



EXECUTIVE SUMMARY

- In GPIF, about 20% of all assets are actively managed by the asset managers, but only a small number of funds achieve the target excess return rate during the three years from FY2014 to 2016.
- In addition to the problem of the selection ability of the GPIF, there is a possibility that the target excess return rate may not be set properly by the asset managers and they focus on the increase of the asset under management beyond their capacity.
- For this reason, we revised the current fixed fee structure and partial performance-based fee structure, and introduced the following new performance-based fee structure.
 - ① In order to strengthen alignment of interest, the base fee rate is lowered to the rate of passive fund, and the maximum fee rate is scrapped.
 - ② Introduction of a carryover which partially accumulates payment of annual performance-based fees so as to link with mid- to long-term investment results.
 - ③ A multi-year contract is concluded to enable to achieve excess return in medium- to long-term goal.
- GPIF has a high reliance on passive fund as a universal owner. Passive fund is based on an efficient market, and active fund is indispensable for the market to be efficient. We hope that introducing this new performance-based fee structure will lead to further evolution of active management institutions.



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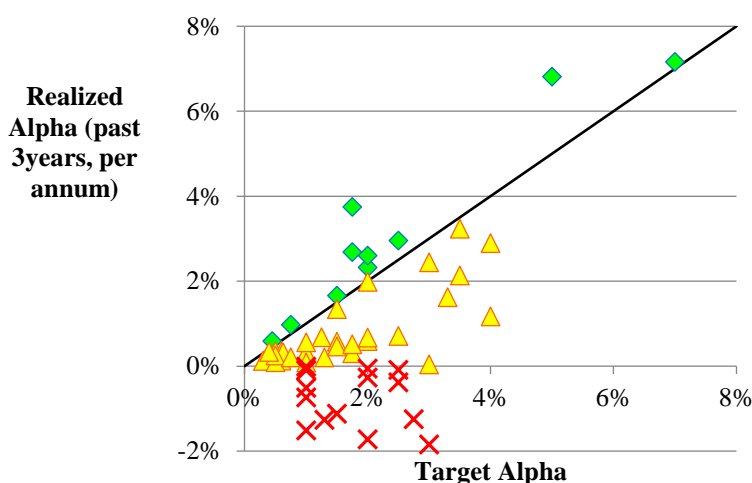
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1. Issue

Of GPIF's 160 trillion yen worth of assets, approximately 20 percent of traditional assets are actively managed by institutions under asset management contracts. However, their performance leaves much to be desired. Figure 1 shows during the three-year period FY2014-2016, only few funds outperformed their targets.

Figure 1: Target and Realized Alpha of GPIF Funds



There are several possible reasons for this. One could be that markets are adequately efficient, and that the potential for active management to prove successful is limited. According to analysis by Sykes and Dell [2017], the average excess return during the past ten years in the advanced-country global large-cap universe was 1.1 percent², but given that around three-quarters of GPIF funds are earning excess returns, as shown in Figure 1, there would still seem to be room to exploit market inefficiencies. Another possible reason is that GPIF is a poor selector of asset managers. Again, Sykes and Dell [2017] found that 26 percent of funds did better than the average target excess return of 2.7 percent during the past ten years³, and even

when database survival bias is taken into account, that is a higher proportion than the proportion of GPIF funds hitting their targets. GPIF itself recognizes that has room to improve its selection abilities, and is working hard on continuously to increase sophistication in this area.

Shifting the perspective to causes on the side of the asset managers, the first thing to consider is that the target excess return rates set by each asset manager are inappropriate. Second, it may be the case that as a result of business-related demands, asset managers may be more focused on increasing the balance of their assets under management than on strictly controlling their management capacity and pursuing excess returns.

² Average for the ten years to June 2017 for funds registered with MercerInsight.

³ Based on data for the ten years to December 2016 for funds registered with MercerInsight.

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Under the current fixed-fee structure and partial performance-based fee structure, asset managers are paid considerable sums regardless of their investment performance. They therefore have little incentive to set target excess return rates appropriately, to be innovative in seeking excess returns, and to control their management capacity, so a resolution of this issue was regarded as being far off⁴. In response to this problem, GPIF decided to introduce a new performance-based fee structure as a means of stepping up its efforts to earn excess returns.

⁴ According to Ross and Turner [1999], even with fixed fees, the interests of investors and asset managers are supposed to be aligned, but the importance of capacity management tends to be neglected, so fixed fees cannot be supported.

2. The new performance-based fee structure

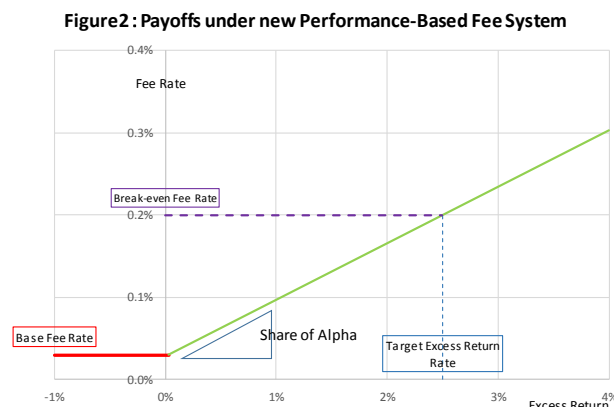
GPIF's introduction of the new performance-based fee structure involves the following three initiatives:

- In light of the issues discussed above, and with the aim of strengthening alignment of interest between GPIF and asset managers, the base fee rate will be decreased and the maximum fee rate will be scrapped in order to better link performance with fees.
- However, a carryover mechanism will be included to even out the amounts of fees paid. Under this mechanism, a portion of the fees will be held back in order to ensure that the amount of fees is linked with medium- to long-term investment performance.
- Furthermore, in order to enable asset managers to achieve target excess returns over the medium to long term, the introduction of this performance-based fee structure will normally involve the conclusion of multi-year contracts (commitments) with asset managers.

(1) Base fee and performance-based fees

The amount of fees will comprise the base fee and the performance-based fees. The basic fee rate has been drastically reduced to the rate of passive fund for institutional separate account. The performance-based fees are based on the precise measurement of the monetary contribution of investment performance. This is achieved by multiplying the excess return rate on the portion in excess of the basic fee rate by the share of alpha and the average daily balance. Moreover, there is no cap on the fee rate. The share of alpha is computed based on the target excess return rate and the fee rate paid when the target excess return rate under the current contract is reached⁵. The payoff under the new performance-based fee structure is shown in Figure 2.

Figure 2: Payoffs under new Performance-Based Fee Structure



⁵ Value-sharing rate = $\frac{\text{Break-even fee rate} - \text{base fee rate}}{\text{Target excess return rate} - \text{base fee rate}}$

The break-even fee rate is the fee rate paid when the target excess return rate is achieved under the current contract.

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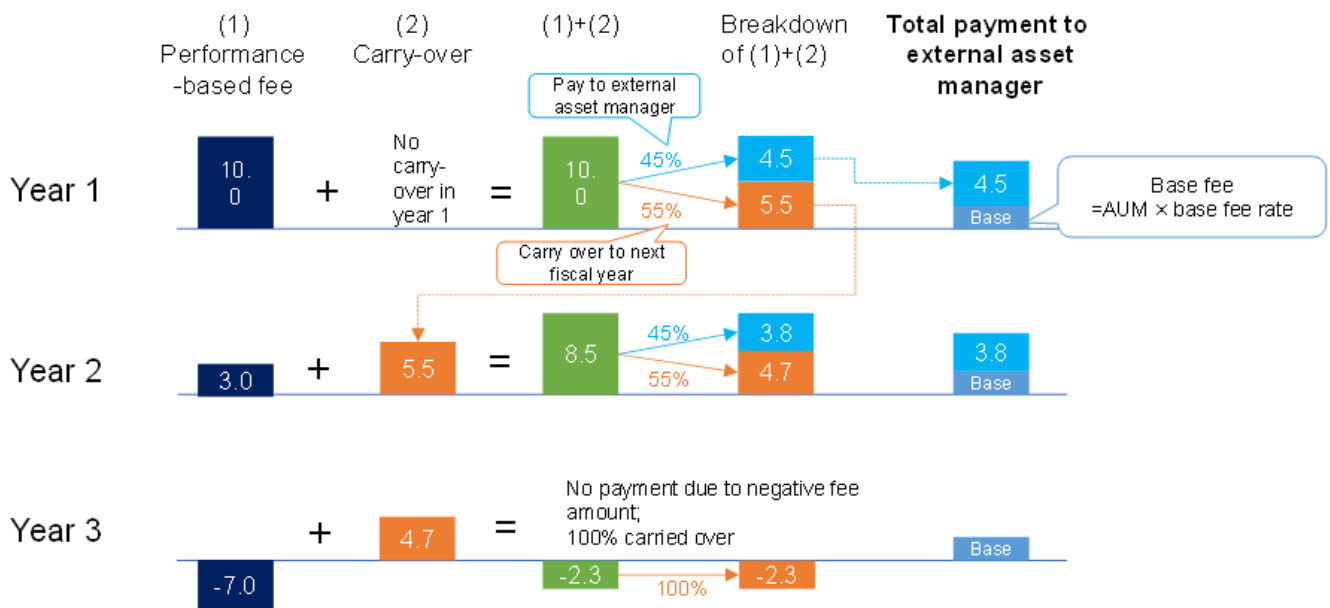
(2) Carryovers

The full amount of the performance-based fees calculated each year will not be paid. Instead, 45 percent of the cumulative amount will be paid to the asset manager, with the remaining 55 percent to be deferred to the following year as a carryover. This mechanism is illustrated in Figure 3.

(3) Multi-year contracts

In conjunction with the launch of this new performance-based fee structure, multi-year contracts are to be concluded with certain asset managers thereby ensuring a long-term commitment.

Figure 3: Carryover Mechanism



3. Background

According to Senic [2011], when putting together a performance-based fee structure, three elements are important: (1) fairness toward investors, (2) positive incentives for portfolio managers, and (3) practicability in administration. During the selection process, numerous proposals were examined with these elements in mind until a final proposal was agreed upon. The process that led to this final proposal is described below:

(1) Current performance-based fee structure

GPIF has actually been implementing a partial performance-based fee structure since 2013. Under this structure, which is described as a “vertical bull call spread” structure, there are maximum and minimum fee rates. In exchange for the asset owner guaranteeing a minimum fee rate, the asset manager accepts an upper limit on the fee rate. This ensures fairness to some degree, and prevents the asset manager from taking on excessive risk. Despite these apparent advantages, in practice the gap between the upper and lower limits is narrow, so it is not all that different from a fixed-fee scheme. As a result, asset managers have little incentive to earn excess returns or control capacity. The problem was that because fees are calculated using the average excess return rate during the past three years and based on the average monthly balance during the fiscal year, the calculation of fees is not based on the degree of contribution in monetary terms of the asset manager.

(2) Extension of upper and lower limits

With the aim of strengthening the link between investment performance and fees, and thereby increase incentives for asset managers, extending the upper and lower limits while maintaining the current structure was initially considered as an option. However, because there

Figure 4: Payoffs under Current Performance-Based Fee

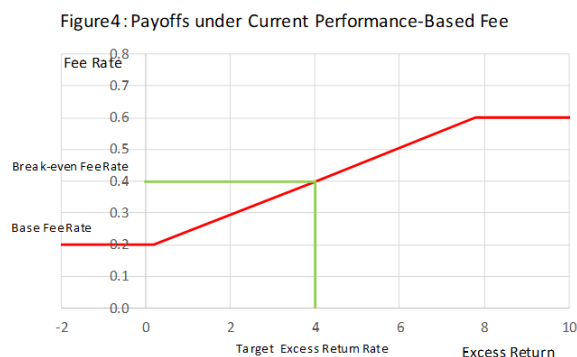
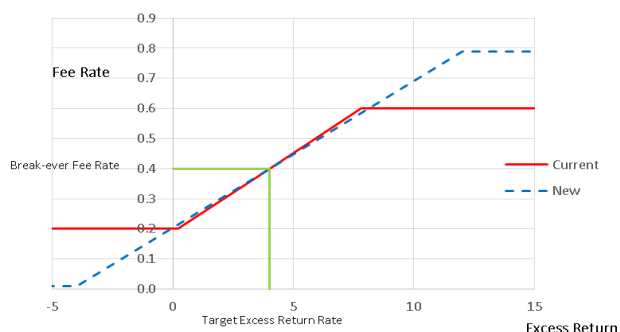


Figure 5: Extension of Upper and Lower Limits



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would still be a maximum, this would be something of a halfway measure. Furthermore, extending the minimum could result in the misunderstanding that performance-based fees could still be paid even with excess returns in negative territory.

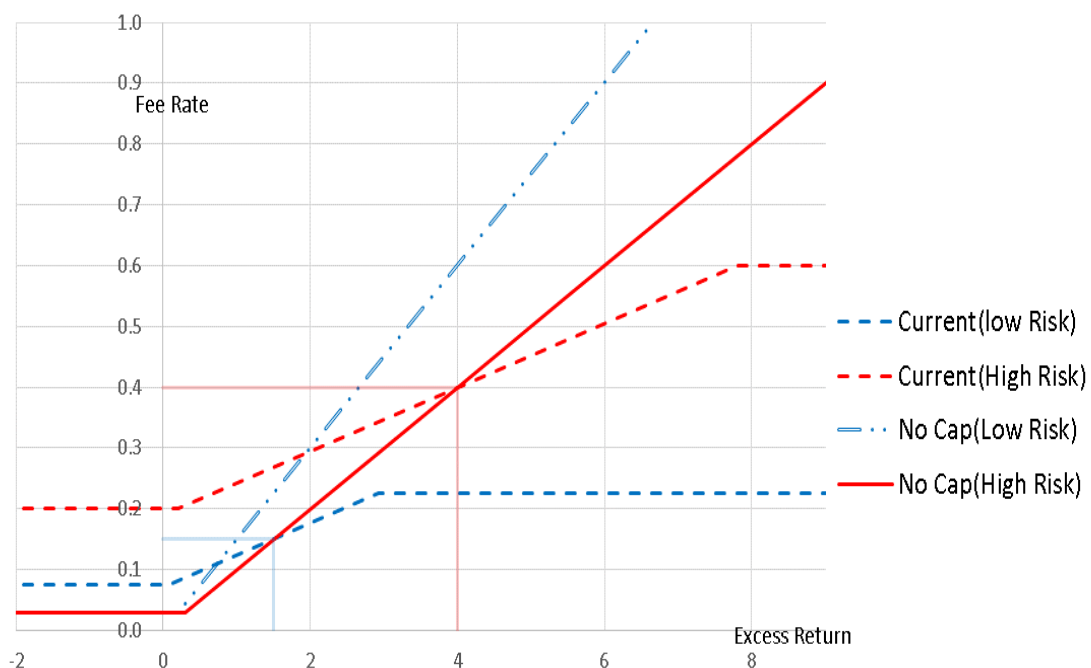
(3) Scrapping of upper limit and adjustment of share of alpha based on Information Ratio

The next thing to be considered as a means of providing more incentives to asset managers was scrapping the upper limit and using the Information Ratio⁶ to adjust the share of alpha. In other words, as can be seen from Figure 6, funds with a higher Information Ratio would have a higher share of alpha with this method.

This method is focused on efficiency in the utilization of risk, and while it was fair to some degree, given the size of GPIF, which has assets worth 160 trillion yen, there are limits to the use of active management, and considering that an investment structure centered on passive investment to the same degree as now would be maintained in the future, giving incentives that serve to encourage risk taking could be expected to strengthen GPIF as a whole's efforts to achieve excess returns. Because of this, an excessive focus on Information Ratio was not regarded as being necessary, and it was concluded that this proposal was inappropriate.

Figure 6:

Scrapping of Upper Limit (Information Ratio considered)



⁶ Information Ratio is the ratio of excess return/active risk. It means the risk-return efficiency of asset manager because active risk is the standard deviation of excess return.

(4) Fixing the share of alpha

The next method to be considered was to scrap the maximum fee rate and set the same share of alpha for all asset managers. This approach could be expected to offer a high degree of fairness to both GPIF and asset managers, but depending on the share of alpha set, there was a danger that it would be misunderstood as being aimed at reducing the total amount of asset management fees paid.

Because of this, it was decided to adopt the formula for calculating the share of alpha presented in 2. (1). In other words, the current fixed fee rate or the break-even fee rate for performance-based fees would provide the basis for the determination of the share of alpha⁷. This would respect the terms of previous contracts and help ensure practicability in administration. In addition, if the target excess return rate were achieved, the same level of fees as in the past would be guaranteed, so GPIF sent a clear message that the goal of the change in the structure is not to reduce the total amount of management fees paid.

(5) High watermarks, clawbacks, and carryovers

In the case of performance-based fees with the maximum scrapped, it is vital to take steps to reduce the problem of excessive payment resulting from the call-option-like nature of the fees⁸. Initially, therefore, mechanisms such as high watermarks⁹ and clawbacks¹⁰ were considered. A problem

with high watermarks, though, is that they result in excessive fees being paid in the event of strong investment performance to begin with followed by poor performance subsequently. Clawbacks, meanwhile, expose an asset manager that has received fees to the risk of having to pay them back to GPIF. This often means that although the fees cannot be recognized as revenue for accounting purposes, they are treated as income for tax purposes, so tax will need to be paid on them. It therefore became evident that clawbacks financially disadvantage asset managers. In light of this issue, the view taken was that a carryover structure, whereby GPIF withholds a portion of fees and pays the remainder to the asset manager, would have the same effect as, and be superior to clawbacks¹¹.

(6) Three-year average of excess returns and fixed-rate payment from cumulative carryover

The excess return rate forms the basis of payments, and we thought that the average for the previous three years should be used. However, some asset managers pointed out that accumulating performance-based fees as a carryover and paying a fixed percentage (45%) of this cumulative amount would have a similar effect. Unlike the three-year average structure, this fixed-rate payment method could take into account positive and negative excess returns over a long

⁷ According to Sykes and Dell [2017], share of alpha between 5 and 25 percent is appropriate. Furthermore, Hodgson [2017] states that if the base fee is 0 percent, 33 percent share of alpha is appropriate.

⁸ Payoff of performance-based fee shown in Figure 2 is similar to call option. If this structure is applied annually, positive excess return results in positive performance-based fee but negative performance-based fee does not accrue in case of negative excess return. Therefore, positive accumulated performance-based fee may occur in spite of negative accumulated excess return. This is the overpayment problem due to optionality.

⁹ High watermark is the fee payment structure used for the purpose of alignment of interest between asset owner and asset manager in hedge funds. Performance-based fees are paid based on the excess return in excess of past highest accumulated excess return in this structure.

¹⁰ Clawback is the fee payment structure used for the purpose of alignment of interest between asset owner and asset manager in private

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period of time (in the case of the three-year average structure, once three years have passed the figures no longer influence the calculation). Moreover, the calculations are simpler to perform than with the three-year average structure. For these reasons, it was determined that the fixed-rate structure would offer a high degree of fairness for GPIF and would be very easy to implement in practice, and the decision was therefore made to adopt it.

(7) Determination of base fee rate

Under the current performance-based fee structure, the gap between the upper and lower limits is narrow, so the base fee rate is considerably high, as it factors in personnel and other costs associated with active management as a management expense. However, GPIF is basically able to meet its investment targets for pension funding through passive management alone, so active management only needs to be engaged in when excess returns are certain. Because of this, GPIF is extremely reluctant to pay large fees for active management that produces poor results. So it was felt that the base fee rate should be set at the level for passive management, which is an alternative method available to GPIF, regardless of the cost structure of the asset manager. However, that level is extremely low, partly because the amount of GPIF assets that are passively managed is so huge. The decision was therefore made to adopt the level for passive management for institutional investors such as pension funds, with information on this level having been provided by consultants.

In normal market, the prices of goods and services are determined based on supply and demand, which reflects the value of the good or service concerned. Given that the cost structure of the supplier is only directly reflected in the price in the case of things like public utilities, and high fixed cost due to high salary experts like fund managers or analysts is meaningless for clients unless excess return is obtained, this method for determining the base fee rate would seem to be fair. In the world of asset management, however, this change in approach may be interpreted as marking an intellectual transformation which requires fundamental changes in the management style of asset managers.

(8) Multi-year contracts

During discussions on the low rate of achievement of target excess return rates, many asset managers voiced the opinion that an impediment to the achievement of target excess return rates is the fact that asset owners often cancel their contracts before results emerge, giving short-term poor performance as the reason. GPIF also came to the conclusion that in its revamp of the performance-based fee structure, if asset managers are going to be under pressure to deliver good investment performance, it would also be in GPIF's interests to enable them to meet their target excess returns over the medium to long term, and that it would therefore be appropriate to commit to lengthy contract periods. In the case of alternative assets, commitment to long contract periods is commonplace, but with traditional assets, contracts normally allow for the free exercise of the right to

equities. In this structure, asset manager refunds part of performance-based fees already received if accumulated excess return is negative after a certain investment period.

¹¹ Hodgson [2017] states that if there is a problem with clawbacks, a reasonable alternative might be to keep back 50 percent of fees (carryover).

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cancel, so such a scheme is unprecedented. Nevertheless, the decision was made to conclude such contracts with certain asset managers, and the assumption is that contracts newly concluded in the future with other asset managers will also be multi-year.

4. Conclusion

Issues remain with the introduction of this performance-based fee structure. For example, how to determine the share of alpha when new contracts are concluded. GPIF therefore intends to continue working on these issues.

The introduction of this new performance-based fee structure came about as a consequence of factors specific to GPIF, namely the need to step up action to secure excess returns, but given the role of GPIF and the amount of assets it controls, GPIF fully appreciates that the new structure will have a big impact on the asset management sector as a whole. Due to legal restrictions, GPIF has to outsource most of its asset management, and it is by no means an overstatement to say that the presence of robust asset managers that are committed to investment performance is vital for the survival of GPIF's operations.

Not only that, but as a universal owner, GPIF is heavily dependent on passive management, and to improve passive-management performance, efficient capital markets are a prerequisite. Active management involves day-to-day effort to improve market efficiency, and is therefore also vital for GPIF. For its part, GPIF is confident that if the introduction of this structure can serve as an opportunity for increasing the sophistication of the asset management sector, particularly of active managers, it will substantially benefit both GPIF and its beneficiaries.

During the process of deciding on this new performance-based fee structure, GPIF received valuable insights from numerous asset managers and consultants, and would like to take this opportunity to express its gratitude for that.

<reference>

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