTB	832,866,256	

(Unit: ¥)

Investment method	Custodian, etc. name	Custodians	Investment fees
Custody	State Street Trust and Banking Co., Ltd.	SSTB	8,353,415,659
	The Master Trust Bank of Japan, Ltd.	MTBJ	22,855,231,305
Transition management	BlackRock Japan Co., Ltd. (31) (Foreign bonds)	MTBJ	345,237
	Russell Investments Japan Co., Ltd. (3) (Domestic equities)	MTBJ	55,000

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

(Note 2) Asset managers entrusted with investment for more than one contract are indicated in numerals.

(Note 3) Fees include consumption tax.

(Note 4) A circle in the remarks column indicates an external asset manager closed in fiscal 2023 with less than three years of investment period since April 2021.

Funds for which three fiscal years have not elapsed since the signing of the contract or funds for which three fiscal years have elapsed since the signing of the contract but for which no fees were paid in the last three fiscal years are not listed.

(Note 5) Fees paid to custodians include certain fees 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 ¥729,969,690.

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

(Unit: ¥)

Asset class	Investment returns	Investment fees
Domestic bonds	5,097,074,730	465,819,154
Foreign bonds	54,171,235,339	11,746,256,256
Foreign equities	753,778	154,365

(Note 1) Returns in the table represent premium charges excluding fees.

(Note 2) Fees indicate management fees and agent fees.

(Note 3) Of domestic bonds, revenues from In-house investment funds were 2,685,883,309 yen and fees were 253,634,311 yen.

Index licensing fees (three-year cumulative)

(Unit: ¥)

	Index companies	Index licensing fees
Index use	FTSE International Limited*	58,419,959
	MSCI G.K.	1,276,266,974
	Morningstar Japan, Inc.	71,509,536

(Note 1) Index licensing fees are paid by GPIF based on direct contracts with index companies, in order to enable outsourced asset managers to use indexes. Consumption tax is included in the usage fees, but consumption tax is not included in the usage fees of index companies with an asterisk (*) in their names.

(Note 2) Index companies for which three fiscal years have not elapsed since the signing of the contract, and index companies for which three fiscal years have elapsed since the signing of the contract but no usage fees were paid for the last three fiscal years are not listed.

2 | Portfolio Holdings by Asset Category as of Mar. 31, 2024

These are lists to summarize GPIF's top 10 portfolio holdings as of March 31, 2024 (as of the end of fiscal 2023), either indirectly through external asset managers or directly with 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.

Russia-related assets including in market capitalization at the end of March 2024 are valued at zero in principle, due to situations such as trade restriction against foreign investors, difficulties in settlement and exchange transaction, and difficulties in access to sufficient information about trading.

○ Domestic bonds holdings in order of market value

No.	Security name	Market value (¥100 million)
1	10-year JGB #373	18,350
2	10-year JGB #371	17,063
3	10-year Inflation-Indexed Bonds JGB #20	11,143
4	10-year JGB #372	10,740
5	5-year JGB #166	9,225
6	20-year JGB #186	8,086
7	20-year JGB #185	7,954
8	5-year JGB #161	7,699
9	30-year JGB #80	7,355
10	5-year JGB #159	7,147
Total	4,802 securities	565,229

○ Domestic equities holdings in order of market value

No.	Security name	Shares	Market value (¥100 million)
1	TOYOTA MOTOR CORPORATION	848,638,700	32,453
2	mitsubishi UFJ FINANCIAL GROUP,INC.	972,554,000	15,343
3	SONY GROUP CORPORATION	110,999,700	14,463
4	TOKYO ELECTRON LIMITED	34,806,600	13,849
5	MITSUBISHI CORPORATION	319,310,646	11,247
6	HITACHI,LTD.	77,637,200	10,854
7	KEYENCE CORPORATION	14,901,800	10,385
8	SUMITOMO MITSUI FINANCIAL GROUP,INC.	112,202,600	10,148
9	SHIN-ETSU CHEMICAL CO.,LTD.	142,005,800	9,421
10	MITSUI & CO.,LTD.	120,298,300	8,651
Total	2,253 securities		610,690

○ Foreign bonds holdings in order of market value

No.	Security name	Market value (¥100 million)
1	US TREASURY N/B 3.875% 08/15/2033	2,857
2	US TREASURY N/B 3.375% 05/15/2033	2,692
3	US TREASURY N/B 0.625% 08/15/2030	2,672
4	US TREASURY N/B 3.5% 02/15/2033	2,650
5	US TREASURY N/B 4.125% 11/15/2032	2,591
6	US TREASURY N/B 4.5% 11/15/2033	2,533
7	US TREASURY N/B 1.875% 02/15/2032	2,510
8	US TREASURY N/B 2.875% 05/15/2032	2,462
9	US TREASURY N/B 1.25% 08/15/2031	2,443
10	US TREASURY N/B 2.875% 08/15/2028	2,438
Total	11,690 securities	599,528

○ Foreign equities holdings in order of market value

No.	Security name	Shares	Market value (¥100 million)
1	MICROSOFT CORP	41,887,579	26,671
2	APPLE INC	85,918,049	22,298
3	NVIDIA CORP	14,954,368	20,450
4	AMAZON.COM INC	54,643,480	14,917
5	META PLATFORMS INC-CLASS A	12,807,905	9,413
6	ALPHABET INC-CL A	35,013,348	7,998
7	ALPHABET INC-CL C	29,021,895	6,688
8	ELI LILLY & CO	4,696,963	5,530
9	TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	141,093,373	5,219
10	BROADCOM INC	2,535,881	5,107
Total	3,433 securities		605,747

○ 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.	6,141
2	Infrastructure	PANTHEON G INFRASTRUCTURE OPPORTUNITIES LP	4,061
3	Infrastructure	TORANOMON INFRASTRUCTURE 1, L.P.	3,103
4	Infrastructure	GLOBAL ALTERNATIVE CO-INVESTMENT FUND I	1,911
5	Infrastructure	TORANOMON INFRASTRUCTURE 2 LP	1,685
6	Infrastructure	DG INFRASTRUCTURE OPPORTUNITIES L.P.	818
7	Infrastructure	DG INFRASTRUCTURE, ILP	646
8	Infrastructure	Brookfield Infrastructure Fund V-C, L.P.	157
9	Infrastructure	TORANOMON INFRASTRUCTURE 3, ILP	1

1	Private Equity	TORANOMON PRIVATE EQUITY 1 AIV, L.P.	3,308
2	Private Equity	TORANOMON PRIVATE EQUITY 2 AIV, L.P.	2,720
3	Private Equity	GLOBAL ALTERNATIVE CO-INVESTMENT FUND II	570
4	Private Equity	EQT X (No.1) EUR SCSp	119
5	Private Equity	TORANOMON PRIVATE EQUITY 3, ILP	83

1	Real Estate	CBRE G REAL ESTATE INVESTMENTS, LP	7,432
2	Real Estate	MUTB G REAL ESTATE FUND	2,296
3	Real Estate	TORANOMON REAL ESTATE 2, LP	957
4	Real Estate	TORANOMON REAL ESTATE 1, LP	867
5	Real Estate	TORANOMON REAL ESTATE 3, ILP	60
6	Real Estate	BLACKSTONE REAL ESTATE PARTNERS X.F L.P.	36

(Note 1) Security names are as of March 31, 2024.

(Note 2) In principle, surplus U.S. dollars in each trust account is invested in money market funds (MMFs). As of the end of fiscal 2023, the balance of MMFs was 168.2 billion yen.

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.

For All Generations

Government Pension Investment Fund, Japan

Annual Report Fiscal Year 2023

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. This report is an excerpt translation of the Japanese original.

Contact

Planning and Communication Division, Planning and Communication Department, Government Pension Investment Fund

Toranomon Hills Mori Tower, 1-23-1 Toranomon, Minato-ku, Tokyo, Japan 105-6377

Tel: +81-3-3502-2486 (direct dial) Fax: +81-3-3503-7398

Website: <https://www.gpif.go.jp/en/>

GPIF homepage



GPIF YouTube channel



GPIF X

