14 July 2006

Review of the Government Superannuation Fund Authority

The Treasury

FINAL REPORT

MERCER

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Terms of Reference

The outcome sought from the review is an assessment of whether the Authority is complying with best practice across all aspects of its operations. The reviewer will be expected to:

A. Form an opinion about whether or not the investment policies, standards, and procedures established by the Authority are appropriate to the Fund; and whether or not the investment policies, standards, and procedures established by the Authority have been complied with in all material respects.

B. Form an opinion as to whether the Authority's operations across all aspects of its organisation are consistent with best practice, as appropriate given the size and nature of the Fund.

C. Form an opinion on the investment performance of the Fund to date.

D. Form an opinion on whether the Authority is satisfactorily positioned to meet the objectives for the Fund under its legislation in the future.

E. Identify anything else considered to be relevant to the performance of the Fund.

Deliverables

The project deliverables are:

- Two progress reports to the Treasury, one due approximately half way through the review and the other approximately three quarters of the way through.
- A draft report provided to the Authority and the Treasury for comment.
- A final report outlining the reviewer's findings.

The Request for Proposals (RFP) attached some further more detailed questions that the reviewer was expected to address in responding to the Terms of Reference.

Mercer note: The detailed questions are those posed at the beginning of Sections 1 through 17.

Executive Summary

Section 1

Mercer Investment Consulting (Mercer IC) believes that GSFA has set clear investment objectives.

Mercer IC believes that the investment objectives may be relevant but that the sponsor of the superannuation scheme, the Crown, has the ultimate responsibility for this judgement.

The Crown has not articulated its judgement on the relevance of investment objectives as adopted by GSFA. There is scope, Mercer IC believes, for the Crown, via the Minister, to provide clearer guidance to GSFA on the purpose for the assets. The wording of the legislation itself "maximising return without undue risk to the Fund as a whole" does not provide enough guidance as to what 'undue' risk is in this case.

The appropriate risk tolerance for the Fund's assets is the key, the only key, to answering the question of appropriate investment objectives for the GSFA to pursue. To date this issue has been 'resolved' through GSFA 'interpreting' the appropriate risk tolerance in conference with Treasury officials.

'Best practice' portfolio management involves the clear discernment of the purpose of a portfolio but so far this issue has yet to be fully resolved in our view and therefore is an obstacle to any objective assessment of whether 'best practice' is being or has been followed. This issue is also relevant to the issue of the investment performance of the GSF in its first few years.

Mercer IC has studied the policies and procedures followed by the GSFA and has been very favourably impressed with the operation of the GSFA relative to industry best practice. The GSF is the largest superannuation scheme operating in New Zealand and, while not a standard scheme could be expected to be a market leader in its policies and procedures.

Mercer IC believes that the GSFA has laid strong foundations in its first four and a half years, and has done so in spite of extremely volatile market conditions in its first 2 years of operation.

Section 2

Mercer IC does not see the modelling assumptions as a potential source of issues for the Review. The modelling assumptions used have been examined and are generally within the tolerances of views adopted by various agencies that specialise in this field.

Section 3

Mercer IC has studied the processes followed by GSFA in determining and reviewing its benchmark portfolio and with the qualifications already made about what 'best practice' investment objectives means in this case, is satisfied that the process has been very robust. Contestable advice has been obtained and considered.

GSFA has adopted a policy of not changing the actual portfolio weightings in order to avoid or take advantage of opinions about short term market valuations and expected returns. GSFA has addressed this issue conscientiously and continues to monitor the debate and the methods which might be employed to implement new policies as and when these are considered to be appropriate.

Section 4

Aside from specified aspects, on the whole we consider the GSFA operates a manager selection process which is close to "best practice". From inception the GSFA has drawn on the research views of an investment adviser which is reputable and has knowledge of the fund manager industry on a global basis.

Generally a wide range of views have been brought to the table, including that of the Board, Management and external advisers.

Section 5

GSFA took contestable professional advice to guide its decision to move from 50% local currency hedging up towards 80% hedging. For New Zealand based investors with the degree of exposure to offshore growth assets similar to GSFA, Mercer IC believes that a very high degree of hedging back to the NZ$ (e.g. the 80% level) is not optimal because the expected returns to hedging may not be sufficient to offset the depreciation of the NZ$ over any period. ‘Best practice’ on this issue in the market place is evolutionary.

Section 6

Mercer IC has developed a detailed view of ‘best practice’ governance of superannuation schemes. This section sets out the rationale for the Mercer global view on this issue and the development of a generic questionnaire as input to an analysis of the quality of governance of GSFA. The questions cover the RFP questions as well. Our opinion is that GSFA is operating under best practice governance taking into account the nature of the Authority.

Section 7

Mercer IC believes that the capacity of the GSFA to deliver very high quality levels of service to the Crown and to GSF members has been admirable within its annual appropriations. Mercer understands that the appropriations process allows for GSFA to estimate and structure appropriate budgets for its business strategies and argue the case for suitable funding. The process involves Parliament voting an appropriation of an overall amount for the purpose, rather than line by line appropriations. Therefore, GSFA has an avenue for expanding its resources as required if it can argue successfully that the expected net benefits are attractive. Mercer expects that GSFA will be doing so to meet the challenges to be faced over the next few years.

Section 8

Mercer IC has carried out a review of the documentation procedures set out in the several reports relating to reporting and flows of information within the GSFA and between the GSFA and its suppliers. Mercer IC has also carried out several site visits to GSFA and can confirm that all processes are being followed.

Section 9

The Authority has established a comprehensive compliance plan, by way of an in-house questionnaire, to ensure that it complies with the legislation and regulations that govern the GSFA and the GSF.

Section 10

Mercer IC believes that the fees paid by the GSFA are reasonable by comparative standards. In saying this we note that, at the margin, there is often the opportunity for clients of significant size (or status) to attempt to drive fees to minimal levels. However, this is not always of mutual benefit given client expectations for servicing and the need for the manager to adequately resource the delivery of their mandate objectives.

Section 11

Mercer has formed a positive overall assessment of the custodian monitoring currently being undertaken by the Authority of its current custodian. To further enhance the governance structure around the custody arrangements we believe that the Authority ought to undertake a benchmarking review of their current custodian, at a minimum, once every three years.

Both of the transitions undertaken by the Authority in April 2004 appear to have been executed with low transition costs as measured by the implementation shortfall technique. Mercer strongly recommends that each time the Authority intends to undertake a transition a detailed and documented decision making process be undertaken.

Mercer IC has studied the processes for monitoring and reviewing fund managers and believes that these conform broadly to the notion of current best practice in the industry. The rebalancing processes have been studied by Mercer IC and found to be best industry practice in defining and achieving an appropriate trade-off between the high costs of rebalancing within very narrow ranges and the loss of portfolio efficiency relative to benchmark, of straying too far away from benchmark portfolio weightings.

Section 12

There are within the GSFA business structure, clear, separate responsibilities and accountabilities for the key functions of investment management, custody and oversight. These responsibilities and accountabilities are monitored and reviewed appropriately.

Section 13

The risk management process is a very thorough one and has been subject to public scrutiny since 2001 through GSFA's annual reports to Parliament or tabled in Parliament by the Minister in the form of Statements of Intent. GSFA has also adopted a formal Risk Management Policy Statement.

Section 14

GSFA argues well that the process of implementing a new investment structure was constrained by market exit strategies needed to sell off large holdings in NZ Government Stock without disrupting the market. Mercer IC also is familiar with the investment climate prior to, during and following the transition phase of the GSF, from its former defensive investment structure to its new diversified portfolio.

From the viewpoint of the general taxpayer it is reasonable to ask whose responsibility it was to make a decision about when to proceed with the restructuring of GSF assets and the related decision about how to proceed. The former question remains relevant to the Review because the review period covers the period when the transition was achieved. Can an objective judgment be sustained that GSFA ought to have delayed putting into effect an investment strategy which was more risky than its historical strategy, at a time when global financial markets were extremely volatile? Mercer IC believes that the general taxpayer should look to this Review for answers to this question and this is the spirit in which Mercer has approached this task.

What appears to be the case is that GSFA assumed the responsibilities referred to in the previous paragraph, appropriately under the legislation, and also appropriately, referred their decisions to the Minister who acknowledged their decisions without fresh direction.

In short, GSFA decided, having taking counsel from a variety of professional sources, that it was desirable to start the transition to a new investment structure as early as possible. GSFA had expressed its own misgivings, especially after the events of September 11, 2001 and actively sought advice.

Mercer IC has sought to make a clear distinction between market entry and the transition process. The market entry discussion ought to include a view on whether to proceed with a transition at all and, if not, what will be the determinants of the speed of the transition. GSFA worked very hard in 2001 through 2003 on the latter issue and Mercer IC accepts the difficulties which GSFA faced in doing so. A separate and formal discussion about whether to proceed at all is an area where we feel that GSFA, and perhaps the Crown, share some responsibility for proceeding to transition a traditionally defensive Fund strategy to a more aggressive strategy during a period of highly volatile financial markets.

The advice given to GSFA was that in spite of financial market volatility there were no compelling reasons to defer the immediate implementation of the transition plan. Neither did the legislation nor Crown directives suggest a timetable nor a process for determining a timetable. But, given the history, nature and size of the Fund assets was the GSFA correct to judge that the time was right to proceed with the transition to a new structure?

With hindsight it is easier to zoom out and suggest that in 2001 GSFA ought not to have approved implementing the transition at all. Mercer's understanding is that GSFA had the authority to do so. Neither did the Minister react negatively to the plans put before him in September, 2001. But did GSFA in the end feel that it was desirable to proceed with a transition immediately? Yes, because professional advice was received that although short term volatility would be high - indeed, global share markets recovered very strongly in the quarter (December 2001) in which GSFA commenced the transition – this volatility ought not to deter GSFA from proceeding with a transition.

Therefore, the answer for the general taxpayer is that GSFA, on balance and after seeking counsel, felt that overall market conditions did not warrant delaying the start of the transition but did warrant close scrutiny and a cautious transition process. While this was a tough judgment to make it did expose the GSF assets, albeit gradually, to volatile, and generally weak, share markets over the next 18 months. History may have turned out differently and it is true that share market investors do face this kind of volatility continually.

Section 15

Mercer IC believes that the use of the Equivalent Capital Value (ECV), in absolute terms, in respect of the margins valued and discount rate used, to communicate the value to the Crown of alternative strategies, may be flawed and further work has been suggested.

A divergence in interests exists between the solvency metric important to the Crown and the portion of that metric the GSFA has responsibility for. Due to these diverging interests (between components of the unfunded liability) Mercer believes the prior recommendation remains valid – that is, to split actual experienced annual changes in unfunded liability between those that relate to asset risks and those that are liability related risks. While technical in nature the issues are important to an assessment of the metrics used to measure the value to the Crown of GSFA's decisions.

Section 16

GSFA's business planning is quite thorough. There are many current issues which require it to have a clear vision of its mission and to move early to anticipate changes in its operating environment. Mercer IC hopes that the 2006 Review will help to remove any uncertainty about the specific risk tolerance which is to guide the investment of the Fund's assets and help to rationalise the funding process. Both of these initiatives would release resources which could then be applied to unresolved issues within the business plan. GSFA itself has already identified a number of strategic issues and these are to be covered in the 2006/07 Statement of Intent. Mercer has also suggested an approach to conducting an annual health check for GSFA.

Section 17

The GSFA has identified the key risks associated with out-sourcing the scheme's administration and has in place reporting systems and processes to monitor and manage those risks.

The agreements and the processes in place to ensure business continuity are extensive and in accordance with best practice.

Section 18

Any worthwhile review has to take a detached, objective approach to evaluating the effects of all of the main factors which have impinged on the investment performance of the Fund assets since GSFA took over the reins. GSFA applied its own professional and experienced resources to its tasks as well as recruited advice from specialist investment consulting firms.

Throughout the Review Mercer has referred to doubts about the appropriate investment objectives for the Fund which left two key questions for the GSFA to decide for itself. First, what is the appropriate risk tolerance for the Fund assets? Secondly, how quickly should the Fund's assets be transferred from its former to new structure?

How the second question was answered by GSFA has been more influential to investment performance in the review period than the first. Decisive action to begin immediately to move to a new structure was followed by an extended period of share market weakness in the world. The Fund could have been more sheltered from this weakness had GSFA delayed beginning its transition indefinitely, pending less market volatility. Section 14 expresses Mercer's views about this issue but also emphasises the openness of the GSFA in expressing its intentions to the Crown and the thoroughness of the processes it employed.

Mercer has looked for evidence that the exit strategy was somehow binding the Authority to enter the markets in lockstep, but even the GSFA itself has assured the Review that there was no such close connection. Mercer has also weighed up the evidence that few schemes abroad and possibly none in New Zealand, which already had market exposures, took pre-emptive actions in 2002 to adopt more defensive stances. (There were instances however of defensive market entry strategies for very large funds.)

Neither did the Crown itself provide any opinion on when GSFA ought to begin its transition.

On balance, Mercer's opinion is that, in spite of all of the factors beyond its control and a variety of other relevant factors, the investment performance of GSF since the changeover in 2001 could have been better. GSFA might have instead adopted the view after a separate and formal report on the issues that it was not appropriate for the GSFA to proceed with any transition at all at that stage. Mercer IC views such a call however as a very fine judgement to make. But having taking on the responsibility for these decisions then GSFA was backing its judgements about whether there was undue risk to the Fund.

Since 2003 performance has been influenced positively by the funds being by then fully transitioned to the benchmark portfolio, by a strong recovery in global share markets, and by the tax effectiveness of passive global equities when these markets do provide capital gains.

For the full period since inception until March 2006 the return on the GSF assets was approximately 6.1%pa after tax, compared to 4.3%pa after tax for a fund fully invested in NZ Government Stock. The original target outperformance against the latter metric was 3%pa which was later lowered to 2.5%pa. In its first 4.5 years the outperformance was 1.8%pa (6.1% less 4.3%).

New Zealand has been extremely well served by GSFA and this opinion on investment performance has been extensively qualified throughout the Review, especially in the context of appropriate interpretation of new legislation and putting that interpretation into day-to-day practice.

1

Statement of Investment Policies, Standards and Procedures – Investment Objectives

RFP: Investment objectives

- Has the Authority set clear and relevant investment objectives?
- Does the Authority have appropriate policies and procedures to ensure that it is meeting its statutory objective of investing the Fund on a prudent, commercial basis, and in doing so, managing the Fund in a manner consistent with:
  - Best-practice portfolio management;
  - Maximising return without undue risk to the Fund as a whole; and
  - Avoiding prejudice to New Zealand's reputation as a responsible member of the world community.

1.1 Best Practice

'Best Practice' usually requires some normative judgements to be made, whether in portfolio management, or in many other activities and industries. For this Review we have generally adopted Mercer Investment Consulting descriptions of 'best practice' as the best starting point for our analysis. Mercer IC is a specialist investment consulting services firm which operates on a global basis with a local presence in New Zealand.

Mercer IC is not infallible in defining 'best practice' but we do have a strong vested interest in defining 'best practice' well, and applying very high standards to the advice which we provide to the global market, in a very competitive climate.

The Review has tried to steer a middle course between taking a dogmatic position on issues, especially where decisions were made several years ago and now could be questioned with the benefit of hindsight, and taking too generous a position, where ‘best practice’ standards appear not to have been applied.

The Review takes a constructive approach with the intention of identifying processes and procedures which might be able to be improved upon to strengthen the GSFA’s capabilities in delivering on its functions.

Many of the issues which Mercer IC wants to make particular comment upon are inter-related and may be traced back to a lack of clarity about the investment objectives for the GSF. The major decision makers are the GSFA and the Crown, but there are other major stakeholders such as the Non-Crown sponsoring employers, the beneficiaries of the superannuation scheme (who, while entitled to defined benefits subject to Crown guarantee, are nevertheless exposed to some political risk), and New Zealand taxpayers.

In the pursuit of fairness and efficiency, Mercer IC *recommends* that both sets of decision makers use whatever scope exists to narrow down the degree of uncertainty which currently exists in determining the investment objectives for the GSF, and in so doing narrow the scope for decisions to be made which are not ‘best practice’.

In determining the amount of investment risk which the managers of a defined benefit superannuation scheme should take to guide the investment structure of its assets, there is little disagreement on a ‘best practice’ approach.

BUT THE GOVERNMENT SUPERANNUATION FUND (GSF) IS A DEFINED BENEFIT SUPERANNUATION SCHEME WITH A DIFFERENCE. The liabilities of the Fund dwarf the assets and the Crown has legal obligations to meet the liabilities.[1]

In this respect it is somewhat more difficult to define what ‘best practice’ should mean. It is uncommon practice for superannuation schemes to operate with a severely large unfunded liability and yet still apply a notion of ‘best practice’ to portfolio management.

The single biggest issue which the Review has had to deal with is the lack of certainty on the principles which are guiding the investments of the GSF and the knock-on effects of this uncertainty to defining ‘best practice’ portfolio management in this case.

[1] Mercer IC globally knows of many funds in developed countries of which the same conditions are true. In cases with funding ratios in excess of 80% there may be ‘best practice’ approaches to immunising the unfunded liabilities, and enhanced immunisation strategies to improve gradually the funding ratio. But in the case of GSF the funding ratio is only of the order of 30%.

1.2 Investment Objectives

Investment Objectives: Government does not appear to have confirmed but has also never objected to GSFA's opinion about what its investment objectives are. The Review needs to address this issue or at least comment on it. (The Attachment to this Section shows the evolution of the GSFA Objectives through time).

Mercer has asked the question - How accurate is the interpretation of the legislation by GSFA? Although GSFA has made explicit its objectives for the Fund, to what extent can we suggest that government fully supports the GSFA interpretation? Has the government implicitly said, "Yes, the GSFA interpretation is correct"? Rather the government, having passed the legislation, might simply prefer that the legislation speaks for itself and, in general, government wishes to stand at arms length (leaving the facility for the Minister to direct the Authority to a very rare occurrence).

The latter interpretation gains weight when one considers the Minister's reply to a letter from the GSFA in 2001 outlining the Authority's proposed strategic asset allocation for the GSF and, how they intended to rebalance the portfolio towards that strategic asset allocation.

Recalling that the Fund was originally restricted to be invested entirely in New Zealand fixed interest and that the new legislation permitted greater freedom of asset classes, it was and remains the GSFA's responsibility to invest the GSF assets. The Authority noted in its letter the directive powers the Minister had under the GSF Act (section 15O refers). Acknowledgment of their letter would remove uncertainty as to whether the Minister intended to exercise those powers in relation to GSFA's stated intentions.

The Minister of Finance wrote:

> "Thank you for your letter of 1 October advising me of the strategic asset allocation and the transition management process that the Board of the Government Superannuation Fund Authority has decided to adopt.
>
> All the best with the transition management process."

Mercer IC does not view the Minister's response as removing any uncertainty about the appropriate investment objectives for the Fund but rather as confirmation that the legislation should speak for itself in guiding the Authority and that any Ministerial direction would be kept to a bare minimum.

GSFA has operated with very clear investment objectives ever since then. But whether these objectives relate to standards of 'best practice' remains open to be doubted and debated. The Authority's position therefore is an unenviable one and Mercer IC would support moves by the Crown towards clarifying the principles guiding the Authority in one of its main functions, perhaps its most important one.

GSFA Annual Reports have set out explicit objectives for over four years since 2001. If the government disagreed with these objectives then it has had ample opportunity to say so publicly. On the surface it appears that the GSFA's public statement of its investment objectives for the Fund square with those of the government but the Review has failed to find unequivocal government corroboration.

Mercer IC finds that it is 'best practice' for the Sponsor of a defined benefit superannuation scheme to take the ultimate responsibility for determining the risk tolerance and the Crown has that responsibility in this case.

In any case the Authority is charged with 'best practice portfolio management' and the Review should establish what this phrase implies for guiding the investments of a Fund directly associated with a defined benefit superannuation scheme, even if not able to be applied in this case.

There is a clear best practice for determining a set of investment objectives for the assets of a defined benefit superannuation scheme. The standard scheme though is one where the sponsor is a company which accepts the obligation of paying out for the defined benefits as they become due to the members (employees and retirees).

The GSF is not a standard private employer scheme, although it has some of its aspects. The GSF differs from a standard scheme in two key respects:

- The scheme is already sub-standard (relative to 'best practice') in being allowed to be well under-funded i.e. having a Fund of assets the value of which is so much below its estimated liabilities;

- Associated with the first aspect is the fact that shortfalls in net GSF revenue are funded by the government out of general taxation.

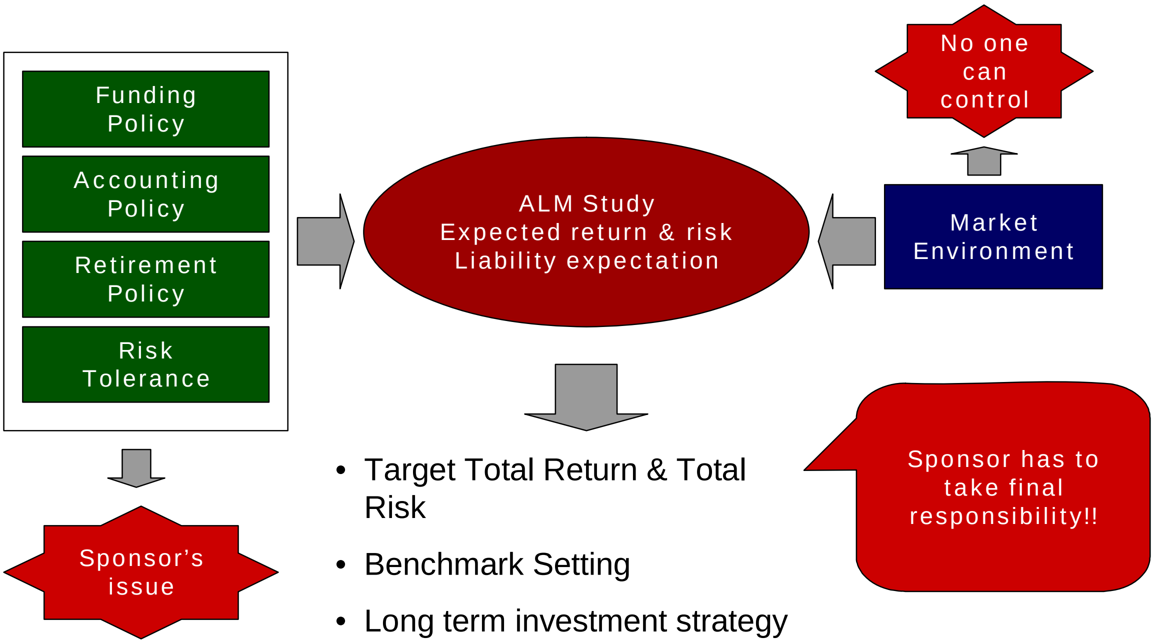
In the corporate case the development of a funding deficit is the direct responsibility of the sponsoring company which is then expected to address the possible mis-match of assets and liabilities.

In the GSF case the development of a funding deficit is not the direct responsibility of the government as a sponsoring employer (though there are some sponsoring employers as well within the Scheme – some former state enterprises which have since been corporatised and/or privatised). In this case the funding deficit impacts on the Crown accounts in three important respects:

i) A contingent liability needs to be accounted for;
ii) The Crown needs to budget for its share of net revenue shortfalls of GSF;
iii) The Crown needs to budget for the tax payments from GSF on its investments.

In determining what 'best practice' means in this context the GSFA is faced with more than one path.

The first path – that of a straight corporate sponsored scheme - would encourage the development of a full scale Asset Liability Modelling Study of the defined benefit superannuation scheme. In this option the benefits to the Crown of the tax revenue generated by the Fund's investments would be excluded from the estimations as being irrelevant to the behaviour of the Fund and its objectives.



The second path is that of an employer scheme more closely described as a 'private' scheme with severe funding difficulties which the Crown has chosen to assist in the manner already outlined. From this perspective a full scale Asset Liability Modelling Study would seem warranted, but encouraged by the Crown in order to take into account the full impacts of the Fund's future investment behaviour on the Crown's accounts.

All superannuation schemes follow the same underlying formula:

Net Member Benefits = Net Contributions (or Cost) + Net Investment Returns

For a defined benefit (DB) plan, benefits are set in nature thus higher investment returns reduce required (employer) contributions and vice versa. For a defined contribution (DC) plan benefits accumulate with contributions and investment returns.

Expanding the formula gives:

Gross Benefits – Benefits Tax
$= \text{Gross Contributions}_{\text{Employer}} + \text{Gross Contributions}_{\text{Employee}} - \text{Contributions Tax}$
$+ \text{Gross Investment Returns} - \text{Investment Tax} - \text{Expenses}$

In respect of the GSF the employer is the Crown and benefits tax is nil, thus:

$(\text{Net Benefits} + \text{Expenses}) – (\text{Gross Contributions}_{\text{Employee}} + \text{Gross Investment Returns})$
$= \text{Gross Contributions}_{\text{Crown}} – \text{Contributions tax} – \text{Investment Tax}$

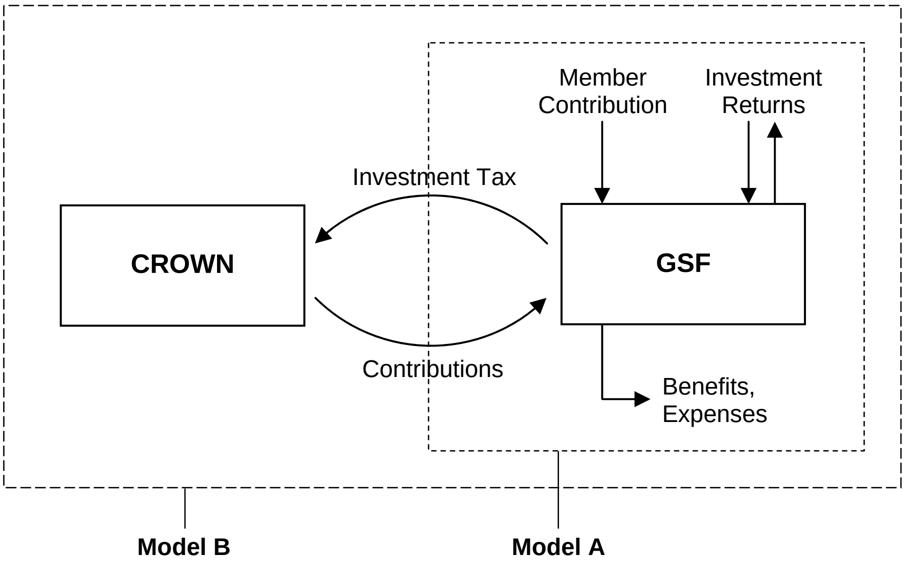
From this formula it can be inferred that:

- the cost of the GSF (net benefits and expenses) is reduced by member contributions and investment returns; and
- the contributions required from the Crown are reduced by tax on contributions and tax on investments.

Thus the benefits to the Crown of a change in strategy are:

- additional investment returns, and
- taxation, <u>in particular investment taxation</u>.

The money diagram of this arrangement is as follows:



Mercer IC believes that Model A is the approach most private sector plans consider. This is appropriate as increased investment taxation leads to lower benefits for DC plans or to higher contributions from the sponsor for Private DB plans. But in this case there are potentially very large taxation flows to the Crown from GSF tax liabilities. Therefore, Model B may be the most appropriate for the Fund to consider in this case.

While it is possible that both models would lead ultimately to the same conclusions about risk tolerance and investment objectives Mercer IC believes that there would be considerable value in carrying out this work for a public Scheme Fund of the order of magnitude of the GSF.

Additional value would come in the form of knowledge of the nature of the gap between the two models, increased confidence in the conclusions to be drawn from the evidence, and improved communication between the sponsor, the Crown, and its agent (the GSFA).

Finally, Mercer IC supports the view that once the principles for setting the investment objectives are better established then Ministerial direction ought to be used extremely sparingly.

1.3 Taxation

> **Taxation:** GSFA modelling assumes that NZ tax accruing to Government from tax liabilities of GSF investments are not relevant to GSFA objectives/SAA/Portfolio Construction. One GSFA metric is a measure of the additional net benefits achieved under a diversified portfolio approach compared to a NZ bond portfolio. GSFA modelling currently ignores relative tax flows of this comparison – it compares the net of tax returns for NZ Bonds and the net of tax returns for a diversified portfolio.

GSF is a superannuation fund which is liable for NZ income tax at a 33% tax rate on assessable income. There are therefore two broad groups of issues under this heading: first, the connections between the tax status of the GSF and the appropriate investment objectives for the GSF (discussed in this section). Secondly, the appropriate measure for evaluating the GSFA from the viewpoint of the Crown depends on whether the effects of tax on the investment income are to be ignored or included. This issue is dealt with in Section 14.

First, tax effects should have been taken into account when assessing the net benefits to the Crown of the new investment structure. This question links the size of the unfunded liability, the performance of the Fund (before and after tax) and what happens to the different tax flows to the government.

Establishment Board comment (SAA 22 June 2001) page 1: "The ………………….that the GSF will be subject to tax under standard New Zealand taxation provisions. This approach to taxation was confirmed to us in a letter from the Minister dated 6 March 2001."

While it is clear that the GSF investments are subject to New Zealand tax it is not as clear that the GSFA's design of an investment structure should take no account of the effects on the tax payments flowing to the Crown of alternative structures.

It may be argued that this issue is peripheral to the Review at hand. But from a public interest viewpoint it seems sensible for the first ever Review of the Authority to make comments upon it. There are at least two points to debate:

- The historical investment structure was fully taxed, being fully invested in taxable fixed interest securities. Therefore, the total return to the Crown was effectively the gross return of the Fund but split into two flows - the after tax returns and the tax receipts flowing from the Fund's tax liabilities.

- GSFA has used a formula for evaluating the success of the new structure based on after tax returns alone. There is evidence that guidance from officials supported this approach but the there has been no direction from the Minister under the legislation. From a public interest viewpoint the approach taken appears to address only one of the two flows which are and were relevant to the Crown's total return on the Fund.

Secondly, moving explicitly to the treatment of tax in the strategic analysis, the GSFA has adopted a strategic asset allocation which relies upon the taxation advantages of passive overseas shares. The taxation advantages assumptions are stated; however no sensitivity tests appear to have been performed on the tax assumptions.

Binding rulings from Inland Revenue have a three year lifetime, and the assets' returns are projected over 30+ years. Sensitivity tests are made for lower and higher Equity Risk Premiums and low return environments, yet full tax rates (i.e. a reduction in tax advantages) and their impact on the investment objectives have not been explored.

Mercer suspects that the objective of fixed interest returns plus 2.5% may not have been adopted if fully taxed growth assets were the basis of the strategic analysis.

Again for a publicly sponsored Scheme of this magnitude one would have expected a degree of stress testing to be undertaken around the key tax 'effectiveness' issue.

There is evidence in the second part of the existing stated objectives (below) that the sensitivity of the Crown to losses reported by GSFA is being reflected in the objectives. If the sponsor does have specific sensitivities in this regard and tacitly supports the objectives as stated then an extremely important principle would have been firmly established once and for all.

"Having no more than a one in 10 chance in any one year of a loss in the total Fund being greater than $100 million (after tax)."

The principle is this. That the interpretation of 'maximising returns without undue risk to the Fund as a whole' is not an issue of best practice portfolio management but an issue of the risk tolerance of the scheme sponsor who is also the Crown.

But since the scheme sponsor is also the Crown (and therefore also the currently elected Government representatives) there may be more at stake in defining the risk tolerance of the sponsor than the appropriate 'best practice' suggested by portfolio management theory. There may be party political considerations involved, considerations relating to the management of the assets and liabilities of other Crown Financial Institutions (total combined financial assets of $25b and rising still rapidly), and considerations about the general government of New Zealand.

Elected governments through time may vary in their judgements about the appropriate risk tolerance for the Fund (GSF) as a whole, and therefore any judgement made by GSFA itself on this issue will always remain open to be over-ridden by a higher authority. Again 'undue risk to the Fund as a whole' is a phrase for which it is difficult for the GSFA to develop a 'best practice' formula.

Mercer believes that further efforts be made to isolate the appropriate risk tolerance specific to GSF as a whole to strengthen the position of GSFA in determining and managing its objectives for the Fund, and the role of taxation in that regard.

1.4 Asset and Liability Modelling

> **Asset and Liability Modelling (ALM):** Following the first ALM study the GSFA Board concluded that ALM approaches in this case are impractical and not useful. The original ALM study found that the volatility of the Net Liabilities was swamped by the sheer size of Liabilities and the variable discount rate on those Liabilities. The path of analysis then taken was to focus on the assets and to define the role of the GSFA in an asset only context. In short, the argument reduced to one that the risk tolerance of the Investments (Assets) was at least as great as for a regular super scheme. GSFA modelled the benefits to Government of higher long term returns (for higher risk) as a capital saving equivalent. Government does not appear to have formally confirmed or denied the approach, although there are references to Treasury support in GSFA documents. At least from time to time it appears that GSFA has had ongoing concerns itself about how best to model the appropriate risk tolerance for the Fund. Our understanding is that the original RFP for an Investment Consultant for the GSF emphasised that ALM would be a major part of the analysis required to be undertaken by the Consultant. We also know that in July 2005 Watson Wyatt were in dialogue with GSFA on the issue.

The GSFA has been swayed by the logic that an asset side focus should predominate and has defined its role as such that its "focus should be on the assets of the Fund and on establishing and managing risk measures solely related to the investment performance of the Fund".

The 2001 report clearly identifies the overall volatility of the Fund's net financial position being related to the use of an after tax NZGB yield curve based on prevailing market conditions for the discount rate on the liabilities.

The 2001 report correctly identifies this volatility as the key risk, then isolates it and focuses on asset risks only. Subsequent advice and analysis Mercer has seen so far has also been done on this basis.

While it seems valid in terms of Strategic Asset Allocation to assume a constant discount rate, subsequent work should have then been related to risk mitigation of the liability valuation. This relates to Mercer IC's assumption that it would be useful to interpret "maximising return without undue risk to the Fund as a whole" as meaning taking a net financial position approach, not solely an asset approach.

Other aspects of the advice that seem too asset focused have been highlighted by Towers Perrin in 2003.

The 2001 report used an ALM model that generated 2000 future pathways for the variables underlying the asset and liability valuations. A study of this nature means that the distribution and extremes of the interaction between assets and liabilities can be quantified, over time. An ALM of this nature has not been repeated. But neither has the Crown voiced concerns about the risk tolerance adopted by GSFA to guide the management of the assets.

The projected valuation of assets and liabilities by the Government actuary using the valuation assumptions is the equivalent of a single pathway at or about the median outcome. By its nature the distribution of outcomes and thus various measures of risk are not determined.

We understand that the GSFA Board believes that the ALM studies are impractical and not useful for them guiding their decision making. In the context of defining a role as focussed on asset matters only this stance is understandable. However, two issues remain:

- Who is responsible "for the Fund as a whole" according to Mercer's interpretation of this definition?
- And in this context of GSFA restricting its role to one similar to an asset manager, is the Government comfortable with this position?

For many public and private pension funds in NZ and around the world, the Trustees of the Fund commission ALM studies. Some sponsors now commission ALM studies for the purposes of reporting in Company financial statements under the pension fund accounting standard IFRS19.

Mercer notes that the Victorian Funds Management Corporation (VFMC), a public entity now responsible for setting investment strategy for the Boards of Victorian public funds (including under-funded pension arrangements) is commissioning ALM studies for the purpose of strategic asset allocation.

Overseas, a few investment managers are offering liability based products and services to Funds.

Since 2001 the tools available have grown such that a range of asset liability models are available for analysing the strategic asset allocation, such that many overseas pension plans consider their liabilities and the interaction of assets and liabilities when setting investment strategy.

1.5 Asset Classes

Asset Classes: The legislation does not restrict GSF to particular asset classes. Treatment of property, private equity, infrastructure, commodities, hedge funds and so on could have been begun earlier than it did and there may be an issue here of lack of best practice. Related to the suite of available asset classes it could be argued to be ‘best practice’ to monitor developments in each asset class, even if the Fund were not invested in them, or invested passively. For example, it might have been useful for the GSFA to carry out reviews of active global equities’ structures which might have become competitive with binding ruling based structures, or in the event of binding rulings being quashed. GSFA will have to do so now with IRD Binding Rulings now being targeted for removal as part of a package of Government policies. The point being made here is that perhaps the GSFA could have been more pro-active in evaluating the merits of active management and the merits of alternative asset classes.

1.6 Active vs. Passive Global Equities

Active vs. Passive Global Equities: The issues here are tied to earlier issues which need to be pinned down first – taxation, risk tolerance, investment objectives. But also the Review needs to address the effect on the characteristics of the total portfolio of introducing any asset class into the portfolio. Our New Zealand research suggests strongly that even in the presence of IRD Binding rulings there is a role for Active Global Equities in the portfolios of balanced superannuation scheme fund options.

GSFA has had advice from more than one source to pursue a 100% passive strategy.

Mercer IC’s policy on this topic has remained robust according to our modelling, over several years of analysis. GSFA has received external professional advice that the hurdle rate for active management of global equities is too great to combat the advantages of an IRD Binding Ruling which, for passive vehicles, allows capital gains to be non-taxable income.

Mercer IC agrees that the hurdle rate is substantial but that the investment characteristics of the total portfolio are enhanced by introducing actively managed global equities. Actively managed global equities in Mercer IC's modelling assumptions achieve higher returns (gross basis) on average than passive funds. On a net of tax basis, actively managed global equities exhibit much lower risk. Passive funds being free of capital gains tax enjoy high highs (no tax on gains) and low lows (no tax relief for losses) and therefore, ceteris paribus, use up more risk budget than active funds.

Assuming that the Government's proposed tax changes proceed the GSFA will be revisiting the whole issue of Active versus Passive Global Equities in the portfolio and the new legislative environment is likely to see proposals for major change in both the strategic asset allocation and the portfolio construction of the Funds assets. The investment objectives themselves will also have to be reviewed.

But considering the Review period of 2001 to 2006, then Mercer IC believes that there have been two distinct issues impacting on the Active/Passive plane. First, the decision to apply post tax analysis to the Fund's performance clearly favoured a tax exempt option. But secondly, there were other grounds, the impact on the risk of the total portfolio, for considering more seriously the introduction of Active Global Equities to the portfolio.

Mercer IC has consulted with other market participants in this regard and found sympathetic integrity for the approach. Our opinion is that there are grounds for including some component of active global equities in the portfolio in spite of the tax advantages of passive over active.

1.7 New Zealand's Reputation

GSFA has adopted full policies and procedures with respect to achieving:

- Avoiding prejudice to New Zealand's reputation as a responsible member of the world community.

Mercer IC is confident that this objective is being addressed by GSFA and in any transition from managing global equities actively rather than fully passively, further policy measures will be considered.

1.8 Conclusions

Investment Objectives

Mercer IC believes that GSFA has set clear investment objectives.

Mercer IC has found it difficult to determine an acceptable definition of what 'best practice' means when applied to the portfolio management of a defined benefit superannuation scheme with a very large unfunded liability which belongs to the Crown, and not to GSFA.

Mercer therefore believes that the investment objectives may be relevant but that the sponsor of the superannuation scheme has the ultimate responsibility for this judgement.

The Crown has not articulated its judgement on the relevance of investment objectives as adopted by GSFA. There is scope, Mercer believes, for the Crown, via the Minister, to provide more clear guidance to GSFA. We support a hands-off approach from the Crown but only if the principles to guide GSFA are clear. The legislation imposes 'best practice portfolio management' on GSFA but in this case Mercer believes that 'best practice' is not well defined, because the permitted volatility of the assets may be partly, even mostly, a political consideration.

If the risk tolerance of GSF assets is partly determined by political considerations then the industry 'best practice' risk tolerance may only square with that chosen by GSF by sheer coincidence.

If the risk tolerance of GSF assets is free of political considerations then the sponsor still has a responsibility, we believe, to articulate the principles to guide the GSFA in a practical way. Mercer IC believes that an Asset/Liabilities study would provide part of the answer and would provide the framework for the Crown and GSFA to reach the same sort of understanding as is required between a private sector sponsoring employer and the Trustees of a defined benefit superannuation scheme.

The appropriate risk tolerance for the Fund's assets is the key, the only key, to answering the question of appropriate investment objectives for the GSFA to pursue.

Policies and Procedures

Mercer has studied the policies and procedures followed by the GSFA and have been very favourably impressed with the operation of the GSFA relative to industry best practice. The GSF is the largest registered superannuation scheme operating in New Zealand and, while not a standard scheme could be expected to be a market leader in its policies and procedures. Mercer IC believes and hopes that the GSFA will move forward strongly on the foundations which it has lain in its first four and a half years of existence and to continue to develop and grow.

Greater clarity of investment objectives would, as discussed earlier, remove any lingering doubts about how to design an investment structure which was fully appropriate to the risk tolerances inherent in the financial position of the Fund as perceived by the scheme's sponsor, the Crown.

But within the existing understandings and legal interpretations GSFA has already established a framework within which to operate ‘best practice’ policies and procedures.

In broad headings Mercer IC considers best practice across:

- Governance
- Risk Tolerance and Setting of Investment Objectives, including metrics
- Setting of Investment Modelling Assumptions by asset class
- Strategic Benchmark Portfolio of assets, its expected returns and risks
- Risk Budgeting
- Construction of the Portfolio Mandates
- Selection of Fund Managers
- Monitoring and Reporting Processes
- Review Processes
- Strategic Planning

The Review proceeds to deliver judgements in the above areas and along the way makes positive suggestions for the future.

For the period since the inception of GSFA in 2001 the Review has attempted to take an even-handed approach to the issues identified. The value of the GSF assets fell during the first two years of the operation of GSFA. These were 2 years of low financial market returns and GSF was required to meet its obligations by way of benefit payouts out of Fund assets rather than out of Fund returns. Hence, the low investment performance may have been exaggerated, in the public’s perception, by comparing asset values alone during those two years.

Nevertheless, the after tax returns on the Fund assets for the first 2 years were very low compared to its long history, (-2.3% in the year to June 2002, and 1.0% for the year to June 2003). This Review, while forward looking in intent, should address this aspect of the history, as an evaluation of the implementation of a public policy via GSFA.

Attachment to Section 1

GSFA – PUBLICISED INVESTMENT OBJECTIVES

1 Legislation: (Assented: 21 August 2001)

"…invest the Fund on a prudent, commercial basis and, in doing so, must manage and administer the Fund in a manner consistent with -

(a) best-practice portfolio management; and

(b) maximising return without undue risk to the Fund as a whole

(c) avoiding prejudice to New Zealand's reputation as a responsible member of the world community.

2 Establishment Board Recommendation for GSFA Approval (30 August 2001)

"The GSF assets will be invested with the objective of:

- Achieving an average rate of return (after tax) of at least 3% p.a. over the returns[2] on a portfolio of New Zealand government stock over rolling ten-year periods. [Note: achieving this rate of return is expected to generate a median equivalent capital value of improved investment performance over the life of the Fund of approximately $1.7 billion];

- A chance of no more than one year in six of an unexpected deterioration in the unfunded past service liability of more than $200 million in any one year; and

- A chance of no more than one in 20 of an unexpected deterioration in the unfunded past service liability of more than $400 million in any one year.

For these purposes the deterioration in the unfunded past service liability is to be measured using the same actuarial discount rates applied to the GSF liabilities at the beginning and the end of the measurement period."

[2] Measured in accordance with the CSFB New Zealand Government Stock Index adjusted for tax. (Later this Index became the NZSX New Zealand Government Stock Index)

3 Government Superannuation Fund Authority Board (February 2003)

"The risk and return for the overall Fund is balanced with a strategic portfolio which meets the Authority Board's investment objective for the Fund of:

- Achieving an average rate of return of 2.5% per annum (after tax) over the returns on a portfolio of New Zealand Government Stock measured over rolling ten year periods. This is expected to generate improved investment performance over the remaining life of the Fund of a net present value of approximately $1.2 billion, relative to a portfolio invested entirely in New Zealand Government Stock.

- Having no more than a 1 in 10 chance in any one year of a loss in the total Fund being greater than $100 million (after tax).

Also reported as above in:

The GSF Annual Report for Year Ended 30 June 2003, page 32;

The GSF Annual Report for Year Ended 30 June 2004, page 33; the words (from October 2001) being added after 'performance' in the first bullet point.

The GSF Authority Annual Report for Year Ended 30 June 2005, page 2; ditto.

2

Statement of Investment Policies, Standards and Procedures – Modelling Assumptions

RFP: Investment performance targets and expected rate of return

- Are the investment performance targets and the expected rate of return realistic given their investment strategy and asset allocation?

Expected rates of return, risks and asset correlations. GSFA has employed specialist investment consultant firms throughout the review period, including Mercer IC itself for specific tasks. Mercer IC has dealt with its involvement with GSFA as part of the process of being appointed to conduct the Review and Treasury has received full details of our involvement.

2.1 Modelling Assumptions

The Establishment Board employed Frank Russell Company, now re-named Russell Investment Group, to carry out the modelling work leading to a decision on strategic asset allocation.

The maintenance of a suite of comprehensive modelling assumptions – asset class expected returns and risks, and asset class correlations – is a prerequisite for carrying out specialist investment consulting services and Mercer IC recognises Russell as an institution of substance both globally and in the New Zealand market. Mercer IC therefore would expect that the set of modelling assumptions used to guide the Strategic Asset Allocation decisions of the Establishment Board and GSFA itself would be satisfactory.

GSFA has continued to employ Russell in the same role as that conducted for the Establishment Board.

Mercer IC does not therefore see Modelling Assumptions as a potential source of issues for the Review. The modelling assumptions used have been examined and are generally within the tolerances of views adopted by various agencies that specialise in this field. Not surprisingly the tolerances can be quite wide, especially for expected returns and emphasis ought to be placed on the quality of the research and arguments behind the parameter values rather than the parameter values themselves.

The modelling assumptions used by GSFA reflect the judgement that over longer periods, riskier assets such as equities will outperform, in return terms, less risky assets, unless one adopts very firm views that the period ahead (15 to 20 years) is expected to be particularly harsh for the global corporate sector and the economies of the world in general. GSFA has not expressed a pessimistic view about the longer term future for the world economies and in this respect agrees with the broad view of Mercer IC (see June 2001 Mercer view at the end of this Section, summarised in the context of other views in mid-2001).

2.2 Equity Risk Premium

The original work for the Establishment Board in 2001 used an Equity Risk premium of 3.5% being the difference between the arithmetic expected gross return on NZ bonds and the expected gross return on global shares in NZ$ terms.

The ERPs listed at the end of this section are representative of a range of market opinion in mid-2001, including that of Mercer IC itself. In this case the ERPs are in terms of US Treasury returns and All Cap US Equity returns. Suitable adjustments made to these figures to the NZ context bring them back to orders of magnitude which show that the assumptions guiding the GSF decisions were reasonable and defensible.

2.3 Mercer IC Modelling Assumptions, September 2001

It is reasonable for the Review to expect mercer IC to provide its own modelling assumptions as at the time when GSFA made its decision on strategic asset allocation and expected returns. In New Zealand terms the expected Equity Risk Premium for International Equities was estimated at 4.3% p.a. gross (arithmetic) being the difference between International Equity Returns of 10.5% p.a. and the NZ Fixed Interest return of 6.2% p.a.

Mercer IC Modelling Assumptions (September 2001)

	Expected Return (%pa)	Expected Volatility (%pa)
NZ Equities	11.2%	20.0%
NZ Equities - With IRD Ruling	11.2%	20.0%
International Equities (Unhedged)	10.5%	14.5%
International Equities - With IRD ruling	10.5%	14.5%
NZ Property	8.1%	12.7%
NZ Fixed Income	6.2%	5.3%
International Fixed Income	6.5%	4.0%
Cash	5.0%	1.5%
Currency Hedge Basket	(0.2%)	7.9%

In the case of the advice received by GSFA, the expected International Equity return was 9.3% p.a. and NZ Fixed Interest 6.0% p.a.

The expected volatility estimates and correlation estimates were also broadly similar.

2.4 Mercer Opinion

The investment performance targets (described in the attachment to Section 1) and the expected rate of return adopted by the GSFA during the period under Review were, and remain, realistic.

Recent Equity Risk Premium Estimates

Provider	ERP Estimate	Basis of Estimate	Comparable Estimate	Comments
Mercer June 2001	4.0%	- Broad market - Geometric return - 10-year Treasury yield	4.0%	This is purely the difference between our all cap equity return (9.4%) and the 10-year Treasury yield on June 30, 2001 (5.4%), all rounded to the nearest 0.1%.
Ibbotson Yearbook: 2001	5.7%	- Large Cap - Geometric returns - Long government bond returns	5.9%	The historical experience in the U.S: Historical large cap returns: 11.0% Historical long gov bonds returns: 5.3% We added 0.2% for small cap effect.
Fama and French April 2001	2.55% 4.32%	- Dividends: 2.55% - Earnings: 4.32% - Arithmetic - Commercial paper	0.5% 2.2%	This is not their forecasted number, but we infer it from the tone of what the markets should have earned over the last fifty years.
Ibbotson and Chen June 2001	3.97%	- Geometric - Broad market - Inflation + real rate	4.0%	This study came up with a total return of 9.37% (a second method came up with 9.66%). They used higher inflation (3.08%), but lower real rate (2.05%) and included a reinvestment factor and interaction factor (0.27%)
Bernstein Spring 2001	1.3%	- Geometric - Broad market - 5-yr Treasury Yield	1.3%	This study argues that the dividend rate is the equity risk premium.
Arnott and Ryan Spring 2001	-0.9%	- Geometric - Long TIPS Yield - Broad market	0.3%	Study assumes only a 2.0% growth rate and continued low dividend yield of 1.2%.
Dimson et. al. 2001	3.4%	- T-Bills - Geometric	1.6%	Based on 12 country average.
Singer et. al. July 2001	3.59%	- Risk free rate - Arithmetic	1.9%	They assume a 4.7% risk free rate and a CAPM model.

3

Statement of Investment Policies, Standards and Procedures – Strategic Asset Allocation

RFP: Asset allocation and investment objectives process

- Did the Authority follow an appropriately thorough process in determining their asset allocation and investment objectives?
- Did the process include contestable advice from a range of sources?
- Was the process documented sufficiently?
- Are processes in place within the Authority to ensure that the investment strategy and asset allocations remain appropriate in changing market conditions?

Asset allocation and investment objectives. Mercer IC has found that GSFA, and prior to that the Establishment Board which recommended to GSFA the initial strategic asset allocation, followed appropriate procedures in determining their investment objectives and the asset allocation. As described in Section 1, and in other parts of the Review, the nature of the GSF superannuation scheme, being defined benefit, well underfunded and supported financially by the Crown, has impinged on a clear definition of 'best practice portfolio management'. Using the statement of investment objectives laid out by the GSFA itself, the asset allocation appears to be broadly appropriate for the GSF assets. Mercer IC has not been asked, as part of the Review, to perform a fresh quantitative assessment of the strategic asset allocation.

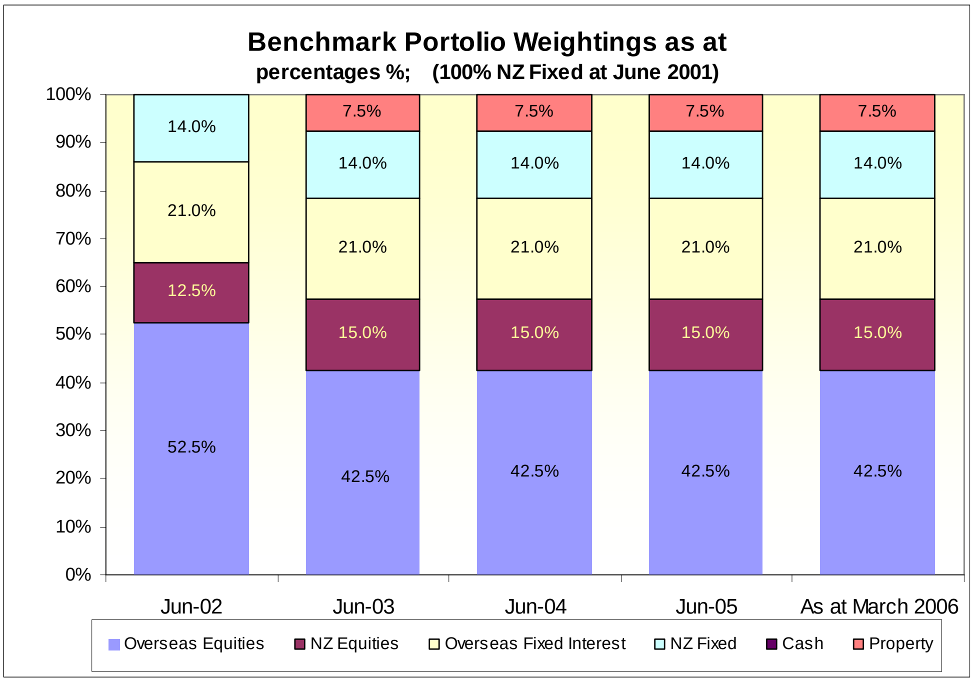
3.1 Benchmark Portfolio – Process

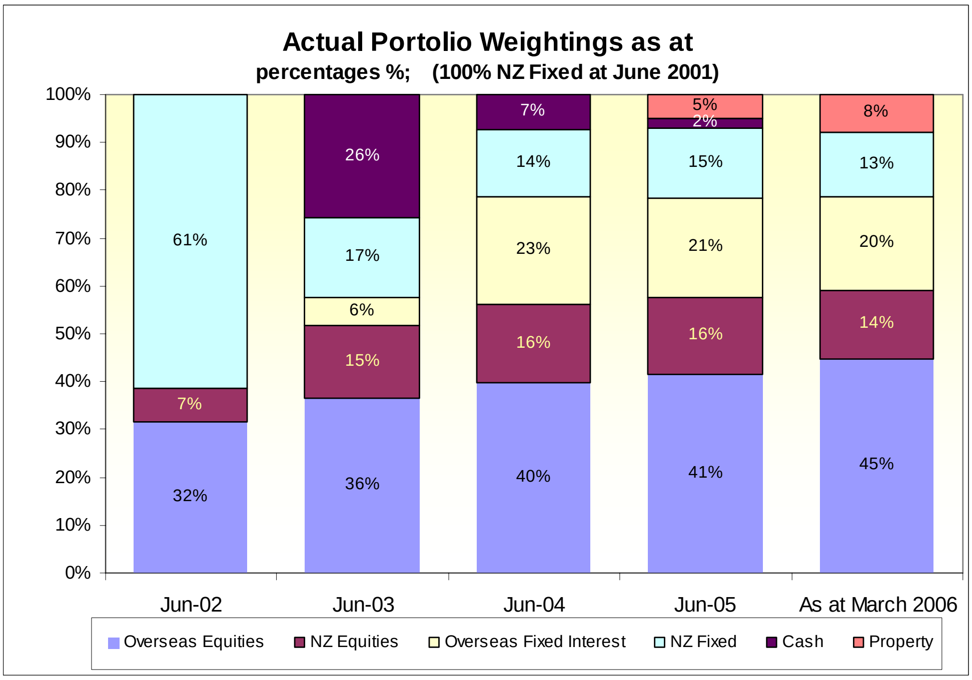
Mercer IC has studied the processes followed by GSFA in determining and reviewing its benchmark portfolio and with the qualifications already made about what ‘best practice’ investment objectives means in this case, is satisfied that the process has been very robust. Contestable advice has been obtained and considered.

The process has been well documented and subject to appropriate review procedures throughout the period since the Authority was established in 2001.

The charts below illustrate, first, the evolution of the benchmark portfolio year by year since 2001 and secondly the actual benchmark weightings as they were transitioned smoothly to the benchmark weightings.

The benchmark portfolio mix is appropriate for the risk tolerances defined by GSFA and is broadly similar to the mix chosen by other large NZ superannuation schemes with risk tolerances of similar levels. The mix balances the expected returns targeted by the GSFA in its stated objectives against the financial markets risks inherent in putting capital assets at risk in pursuit of rates of return in excess of the risk free rate.





3.2 Benchmark Portfolio – Changing Market Conditions

A benchmark portfolio is designed to perform in the conditions foreseen, as well as can be foreseen, for the longer term period ahead usually a period in excess of 10 years. The benchmark portfolio is not expected to be resilient for short term periods. There is a case for considering temporary shifts away from benchmark weightings where the investor feels that the evidence points strongly towards very high or very low equity risk premiums in the short term period ahead. This is an area of some controversy and ongoing analysis. 'Best practice' has yet to emerge to guide practical policies.

GSFA has adopted a policy of not changing the actual portfolio weightings in order to avoid or take advantage of opinions about short term market valuations and expected returns. GSFA has addressed this issue conscientiously and continues to monitor the debate and the methods which might be employed to implement new policies as and when these are considered to be appropriate.

4

Statement of Investment Policies, Standards and Procedures – Selection of Fund Managers

RFP: Investment manager selection process

- Was the investment manager selection process adopted by the Authority rigorous and consistent with best practice?
- Was the investment manager selection process appropriately contestable?
- Does the Authority aim to select an appropriate number of investment managers?
- Has and is the Authority screening an appropriate number and range of Fund managers?

We note that the GSFA, and the GSF Establishment Board, has actively engaged the services of investment consultants to assist in their manager selection process. This has primarily involved the Russell Investment Group (Russell) where an ongoing relationship has been in place. Other consultants have been engaged by the GSFA on an occasional basis. This has included Mercer Investment Consulting in respect of the GSFA's overseas property exposure and "second opinion" views on offshore fixed interest managers.

It is appropriate to first outline Mercer's interpretation as to a high quality procedure for selecting fund managers, ahead of a closer look at the GSFA's own practices.

4.1 What Mercer regards as Best Practice for Manager Selection

Below we set out in brief the process which Mercer considers to be best practice when working with large public funds on manager appointments. Manager search work is related to manager structure advice in that this advice will normally lead to the definition of the roles that need to be filled by the managers to be hired. Manager search work also draws on Mercer's manager research effort which aims, among other things, to identify investment products with high enough probabilities of outperforming their benchmarks over the medium term to justify the active management risks that they entail.

It needs to be borne in minds that clients may have objectives in mind other than mere out-performance. Examples might be a desire to feel comfortable about their investment managers, a desire to maintain good working relationships, or a desire to achieve a good balance within their manager structures.

A well conducted manager search process should help the client form a realistic view of what to expect from the investment managers that they decide to hire. This is of benefit in the sense that it should reduce the risk of the subsequent dissatisfaction with the investment managers after the manager search exercise has been completed. It should also help to identify the circumstances in which a review of a manager's appointment is warranted.

The process which Mercer considers to be best practice when advising on manager appointments may vary depending on client preferences, the budget and timeframe for the assignment, and the type of mandate under consideration. However, in brief it can be summarised as follows:

1. <u>Identify key specifications of the role(s) to be filled.</u> These are likely to include the approximate account size and likely rate of growth in account size, the preferred benchmark index for the mandate, any unusual restrictions likely to be included in the mandate, any preferences between segregated accounts and pooled vehicles, client sensitivity to investment management fees, the level of outperformance that the client would consider to be satisfactory over the medium term (which should lead to an estimate of the minimum acceptable tracking error), the extent to which the client would most likely be willing to tolerate short term underperformance (which should lead to an estimate of the maximum acceptable level of tracking error), and any client preferences as to the number of candidates to be included in the search.

2. <u>Formulate a "long list" of potential candidates for consideration in the search.</u> This should start with consideration of the list of "A" rated products for the most relevant product category, and exclusion of those which appear likely to be unsuitable to meet the client's requirements based on the specific information discussed above. If the number of candidates remaining is more than required, judgement needs to be exercised to determine which of these are most likely to be best suited to the client's requirements. If the number of candidates remaining is

less than required, additional candidates from the next rating category down should be considered for inclusion, and so forth. It is also during this stage that the client may wish to discuss manager options which have come to their own attention.

3. <u>Prepare a report profiling the list of candidates to be included in the search.</u> The format of this will typically include an introductory section explaining the background to the search and the approach taken to formulate the list of candidates, a section summarising relevant facts and figures about the candidates, a section presenting narrative profiles of each of the candidates being put forward for consideration, and a section presenting summary analyses of relevant performance data.

4. <u>A discussion takes place between client and consultant to formulate a short list of candidates for final interviews.</u> At this stage Mercer checks with the client if they have any sensitivity regarding disclosure of background information on the client and the search to the managers concerned, and whether they are happy for us to let managers know how many or which other candidates they are competing against.

5. <u>Schedule and arrange final manager interviews.</u> These will normally be in the client's office for efficiency reasons. For international searches where some or all of the candidates are based in a different country, in many instances it will be suitable for video-conferencing to be used during the presentations. Depending on the budget, a further option worth considering is for the client to follow up the final presentations with on-site visits to the office of the one or two most favoured candidates before taking a final decision. In some cases it may also be appropriate to prepare an additional report for the client as a briefing paper for the final presentations, including guidance on factors to consider during the selection process and perhaps also some suggested questions for each manager.

6. <u>Attend the final presentations with the client as required.</u> This step is fairly self-explanatory. Often it will conclude with a discussion with the client with a view to arriving at a final decision.

7. <u>Implementation of decisions.</u> There is scope to add substantial value for the client by helping them to implement their decisions in the most efficient possible way, so the importance of this task should not be ignored.

4.2 Identifying a Suitable Investment Manager

Mercer's concept of best practice for determining high quality investment managers is encapsulated in its research process. The following description of that process may be interpreted in the wider context of suppliers of investment manager research. Levering off a global network of research staff, the primary aim of this program is to assess, for each investment product we research, its prospects for medium to long-term out performance relative to its risks. The process combines quantitative and qualitative analysis. Two main types of quantitative analysis are carried out, often before we embark on the qualitative analysis.

- The simplest part of the process is quantitative analysis of past performance data, where we make use of the Mercer Manager Performance Analytics (MPA) tool. MPA is a software system which enables analysis of past performance, of risk measures and of risk-adjusted performance measures in absolute terms and also relative to suitable benchmarks, and to peer groups.

- The other main type of quantitative analysis we carry out is analysis of portfolio structures. For analysis of equity portfolios we use an analytical system developed by Style Research Limited. The aims of this analysis are, first, to quantify how aggressively a portfolio is positioned relative to its benchmark, second, to identify what types of individual stock positions the manager is taking in trying to outperform its benchmark and the relative importance of these positions and, third, to identify and quantify the different types of "style biases" that are embedded in the portfolio (e.g. value, growth and small cap biases).

Research meetings with managers focus on identifying the following:

- Evidence of any sustainable competitive advantages that should give a manager above average prospects for future out-performance (e.g. superior research resources, a superior approach to investment analysis, or something superior about the manner in which the research and analytical resources are harnessed in the investment decision-making process); and,

- Evidence of any significant potential weaknesses which may effect the prospects for future out-performance, or give rise to an above average risk of future under-performance (e.g. a weakness in any of the areas mentioned above, poor risk controls, excessive transaction costs due to poor dealing procedures or excessive assets under management, or broader organisational or business management issues that could potentially detract from performance in some way).

In most cases we end up identifying a combination of both strengths and weaknesses, which we need to weigh up against each other in the final assessment. These are classified using four different factors, which culminate in an overall rating:

1. Idea generation
- The key attribute that a manager needs to possess to have potential to outperform over the long term is the ability to generate value-adding investment ideas

2. Portfolio construction
- The quality of a manager's portfolio construction process will determine how effectively its value-adding investment ideas are converted into consistent outperformance

3. Implementation
- For a manager to outperform, the value added through its investment ideas and portfolio construction process must outweigh the drag on its performance due to transaction costs

4. Business management
- Well managed investment firms are more likely to maintain and enhance the competitiveness of their investment strategies over time than poorly managed firms

4.3 Discussion on the GSFA's Practices

In the commentary below we cover the manager selection arrangements of the GSFA. In respect of process adopted we have primarily focused on the two manager replacements which have occurred since inception, affecting the New Zealand Equity and International Fixed Interest sectors.

More generally, the GSFA advises that it has a standard process for the initial selection of managers to be considered for an investment management role, documented in its Operations Manual. To date the Investment Committee has been responsible for the manager selection process. Delegated authority is sought from the Board in each case for the Investment Committee to approve the form/process for the selection, to select the preferred managers and sometimes also to approve the manager configuration and broad investment parameters.

In terms of replacing managers in an established asset class, the Board has a policy of maintaining a reserve-list, so that if it is faced with replacing a manager at short notice, it is prepared. In a situation where new candidates have been identified for short listing, a complete selection process is carried out. Investment advisors are used by the GSFA to provide an initial list of candidates that are ranked highly by the advisor and, in the advisor's view, would meet the requirements of the mandate. Investment advisors may be present at the interviews for the main purpose of clarifying any issues that arise and to ensure that the selection panel have covered all relevant areas and are consistent in each interview. Advisors do not form part of the selection panel.

4.4 Active New Zealand Equities

The GSF Establishment Board initially considered two manager configurations – a 50% allocation to a passive manager with the remainder split between two “highly active” managers (not specified here), or the use of two active managers alone with moderate outperformance targets. The latter structure was selected and the GSFA initially appointed Tower Asset Management and BT Funds Management (BTFM), the latter being replaced by AllianceBernstein (Alliance) in 2004. These firms in total manage around NZ$550 million and both have alpha targets of +300 basis points per annum.

We are supportive of the GSFA’s decision to implement actively managed New Zealand equity strategies as we believe more than adequate evidence exists to indicate that the market offers exploitable value-add potential. In other words we believe that, through appropriate research, managers can be identified in advance who can achieve (over reasonable periods of time, say 3-5 years) returns above passive levels on an after fees basis.

The GSFA’s decision to hire two managers was also a reasonable one in order to provide diversification benefits, particularly in respect of manager risk, given the size of assets being allocated. A case can be made for including a manager which had higher alpha objectives and/or focused on the smaller cap segment of the market. Whether or not there are net benefits of this approach are in our opinion arguable rather than clear-cut, particularly given the size of the local market, but the option is one which investors should consider. At the time the GSFA’s revised structure was established, manager options in the sector were less pronounced than in the past two-three years. Accordingly the nature of the mandates put in place by the fund is not a surprise. However, this assessment should be an ongoing process as opportunities in the market arise.

From our observation of the documentation and discussions, the process followed by GSFA in replacing BTFM with Alliance was broadly in line with what we would regard as “best practice”. In early March 2004, following the departure of a portfolio manager Russell advised that it had downgraded its assessment of BT’s product and a decision was made by the GSFA Board to seek a replacement. By mid March, requests for information had been sent to four potential replacement managers, these being potentially acceptable options as judged by Russell. Manager presentations were held on 30 March. On 7 April the GSFA Board determined to replace BTFM with Alliance. In the circumstances we consider this to be a timely sequence of events.

In terms of whether the process was contestable, collation of the group of possible replacement managers was heavily influenced by the views of Russell (discussions were held with the GSFA but this did not add to the manager list). Given the funds under management of the GSFA, there are only a limited number of New Zealand equity managers who can take on a mandate in excess of $250 million, particularly from one client. Accordingly, identification of a shortlist for such a mandate is not a protracted exercise. We regard the GSFA taking advice on manager research views from a specialist adviser as an appropriate step and in line with best practice. Not seeking further advice from a second adviser, for a mandate in a local market where internal staff had a broad understanding of the market participants, is not an oversight in our view.

Notwithstanding, the above discussion does raise a related question as to whether the GSFA could have been more pro-active in evaluating BTFM and seeking other views as to its outperformance capabilities. Although Russell was retained to provide advice on manager views, earlier action to review BTFM may have been possible. It is a matter of judgement, but to illustrate other research perspectives held, Mercer Investment Consulting downgraded BTFM from recommended status in May 2003 (due, amongst other things, to perceived deterioration in culture and motivation).

In determining its preferred candidate to replace BTFM, the GSFA had regard to the following factors: key personnel, investment process, and complementary fit with existing manager, historical performance, capacity constraints, compliance/systems/ reporting, management contract, fees, previous assessment (earlier presentations) and manager diversification issues. These are all valid factors. In terms of the decision process we narrow our comments to the following:

- Potentially too little weight given to capacity issues. At $820 million of equity assets under management at the time (albeit in various strategy types), Alliance had less capacity than other short listed candidates to take on a substantial mandate, with implications for drag on future investment performance. Of note is that the GSFA's second manager, Tower, is also amongst New Zealand's largest equity managers and for several years has been closed (or 'soft closed') to additional funds.

- Potentially too much weight given to opting for "complementary" styles, i.e. Alliance was perceived as "growth" oriented alongside Tower being "value" oriented and this was considered a factor in Alliance's favour. While in overseas markets the concept of manager style has significant meaning, it is of less consequence in connection with the management of New Zealand equities where the market has low breadth (e.g. is short of companies which operate in rapidly evolving industries such as technology or pharmaceuticals). In practice, for a manager to focus on entirely growth or value stocks (to the extent they are available) would constrain their portfolio universe to unduly narrow levels. While there can be contrary claims by fund managers (sometimes for branding reasons), Mercer's experience is that there is an absence of statistically significant outcomes in respect of value or growth biases. An emphasis on style characteristics in manager selection can serve to unduly influence the process.

We note that the equity funds under management of both firms used by the GSFA for domestic equity, Alliance and Tower, are primarily sourced from clients under the advice of Russell. A change in research view by Russell on these managers would be likely to entail a significant movement of funds being attempted simultaneously by multiple clients. We simply raise this as a risk which impacts on the flexibility and operational effectiveness of any manager switch by the GSFA.

Finally, we note that the mandates awarded to the GSFA's domestic managers allow for investment in shares issued by entities registered in New Zealand and dual listed stocks that are included in the NZX50 Index. This means that in order to add value the fund managers must either take a view on the weightings of stocks in the local index or invest into other local stocks. It further means that they can be forced to take positions in small companies, many of which are to some degree illiquid and subject to wide pricing variations. Accordingly, in the industry it is common for fund managers to include a component of Australian equities in their domestic equity portfolio - typically in the range of 10-30%. Effectively, the portfolio is a New Zealand equity portfolio in that it attempts to add value to a domestic equity index. However, the range of stocks that a fund manager can select is extended into a deeper neighbouring market which is associated in many respects with New Zealand (many companies operate in both markets and company coverage by the industry is often Australasian in nature).

Mercer is generally supportive of the introduction of Australian equities into a domestic equity portfolio as an opportunity to expand value-added options and improve diversification, whilst maintaining a New Zealand domiciled benchmark index. We believe it is a relevant approach for the GSFA particularly given the size of the mandates and potential capacity issues with the sizeable managers currently utilised.

4.5 Active International Fixed Interest

The GSFA uses three firms for active management of international fixed interest – PIMCO, Goldman Sachs Asset Management and Wellington Management. The latter firm replaced the original appointment of Fischer Frances Trees and Watts (FFTW). The three mandates total approximately $750 million. Target alpha in all cases is 100 basis points per annum which is within the range of common market objectives.

In April 2003, Russell advised the GSFA of an imminent rating change of FFTW. FFTW was funded by the GSFA on 24 July 2003 with a $200 million mandate. In August 2003 Russell downgraded FFTW, evidently driven by staffing changes at senior management level and advised that manager replacement was not urgent but should take place over a three-six month timeframe. The GSFA considered two options: accept Russell's advice and actively starting to look for a replacement manager or seek further information on FFTW before making a decision. The latter option was chosen. FFTW presented to the Board on 3 November covering recent staff changes and concerns expressed by GSFA's investment adviser. FFTW was retained on a "watch" basis for review in March 2004, being seven months after appointment, and planned further funding was curtailed. In the interim a second research view on the manager was sought and received from Mercer Investment Consulting. Over this period there is evidence that GSFA went to some lengths to reconcile the arguments raised by FFTW and the views of advisers. On 2 March 2004 the Board determined to terminate FFTW in favour of Wellington Management.

The above sequence has been set out as it is clearly not ideal for an investment manager to be reviewed, and subsequently terminated, so close to funding (for cost and other administrative reasons). The process followed was in our view reasonable. In addition, we note that the investment adviser's advice (as per GSFA board papers September 2003) was that they did not consider Wellington to have complementary skills to the fund's other international fixed interest managers, PIMCO and Goldman Sachs, for skill mix reasons. Notwithstanding, Wellington was appointed. We have not been able to ascertain what decision criteria (i.e. assessment of the relative merits of potential replacement managers) led to this outcome, except to note GSFA's advice that "in the case of replacing FFTW, Management sought advice from the investment advisor on the top rated managers that would complement the other two managers. The National Provident Fund was in the process of selecting a second fixed interest manager, and as their two candidates were the same [Wellington and Morgan Stanley], the Authority used the opportunity to interview those two managers when they came to New Zealand to present to NPF".

4.6 Passive International Equities

The GSFA's international equities exposure is managed passively. The managers used are AMP Capital Investors and Arcus Investment Management (Arcus assumed BNZ Investment Management in early 2006 and State Street Global Advisers is used as the sub-manager). The mandates total approximately $1,500 million.

"Best practice" considerations in selecting passive managers are different from those involved in selecting active managers. Although many passive managers would prefer not to look at it this way, passive management is in many respects a commodity product and, as with commodities in general, a key determinant in making a purchase is price. Hence, a key concern is that manager selection reflects the best value for money (i.e. lowest cost) available among the passive managers that are regarded highly for the relevant mandate.

In the normal course of events, we would expect a fairly well regarded manager to be preferred over a top rated manager if it is meaningfully lower in cost. To the extent that costs do not differentiate, more qualitative factors can be used such as client service quality. In some cases, qualitative factors could be used to justify inclusion of a manager that would otherwise be excluded on cost grounds (e.g. corporate governance issues or financial substance of the organisation) but we would expect that in most cases costs should be the key factor. In essence, therefore, the trade-off is often one between selection of a "first tier" manager which has the ability and resources to manage effective index-tracking portfolios and there are no second-order concerns of consequence, and a high quality but "second tier" manager which raises some concerns of consequence – for instance quality of client service, the pooled funds are small meaning that tracking will be harder regardless of ability and resource, or wider organisational changes.

In the case of the GSFA, the passive strategies employed attempt to mimic a benchmark which is a modified MSCI "grey list" Index. Such strategies require relatively little original research and, typically, low account servicing. A key criterion is that the product has a binding ruling from the Inland Revenue to ensure exemption from capital gains tax. At the time the GSFA considered passive managers, only three options were available (a narrow but unavoidable universe). Requests for Proposals were sent to all three - AMP, BNZ and Tower. The intention had been to invest funds with all three, but negotiations between the GSFA and Tower broke down. Accordingly two managers were appointed, with AMP receiving a larger proportion on account of financial backing perceived to be superior. Specifically, AMP offered the guarantee of its parent versus BNZ offer of a letter of comfort). In the circumstances, we do not take issue with the GSFA's approach for selecting international passive equity managers and the attention to second order factors is appropriate. Issues related to the level of manager fees are covered in Section 10 of this report.

4.7 Active New Zealand Fixed Interest

The GSFA uses two firms for active management of domestic fixed interest – AMP Capital Investors and AllianceBernstein. The mandates are for a combined amount of approximately NZ$500 million. The target alphas of the GSFA's mandates are, at 60 basis points per annum, lower than industry averages. One point of note is that the AMP and Alliance fixed interest mandates target an alpha which, in our experience, is below "standard" targets for these managers (i.e. as used by most of their other clients). We questioned GSFA as to the reason for this, who advise that the Board's initial fixed interest mandates allowed significantly less credit than other mandates and the outperformance target reflected the level of outperformance the managers believed they could achieve, given the mandate settings. The Board later addressed the issue as to why New Zealand managers had not been meeting the 60 basis point performance target. The conclusion was that the lower volatility in fixed interest markets had significantly contributed to the lower returns. In response, the Board increased the level of credit permitted in portfolios whilst being comfortable with the consequent impact on portfolio risk. We note there is some risk here of allowing manager targets to drift down with actual performance, although it is true that a number of domestic fixed interest managers have struggled to meet their objectives in recent years.

4.8 Active International Property

The GSFA has exposure, initiated relatively recently, to international listed property through AMP Capital Investors and LaSalle Investment Management in mandates totalling approximately $200 million. In addition, the GSFA has exposure to United States unlisted property through DB REEFE in a mandate which has recently grown to around $75 million.

We note that Mercer Investment Consulting was engaged by the GSFA in 2004/05 to provide advice on an allocation to global property and assist in the manager selection phase. Accordingly, for the purposes of this report we have not commented on the process followed.

4.9 Mercer Opinion

Aside from the aspects drawn attention to above, on the whole we consider the GSFA operates a manager selection process which is close to "best practice". From inception the GSFA has drawn on the research views of an investment adviser which is reputable and has knowledge of the fund manager industry on a global basis. Generally a wide range of views have been brought to the table, including that of the Board, Management and external advisers.

5

Statement of Investment Policies, Standards and Procedures – Foreign Currency Exposure

RFP: Hedging policy

- Is the foreign exchange hedging strategy adopted by the Authority prudent and consistent with best practice?

- Was an appropriate process followed for determining the hedging strategy?

Currency Hedging: GSFA has generally raised the degree of benchmark hedging of global equities from an initial position of 50% after tax towards 100%. Currently, the benchmark position is a maximum of 80% hedged after tax. Mercer IC has a distinctly different stance to that adopted by GSFA and therefore we propose to address the rationale for Mercer's adopted stance in the Review. GSFA has consulted fund managers and New Zealand Superannuation Fund personnel about this issue and this advice may be regarded as 'contestable' advice as referred to in the Treasury RFP. Some other funds in New Zealand have adopted 100% hedging (after tax) of their passive global equities' exposure but the policy is not widespread.

5.1 Mercer Framework

Mercer IC's latest opinion on this issue from a New Zealand perspective is set out in the report, Modelling Assumptions 2006 (February). An attachment to this section takes an excerpt from that report.

While it is accepted that there are a variety of views on this subject Mercer IC proposes to show that the GSFA policy stance is very much open to debate and therefore the broad issues should be at least be sketched out here.

Our strongest criticism is **against** the proposition that the benefit of forward basis points for hedging global equities' assets exposure generally provides a risk neutral advantage for NZ$ based investors over unhedged exposures.

Mercer IC accepts that there is a very strong case for the structural argument which sees a net positive contribution from hedging over the longer term. Our report argues along the same lines to a GSFA report which quotes some market participants on this issue. A figure of 160 basis points at equilibrium has been used by Mercer IC and included in the modelling assumptions' discussion.

Mercer IC also accepts that there will be cyclical variation of forward points to hedging as has been demonstrated over the past years since the NZ$ was floated (1986) varying between zero and 400 basis points in orders of magnitude. Behind such cycles are the relative economic cycles of New Zealand versus the rest of the world. A relatively strong NZ phase will see the forward points increase (2005) and vice versa as the NZ phase becomes relatively weak (1999).

The full logic of Mercer IC's model is that, over the course of the cycle, NZ's full yield curve and that of the rest of the world will be adjusting towards equilibrium <u>and that NZ's foreign exchange rates will similarly adjust.</u> Therefore, when the forward points' "premium" appears to be very high is a signal to be very cautious about hedging as the NZ$ exchange rates may be about to adjust to justify the forward points which the financial markets have already built into the short end of the curve.

In Mercer IC's view then the case can be made that the expected returns and the expected volatility may be the same for unhedged as for hedged global equities over the long term. The case then for adopting a high degree of hedging as a benchmark (e.g. 80% plus after tax), based on forward points alone, would be extremely weak. Forward points to hedging may not compensate for the depreciation (expected by the markets) in the NZ dollar over the investment horizon.

The benchmark currency hedging issue is a separate issue to tactical currency positions or market entry decisions.

The pace which the NZ dollar exchange rates have historically demonstrated, on the way up and on the way down, suggests to Mercer IC that the currency hedging decision should not be a 'set and forget' policy determined by a view of the long run forward points judgement. Rather Mercer supports an approach which balances the benefit of forward points against the ever present risk of NZ$ depreciation in the short term.

Therefore, the benchmark strategic foreign currency exposure (for global equities) should be neither 100% hedged nor 0% hedged after tax, but be some intermediate position which recognises that forward points are important, but not all important and that the global Cash markets are telling us something about the real structural risks to the NZ$ (even if the judgements appear to be continually too pessimistic). The pace of depreciation/appreciation when it occurs also tends to be very rapid. That is, so rapid as to mean that a 100% hedged, or completely unhedged position can overpower the strength of the diversified benchmark portfolio which has been so carefully designed to be resilient to short term risks in any one particular area.

Mercer IC also sees a role for tactical (active) currency hedging policies but does not judge that the current policies (inactive) are as contentious as the benchmark portfolio currency exposure policy.

5.2 Mercer Opinions

- Is the foreign exchange hedging strategy adopted by the Authority prudent and consistent with best practice?

For New Zealand based investors with the degree of exposure to offshore growth assets similar to GSFA, Mercer IC believes that a very high degree of hedging back to the NZ$ (e.g. the 80% level) is not optimal because the expected returns to hedging may not be sufficient to offset the depreciation of the NZ$ over any period. ‘Best practice’ on this issue in the market place is evolutionary. In this case the policy stance may be classified as a reasonable stance given that the process used by the GSFA involved receiving professional advice from more than a single source and acting upon that advice.

- Was an appropriate process followed for determining the hedging strategy?

Yes. Advice was received and alternative views put forward.

Attachment to Section 5

Excerpt from Mercer IC Modelling Assumptions, February 2006.

"In the past Mercer has not included an explicit allowance for currency changes in the determination of expected returns for unhedged overseas equities for NZ investors, nor an explicit allowance for forward points' pick-up for hedged overseas equities. Current circumstances support changing the approach to making allowance for these two factors because of the degree of disequilibrium between NZ fixed interest markets and Global fixed interest markets, and the disappointing rate of progress in lowering New Zealand's dependence on foreign savings.

NZ interest rates lie generally above world rates. Currently, the NZ 90 day bank bill rate, at 7.7%, lays 4.0% above the global 90 day rate of 3.7% – a weighted sum of NZ TWI currencies. A fully hedged portfolio of global short term securities therefore provides 4.0% 'forward points' to recompense NZ$ based investors for the differential in rates.

4.0% forward points, or 400 basis points, is an unusually high differential and reflects the fact that the NZ economy is struggling to contain inflationary pressures at a time when other countries are generally more relaxed about their inflation outlooks. Long term averages though still show that 200 basis points is a common estimate for NZ$ forward points. Our judgement looking ahead at the next 20 years is that a structural differential will still be demanded of NZ but that this may reduce towards 160 basis points as the RBNZ continues to raise the world's credibility in NZ's commitment to low inflation, and the size of the New Zealand Superannuation Fund becomes more material in relation to the size of NZ's debt burdens.

Our approach to estimating the benefit of hedging foreign exchange exposures back to the NZ$ is consistent with the approach to estimating bond and cash returns. We allow the forward points pick-up of 400 basis points to adjust smoothly back towards 160 basis points over two years – a fall of 240 basis points or 2.4%. We model the 90 day bank bill rate to fall from 7.7% to 4.8% over the same period - a fall of 2.9%. Beyond two years we assume a forward points' pick-up of 1.6% p.a.

Over the next 20 years then the average forward points for hedging is estimated at 200 made up of 'high' points in the first two years and 160 points over the remaining 18 years of the 20 year horizon.

The forward points' pick-up is added to hedged global assets: to bond returns, property returns and to equity returns.

Our judgement is that not all of the reduction in forward points in the first two years will be due to the actual depreciation in the NZ$ itself. Part of the adjustment is attributed to weakness in the NZ$ and part to other factors, such as a slower pace of economic growth, perceptions of the relative quality of NZ economic policies, and luck.

Unhedged global equities in this environment will attract an additional return in NZ$ terms (due to currency weakness). Over the long term the estimate of currency weakness is 1.6% p.a. Over the short term the benefit may turn out to be very substantially higher. Typically the NZ$ exchange rate can move by 15% in either direction within any 12 month period. A depreciation of that magnitude in a single year would mean that unhedged global equities would produce additional returns well ahead of the forward points on offer, and well ahead of the average long term depreciation rate.

The additional return to NZ$ based investors through forward points is not regarded by Mercer as a free lunch. The price which NZ$ based investors have to pay is the realisation that they are investing from the base of country/currency which the financial markets are expecting to depreciate – quite heavily in the short term, and on average over the long term. The price or risk which NZ$ based investors have to face is that the NZ$ will fall by more than the forward points on offer over shorter periods. "

6

Operations Consistent with 'Best Practice' – Governance Practices

RFP: Governance

- Are the governance arrangements practiced within the Authority in accordance with best practice?
- Is there a clear separation of responsibilities between the Board and management?
- Is the Board kept informed of all matters that require its attention?
- Are the decision-making processes within the Authority's management and Board prudent?
- Are the decisions made by the Board and management appropriately documented, given their accountability as a Crown entity?
- Are there sufficient registers to record conflicts of interest? Are they up-to-date?
- Are there exposures to stakeholders that would warrant monitoring of the Board's personal investments?
- Are the Board and Management delegations appropriate?
- Is the Authority employing consultants for advice that could be adequately provided in-house?
- Are there adequate processes to ensure the Board has, and will continue to have, the balance of skills and experience required for its tasks?

Sections 6, 7, 8, 12 and 13 have a high degree of overlap. Many of the issues and questions raised are inter-related. The individual sections pick up further detailed points under the specific Section questions, where necessary.

Mercer IC responses to the specific questions at the start of this section are based on GSFA's responses, the Review documents and meetings with GSFA.

- **Are the governance arrangements practiced within the Authority in accordance with best practice?**

Yes. Best practice in this instance has been drawn from the experience of Mercer IC in analysing, globally, private sector company defined benefit superannuation schemes. In this instance GSFA has been established by legislation and its Board members are appointed by the Minister. The questionnaire responses need to be evaluated in the light of the difference between the two entities and the descriptions in the columns headed 'best practice'.

- **Is there a clear separation of responsibilities between the Board and management?**

Yes. Procedures covered in Section 12.

- **Is the Board kept informed of all matters that require its attention?**

Yes. Details in Section 8.

- **Are the decision-making processes within the Authority's management and Board prudent?**

Yes and published each year and presented to Parliament.

- **Are the decisions made by the Board and management appropriately documented, given their accountability as a Crown entity?**

Yes and Mercer IC has visited GSFA offices to study sample documentation including Board Minutes and Committee Minutes. An ongoing record is kept in line with the authorising legislation of issues requiring Management sign-off and issues requiring Board sign-off. (Section 8)

- **Are there sufficient registers to record conflicts of interest? Are they up-to-date?**

Yes to both questions.

- **Are there exposures to stakeholders that would warrant monitoring of the Board's personal investments?**

Potentially, yes, but in current practice, no since all funds management decisions are outsourced.

- **Are the Board and Management delegations appropriate?**

Yes.

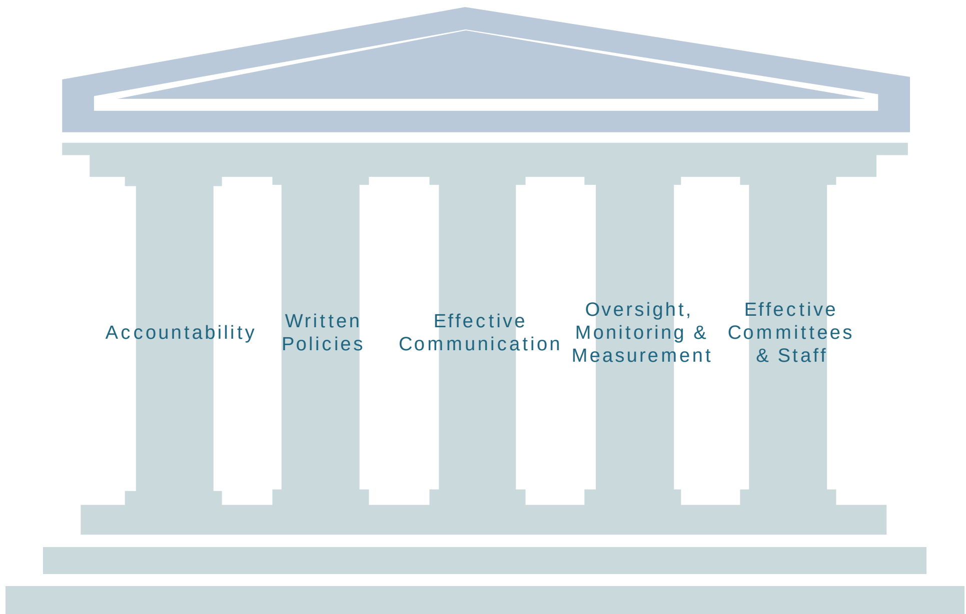
- **Is the Authority employing consultants for advice that could be adequately provided in-house?**

This is an area for judgment. The Authority requires sufficient expertise within to make best use of the specialist advice which is outsourced. Mercer IC views the current and planned balance as appropriate.

- **Are there adequate processes to ensure the Board has, and will continue to have, the balance of skills and experience required for its tasks?**

Yes. The current annual Budget process may be employed to seek and secure appropriate levels of funding for the approved programme of work to achieve the business objectives.

Governance: Mercer IC has developed a detailed view of ‘best practice’ governance of superannuation schemes. This section sets out the rationale for the Mercer global view on this issue and the development of a Fund questionnaire as input to an analysis of the quality of governance of GSFA. The questions cover the RFP questions as well. The questionnaire is split into 5 specific topics or ‘pillars’ of best practice governance: Awareness and Accountability; Documentation; Effective Communication; Oversight, Monitoring and Measurement; Effective Committees and Staff.



6.1 Characteristics of Good Governance

Mercer IC argues that the principle characteristics of good governance of superannuation schemes are not, in general terms, conditional on specific geographies, although legislative provisions vary widely between geographies.

The development of good governance of superannuation schemes has been a feature of the global superannuation and investment climate in recent years. For example, OECD guidelines for pension fund governance were agreed in 2002 and updated in 2005. As the manager of the largest registered superannuation scheme in New Zealand, the GSFA might reasonably be expected to adopt a leadership role in adopting and promoting best practice governance.

Mercer IC views the principal characteristics of good governance as achieving:

- Clear Mission
- Clear lines of responsibility & accountability
- Strategic & business planning process
- Code of conduct or ethical values
- Quality Board members
- Effective delegation to:
    - Committees (Audit, Remuneration, Investment)
    - External providers (Custodian, Asset Consultant, Other)

6.2 Principles of Good Governance

There are five principles of good governance which guide Mercer IC’s policies towards best practice management of schemes:

1. Disclosure
2. Transparency
3. Equitable treatment
4. Clear set of duties and responsibilities
5. Clear delegation

Based on actual Australian schemes’ experiences Mercer IC has found that the better performing schemes outperform on average by the order of 1.5%pa and that the better performing schemes share good governance attributes and the poor performers share poor governance attributes.

Worst Three Performers	**Best Three Performers**
Average 5 managers	Average 9 managers
Trustee	Trustee
No Investment Committee	Separate Investment Committee
No significant training	Moderate training
No investment expertise	Some investment expertise
Chair is a "dictator"	Chair is a "facilitator"
Blame culture	Some acceptance of mistakes

Difference in performance approx 1.5%p.a.

Of course, it would have been helpful for this Review if there were a number of superannuation schemes in New Zealand of similar magnitude to GSF and to base the analysis, not on Australian evidence, but on New Zealand evidence.

There are no other Defined Benefit schemes in New Zealand of the order of magnitude of GSF and so direct comparisons with like schemes operating here are not possible. It is possible to compare dissimilar funds such as the New Zealand Superannuation Fund, or smaller DB or DC schemes, but we are not confident that adjustments could be made which would make direct comparisons sufficiently valid to develop a local, New Zealand framework of 'best practice' governance for a very large scheme.

It is helpful therefore we believe to draw on the Australian schemes' experiences, provided of course that, where relevant, the required adjustments are made to take into account the differences in operating environment.

6.3 Putting Good Governance into Practice

'Best practice' governance identifies and makes clear the roles and accountabilities of each entity in each specific operation . GSFA has completed a Mercer IC questionnaire and Mercer has analysed the responses to guide the opinions expressed at the opening of this section.

Specific advantages of good governance may be grouped into higher gross returns, lower risks, including lower investment risks (Section 13), and cost savings. Costs savings may arise out of improved control of areas which can be controlled or out of managing areas which cannot be controlled. Specifics are provided in the following chart of potential sources of leakage and higher unnecessary final cost.

Controlled	**Uncontrolled**	
▪ Manager fees	▪ Manager systems	▪ Income collection
▪ Manager performance fees	▪ Broker systems	▪ Tax reclaims
▪ Commission recapture share	▪ Market impact	▪ Reconciliations
▪ Stock lending share	▪ Timing costs	▪ Stock lending systems
▪ Custodian safekeeping fees	▪ Softing	▪ Lending volumes
▪ Custodian transaction fees	▪ Bundling	▪ Lending fees
	▪ Commission recapture programme	▪ Cash management
	▪ Custodian systems	▪ Interest rates
		▪ Overdraft rates

A useful principle for implementation is ‘what gets measured gets managed’.

A deeper understanding of ‘operations’ includes:

1. Identifying and realising opportunities to reduce costs and increase income
2. Functional interaction and relationship between managers and custodians to improve efficiency
3. Compliance with regulations, principles and best practice to satisfy governance requirements

<u>All of these issues</u> impact on the Trustees’ ability to control costs and risks, to maximise the potential returns from investments and to put into practice good corporate governance.

7

Operations Consistent with 'Best Practice' – Organisation Structures

RFP: Organisational structure

- Is the organisational structure of the Authority appropriate for the outputs the organisation is trying to achieve and, in particular, is the role of Annuitas appropriate as the sub-contracted supplier of staff?
- Are the knowledge and skills of staff appropriate for their responsibilities?
- Are the remuneration policies adopted by the Authority (and/or Annuitas) an appropriate balance between the Authority's responsibilities as a Crown entity and its need to employ appropriately qualified and experienced staff?
- Do staff contracts contain appropriate performance objectives commensurate with each role?

Mercer IC believes that, within the budgetary constraints, the capacity of the GSFA to deliver very high quality levels of service to the Crown and to GSF members has been admirable. Elsewhere in this report Mercer has raised the issue of whether the budget appropriation is sufficient in today's environment where the relevant skills to run a best practice superannuation scheme business operation of such a magnitude are quite rare. GSFA has the option of proposing a budget appropriate to fulfil its objectives.

For large private superannuation schemes in New Zealand, the standard approach to funding the costs of running the scheme would be out of the returns on Scheme assets. The Board of Trustees (in this case the GSFA Board) would therefore be the responsible entity for establishing an appropriate balance of costs relative to benefits. Mercer IC is also conscious that the Board members themselves are not in the same position as the appointed members to a corporate superannuation scheme Board of Trustees with responsibilities to represent the company and/or the employee members. In this case the

Board members are appointed by the Minister under the Act. Importantly therefore each Board member is already 'independent' of the day-to-day operations of the Crown and of the specific employers of members in each Scheme making up the GSF.

7.1 Appropriate Structure

The existing structure represents Annuitas as a provider of personnel to the Board rather than as a provider of services from one entity to another. In the absence of National Provident Fund (NPF), or any other fund, from the Annuitas partnership, GSFA could then 'employ' Annuitas staff on a full-time basis directly. The joint venture with NPF which is Annuitas should survive provided the benefits to GSFA and NPF of combining their resources outweigh the perceived costs of the relationship. Mercer IC believes that the current perception of GSFA is that the current structure works very well with the benefits of combining resources with NPF outweighing any costs.

There are clearly circumstances in which the current perceptions would be called more into question but these circumstances do not appear to be on the immediate horizon. The call on Annuitas resource is roughly 55% by GSFA and 45% by NPF – a rather balanced usage. Circumstances which would tilt the balance more towards one end might raise the odds that the net benefits to one or both parties would be perceived less favourably.

7.2 Knowledge and Skills

Mercer IC staff have had contact with all of the staff employed by Annuitas over the years and have met Board members. The skills and experience of all Board members is known, although it is fair to say that the Annuitas staff are better known to Mercer than the Board members themselves, though there are individual Board members whom we know very well. The Review has enabled Mercer IC to gain new insights through many visits with the Chief Executive, two interviews with the Chairman, and one with the General Manager, Investments. A meeting between Mercer IC and GSFA representatives was also held on June 14, 2006 to discuss a draft report of the Review.

Mercer IC believes that both the staff resources and Board members' resources together comprise all of the resources required to run a best practice operation of this type with plans to expand the team as required.

7.3 Remuneration Policies

The remuneration formula for Annuitas staff under the GSFA arrangements has been viewed and in our view strikes an appropriate balance between base salary and salary at risk (dependent on performance). There is scope as discussed above for the funding arrangements to be altered in order to improve the signalling mechanisms – the links between individual efforts and remuneration. As Ministerial appointments New Zealand's history in these matters is not to provide overly generous remuneration packages to Board members. In practice, there appear to be intangible benefits. It is surprising how the pool of talented people for such, essentially, public service roles remains populated and, as a general observation, must be a risk for the future. This is an issue of succession of Board members and Chairman.

As for the Annuitas staff, inevitably there is an issue of what can be measured and related accurately to specific individuals. Perhaps there may be greater scope in the future for performance based assessments to be more along the lines of the industry as a whole. It is very likely that the investments of the GSF will be managed on a more active basis in the future with the proposed removal of the ‘Grey List’ approach to taxing investment income.

Elsewhere the Review has also addressed the scope for removing any remaining uncertainty about the appropriate metrics to be used by the Crown in evaluating the performance of GSFA and the people responsible for achieving its objectives on behalf of the Crown and other stakeholders.

Mercer IC supports the use of remuneration formulae which combine signals for individual performance enhancement as well as enhancing the performance of the employing entity as a whole. The working atmosphere evident at GSFA is professional, focussed and yet good spirited. The Review’s requests for information were dealt with very promptly and accurately and with an obvious keenness to provide the Review with everything required to make a complete and thorough assessment of each issue.

7.4 Staff Performance Incentives

As indicated above there are incentive structures in place and with imminent changes in the investment tax laws and possibly the GSFA approach to its budget process there is scope for more change to occur in this direction. This development would be positive for GSFA because of the scarcity of talent within New Zealand and the growing demands for such talent which is likely to flow from Government’s initiatives to promote improved savings behaviour and the pattern of investment by New Zealanders.

In discussions with GSFA the role of the New Zealand Superannuation Fund has been raised as a source of intellectual capital available to GSFA. While such access is positive up to a point there are clearly limits to such access and too heavy reliance should not be placed on a door which, while currently ajar, may close without notice, or not be accessed on a timely basis. In short, there will be a continuing need for GSFA to attract and retain excellent staff in-house.

8

Operations Consistent with 'Best Practice' – Information Management

RFP: Information management

- Are the information management and documentation procedures adopted by the Authority thorough and prudent?
- Are those procedures being followed?
- What processes does the Authority have to produce the documents required of them by legislation (e.g. Annual Report, Statement of Intent, actuarial valuation)?
- Are these processes being followed?

Mercer IC has carried out a review of the documentation procedures set out in the several reports relating to reporting and flows of information within the GSFA and between the GSFA and its suppliers. Mercer IC has also carried out several site visits to GSFA and checked off that all processes are being followed.

8.1 Quality of Information Management

Mercer IC has found the quality of information management to be extremely high across the various internal operations of the business and between the GSFA and its suppliers.

GSFA's responses to a Mercer IC Questionnaire have been checked through with the Management (Chief Executive and General Manager, Investments) and we have examined the Minute Books of the Board and its Committees.

Mercer IC has also checked through the Board Evaluation Tool, a self assessment questionnaire of each of the Board members, including the Chairman, which covers the issue of information management flows and the efficiency and effectiveness of the operation of the Board.

Mercer IC sought examples from GSFA of its agreements with services providers and sighted:

Legal Advice:	Services Agreement with Phillips Fox Performance Assessment Process document
Taxation Advice:	Services Agreement, PricewaterhouseCoopers
Investment Management:	Services Agreement, AMP Capital

Mercer IC had also been provided with full copies of the service agreements listed in Appendix B.

The services agreement with Russell Investment Group was not provided to Mercer IC nor sighted by Mercer IC given that Russell Investment Group is a competitor to Mercer IC in the New Zealand market.

8.2 Information Management Processes for Compliance with Legislation

Section 9 signs off on the broad issue of legal compliance by GSFA and the GSFA's use. But for this Section it may be useful to have a closer look at the GSFA compliance questionnaire itself.

The questionnaire covers 14 broad types of issues. The first 13 are checked and reported upon by management as to their status. The final section is a sign-off from the Board itself of all of the issues needed for Board approval. The types of issues in sequence are:

1. Compliance with the Superannuation Schemes Act 1989, the Financial Reporting Act 1994 and the Crown Entities Act 2004. (12 questions)
2. Assets (6 questions)
3. Liabilities (17 questions)
4. Equity (1 question)
5. Profit and Loss (3 questions)
6. Other Reporting Disclosures (8 questions)
7. Off Balance Sheet items (3 questions)
8. Foreign Exchange Exposure (7 questions)
9. Going Concern and Solvency Considerations (12 questions)
10. Compliance with Accounting Policies and Procedures (9 questions)

11 Compliance with Government Regulations and Contractual Agreements (7 questions)
12 Audit (4 questions)
13 General (14 questions)
14 Final Board Review (17 questions)

Management is required to report progress on all of the questions raised and, when final, report through to the Authority Board.

Sample of five Board questions for illustration:

- Are you satisfied that all major problems identified by the auditors have been resolved satisfactorily?

- Have the external auditors been asked whether there are any matters to be brought to the Board's attention which will affect the Board members' consideration of the financial statement?

- Is the programme for the identification of key risks integrated and agreed with the external auditors?

- Are you satisfied that management have ensured that business practices undertaken during the year have not been unethical?

- Are you satisfied with the explanations provided in the financial statements when prospective financial information that has previously been published and actual results are materially different?

8.3 Crown Entities Act, 2004

Under this Act the GSFA is required to prepare its Statement of Intent (SOI) according to a different set of standards than under the previous legislation. 2006/07 is the first year for which GSFA is required to report in this new way. The differences between the old and the new SOI requirements are tabulated here. Those aspects of the requirements which are able to be directed by Ministers are **in bold.**

The new legislation is expected to place new demands on GSFA with respect to its information management processes. Progress in refining the investment objectives of the GSFA and its funding basis are likely to enhance the ability of GSFA to adapt appropriately.

Public Finance Act 1989		**Crown Entities Act 2004**	
SOI covers parent and group	41D	Parent prepares SOI for parent and group	139(2)
The objectives of the Crown entity or group	41D(1)(a)	**The specific impacts, outcomes or objectives that the entity seeks to achieve or contribute to**	141(1)(c)
Nature and scope of activities to be undertaken	41D(1)(b)	**The nature and scope of the entity's functions and intended operations**	141(1)(b)
Performance targets and other measures by which performance may be judged in relation to objectives	41D(1)(c)	**The main financial and non-financial measures and standards by which the future performance of the entity may be judged**	141(1)(f)
Statement of accounting policies	41D(1)(d)	*No equivalent, but forecast financial statements and SSP must be produced in accordance with GAAP, and Annual Report must include statement of accounting policies*	
Ratio of consolidated shareholders funds (or equivalent) to total assets	41D(1)(e)	*No equivalent, but note the new broader requirement for forecast financial statements*	
Statement of the principles adopted in determining the distribution of profits to the Crown and an estimate of the amount or proportion of annual tax paid earnings that is intended to be distributed to the Crown (if required by Minister)	41D(1)(f)	*No equivalent, but may be covered under 141(1)(c) & 141(1)(f). Note the new broader requirement for forecast financial statements. Also significant impact of s.165 "Net Surplus Payable"*	
Procedures to be followed before the Crown entity, or another member of the group, subscribes for, purchases or otherwise acquires shares in any company or other organisation	41D(1)(g)	**Any process to be followed for the purposes of s100 (which requires Crown entities to acquire certain interests only after notice to the Minister and in accordance with procedures and conditions in its SOI or specified by its Minister)**	141(1)(h)
Statement of output objectives (if named in 5th schedule)	41D(1)(h)	**Statement of forecast service performance**	142(1)(b)
Any activities (not covered by 41D(1)(h)) in respect of which the Crown entity will be seeking compensation from the Crown (whether or not the Crown has agreed to provide compensation)	41D(1)(i)	*No equivalent, but note the new broader requirement for forecast financial statements*	
Other matters agreed with Minister, including information to be supplied to Minister	41D(1)(a)	**The matters on which the entity will consult its Minister before making a decision, the matters on which it will report to its Minister and the frequency of reporting**	141(1)(g)
Estimate of the current commercial value of the Crown's investment in the Crown entity group and statement of how value assessed if required by Minister	41D(2)	*No equivalent, but note the new broader requirement for forecast financial statements*	
		Key background information about the entity and operating environment	141(1)(a)
		The specific impacts, outcomes or objectives that the entity seeks to achieve or contribute to and, if the entity is directed to give effect to or to have regard to government policy directions, how those objectives might relate to any outcomes or objectives referred to in the direction	141(1)(c)
		How the entity intends to perform its functions and conduct its operations to achieve those impacts, outcomes or objectives	141(1)(d)
		How the entity proposes to manage the organisational health and capability of the entity	141(1)(e)

		Other matters the entity is required to include under this Act or another Act	141(1)(i)
		The matters on which the entity will consult its Minister before making a decision	141(1)(g)
		Any other matters that are reasonably necessary to achieve an understanding of the entity's intentions and direction	141(1)(j)
		Forecast financial statements for 1st year (prepared in accordance with GAAP)	142(1)(a)
		Any other measures and standards necessary to assess the entity's performance at the end of the 1st financial year	142(1)(c)
		A statement of any significant assumptions underlying the forecast financial statements	142(1)(c)
		Any additional information and explanations needed to fairly reflect the forecast financial operations and financial position of the entity	142(1)(e)

Source: New Zealand Treasury Website, 2006. www.treasury.govt.nz

9

Operations Consistent with 'Best Practice' – Legal Compliance

RFP: Compliance with legislation

- Does the Authority have appropriate processes in place to ensure that all its requirements under the Government Superannuation Fund Act are being complied with?
- Does the Authority have appropriate processes in place to ensure that all its requirements under other relevant legislation (for example, tax legislation) are being complied with?

9.1 Process

GSFA has supplied to the Review the questionnaire which GSFA uses as a means of ensuring compliance with the legislation, being the legislative and regulatory framework which governs the activities of the Authority, and any additional requirements that the Authority deems require compliance monitoring.

The questionnaire facilitates allocation of compliance sign off to those areas which are applicable to the Executive Management and then an overall sign off for the Board.

The process is carried out as follows:

1. Determine the legislation and regulations that govern the Authority and the Government Superannuation Fund (GSF), both from an independent review and from a review of the Questionnaire. This includes the significant legislation that the

governs the Authority and the Fund, being, amongst others and not limited to the following; Government Superannuation Fund Act 1956 (including the Government Superannuation Fund Amendment Act 2001), Crown Entities Act 2004, Superannuation Schemes Act 1989, Financial Reporting Act 1994, Income Tax Act 2004 and other relevant tax legislation.

2. Review the questionnaire in order to determine if it covers all the requisite grounds of compliance for the Authority in terms of legislation and regulation and any additional grounds of compliance the Authority has so determined;

3. Analyse the legislation and regulations and cross check conclusions with the Questionnaire structure and content.

9.2 Mercer Opinion

The Authority has established a comprehensive compliance plan, by way of the questionnaire, to ensure that it complies with the legislation and regulations that govern the Authority and the GSF.

All of the compliance operations are subject to the scrutiny of the Audit and Risk Review Committee of the GSFA Board.

Mercer concludes that the questionnaire covers the legislative and regulatory regime that governs the Authority and the Fund.

The Authority has the systems and procedures in place to ensure that the questionnaire can be completed and reviewed.

10

Operations Consistent with 'Best Practice' – Fund Managers' Fees

RFP: Investment manager fees

- Are the investment manager fees paid by the Authority reasonable and in line with those paid by comparable institutions?

10.1 General Comment on Fees

Investment performance clearly plays an important role in selecting an appropriate investment manager. Performance typically is presented gross of fees, which isolates the effects of investment decisions made by the investment manager. Investors may be willing to pay more if they expect superior investment returns – consistent alpha is scarce and worth paying for. By the same token, justifying higher-than-average investment management fees is difficult absent above-average performance. Investors should evaluate fees in an effort to find the most cost-efficient, outperforming investment managers.

Equities are riskier than fixed income securities; they also have higher value-adding potential. The relatively lower value-adding potential for fixed income places downward pressure on fees (with the exception of high yield and convertible fixed income securities) as equity fees are markedly higher in both domestic and international asset styles.

We have identified the investment management costs to GSFA of the services provided by each manager on an individual mandate basis. This includes all fees related to managing investment mandates which are charged back to the client, including any rebate and scale discount formulae. We have also taken into account the degree of manager value added (alpha) expected to be achieved within each mandate. We can then make an assessment as to whether the fees charged to GSFA are reasonable, bearing in mind that no level of fee can guarantee achievement of value added (although the probability of this should be maximised – an issue linked to the processes which GSFA has followed for selecting and reviewing managers – see sections 4 and 11).

The GSFA typically adopts segregated mandates, with the exceptions being for offshore investment in equity and property. The use of standalone mandates means that the GSFA owns, and needs to account for, separate assets such as shares and bonds rather than units in a pool shared by other investors. Pooled funds typically have lower placement minimums than separate accounts, making them an effective means for many schemes to gain access to an investment strategy, and custody is maintained within the pool.

A segregated approach increases the administration load as each security needs to be accounted for separately, and requires the use of a separate custodian. However, it allows for greater flexibility within the mandate and can also be a suitable way for an investor to access managers from a tax perspective. While minimum size thresholds imposed by managers can negate their use by some investors, in the case of the GSFA this does not pose an issue. The GSFA has its own appointed custodian and we believe the use of segregated mandates where available is appropriate.

There is generally little difference in fees for separate accounts versus pooled funds in domestic asset classes. At most placement levels, pooled funds tend to be slightly more expensive than separate accounts. This reflects the inclusion of custody costs, which tend to be higher for fixed income when compared to equity. For global products (both equity and fixed income), pooled funds are distinctly more expensive than separate accounts. This reflects the inclusion of custody costs, which tend to be more expensive for international securities when compared to domestic.

10.2 Context for Relative Assessment

Mercer Investment Consulting operates in the New Zealand markets and accordingly has knowledge of fund manager services provided specifically to locally based investors. In addition, on a global basis Mercer conducts periodic surveys of fund manager fees. This information is summarised in a document known as the Mercer Global Fee Study, which provides an additional degree of perspective for present purposes. It is particularly relevant given the large size of the GSFA's investments in a local, but not offshore, context. In other words, fees paid by GSFA should be competitive on a global scale, after making a (small) allowance for geographical issues affecting servicing the mandate.

The Global Fee Study uses published fee schedules on Mercer's Global Investment Manager Database (GIMD), to which more than 2,000 firms regularly provide data on more than 11,000 strategies. The analysis focuses on fees for separately managed and institutional pooled accounts. Tiered or asset-based fee schedules, which offer a discount for larger accounts, are available for the majority of separately managed and institutional pooled accounts. Fees quoted in basis points generally decrease as placement size increases.

We note that the Global Fee Study reflects only initially quoted fees, whereas in Mercer's experience over 70% of investment managers indicate they will negotiate fees and/or offer performance-based fees. Because investment managers typically publish fees and then negotiate downward, we would expect actual fees paid by clients to be less than the average fee shown in the study in each sector.

10.3 Active New Zealand Fixed Interest

The GSFA uses two firms for active management of domestic fixed interest – AMP Capital Investors and AllianceBernstein. The mandates are in the vicinity of NZ$250 million each. The target alphas of the GSFA's mandates are, at 60 basis points per annum, lower than industry averages which would tend to dampen the fee (this is discussed in Section 4). Notwithstanding we regard the fees as competitive.

10.4 Active New Zealand Equities

The GSFA uses two firms for active management of domestic equity – AllianceBernstein and Tower Asset Management. The mandates are in the vicinity of NZ$280 million. The fees negotiated for GSFA are close to the industry averages suggested by Mercer's Global Fee Study for similar volumes (one fee is slightly above). The alpha targets used by the GSFA's managers are also close to industry averages used for the data.

10.5 Active International Fixed Interest

The GSFA uses three firms for active management of international fixed interest – PIMCO, Goldman Sachs Asset Management and Wellington Management. The first two mandates are for approximately $260 million and the third for around $210 million. Target alpha in all cases is 100 basis points per annum which is a common objective for mandates of this type. Of note is that the fee charged by PIMCO relates to the funds under management of <u>both</u> the GSFA and the National Provident Fund.

Fees paid by the GSFA compare favourably with the Global Fee Study data.

10.6 Passive International Equities

The GSFA's international equities exposure is managed passively. The managers used are AMP Capital Investors (around $1 billion) and Arcus Investment Management who use State Street Global Advisers as a sub-manager (around $500 million).

We note that passive strategies attempt to mimic benchmark indexes, which in the case of the GSFA is a modified MSCI "grey list" Index. Such strategies require little original research and, typically, minimal account servicing. As noted previously, the potential for value added drives fees to the point that the market will pay them. By nature of their objective, passive strategies have little to no potential to add value versus a benchmark, so passive fees are consistently lower than active investment management fees. On average, index-based equity strategies cost 50 to 65 basis points less than active strategies. This means active managers must outperform their benchmark index by at least this much, or they will have underperformed a passive strategy after management fees are deducted.

The Global Fee Study focuses on active rather than passive management of international equities and accordingly the data is not relevant to the GSFA. However, the range of market fees for this asset class, managed passively, is very tight given the relative homogeneity of the products. Fees paid by the GSFA are close to Mercer’s observation of market norms.

10.7 Active International Property

The GSFA has exposure, initiated relatively recently, to international listed property through AMP Capital Investors (approaching $100 million) in a pooled fund and LaSalle Investment Management (just over $100 million) in a segregated account. LaSalle has an outperformance target of 250 basis points per annum, while AMP’s target is less explicit other than a broad objective of outperforming the index.

The GSFA also has exposure to United States unlisted property through DB REEFE in a pooled mandate which has recently grown to around $75 million. The fee structure for this is idiosyncratic being a mixture of investment management, new property acquisition and finance fees, plus a performance fee, making relative fee competitiveness judgements problematic.

10.8 Currency

The GSFA contracts with State Street Global Advisers and ANZ National Bank to provide currency hedging services for international equities and fixed interest.

The quantum of currency hedging is very substantial in the NZ context, allowing the transacting parties to negotiate outside but below the range of fees levels of ‘normal’ NZ practice.

10.9 Conclusions

In considering the investment management fees paid by the GSFA to their external managers, we have taken into account our own experience with New Zealand clients, the experience of offshore colleagues (particularly in respect of larger mandates) and Mercer’s Global Fee Study. We have also had regard to the performance objectives of each manager and the general quality and substance of those managers. We conclude that the fees paid by the GSFA are reasonable by comparative standards. In saying this we note that, at the margin, there is often the opportunity for clients of significant size (or status) to attempt to drive fees to minimal levels. However, this is not always of mutual benefit given client expectations for servicing and the need for the manager to adequately fund resourcing to deliver on their mandate objectives.

We perceive our conclusion that the GSFA is paying fees at satisfactory or better levels to be a function of:

- competitive tension existing in the provision of funds management services in all asset classes covered, particularly for a client seen as "desirable" to managers on a comparative basis (i.e. a large investor by New Zealand standards, associated with government, with a long term investing horizon);

- the involvement of investment advisors with knowledge of fee levels on an international basis;

- some knowledge within the Board of GSFA, and its adviser Annuitas, of fees paid by comparable local institutions for comparable mandates.

We have asked GSFA whether there is a policy for when or under what circumstances it attempts to secure fees with a manager based on the combined investment with the National Provident Fund (as is done with PIMCO and LaSalle). The GSFA advises there is no policy on this matter, aside from an informal arrangement whereby where one of the Funds (say GSFA) is engaging a manager used by the other Fund (NPF), Annuitas will seek to negotiate fees based on the combined sums under management. A clearer policy on this would potentially be useful, depending on expected protocols for how independently the two funds should operate. This raises the further issue of whether the policy should extend to fund manager relationships put in place by other government entities such as the Accident Compensation Corporation and the New Zealand Super Fund.

We have also asked the GSFA whether there any fee arrangements based on the multiple use of one manager for different mandates within the Fund, for example AMP Capital Investors and AllianceBernstein. There are no explicit arrangements in place to cover this. However, we are advised that this issue would have been taken into account during the fee negotiations for the second mandates for AMP and AllianceBernstein. Certainly we believe such a procedure is appropriate to adopt as standard.

11

Operations Consistent with ‘Best Practice’ – Custody, Transition and Rebalancing Policies

RFP: Investment manager and custodian monitoring

- Are the processes put in place to monitor the investment managers and the custodian thorough and consistent with best practice? Have appropriate benchmarks been identified?
- Are these processes being followed?
- What compliance functions does the Authority have in place to ensure adherence to investment manager mandates?

11.1 Custody

Information provided

- *Service Level Agreement between Government Superannuation Fund Authority and JPMorgan Chase Bank N.A. 26 April 2005* (“SLA”).
- *Mercer Authority Review, Custodian* (“custodian monitoring document”) (sets out how the Authority is monitoring the custodian).
- *30 August 2001, Recommendation from the GST Establishment Board for the Appointment of Global Custodian*
- *Government Superannuation Fund & National Provident Fund, Service Review – Quarter 1, 2005, 27 May 2005, JPMorgan*
- *Government Superannuation Fund & National Provident Fund, Service Review – Quarter 2, 2005, JPMorgan*

- *September 2005 Quarter Service Review, JPMorgan*
- *December 2005 Quarter Service Review, JPMorgan*

11.2 Custody Background

Mercer IC was used as the consultant to assist in the selection of a custodian for the National Provident Fund prior to the GSFA being established. Following an open tender, NPF selected JP Morgan as its custodian and in 2001. GSFA made the same decision (without further Mercer input).

Custodians play a pivotal role in the investment management process. The timeliness, accuracy and flexibility of the services provided by a custodian have a measurable impact on the overall performance of clients' investment portfolios. An effective custodian monitoring program should monitor the accuracy, timeliness and flexibility of the service delivery. Ultimately we consider that a systematic, comprehensive custodian monitoring program, diligently applied, is the best means available of ensuring that the Authority is getting the best service possible from its current custodian.

11.3 Custodian – Accuracy

Unfortunately no custodian, no matter how well trained their staff or how sophisticated their systems, is infallible. Mistakes can and do happen and can have serious consequences for the overall performance of client portfolios. Errors in trade processing for example can flow through into incorrect portfolio holdings and valuation reports. Subsequent investment decisions which are based on this inaccurate information could be different from the decisions that would have been made if accurate information was provided; materially different performance outcomes could arise.

The challenge in custodian monitoring is to assess custodians in terms of their ability in minimizing the incidence of errors, the speed with which they identify errors and their efficacy in managing the impact of errors on their clients' portfolios. It is also important to consider the degree of protection offered to the client through the contractual terms.

11.4 Custodian –Timeliness

The consequences of a custodian delivering accurate information late can be as detrimental as delivering inaccurate information on time. To illustrate, let us consider the scenario where an investment manager has been advised that new money for investment will be imminently credited to a client portfolio. The investment manager is not permitted to gear the portfolio, so they must wait for the custodian's liquidity report to confirm that the money has been credited before they can start purchasing new securities.

In the event that the liquidity report is delivered late - too late for the investment manager to invest all the new money - the residual money sits idle in the account until the next day. In a rising market this delay could generate a significant opportunity cost which would then translate into a lower overall return for the portfolio.

11.5 Custodian - Flexibility

The key with flexibility is to strike an appropriate balance between control and efficiency; this balance will be different for each of the functional areas of the custodian's organisation. In some areas, such as securities pricing, we believe there should be limited flexibility; processes and controls in this area should be rigorously applied to ensure there is no interference with the agreed method of pricing securities.

Yet in other areas, such as performance reporting, flexible systems which can accommodate tailored reporting for clients could assist investment decision making and potentially enhance returns. Flexibility can also translate into greater service scope which may include, for example, offering so-called revenue enhancing services such as securities lending and commission recapture programs.

11.6 Custodian - Assessment

Please note: the text that follows a shaded bullet (●) are Mercer's comments on what we consider to be market best practice; and the text that follows an unshaded bullet (○) are Mercer's assessments on the Authority's current practices relative to market best practice.

There are five key elements of best practice custodian monitoring:

(1) Clearly defined and agreed service standards

- The first step in building a best practice custodian monitoring program is to clearly define and agree the timeliness and accuracy standards for each individual service to be provided by the custodian to the client.

- This information is typically documented in a Service Level Agreement ("SLA") between the client and the custodian.

o Based on our review of the SLA, Mercer considers that the Authority has a comprehensive SLA in place with JPMorgan which clearly sets out the agreed service standards; and in our opinion reflects market best practices.

(2) Clearly defined and agreed performance measures

- Having the foundation of a clearly defined and agreed set of service standards then enables the establishment of performance measures, typically called Key Performance Indicators (KPI).

- KPIs are the measures by which the client will assess and monitor the performance of the custodian in meeting the agreed service standards as set out in the SLA.

  - Based on our review of the December 2005 Quarter Service Review report, we note that the KPIs have been agreed between the Authority and JPMorgan.

(3) Regular and useful custodian performance reporting

- The custodian's reporting of their performance against the agreed performance measures ("KPI reporting") typically forms the basis of the service review meetings (quarterly, biannual) between the custodian and the client.

- To be considered market best practice KPI reporting must, at a minimum:

  - Clearly depict the historic performance of the custodian against each individual KPI;

  - Highlight and explain any instances of accurate information being delivered late or inaccurate information delivered on time and subsequently reissued;

  - Be issued not less than quarterly (to allow action to be taken to address any service deficiencies); and

  - Have clearly documented and agreed escalation procedures that ensure that the relevant individuals are made aware and kept informed of material issues and service deficiencies.

  - Based on our review of the December 2005 Quarter Service Review report and specifically the section entitled "Service Deliverables", Mercer considers that the custodian's performance is being comprehensively and systematically reported.

(4) Complete and up to date record of all issues

- In addition to monitoring the custodian's performance in terms of their ability to deliver services accurately and on time, Mercer also considers it essential for the custodian to maintain an accurate and up to date log of all outstanding issues between the custodian and the client ("issues log").

- The issues log typically forms the basis of the regular (weekly, fortnightly, monthly) service meetings between the custodian and the client.

- Maintaining and regularly sharing the issues log:

  - helps to ensure that a full and accurate list of outstanding issues is maintained (thereby reducing the risks of issues falling between the gaps); and

  - enables the client to monitor the custodian's timeliness in resolving issues and identify any systematic issues and patterns.

o Based on our review of the December 2005 Quarter Service Review report and specifically the section entitled "Service Plan", Mercer notes that JPMorgan does appear to be maintaining a sufficiently thorough and up to date log of all outstanding issues relating to the Authority's custody arrangements.

(5) Regular service meetings

- Building the protocols to ensure an open dialogue between the client (and the client's other service providers) and the custodian is crucial to any best practice custodian monitoring program. Indeed it is fundamental to ensuring a productive and efficient relationship between the two organisations and their respective staff.

- The frequency, agenda and attendees are key drivers of the efficiency of service meetings; the right mix of these elements will differ for each client-custodian relationship.

- For each meeting an agenda (with associated papers including the issues log and KPI reporting) should be issued to all attendees prior to the meeting and accurate minutes should be maintained and distributed after the meeting.

- For organisations of a similar scale and complexity (in investment structure) as the Authority we would expect there to be at least two concurrent meeting streams:

    - a regular service meeting with a detailed operational focus conducted fortnightly or monthly; and
    - a higher level, more formal service review meeting conducted quarterly or biannually.

- Based on our review of the Quarter Service Review reports, Mercer notes that service review meetings are being conducted and appear to be adequately documented. Mercer has also been advised that fortnightly conference calls are held between JPMorgan and the Authority.

11.7 Custodian - Conclusions

Mercer has formed a positive overall assessment of the custodian monitoring currently being undertaken by the Authority of its current custodian JPMorgan. The Authority has a comprehensive Service Level Agreement with JPMorgan which clearly defines the service standards, there appears to be a systematic program of monitoring in place to track JPMorgan's service delivery against these standards and regular service meetings to help ensure an open dialogue is maintained between the Authority and JPMorgan.

To further enhance the governance structure around the custody arrangements we believe that the Authority ought to undertake a benchmarking review of their current custodian, at a minimum, once every three years. The custody market is continually changing both in terms of service scope and fees. Over the last five years, there have been significant changes in terms of new services being offered, shorter timeframes for delivery of information, roll out of new technology, as well as a general decline in fee rates. For these reasons a custody arrangement negotiated in 2001 may potentially be delivering lower value for money than an arrangement negotiated today with the same custodian.

This benchmarking exercise is intended to compare the capabilities of the current custodian against a peer group of similar custodian organisations who offer services to New Zealand based clients of a similar scale and sophistication as the Authority. The benchmarking exercise should also provide an assessment of whether the Authority is getting value for money from its current arrangement both in terms of fees as well as service standards.

As an example of the services which are available, Mercer itself provides a custodian benchmarking service which uses our Global Custodian Database, one of the largest repositories of custodian information in the world. Our Database gives us a platform for assessing custodians consistently and thoroughly across all the functional areas of their organization and all the geographies in which they operate. By using the Database neither the current custodian nor any other third party will need to be contacted in order to undertake the benchmarking exercise.

In addition, a fee module can analyse the current custodian's fee arrangement against up to date fee rate cards from other custodians for clients with similar characteristics as the Authority. The analysis also takes into account of the custodians' implicit (or hidden) revenue sources such as securities lending, foreign exchange, commission recapture and cash management.

11.8 Transition management

Information provided

- *Report 8.7 Transitions* ("transition management document") (sets out information on the International Fixed Interest and New Zealand Equities transitions conducted in April 2004).

Background

Based on the information provided, we note that the Authority undertook two transitions in April 2004, one involving International Fixed Interest and the other New Zealand Equities. In both cases the approach taken was not to engage a professional transition manager but rather to use the incoming managers to restructure the portfolios into line with their requirements.

The Authority employed a technique known as implementation shortfall to measure the performance of both transitions. The implementation shortfall for the International Fixed Interest transition was calculated to be a cost of 3 basis points and the implementation shortfall for the New Zealand Equities transition was calculated to be a benefit of either five or 12 basis points depending on the time period over which performance was measured.

11.9 Transitions - Assessment

Managing transitions

Ultimately, there are three options currently available to the Authority in terms of managing transitions, each choice can be distinguished by the approach taken in terms of project management and trade execution.

- Do not use professional transition management – undertake the project management component internally and use the investment managers to execute trades through Authority's appointed broker(s);

- Use a professional transition manager, broker model – engage a transition manager affiliated with a broker or custodian to manage the project management component and execute the trades; or

- Use a professional transition manager, consultant model – engage a transition manager affiliated with a consultant to provide specialist project management expertise and coordinate all facts of the transition including, but not limited to, the trade execution through the brokers on their panel.

One of the challenges in selecting the right transition management arrangement is that there are no ex ante guarantees that one arrangement will outperform another. Mercer considers it critical to consider the specific characteristics and requirements of each transition and assessing each alternative approach in terms of its suitability. Mercer suggests that the degree of complexity of the transition should be one of the main factors considered.

Complexity of transitions is not driven by the total value to be transitioned, all other things being equal whether there is $100 million or $1 billion of assets to be transitioned this will not affect the complexity of the transition. Complexity is a function of the number of individual transactions, the number of parties (investment managers, custodians, brokers, advisers) involved, the number of portfolios and asset classes involved and whether there are any administrative functions that need to be taken account such as unit pricing and member investment choice.

For complex transitions we would suggest that the transition management arrangements which can draw on specialist project management expertise could be considered more favourably than those arrangements without that expertise.

Measuring transition cost and transition performance

There are a number of analytical methods that can be used to measure the total cost of a transition. Since the release of the "T standard", Implementation Shortfall has become more widely adopted and is now a market standard.

Implementation Shortfall analysis is intended to present a measure of transition cost, that is both the direct (transaction costs) and the indirect costs (opportunity costs) of the transition. The implementation shortfall technique compares the actual value of the portfolio after transition to the hypothetical value of the portfolio, if all necessary trades were undertaken instantaneously and at zero cost at the start of the trading period for that portfolio.

Mercer considers implementations shortfall the best way currently available of measuring the total cost of a transition. However, we do not consider implementation shortfall the best way of measuring the overall performance (success or failure) of a transition management exercise, since it captures market movement which is largely exogenous to the transition manager's control.

- Mercer recommends that a broader approach be taken when assessing the performance of a transition management exercise. At the outset a range of qualitative and quantitative objectives should be agreed for the transition. At the conclusion of the transition the transition management exercise should be benchmarked against each of these objectives. Typical objectives and their respective measures are illustrated below.

Objective	Transition performance measure
To apply a controlled process	Assessment of the Authority's management team and advisors as to the rigour applied to designing the project plan, the time taken to implement the transition, whether agreed deadlines were met and the extent to which each party involved in the transition was delivered accurate and timely information.
To minimise transaction costs	Quantified to the cent under two scenarios: the actual transaction costs; the hypothetical costs that could have been incurred without professional transition management.
To maintain effective market exposures	Extent to which the Authority's actual asset allocations diverged from the strategic asset allocations as a result of the transition, and the extent to which actual currency hedging levels diverged from target currency hedging levels.
To mitigate operational risks	The number of failed transactions, overdrafts, missed corporate actions, as well as the drain on the Authority's management team's time and the number of unit pricing anomalies.

11.10 Transitions - Conclusions

Both of the transitions undertaken by the Authority in April 2004 appear to have been executed with low transition costs as measured by the Implementation Shortfall technique. Indeed using this measure the New Zealand Equities transition was actually calculated to have achieved a benefit or "transition uplift".

There are no ex ante guarantees that using professional transition management will outperform a self managed transition. However, empirical data does suggest that using well resourced, experienced professional transition manager does tend to deliver outcomes which more consistently meet clients' transition objectives than self managed transitions.

Mercer strongly recommends that each time the Authority intends to undertake a transition a detailed and documented decision making process be undertaken. Key items to include in this analysis would be a relative assessment of the alternative approaches in terms of their ability in achieving the agreed transition objectives and their suitability in managing transitions with the particular characteristics and requirements of the transition in question.

11.11 Fund Manager Monitoring

Mercer IC has studied the processes for monitoring and reviewing fund managers and believes that these conform broadly to the notion of current best practice in the industry. Section 4 has already covered the important issue of the manager selection process which, if well executed, lowers the probability of carrying out formal reviews too frequently. Section 4 also covers in detail the manager rating and selection processes which are also relevant to ongoing monitoring of service levels and (from Section 10) the level of fees.

Compliance processes are also in place which reduce the likelihood of breaches to the fund manager agreements and describe the mechanisms for managing breaches.

11.12 Rebalancing

GSFA has explicit rebalancing policies set out in its Statement of Investment Policies, Standards and Procedures. Rebalancing is managed passively within approved ranges. Asset weightings are managed monthly.

The rebalancing processes have been studied by Mercer IC and found to be best industry practice in defining and achieving an appropriate trade-off between the high costs of rebalancing within very narrow ranges and the loss of portfolio efficiency relative to benchmark, of straying too far away from benchmark portfolio weightings.

The rebalancing ranges are reported each year in the Annual Report. They include rules for individual asset classes and hedging ratios, as well as total growth assets and total fixed interest assets limits.

12

Operations Consistent with 'Best Practice' – Separation of Key Functions

RFP: Key Functions

- Is there a clear separation between investment management, custody and oversight functions?
- Does the Authority have an appropriate balance between its own in-house investment management advice and outsourced advice?
- Is there a programme in place for Authority personnel to update their skills and to keep in touch with evolving investment management practices?

12.1 Separation of Functions

There are within the GSFA business structure, clear, separate responsibilities and accountabilities for the key functions of investment management, custody and oversight. These responsibilities and accountabilities are monitored and reviewed appropriately. There are separate sections covering the operations of the custodian and the fund managers.

Within the GSFA itself there are clear, separate responsibilities and accountabilities for the Board and its Committees, for the executive management, employees and Annuitas contractors.

12.2 Balanced Sources of Advice

Appointments to the Board of GSFA are made by the Minister and an objective assessment of their skills and experience would be hard pressed not to be impressed by their individual skills relevant to the responsibilities, but also the mix of skills necessary to manage the GSFA well so that it carries out its functions very well.

Well qualified Board members, including the Chairman, are the first ingredients for ensuring that balanced sources of advice are obtained. It takes a certain degree of skill and/or experience to discern what kinds of advice are required, where to acquire the advice, and how to evaluate it once it has been received.

GSFA has sought service providers through competitive tenders and set up monitoring and review processes for the advice received. On occasions GSFA has also sought second opinions on issues, or consulted informally with its peers and specialists in the market for specific advisory services, including Mercer IC.

As the GSFA progressed through its third year, 2003, as the full transition was being completed, GSFA felt that its in-house investment capacity ought to be strengthened in line with its general business planning. Much of the burden in the early years for carrying the investment decisions was borne by Board members, rather than by management. The new Annuitas service agreement (end of 2003) addressed this perceived imbalance and in 2005 a new position of General Manager, Investments was filled.

The creation of this new position strengthened the in-house resource, it is true, but within an overall model which stresses the outsourcing of the day-to-day management of investments and a ‘best practice’ model of ‘managing the managers’. In this respect the emphases of GSFA are similar to the New Zealand Superannuation Fund whose assets under management are destined to become much larger than those for which GSFA is responsible.

12.3 GSFA Personnel – Skills’ Programme

GSFA personnel, both at the Board and Management level, are encouraged to maintain and enhance their skill levels while carrying out their responsibilities. Carrying out their responsibilities brings personnel into contact with a wide range of local and international fund manager operations and other large funds, with custodian and investment consultants and tax consultants.

GSFA has been able to attract and retain high quality staff and the Minister has been able to attract and retain high quality Board members. As an external observer Mercer IC feels that GSFA has struck the correct balance in designing its staff conditions, including training. Mercer doubts that the Crown can rely upon this happy outcome indefinitely, especially considering the skills increasingly required at Board level and appropriate remuneration determined by local and global packages for this type of work.

A study by the Crown looking at the incentive structures for GSFA in relation to a less uncertain set of objectives is likely to pay a dividend in the form of greater confidence in the abilities of GSFA to build on its strong position.

13

Operations Consistent with 'Best Practice' – Managing Investment Risks

RFP: Investment risk management

- Does the Authority have a thorough process for identifying and responding to investment risks?
- Have the Authority identified the significant investment risks they are exposed to?
- Are there any investment risks that appear to be unmanaged by the Authority?

13.1 Risk Management Process

GSFA's process starts with a Statement of Investment Beliefs which is continuously reviewed and formally reviewed annually. The Statement of Investment Policies, Standards, and Procedures is a living document in two parts. Part 1 covers matters required under the Act. Part 2 covers the current investment structure of the Fund. Both parts embrace the issues of investment risks and how these risks are managed within the policies and investment guidelines for the Fund.

The process is a very thorough one and has been subject to public scrutiny since 2001 through GSFA's annual reports to Parliament or tabled in Parliament by the Minister in the form of a statement of intent. GSFA has also adopted a formal Risk Management Policy Statement and carries out Risk Profile audits covering both investment risks and all other identified risks. Audit schedules have been sighted as at 6 October, 2004.

13.2 Identification of Risks

The Risk Standards Working Group (RSWG) is a group of US industry practitioners working with US corporations but writing under copyright as individuals[3]. Their 1996 report remains a standard for industry practice. The standards are grouped into three:

I. **Management**
   a. Acknowledgement of fiduciary responsibility
   b. Approved written policies, definitions, guidelines and investment documentation
   c. Independent risk oversight, checks and balances, written procedures and controls
   d. Clearly defined organizational structure and key roles
   e. Consistent application of risk policies
   f. Adequate education, systems and resources, back-up and disaster recovery plans
   g. Identification and understanding of key risks
   h. Setting risk limits
   i. Routine reporting, exception reporting and escalation procedures

II. **Measurement**
   a. Valuation procedures
   b. Valuation reconciliation, bid/offer adjustments and overrides
   c. Risk measurement and risk/return attribution analysis
   d. Risk adjusted return measures
   e. Stress testing
   f. Back testing
   g. Assessing model risk

III. **Oversight**
   a. Due diligence, policy compliance and guideline monitoring
   b. Comparison of Manager strategies to compensation and investment activity
   c. Independent review of methodologies, models and systems
   d. Review processes for new activities

[3] "Risk Standards for Institutional Investment Managers and Institutional Investors, 1996." Brenner, Byrne, Campisano, Cottrill, deMarco, Lukomnic, Rose, Russ, Seymour, Wassmann, Williamson.

13.3 GSFA - Identification and Management of Risks

I. Management

	Comments/principal location
a. Acknowledgement of ‘fiduciary’ responsibility	SOI, AR
b. Approved written policies, definitions, guidelines and investment documentation	SIPSP
c. Independent risk oversight, checks and balances, written procedures and controls	GSFA Board
d. Clearly defined organizational structure and key roles	SOI, AR
e. Consistent application of risk policies	SOI, AR, QIP, IMA, SLAC, SIPSP and GSF Board
f. Adequate education, systems and resources, back-up and disaster recovery plans	GSF Board
g. Identification and understanding of key risks	SOI, AR, SIPSP
h. Setting risk limits	SIPSP
i. Routine reporting, exception reporting and escalation procedures	SIPSP, IMA, SLAC

SIPSP = GSFA Statement of Investment Policies, Standards and Procedures
SOI = GSFA Statement of Intent
AR = GSFA and GSF Annual Reports
IMA = GSFA Investment Management Agreements with Fund Managers
QIP = GSFA Quarterly Investment Performance Reports
SLAC = GSFA Service Level Agreements – Custody
GSFA Board = Board, 4 Standing Committees plus Special Committees
SAA Reviews – Annual or as required

II. Measurement

	Comments/ Principal location
a. Valuation procedures	SIPSP, SLAC, IMA
b. Valuation reconciliation, bid/offer adjustments and overrides	SLAC
c. Risk measurement and risk/return attribution analysis	SIPSP, QIP, IMA, Special reports in-house or outsourced as required
d. Risk adjusted return measures	QIP
e. Stress testing	SAA Reviews
f. Back testing	SAA Reviews
g. Assessing model risk	SAA Reviews

III. Oversight

	Comments/ Principal location
a. Due diligence, policy compliance and guideline monitoring	SIPSP, SLAC, IMA, QIP
b. Comparison of Manager strategies to compensation and investment activity	QIP, SIPSP, Continuous
c. Independent review of methodologies, models and systems	Special reports outsourced as required
d. Review processes for new activities	GSFA Board or Management as appropriate

SIPSP = GSFA Statement of Investment Policies, Standards and Procedures
SOI = GSFA Statement of Intent
AR = GSFA and GSF Annual Reports
IMA = GSFA Investment Management Agreements with Fund Managers
QIP = GSFA Quarterly Investment Performance Reports
SLAC = GSFA Service Level Agreements – Custody
GSFA Board = Board, 4 Standing Committees plus Special Committees
SAA Reviews – Annual or as required

14

Investment Performance – Market Entry and Exit Strategies

RFP: Market entry strategy

- Was the market entry strategy adopted by the Authority prudent and consistent with best practice?

14.1 The Background

Market Entry: GSFA argues well that the process of implementing a new investment structure was constrained by market exit strategies needed to sell off large holdings in NZ Government Stock without disrupting the market. Mercer IC also is familiar with the investment climate prior to, during and following the transition phase of the GSF, from its former defensive investment structure to its new diversified portfolio.

From the viewpoint of the general taxpayer it is reasonable to ask whose responsibility it was to make a decision about when to proceed with the restructuring of GSF assets and the related decision about how to proceed. The former question remains relevant to the Review because the review period covers the period when the transition was achieved. Can an objective judgment be sustained that GSFA ought to have delayed putting into effect an investment strategy which was more risky than its historical strategy, at a time when global financial markets were extremely volatile? Mercer IC believes that the general taxpayer should look to this Review for answers to this question and this is the spirit in which Mercer has approached this task.

What appears to be the case is that GSFA assumed the responsibilities referred to in the previous paragraph, appropriately under the legislation, and also appropriately, referred their decisions to the Minister who acknowledged their decisions without giving any fresh directions.

GSFA, having taking counsel from a variety of professional sources, decided that it was desirable to start the transition to a new investment structure as early as possible. GSFA had expressed its own misgivings about the market environment and actively sought advice.

Mercer IC has sought to make a clear distinction between market entry and the transition process. The market entry discussion ought to include a view on whether to proceed with a transition at all and, if not, what will be the determinants of the speed of the transition. GSFA worked very hard in 2001 through 2003 on the latter issue and Mercer IC accepts the difficulties which GSFA faced in doing so. A separate and formal discussion about whether to proceed at all is an area where we feel that GSFA, and perhaps the Crown, share some responsibility for proceeding to transition a traditionally defensive Fund strategy to a more aggressive strategy during a period of highly volatile financial markets.

The advice given to GSFA was that in spite of financial market volatility there were no compelling reasons to defer the immediate implementation of the transition plan. Neither did the legislation nor Crown directives suggest a timetable nor a process for determining a timetable. But, given the history, nature and size of the Fund assets was the GSFA correct to judge that the time was right to proceed with the transition to a new structure?

With hindsight it is easier to zoom out and suggest that in 2001 GSFA ought not to have approved implementing the transition at all. Mercer's understanding is that GSFA had the authority to do so. Neither did the Minister react negatively to the plans put before him in September, 2001. But did GSFA feel that it was desirable to proceed with a transition immediately? Yes, because professional advice was received that although short term volatility would be high - indeed, global share markets recovered very strongly in the quarter (December 2001) in which GSFA commenced the transition – this volatility ought not to deter GSFA from proceeding with a transition.

Therefore, the answer for the general taxpayer is that GSFA, on balance and after seeking counsel, felt that overall market conditions did not warrant delaying the start of the transition but did warrant close scrutiny and a cautious transition process. While this was a tough judgment to make it did expose the GSF assets, albeit gradually, to volatile, and generally weak, share markets over the next 18 months. History may have turned out differently and it is true that share market investors do face this kind of volatility continually.

The lack of a full and separate consideration of market entry timing (decision to proceed) for the GSF, whether a responsibility for the Crown or for GSFA itself, appears to have been a gap in the process followed in 2001 and 2002. Or, it was generally accepted by the decision makers (Crown and GSFA) and, if so, then in Mercer's view it was tacitly so.

However, GSFA did set out very clearly its transition plan and its intention to proceed forthwith, based on advice provided to it. The Crown was fully informed of GSFA's intentions.

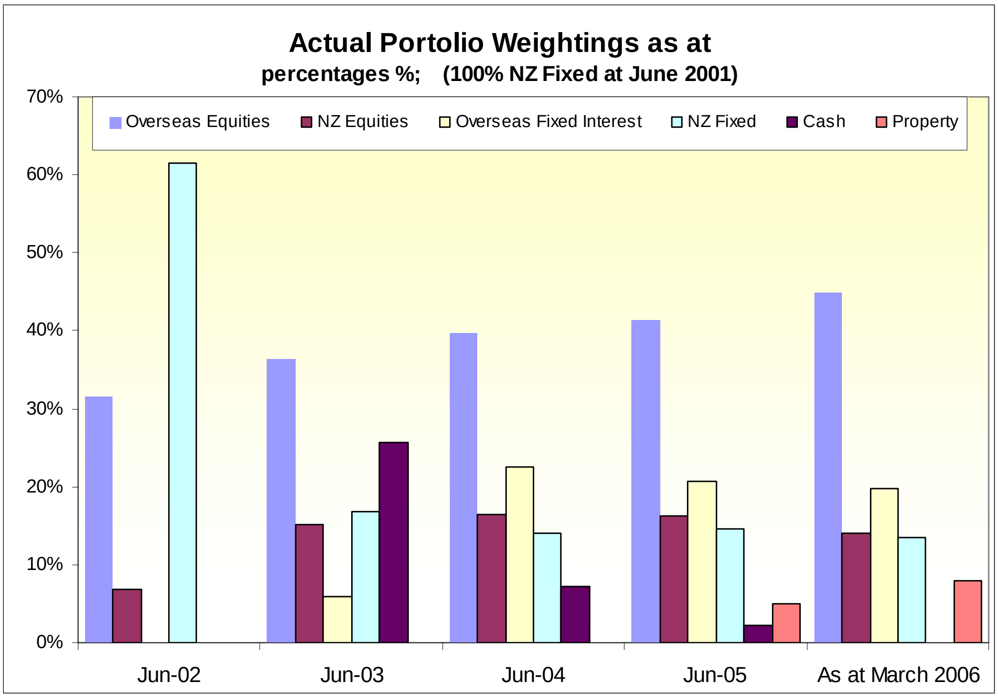
GSFA's perspective is that it was acting on advice about how to make the transition from its then inherited, and existing, investment structure to the structure which it had adopted after long months of consideration and recommendation, first by the Establishment Board which worked closely with the Crown, and then by the Authority itself.

14.2 Market Exit

Mercer accepts that the constraints faced by GSFA in moving from a multi-billion dollar fund of New Zealand Government Stock to a fund with a wide diversification of assets were considerable. The GSFA achievement in selling down the investments by public tender over a period of about a year was a considerable one in the context of the small scale of the New Zealand markets. GSFA sought high quality advice and completed the whole process with a high degree of integrity and with little, if any, discernible impact on the efficient functioning of the markets themselves.

The issue which inevitably arises however is whether the demanding task of designing and organising a market exit strategy also worked against the possibility of not proceeding at all, for a time, with a market entry process.

The Review has been unable to find a wholly convincing argument or legal imperative for the move to a diversified portfolio to be started immediately, without formal consideration of not proceeding at all, although there was certainly an awareness of the market weakness being experienced from 2000 onwards through into 2003.

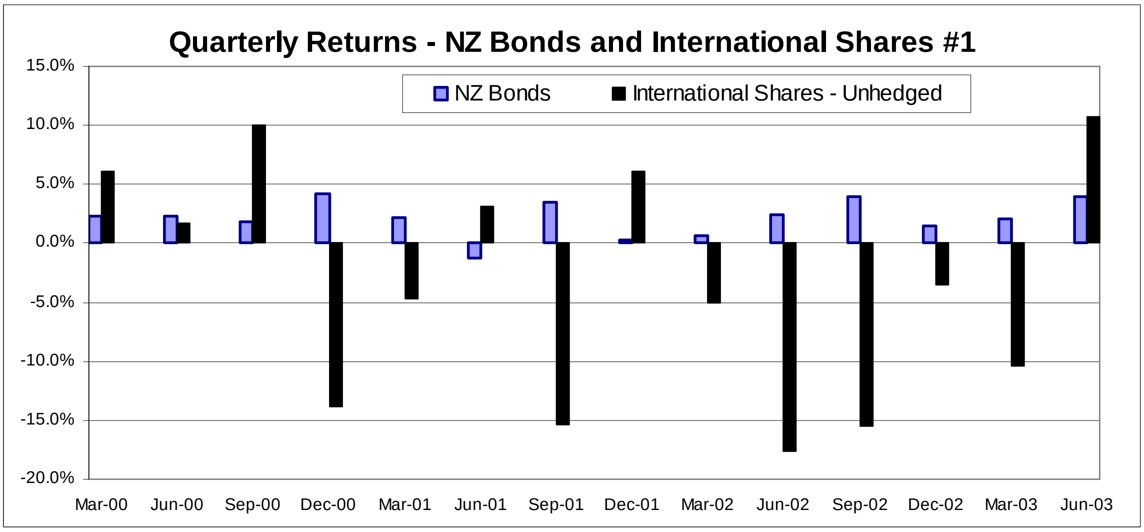

Actual Portolio Weightings as at
percentages %; (100% NZ Fixed at June 2001)
Overseas Equities
NZ Equities
Overseas Fixed Interest
NZ Fixed
Cash
Property
70%
60%
50%
40%
30%
20%
10%
0%
Jun-02
Jun-03
Jun-04
Jun-05
As at March 2006

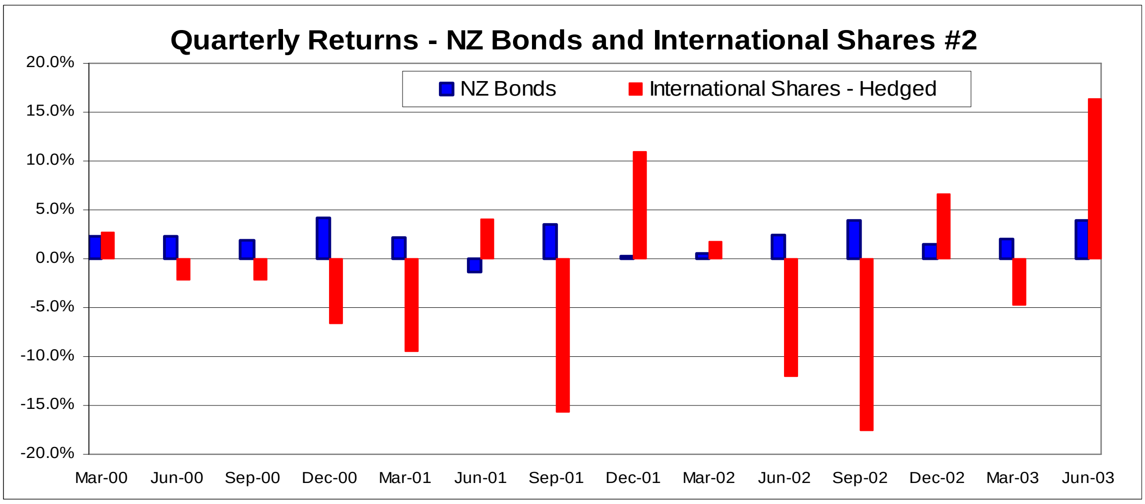
14.3 Transition Management Plan

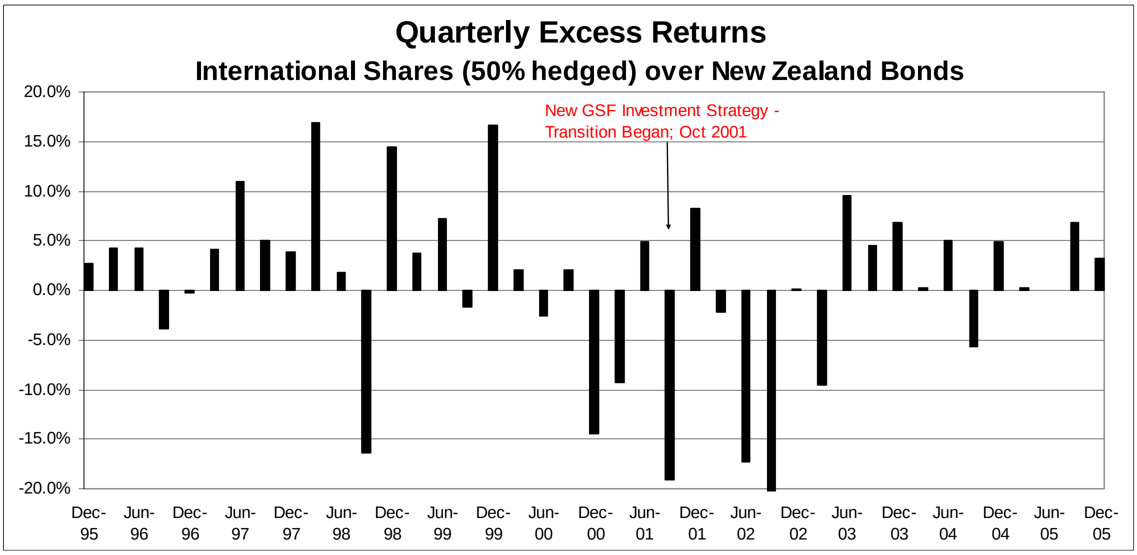
Mercer IC has studied the Plan and been very favourably impressed with the attention given to all of the issues required to ensure an orderly disposition of very large tranches of NZ Government Stock over an extended period. It is very clear that the transition process needed to be handled expertly if the GSFA were to realise the full value of the Fund's assets while at the same time avoiding disrupting the efficiency of the market itself.

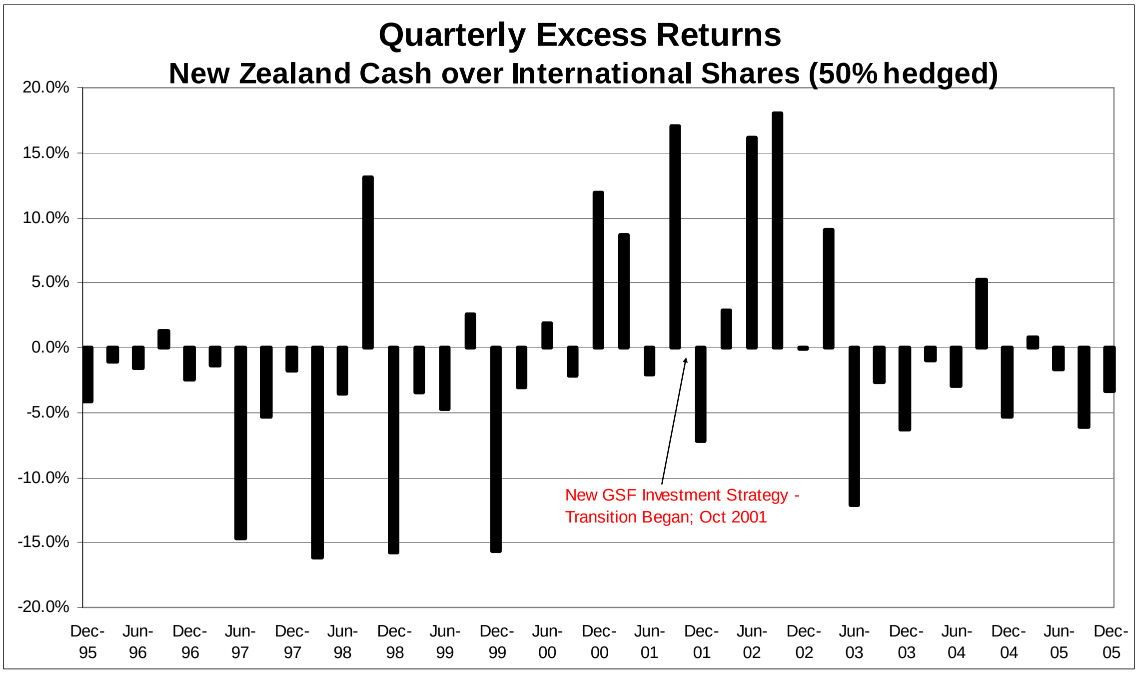
Similar arguments also prevailed on the market entry side given that even global equity futures markets do not always enjoy deep liquidity, nor forward markets for hedging global currency exposures back into NZ dollars. GSFA achieved its transition goals very successfully.

14.4 Market Conditions









14.5 Market Entry Considerations - Alternatives

It is reasonable to ask what is a 'best practice' approach to Market Entry for a very large investment fund under no particular constraints The answer lies in coming to a judgement about the trade-off between entering the markets progressively over time and entering them immediately. An important factor is also the continuing expected Cash Inflow to the Fund through the first years of its new investment structure.

Mercer IC addressed this issue for the Guardians of the NZ Superannuation Fund a few quarters after September 2001 and included a section in the main report on the market entry decision. That report illustrated that formal consideration to market entry issues was regarded as very important for a very large Fund.[4]

Mercer IC advised the Guardians not to delay their market entry predominantly on the grounds that imminent Cash Inflows would be considerable relative to the initial size of the Fund. Less importantly, but still influential, was the fact that Global Equity market valuations had improved since September 2001, and public disclosure issues (Enron, WorldCom) which had pervaded the financial markets during 2002 had died down.

14.6 Consequences of Remaining Very Defensive

The legislation was clearly put into place in order to bring a much more diverse investment strategy to bear on the assets of GSF. GSFA was therefore faced with two short term strategies and four extreme outcomes – the other outcomes being mediocre in practical terms.

Implementing the diversified strategy as quickly as possible (within the constraints of market exit) could be achieved during very accommodating or (as in the event) very unaccommodating conditions. In the first case, GSFA would be seen as very wise to have acted without demur but in the second, GSFA would come under fire as would the policy argument for the legislation in the first place.

Delaying implementation could also have two extreme outcomes. Weak share market performances would have seen the GSFA praised for its wisdom in delaying. But consistently strong equity markets (as did occur from 2003 onwards) would have brought GSFA's judgment into question, especially since the legislation was intended to allow the Fund to benefit from the higher returns which equity markets provide.

14.7 Enabling a Faster Transition under Constrained Exit, Derivatives

GSFA has advised the Review that enabling a much faster transition by using derivatives was considered in theory but rejected as an impractical course of action in the NZ context, even if GSFA had wished to engineer a faster process. The NZ market is small relative to the quantum of funds which GSFA managed. In addition, global equity futures contracts do not qualify for NZ IRD Binding Rulings, and the benchmark portfolio specified such exposures.

[4] Market entry strategies generally come at some cost which, together with the difficulty of making market timing calls, rule out delaying implementation for smaller Funds.

14.8 Balanced Judgement

GSFA has exercised its judgment to proceed to implement its gradual transition during a very shaky period for share markets and after receiving professional advice about the short and longer term scenarios for financial markets.

Any judgment of the performance of the GSFA in its market entry strategies needs to take account of all the factors and cross-currents operating at the time of its decisions. These issues are addressed in Section 18 which summarises the Review's conclusions on GSFA's investment performance.

The attachment to this section is an excerpt from a publication in late 2001 of a New Zealand based fund manager which we provide here as probably representative of the industry at the time.

Mercer IC accepts that the transition was a formidable task. The Review has no negative judgement to make about the decision to design a more risky strategic asset allocation, in order to seek higher rates of return on the Fund's assets over the longer term.

It is also accepted that judging when bear markets end and bull markets begin is challenging to say the least and there are strong grounds for sticking to a benchmark strategy once a great deal of turbulence has already been experienced. There is strong logic in proceeding immediately to implement a transition once you are committed to the need to move from an old structure to a new one.

In this case there were special risks to implementing the transition immediately. First there was the sheer quantum of funds at risk. Secondly, the Fund's assets had been managed historically extremely conservatively.

Excerpt: AMP Henderson Global Investors (September 2001)

Lessons from a Difficult Year

Summary - Eight Lessons for Investors

1. There is nothing particularly unusual about the recent fall in equity prices. Declines of this magnitude and duration have happened in the past with regular frequency, and will do so in future.

2. The period from 1987 to 2001 was an unusually long time without a major equity correction. This may have left investors complacent about equity risk. Standard volatility assumptions imply negative equity returns about one year in three. A severe shakeout, such as this one, has historically happened every 5-10 years.

3. This does NOT mean we shouldn't invest in equity markets, merely that they are volatile. It is reasonable to expect share returns to exceed fixed interest by around 3% p.a. This implies equity returns should be higher by around 50% over ten years. Equities should remain a significant portion of the portfolio of long term investors.

4. Reacting to market falls by withdrawing funds is fatal, as is plunging in whenever markets have risen. This is largely because markets tend to revert to average returns. The strongest equity market returns are often experienced immediately following significant corrections.

5. Investors everywhere are prone to investing with hindsight. Inflows to securities markets surge in response to high returns and vice versa. Over longer periods this conceivably reduces returns by up to one half, and possibly more. Most investors would be far better served by not trying to time markets.

6. Near term prospects for equity markets are improving. The major markets are at their cheapest levels for several years. Monetary policy has turned stimulative and earnings estimates have now been heavily discounted. By contrast, fixed interest prospects look poor, as they have done after previous crises. The NZ$ has strengthened recently, but its upside potential is capped by the ongoing balance of payments overhang.

7. The benefits of diversification are as apparent as ever. Speculators in tech stocks have seen their investments fall almost 70% since early 2000. Broad equity markets have fallen only about one third of this amount. In contrast, returns from other asset classes have been strong. New Zealand equities are up 8% so far this year. Local and global fixed interest returns have been in the range of 10-12% for the twelve months to August. These gains should mean that balanced fund investors have essentially maintained their capital values. This is not a bad result considering how much those asset values had benefited from the preceding five years of bull markets.

8. Possibly the greatest damage from episodes like this is not to asset values, but rather to investors' confidence and to their investment strategy. It is imperative that investors choose an approach they are comfortable with and stick to it through thick and thin. None of these lessons are new or novel. The great shame is that investors seem to need to periodically re-learn them.

15

Investment Performance – Linkages to Crown Requirements Including Metrics

RFP: Satisfactory positioning for the future #1

- Are the measures of whether the Crown is getting adequate performance and value from the Authority appropriate?

Benefits to Crown: The legislation says 'maximise returns without undue risk to the Fund' GSFA has acted on behalf of the Fund alone in terms of a strict interpretation of the legislation. The Crown/Minister may have wished to have GSFA take tax revenue into account in assessing net benefits to Crown but the Minister does not appear to have intervened in this matter (see Section 15O of the legislation for provisions for ministerial direction).

Mercer believes that the key measure for the Crown is the net cost of the Scheme. This is explored previously in section 1.2 as:

Net Cost to Crown = Gross Contributions $_{Crown}$ – Contributions tax – Investment Tax

Crown contributions are a function of the Fund Share of Benefits (FSB) determination by the valuation actuary. The FSB represents the ratio of benefits paid each year by the GSF with the balance paid by the Crown. As shown in the above formula contributions tax and investment tax payments also affect the cost of the GSF to the Crown.

The other means of exploring net Crown cost is:

Net Cost to Crown = (Net Benefits + Expenses) – (Gross Contributions $_{Employee}$ + Gross Investment Returns)

Thus a riskier higher return strategy would be expected to reduce costs by increasing investment returns.

Mercer believes that metrics that analyse benefits to the Crown should:

- Consider how net Crown cost could be reduced, through
    - higher investment returns
    - higher investment taxes
- Consider downside risk measures such as
    - solvency position
    - potential for a worsening deficit.
- Consider investment performance objectives that are relevant to the entity and are reflected in the strategic asset allocation selected.

The Metrics used by the GSFA were

- Benefits of higher returns
    - Equivalent Capital Value (ECV)
- Solvency considerations
    - Probabilities associated with $300m movements in a constrained Unfunded Past Service Liability (UPSL)
- Performance Objectives
    - After tax return objective of bond index + 2.5%
    - Probabilities associated with $100m annual loss

As would be expected the measures used take into account the benefits of reduced contributions through higher expected returns, and the impact on solvency of holding riskier assets.

Mercer does however disagree with elements of the basis. The areas of critique are:

- The treatment of investment tax in the analysis
- The basis for some of the measures
- The use of some of the measures

Treatment of investment tax in the analysis

As discussed in section one, all analysis was performed on an after tax basis, thus

- Investment taxes were not considered as a benefit to the Crown
- Investment objectives were set relative to a tax minimised investment strategy, and the sensitivity of the tax advantage assumptions was not explored.

Should the Review ignore the effect of tax on Crown finances of GSFA investment structure? Surely the intention of the legislation was to improve the overall economics of running the schemes from the Crown's perspective?

For the GSF the sponsor is the Crown, who can use investment taxation as well as after tax investment gains to reduce Crown contributions.

The basis for and use of some of the measures

Mercer believes the following:

- Pre-tax return assumptions could also have been used, to capture tax flows to the Crown from the strategic asset allocation decision making.

- The passive tax advantage assumptions flow through all the analysis. For the performance targets:

  - The hurdle of 2.5% p.a. is lower on a fully taxed basis for the target of out performing the fully taxed bond index.

  - The ECV measure does not measure all the net benefits to the Crown of alternative investment strategies.

  - The benefit to the Crown of increased investment tax flows appear to have been ignored. Thus the margins valued were understated by up to one half.

- The ECV measure used only one discount rate – the expected after tax bond return.

  - Other discount rates were available for consideration

    - the Crown's cost of borrowing, or
    - the expected return of the portfolio being modelled.

  - Overall these alternative discount rate measures would have produced

    - lower estimates for the absolute ECV value, and
    - lowered the relative benefits to the Crown of higher risk strategies.

- Mercer believes the use of the ECV, in absolute terms, in respect of the margins valued and discount rate used, to communicate the value to the Crown of alternative strategies, may be flawed.

- A divergence in interests exists between the solvency metric important to the Crown and the portion of that metric for which the GSFA has responsibility. The solvency metric initially used was the unfunded past service liabilities (UPSL).

- The UPSL measure is very important but was found to be primarily sensitive to liability valuations.

  - From the Crown's point of view the full UPSL (variable assets less variable liabilities) best represents the solvency risks faced.

  - From GSFA's point of view the constrained UPSL (variable assets less fixed liabilities) best represents the solvency risks it can attempt to control and is responsible for. A constrained version of the UPSL subject solely to asset risks was discussed at the time of the 2003 review by peer review consultants Towers Perrin.

  - Due to these diverging interests (between components of the UPSL) Mercer believes the prior recommendation remains valid – that is, to split actual experienced annual changes in UPSL between those that relate to asset risks and those that are liability related risks.

- Mercer believes that modelling of the 'full' solvency position should however continue, for the benefit of the Crown.

- Mercer believes that a ratio based measure of solvency is a better approach to analysing asset liability dynamics.

16

Investment Performance – Business Planning

RFP: Satisfactory positioning for the future #2

- Is the Authority appropriately prepared for the future? Is business planning thorough and prudent?

GSFA's business planning is quite thorough and it needs to be. There are many current issues which require it to have a clear vision of its mission and to move early to anticipate changes in its operating environment. Mercer IC hopes that the 2006 Review will help to remove any uncertainties about the specific risk tolerance which are to guide the investment of the Fund's assets and help to rationalise the funding process. Both of these initiatives would release resources which could then be applied to unresolved issues within the business plan. GSFA itself has already identified a number of strategic issues and these are to be covered in the 2006/07 Statement of Intent.

16.1 Performance Objectives – Board

Performance objectives form part of the Statement of Intent which is now governed by the Crown Entities Act 2004. The schedule of requirements under the Act was set out in Section 8. Of course, the Board then has to interpret a specific set of objectives within the overall objectives and function set out in its own Act.

The Board assesses its own performance, member by member, each year.

16.2 Performance Objectives – Management

Performance objectives for Management are established by the Board each year. The strategic planning sessions having been conducted late in the previous year the Board then considers the work programme for the year and decides upon the performance objectives for Management early in the New Year.

Unsurprisingly, the onus on the Chief Executive is heavy with an ‘overriding objective’ in the current year to:

> “Manage the Management Services Agreement (MSA) for the Board, particularly with respect to the accountabilities and responsibilities of the Chief Executive and the development and training of all staff to ensure they are best placed to achieve their accountabilities and responsibilities under the MSA.”

There are a series of operating objectives:

- Statement of Intent
- Organisation structure process and resources
- Five Year Review of the Authority
- Managing the impact of tax changes (Government Discussion Document)
- Strategic asset allocation
- International Equities
- Alternative Asset Classes
- Risk Budgeting
- Manager selection and monitoring
- Extension of avoiding prejudice to NZ’s reputation
- Currency management
- Adviser relationships
- Liaison with other Crown Financial Institutions
- Operations manual
- Investment Committee
- Schemes - objectives
- Finance - objectives

16.3 Statements of Intent

GSFA’s Statements of Intent have been provided for each year since the Authority was established in 2001. The latest version is therefore for the year to June 2006, and as reported earlier the version for next year is currently being drafted.

Main headings for the current year were:

1. Introduction
2. Nature and Scope of Activities

3. Organisational Structure
4. Statement of Output Objectives
5. Performance Targets
6. Fund Performance Expectations
7. Risks to the Performance of the Fund
8. Risks Related to the Fund's Liabilities
9. Administration Risks
10. Financial Management
11. Forecast Financial Statements

16.4 Strategic Planning Process

To some degree the strategic planning process is governed by the legislation and the legislated requirements for reporting. If one were to comment on whether there is a bias in favour of too little or too much 'control' then Mercer IC believes that an objective assessment would come down on the side of too much.

Investing can be more of an art than a science and trying to regulate for good investment performance is unlikely to succeed. Public interest must be served however in having transparency of GSFA's operations, but not to the extent of stifling initiatives to pursue genuine ideas for adding value, or of having a bias towards saving costs rather than a bias to raising net benefits to investment performance.

Certainly, any investment risks within the business strategy should be disciplined and measured, and the Authority has worked within 'best practice' in this regard.

16.5 Strategic Planning Issues

Strategic planning sessions are held at least annually with the Board and Management both in attendance. The latest meeting was held in November, 2005. For illustration purposes, issues flagged for action included:

- Five yearly review (2006)
- SWOT analysis
- Risk Management
- Value Added by fund managers
- Learning organisation
- GSFA's mission
- Investment objectives
- Risk budgeting
- Expected returns
- Manager selection/implementation
- Resourcing

Action points were recorded for each topic requiring action.

16.6 Annual Health Check Template

Mercer IC Australia has developed a health check template which GSFA may wish to consider as a general idea for an annual warrant of fitness.

The approach involves defining an appropriate peer group of Funds, observing and agreeing on good and bad performers within the group, and testing the GSFA's performance against the best, the worst and the median performers.

16.7 Mercer Opinion

GSFA's business planning is quite thorough. There are many current issues which require it to have a clear vision of its mission and to move early to anticipate changes in its operating environment.

Mercer IC hopes that the 2006 Review will help to remove any uncertainties about the specific risk tolerance which is to guide the investment of the Fund's assets and help to rationalise the funding process. Both of these initiatives would release resources which could then be applied to unresolved issues within the business plan. GSFA itself has already identified a number of strategic issues and these are to be covered in the 2006/07 Statement of Intent.

17

Investment Performance – Schemes Administration

RFP: Schemes

- Has the Authority identified and addressed all risks in outsourcing its schemes administration arrangements?
- Are appropriate disaster recovery procedures in place?

17.1 Documents Reviewed

To assist with our assessment of the Authority's management of administration outsourcing risks and disaster recovery procedures we were provided with the following documents.

1. Schemes Administration Management Agreement between the Government Superannuation Authority and Datacom Employer Services Limited dated 18 October 2004, "the Administration Agreement".

2. Deed of Guarantee between Datacom Group Limited and the Government Superannuation Fund Authority (included as Schedule 13 of the Administration Management Agreement) undated and unsigned.

3. Agreement for the Provision of Disaster Recovery Services between Eagle Technology Group and the Government Superannuation Authority and Datacom Employer Services Limited signed but undated.

4. GSF Schemes Administration Quality Plan Version 1.3 prepared by Datacom prepared May 2006.

5. Business Continuation Plan for GSF Schemes Administration Version 07 prepared by Datacom and effective from 7 February 2006.

6. Report titled Datacom GSF Schemes Administration DirectLink DR Simulation prepared by Carolyn Smith (Datacom) for John Gill (Datacom) and Philippa Drury (GSFA) dated 25 January 2006.

In addition to these documents which were supplied to us we also reviewed

7. The Reports of the Government Superannuation Fund Authority and the Government Superannuation Fund for the Year Ended 30 June 2005.

8. The Report on the Government Superannuation Fund Actuarial Valuation as at 30 June 2005.

17.2 Summary

The GSFA has identified the key risks associated with out-sourcing the scheme's administration and has in place reporting systems and processes to monitor and manage those risks.

The agreements and the processes in place to ensure business continuity are extensive and in accordance with best practice.

17.3 Review of approach over the last five years

The Administration Agreement with AXA New Zealand "AXA" expired on 30 April 2005. A new agreement with Datacom Employer Services Limited "DES" was entered into in October 2004. The transition of services from AXA to DES was completed on 25 April 2005. Accordingly we have focused our attention on the current arrangements that are in place to manage administration out-sourcing risks.

Having said this, one of the risks associated with outsourcing an administration function is the management of a transition between administration providers. In his 2005 report the GSFA Chairman describes the transition from AXA to DES as seamless. All evidence supports this being the case. Undoubtedly the transition was less complex than some as DES assumed responsibility for the management of the computer hardware and operating systems used by AXA (and owned by the GSFA Authority) and employed those AXA staff who were administering the GSF when it was with AXA.

17.4 Administration out-sourcing risks

The risks associated with out-sourcing the Schemes' administration include:

i) Quality control, including timeliness and accuracy
ii) Staffing
iii) Computer systems
iv) Price
v) Business Continuity
vi) Transition management
vii) Indemnity.

We consider GSFA's approach to managing these risks in turn.

i) Quality control, including timeliness and accuracy

The Administration Agreement sets out in some detail the services required of the administration manager and the means of measuring the quality of those services. The manager completes a monthly report to the GSFA and is also required to maintain a Quality Plan.

The Administration Agreement also provides for a Biennial Review of the administration manager's services. This review will cover the success of the relationship measured against the Performance Standards, the quality of the service, the quality of support and generally, the overall performance of the administration manager of its duties under the Administration Agreement. The first such review is scheduled for 30 June 2007. The administration manager agrees to implement the agreed outcomes of such reviews.

ii) Staffing

Key personnel are identified in the Administration Agreement. The appointment of Key Personnel by the administration manager is subject to notification being given to the GSFA as to the proposed appointee including details of his or her skills, qualifications, experience and the proposed duties and responsibilities he or she will assume. The GSFA has the right to object to such an appointment.

The monthly report from the administration manager to the GSFA includes details of all staff turnover (not just Key Personnel) and weekly operational meetings are held at which any resourcing concerns are discussed.

We note that prior to its appointment to the role of administration manager for the GSFA, Datacom Employer Services Limited was not a recognised provider of superannuation administration out-sourcing services in New Zealand but had very strong credentials in payroll out-sourcing and other areas with similarities to superannuation administration. We understand that Datacom is looking to expand this aspect of its operations and this should assist with staff retention.

The Administration Agreement includes “ring-fencing” arrangements that would secure the services of Key Personnel and Operational Personnel should the GSFA terminate the Administration Agreement and elect to resume responsibility for administration functions itself.

iii) Computer systems

The administration agreement comprehensively sets out details of the arrangements and obligations that apply in respect of computer systems.

The GSFA has given the administration manager licensing rights to use existing systems owned by the GSFA and has assigned rights in terms of maintenance and licensing agreements held by the GSFA to the administration manager. These licensing rights and assignments apply solely for the purpose of administering the GSF Schemes.

Under this arrangement the GSFA retains ownership of the computer systems used to manage the administration of the GSF Schemes. This is not standard administration out-sourcing practice in New Zealand. Under standard practice the administration manager would own or licence a computer system which it would use for all schemes under its administration. This departure from industry practice is a practical response to the management of Schemes as complex as the GSF Schemes and ensures that options are let open for the GSFA in terms of any future change in appointment.

The Administration Agreement sets out how development of new systems or software is to be approached and permits use of another party for such development.

iv) Price

Considerable effort is required to transition the management of any large superannuation scheme to an alternative administration manager. Accordingly it is important that the charges to apply are set in a manner that does not allow the service provider to take advantage of the hurdle costs associated with a transition.

The Administration Agreement sets out the fee payable to DES for each of the years to the end of the Initial Term. It also requires the administration manager to propose initiatives to achieve financial savings. If those initiatives are approved by the GSFA then the savings are shared 50/50.

Furthermore the Administration Agreement provides that failure to meet performance standards will result in a loss of fees to the administration manager.

v) Business Continuity

Clearly continuity of critical services is essential to the successful outsourcing of superannuation administration.

DES is required under the terms of the Administration Agreement to have in place a Business Continuity Plan which is in accordance with best industry practice, to periodically test the Plan (six monthly) and to review the Business Continuity Plan at least monthly.

We have reviewed the Business Continuity Plan. We note that it appears the original draft was prepared in July 2005 (after the date on which DES assumed responsibility for administration) and that it was finalised in December 2005.

The Business Continuity Plan in place is comprehensive. A copy if the most recent report in respect of testing of aspects of the Plan (January 2006) reveals that DES is following the procedures set out in the Plan.

In addition to the Business Continuity Plan there is a contract between Eagle Technology Group the Government Superannuation Authority and Datacom Employer Services Limited. Eagle provides hardware, software and support services to GSFA. The agreements set out Eagle's and Datacom's obligations in respect of preparedness for and response to a disaster event.

GSFA provided further explanations of their process as follows:

> "There is a contract for the provision of disaster recovery services between the GSFA, Datacom and Eagle Technology Group. Tests under the disaster recovery contract are carried out annually or more frequently if requested by the GSFA.
>
> The contract was originally between Eagle Technology Group and AXA New Zealand, as the GSF schemes administrator.
>
> As part of the transition to Datacom, the disaster recovery services provided for in the contract were implemented. This was to ensure the GSF Business System could be recreated in the event (for example) that on transition day the delivery truck moving the GSF Business System equipment from AXA to Datacom was in an accident between sites. Implementation included the establishment of a disaster recovery site, fully equipped with the necessary hardware, software and people resources. Prior to transition day, back up tapes for the GSF Business

System were recalled from offsite storage, loaded onto the disaster recovery equipment at the disaster recovery site and successfully tested.

At close of business on transition day, a full back up of the GSF Business System was taken and placed in the disaster recovery site.

The GSF Business System was successfully reinstalled at Datacom on transition. Once the system had been operating for 24 hours, the disaster recovery site was dismantled."

vi) Transition management

The GSFA arrangements, which provide for ongoing ownership of computer systems and the ring-fencing arrangements set out in the Administration Agreement, mean that the GSFA is well place to manage a transition between managers should this be required.

In this regard we do note that there are a very limited number of providers of administration services in New Zealand that would have the capacity to assume responsibility for management of the GSF Schemes. This risk is outside the control of the GSFA.

vii) Indemnities and Guarantees.

The terms of the Administration Agreement and the associated Deed of Guarantee from Datacom Group Limited provide the GSFA with appropriate protection against actions of the administration manager which might result in liability to the GSFA.

18

Investment Performance – Mercer Opinion

RFP: Terms of Reference

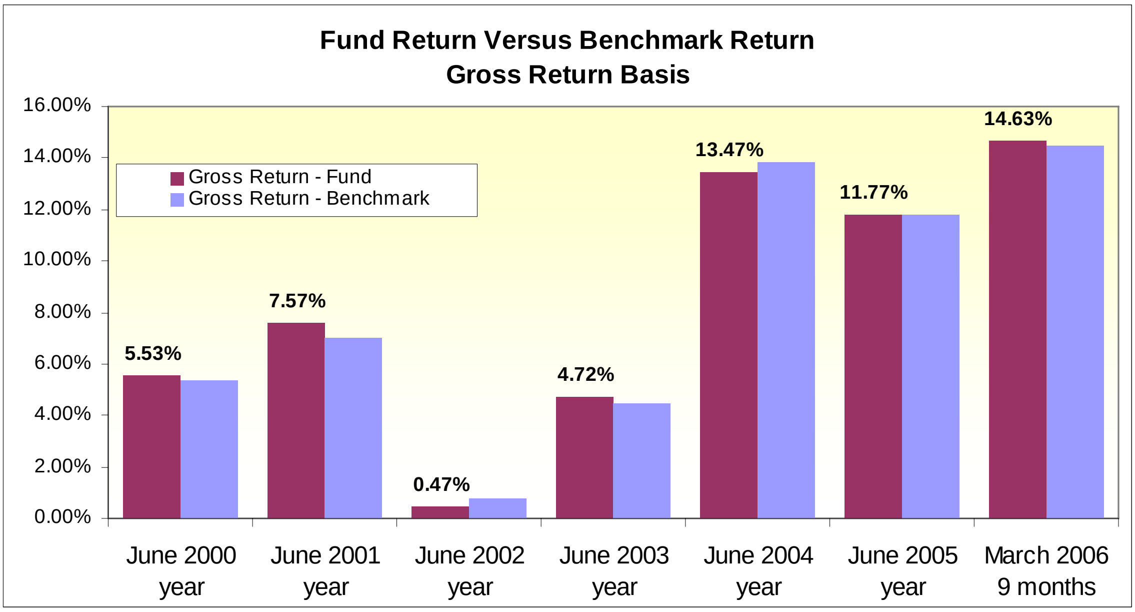
- Form an opinion on the investment performance of the Fund to date.

Investment Performance to date: Investment performance may be measured in absolute or relative terms, against a series of metrics including risk metrics and against, say, a previous strategy. All of these may be relevant here. In Mercer's overall view the bottom line judgment is that GSF's investment performance has been disappointing relative to some standards of comparison as below.

The primary investment objective requires ten years of data in order to assess investment success. As we have only 4½ years of investment performance data fully under the new strategy we have utilised other measures. Mercer's standards of comparison are:

- The transition from a very defensive strategy
- Timing of exit out of income assets
- Timing of entry into growth assets
- Fund size considerations
- Active manager performance
- Strategy performance relative to peers and relative to former strategy
- Hindsight

The terms of the Review require benchmarks against industry best practice for the largest pension fund in New Zealand in terms of assets, liabilities and unfunded liabilities. A review under fairly stringent criteria is, Mercer believes, appropriate.



But there are also several other relevant circumstances which ought to be taken into account in evaluating the performance of the Authority (as distinct from the performance of the Fund). The terms of reference do not ask for an opinion on the legislation (which led to the investment in riskier assets). Our understanding is that the Crown has no wish to return to investing in a purely defensive strategy.

The big picture is that had the Authority been established two years later (August 2003), the GSF diversified portfolio strategy would have had vastly much improved performance – e.g. the same climate as enjoyed by the New Zealand Superannuation Fund in its nursery years. Establishment two years earlier (1999) would have produced much worse returns than the actual timing and the NZSF timing (the table below compares the return estimates).

While the timing of the establishment of the GSFA could be argued to have been a major factor in the absolute investment returns achieved, the Review has explored a much wider range of factors in order to come to an objective opinion.

18.1 Investment Performance

While the financial performance of the GSF assets was low for the first two years - from the gradual switch out of a defensive strategy to a more diversified, more rewarding (eventually) but more financially risky strategy - there is an important need to do a proper attribution analysis of the Fund's performance. The returns for more recent years have been very strong.

Performance over the 18 quarters since Q4 2001
(The Table compares actual timing with investing two years either side)

Period	**Gross Return %pa**
Q4, 2001 to Q1, 2006	***9.1% p.a.***
Actual inception to Review	
Q4, 1999 to Q1, 2006	***6.5% p.a.***
Assumed Inception in 1999 to Review	
Q4 2003 to Q1 2006	***15.8% p.a.***
Assumed Inception in 2003 to Review	

The GSFA's chosen metric for measuring performance is 2.5% above the after tax return on NZ Government Stock on a rolling ten year basis, but only four and a half years have so far elapsed, and so this metric cannot be properly applied until 2011.

This section considers the actual performance of the fund in the context of:

- Factors beyond the control of the GSFA
- Factors within the control of the GSFA
- Other relevant factors

18.2 Factors Beyond GSFA Control

1. Weak share markets carried on into 2002 and 2003
2. Market exit strategy (from NZ Government Stock) was required to effect the transition to the new strategy
3. GSFA legislation
4. Political climate

It is uncontroversial that the overall market conditions during the period 2000 to 2003 were unfavourable to transitioning to growth assets as discussed already in Section 14.

GSFA was placed in the position of selling down large amounts of NZ Government Stock which had the potential of disrupting the local fixed interest markets. Concerns were also expressed by GSFA about the impact of its transition on the NZ dollar currency markets and, indeed, on international equity futures and physical markets.

The legislation was silent on the issue of transitioning the assets from one structure to another and so the burden of implementation became solely that of the GSFA and its advisers, in the absence of Ministerial direction as provided for in the new legislation. Responsibility for managing the investments was also being transferred, via the legislation, from a government department to a new, independent authority with its own legal functions and responsibilities.

The assets of GSF had been managed defensively for decades within the public sector and there was sufficient, if not unanimous, political support for the new legislation to be passed, permitting the Fund's assets to be invested more diversely. The new Authority might have reasonably interpreted the passing of the legislation as an indication that it ought to get on with the job of diversifying the Fund's financial assets.

18.3 Factors Within GSFA Control

1. Risk tolerance
2. Benchmark portfolio (Strategic Asset Allocation)
3. Market entry strategy
4. Selection of asset classes
5. Selection of fund managers
6. Dynamic asset allocation strategies

In the absence of full direction from the Crown about the appropriate risk tolerance for the Fund GSFA needed to do its own research and analysis, based on the work of the Establishment Board and some interaction with the Minister and officials. GSFA had discretion therefore to adopt a staged timeframe beyond that driven by the demands of exiting the local bond market, and did, in fact, exercise such discretion. Full consideration was also given to the prevailing global market and economic conditions in determining the pace at which the transition to the full benchmark portfolio would proceed.

The benchmark portfolio, according to 'best practice', was designed with longer term investment characteristics in mind rather than short term conditions, and guided by the risk tolerance profile.

GSFA also had the discretion not to proceed immediately with any form of transition but after considering the issue, in the specific context of the terrorist events of September 11th, 2001, and seeking professional advice GSFA decided that it would proceed with a transition.

For this Review Mercer IC feels that the decision to proceed at all in the market conditions then prevailing may be questioned in this Review, from the viewpoint of the historical risk tolerance of the Fund's assets.

Mercer IC has sought to make a clear distinction between the market entry issue and the transition process issue, though they are related. The market entry discussion ought to include debate on whether it was appropriate to proceed with a transition at all in 2001 and, if not, what would be the determinants of the speed of the transition. GSFA worked very hard in 2001 through 2003 on the latter issue and Mercer IC accepts the difficulties which GSFA faced in doing so.

A discussion about whether to proceed at all is an area where we feel that GSFA, and perhaps the Crown, shared some responsibility for proceeding to transition a traditionally defensive Fund strategy to a more aggressive strategy during a period of high financial market volatility. This issue seems to be a reasonable question for the Review to raise and try to cover although it may now be a matter of historic interest only. (Section 14)

Turning to strategic asset allocation GSFA's selection of asset classes appears to have been unnecessarily narrow for the quantum of assets being deployed. While it is normal to focus on traditional asset classes at the formative stages of investment structure design a Fund of over $3.5 billion has potential access to many attractive non-traditional assets and sub-asset classes. Some of these options, e.g. private equity, suffer low start up returns.

GSFA employs active managers for certain sectors that are selected on the advice of external consultants and are replaced from time to time. GSFA has set out-performance objectives that the managers are expected to meet or exceed and the managers are compensated accordingly.

Over the Review period (4.5 years) the following levels of out-performance ('alpha') were achieved. As the objectives are given to the managers on a pre-tax basis we have used this in our comparisons. We have also shown out-performance levels from the Mercer Surveys of active managers over the same period:

	NZ Equities	NZ Bonds	Global Bonds
GSFA Target alpha (%p.a.)	+3.00	+0.60	+1.00
Actual alpha (%p.a.)	+0.29	+0.11	+0.38
Mercer Surveys (% p.a.):			
Upper Quartile	+3.8	+0.8	+1.0
Median	+1.9	+0.4	+0.5
Lower Quartile	+0.6	+0.2	+0.3

In each case the out-performance to date from the GSFA actively managed portfolios has been below target and below survey medians. Over the period, which is sufficiently long to make manager comparisons, the performance of the GSFA's active fund managers has been disappointing.

GSFA made a decision to invest passively into global equities in order to achieve a binding ruling exempting the Fund from tax on capital gains. Over the 4.5 year period global equities, as measured by the MSCI World Index (unhedged in NZD), returned 0.7% p.a. In order to achieve the IRD binding ruling only 'grey-list' countries can be included in the portfolio. The MSCI Grey List Index and the modified Grey List Index used by AMP (termed the AMP World Index) returned -0.36%p.a. and -0.47%p.a. respectively over the 4.5 year period, underperforming the MSCI World Index by approximately 1.1% p.a. The unhedged indices are used as the binding ruling does not apply to foreign currency hedging gains.

In addition the total return (capital growth plus dividends) for global equities was less than the dividend return alone meaning that no tax benefit was achieved over the period from tax exemption on capital gains. The median of active global equity managers (‘core’ style) returned 1.2% p.a. above the MSCI World index over the period.

Passive management of global equities during a period of falling share prices effectively raises the tax rate on the total returns of the funds, since the total gross returns are impacted by the full amount of the capital losses on the passive component while the taxable components, including currency gains remain taxed at the full rate. Therefore the tax liability is exaggerated when expressed as a fraction of the total gross returns.

Combining market entry, active funds management and passive funds management results in disappointing investment performance over the period.

Comparing the GSF’s returns, supplied by GSFA, against the total return objective of NZ Government Stock + 2.5%pa after tax (initially +3%pa after tax, refer attachment to Section 1), we note first that over the period (inception to March 2006) the after tax return on NZ Government Stock was approximately 4.3%pa, or 6.5%pa gross of tax. GSF’s actual returns after tax over the period were approximately 6.1%pa compared to a gross of tax return of 9.2%pa.

On this basis the actual return after tax was 1.8%pa higher than that which would have been achieved by remaining invested in NZ Government Stock or an ‘underperformance’ of 0.7%pa relative to the long term target of 2.5%pa. Therefore, compared to the previous strategy of 100% NZ Government Stock the GSFA’s strategy to date has not met expectations of out-performance. However, we note that this target is measured over a 10-year period and the first 10 year period will not be completed until September 2011.

Comparing the GSF returns for the period October 2001 to March 2006, supplied by GSFA, against other New Zealand superannuation schemes sees the GSF ranked 78 out of 100 using a universe of schemes as represented in the Mercer Investment Performance Survey[5]. This survey measures the after tax returns of stand-alone New Zealand superannuation schemes. It is very important to note that the GSF was not fully invested to its benchmark portfolio until 2003 and so this particular metric suffers from that drawback.

A final point under this generic heading of factors within the control of GSFA is that dynamic asset allocation strategies might have been used to avoid periods of overvaluation or to take advantage of periods of undervaluation of assets. ‘Best practice’ is not at all well defined in this area, though it continues to receive a great deal of attention in the industry.

[5] The Survey ranks the highest return as 1 through to the lowest return as 100.

18.4 Other Relevant Factors

1. Message inherent in the new legislation to implement a diversified strategy.
2. Market timing is always difficult.
3. The bull market in Global Equities in the 1990s was very powerful and very long; even experienced investors underestimated the power of the bull market on the way up, and it would not be surprising to find that seasoned investors might also underestimate the power of the bear market conditions, on the way down.
4. In general, NZ superannuation schemes and their advisers did not choose to move towards more defensive strategies. "Time in the market" arguments won over "timing the market" strategies.
5. Similarly, superannuation schemes around the world did not move to more defensive strategies. Certainly, there were some which did shift.
6. GSFA was unlucky to be faced with these market conditions.
7. September 11th, 2001, and its immediate aftermath might be reasonably interpreted as signalling that the worst was over for financial markets.
8. In general, the active fund managers used by GSFA were not able, in total, to add much value over the period under review.
9. The tax advantages offered by passive Global Equities Funds in the NZ context, while offering attractive after tax returns when gross returns were positive, also meant that there was no mechanism for protecting net returns on the downside when gross returns were negative.
10. Comparisons of absolute returns are still favourable compared with a 'Bonds only' strategy between 2001 and 2006.

18.5 Mercer Opinion

Any worthwhile review has to take a detached, objective approach to evaluating the effects of all of the main factors which have impinged on the investment performance of the Fund assets since GSFA took over the reins.

Throughout the Review Mercer has referred to doubts about the appropriate investment objectives for the Fund which left two key questions for the GSFA to decide for itself. First, what is the appropriate risk tolerance for the Fund assets? Secondly, how quickly should the Fund's assets be transferred from its former (low risk tolerance) to new (much higher risk tolerance) structure?

How the second question was answered by GSFA has been more influential to investment performance in the review period than the first.

Decisive action to move to a new structure was followed by an extended period of share market weakness in the world. The Fund could have been sheltered from this weakness had GSFA deferred its planned transition or delayed its transition by adopting a slower entry strategy. Indeed, the latter tactic was used to some extent.

Mercer has weighed up the evidence that few schemes abroad and possibly none in New Zealand took pre-emptive actions in 2002 to adopt more defensive stances. Many schemes however did have active or partially active mandates for Global Equities which did have the flexibility, not open to passive mandates, to avoid market sectors or companies perceived to be particularly over-valued.

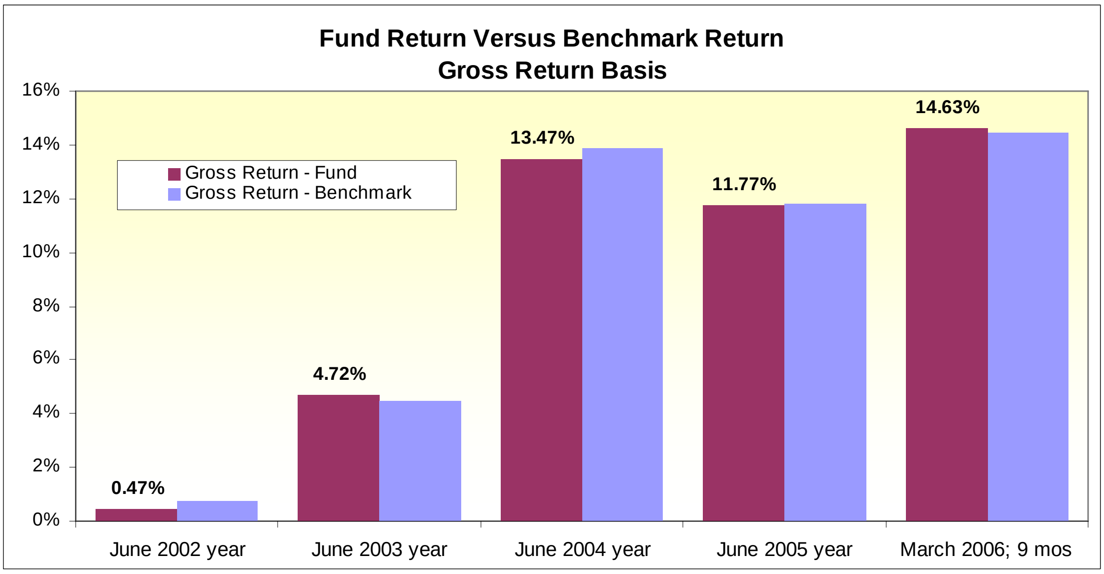
Neither has the Crown itself weighed in with a forceful view in these matters.

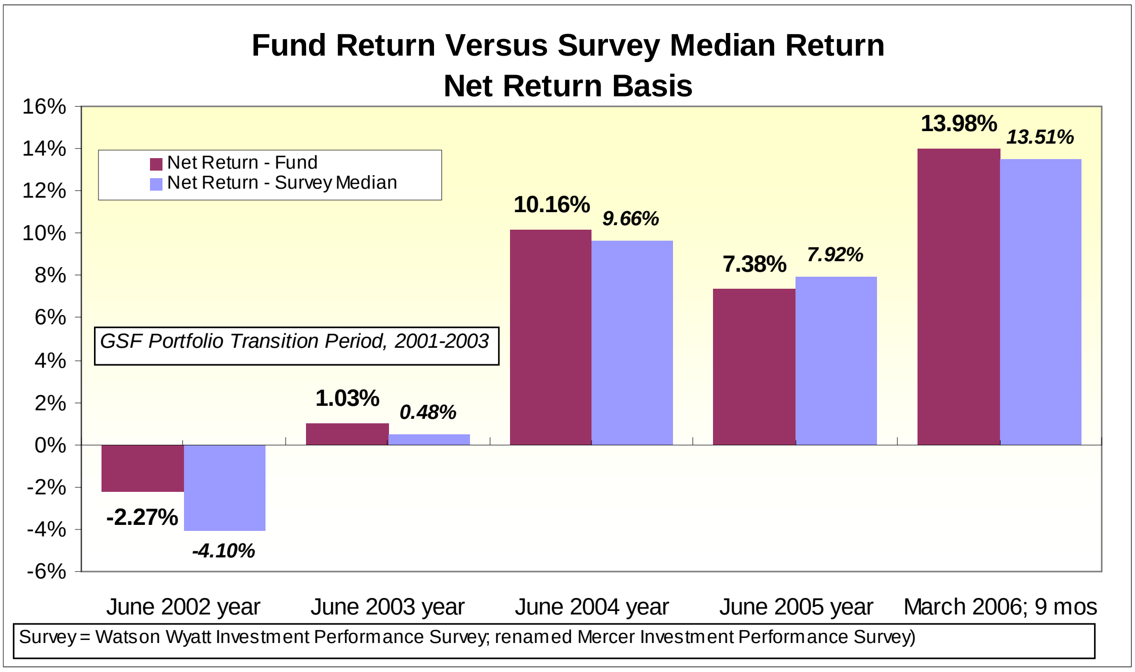
On balance, Mercer's opinion is that, in spite of all of the factors beyond its control and a variety of other relevant factors, the investment performance of GSF since the changeover in 2001 could have been better. GSFA might have instead adopted the view after a separate and formal report on the issues that it was not appropriate for the GSFA to proceed with any transition at all at that stage. Mercer IC views such a call however as a very fine judgement to make. But having taken on the responsibility for these decisions then GSFA was backing its judgements about whether there was undue risk to the Fund.

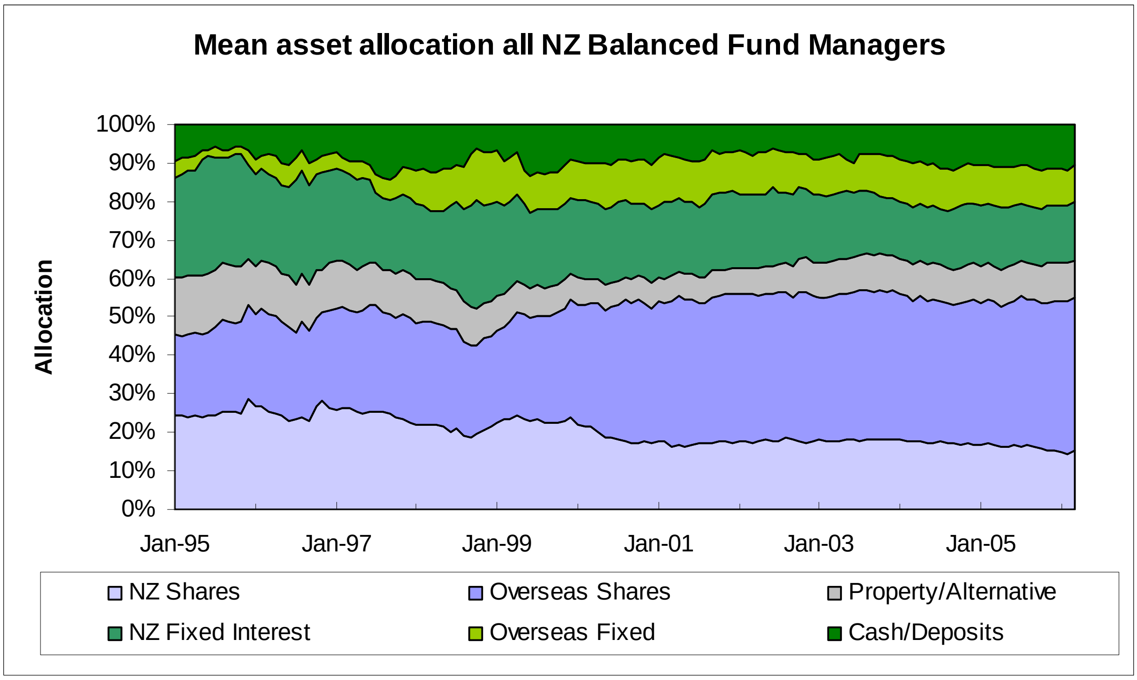
The bull market in equities of the 1990s had endured for a very long time through to 2000 and there appears to have been no over-riding imperative, political or otherwise, to expose a traditionally defensive fund to the bearish investment climate prevailing in 2001.

New Zealand has been extremely well served by GSFA and this opinion on investment performance has been extensively qualified throughout the Review, especially in the context of practical interpretation of new legislation.

The median managed fund in New Zealand returned 6.4% in the December quarter 2001, the quarter in which the GSFA first invested and the quarter following September 11th. This outcome illustrates the nature of the investment environment and the pressures on investment decision makers operating in real time.




Fund Return Versus Survey Median Return
Net Return Basis
16%
14%
12%
10%
8%
6%
4%
2%
0%
-2%
-4%
-6%
Net Return - Fund
Net Return - Survey Median
GSF Portfolio Transition Period, 2001-2003
-2.27%
-4.10%
1.03%
0.48%
10.16%
9.66%
7.38%
7.92%
13.98%
13.51%
June 2002 year
June 2003 year
June 2004 year
June 2005 year
March 2006; 9 mos
Survey = Watson Wyatt Investment Performance Survey; renamed Mercer Investment Performance Survey)


Mean asset allocation all NZ Balanced Fund Managers
Allocation
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Jan-95
Jan-97
Jan-99
Jan-01
Jan-03
Jan-05
NZ Shares
Overseas Shares
Property/Alternative
NZ Fixed Interest
Overseas Fixed
Cash/Deposits

Mercer
Investment Consulting

NZ Managed Fund Survey
Returns for periods ending 31 December 2001

Manager/Fund	3 Months		1 Year		2 Years		3 Years		5 Years	
	(%)	Rank	(%)	Rank	(% pa)	Rank	(% pa)	Rank	(% pa)	Rank
AMP Henderson Global Investors	4.5	(12)	1.4	(6)	1.0	(10)	4.6	(10)	8.4	(10)
ANZ Asset Management	6.1	(8)	0.5	(9)	2.2	(7)	5.5	(8)	8.9	(7)
Alliance Capital Management	9.4	(1)	3.0	(4)	3.1	(5)	6.4	(5)	8.5	(9)
Arcus Investment Management	8.4	(2)	1.1	(7)	2.2	(7)	6.7	(3)	10.5	(1)
Armstrong Jones	6.8	(4)	-2.6	(11)	-1.7	(12)	4.2	(11)	8.7	(8)
BNZ Investment Management	5.0	(10)	4.1	(3)	4.0	(3)	6.3	(6)	10.0	(2)
BT Funds Management	6.5	(6)	2.2	(5)	3.8	(4)	8.1	(2)	9.4	(5)
Colonial First State Inv Management	7.4	(3)	7.0	(1)	7.1	(1)	8.5	(1)	9.1	(6)
Guardian Trust Funds Management	6.4	(7)	-0.2	(10)	1.1	(9)	5.2	(9)	9.6	(4)
Mercer Retirement Trust	6.8	(4)	1.1	(7)	3.1	(5)	5.7	(7)	na	
Tower Asset Management	5.2	(9)	5.0	(2)	5.4	(2)	6.7	(3)	9.8	(3)
WestpacTrust Inv Management	4.8	(11)	-4.5	(12)	-0.5	(11)	3.9	(12)	8.1	(11)
Number of Funds	12		12		12		12		11	
Upper Quartile	7.0		3.3		3.9		6.7		9.7	
Median	6.4		1.2		2.6		6.0		9.1	
Lower Quartile	5.2		0.4		1.1		5.1		8.6	
Managed Fund	5.0	(10)	0.8	(9)	2.3	(7)	5.2	(9)	9.3	(6)

All rates of return are before tax and before management fees in $NZ. Rates of return are annualised for periods exceeding one year.
Past investment performance is not an adequate test of comparative performance, nor a reliable indicator of the expected absolute level of returns in the future.

WILLIAM M.
MERCER

Appendix A

Terms of Reference

The outcome sought from the review is an assessment of whether the Authority is complying with best practice across all aspects of its operations. The reviewer will be expected to:

A. Form an opinion about whether or not the investment policies, standards, and procedures established by the Authority are appropriate to the Fund; and whether or not the investment policies, standards, and procedures established by the Authority have been complied with in all material respects.

B. Form an opinion as to whether the Authority's operations across all aspects of its organisation are consistent with best practice, as appropriate given the size and nature of the Fund.

C. Form an opinion on the investment performance of the Fund to date.

D. Form an opinion on whether the Authority is satisfactorily positioned to meet the objectives for the Fund under its legislation in the future.

E. Identify anything else considered to be relevant to the performance of the Fund.

Deliverables

The project deliverables are:

- Two progress reports to the Treasury, one due approximately half way through the review and the other approximately three quarters of the way through.
- A draft report provided to the Authority and the Treasury for comment.
- A final report outlining the reviewer's findings.

Expectations

We expect the report to …	But do not expect it to …
Address the questions outlined above.	Review the legislation under which the Authority operates. Complete a detailed quantitative analysis of the asset allocation of the Fund adopted by the Authority.

Attached are some further more detailed questions that we would expect the reviewer to address in responding to the Terms of Reference above.

Mercer note: The detailed questions are those posed at the beginning of Sections 1 through 17.

Appendix B

List of Review Documents

GSFA REVIEW 2006

	REPORT TITLE (abbr), Author	Note
(SET-UP) DOCUMENTS		
A	REQUEST FOR PROPOSAL, Treasury	
B	MERCER PROPOSAL, Mercer IC	
C	MANAGEMENT ARRANGEMENTS, 23 March, 2001 Establishment Board	
D	STRATEGIC ASSET ALLOCATION, 22 June, 2001 Establishment Board	
E	RECOMMENDATIONS TO GSFA, 30 August 2001, Establishment Board	
F	GLOBAL CUSTODIAN RECOMMENDATION, 30 August, 2001 Establishment Board	
G	TWO REPORTS COMBINED INTO 1; SCHEMES' ADMINISTRATION; CONFIGURATION FUND MANAGERS and SEARCH PROCESS. 24 August 2001 Establishment Board	
H	THREE REPORTS COMBINED INTO 1; TRANSITION TO GSFA; FUND MANAGERS; DRAFT STATEMENT OF INTENT; Establishment Board	
I	STATEMENTS OF INTENT 2002 – 2006, tabled in Parliament	

	Draft Statement of Intent for year commencing 1 July 2006	
J	GSFA ANNUAL REPORTS 2002 – 2005; GSF reports (Ministry of Economic Development, 2000, 2001	
K	VALUATION REPORTS 2002 – 2005	
L	GOVERNMENT SUPERANNUATION AMENDMENT ACT 2001	
M	2003/04 Financial Review of GSFA, Report of the Commerce Committee	
O	Letter from Minister to GSFA dated 12 October, 2001, re receipt of GSFA investment strategy and transition plans	

SECTION		
1	STATEMENT OF INVESTMENT POLICIES, STANDARDS AND PROCEDURES – GSFA 2 November, 2005 GSFA Amendment Act 2001, S39 (re HJ1) Letter from Minister to Chair of Establishment Board, 6 March 2001, *Tax Status of the Government Superannuation Fund.* Treasury Report, 15 December 2000: GSFNZ Investment Strategy Guidance Treasury meeting with GSFNZ Establishment Board, 19 Dec 2000, *Minister's Initial Position on Investment Strategy; Process from here;* Letter from Minister to Chair, Establishment Board, 10 Sep, 2001. *Transition of the Government Superannuation Fund from the Ministry of Economic Development to the Government Superannuation Fund Authority/Investment Manager Configuration* See also Section 14 Letter from GSFA to Minister, 1 October 2001. *Performance Matters – Strategic Asset Allocation and Transition Proposals* GSF Voting Policy (received 4 May 2006) one page e.g. reference to 15 J (2)	
2	INVESTMENT MODELLING ASSUMPTIONS	
	Mercer Modelling Assumptions, February 2006 Mercer Capital Markets' Outlooks	
3	STRATEGIC ASSET ALLOCATION, Establishment Board (SETUP) ASSET ALLOCATION STRATEGY, Frank Russell Company (NZ), June 2001 ACTIVE VERSUS PASSIVE EQUITY MANAGEMENT, Frank Russell Company (NZ). March 2001 Discussion of Investment Consulting Services, Watson Wyatt report, 29 July, 2005 Extract from GSFA Board Minutes 7 December 2005 *"Item 7.4 Risk Budgeting and Monitoring Framework"* Russell REPORT #8 SAA Review 3 March 2003, below Russell REPORT #9 SAA Review November 2005; GSFA Board minutes 8 Feb 2006, reference to Treasury consideration of ALM research?	

4	MANAGER CONFIGURATION, PROCESS Establishment Board Russell REPORT #4 Fees BT Funds Management NZ Shares replacement process – various papers received 4 May 2006 Russell REPORT #7 FFTW replaced with Wellington Responses from GSFA to Mercer IC queries (May, 2006)	
5	STATEMENT OF INVESTMENT POLICIES, STANDARDS AND PROCEDURES – GSFA 2 November, 2005 Hedging advice from Russell Various papers recd May 5th, 2006 re Board's decision to increase the Strategic Hedge Ratio from 50% after tax to 80% after tax. (referred to as Russell #6 below as Russell advice reversed). Russell #9 (see below)	
6	(GOVERNANCE PRACTICES) OECD Guidelines for Pension Fund Governance, April 2005 Management Services Agreement between GSFA and Annuitas (30 October 2003) Assessment of the GSFA's Level of Satisfaction of the Provision of Legal Services, Dec 2005	
7	(ORGANISATION STRUCTURES) Audit and Risk Review Committee (timetable for agenda items) and Terms of Reference Schemes Committee Terms of Reference Responsible Investing Committee Terms of Reference Investment Committee Terms of Reference Board Member Expenditure – Policies and Procedures Acceptable Conduct Policy for Board Members Acceptable Conduct for Employees and Annuitas Contractors Annuitas – Management Services Agreement Fraud Minimisation Policy (Approved by the Board 5 April 2006)	

8	(INFORMATION MANAGEMENT) Assessment of GSFA's level of satisfaction of provision of legal services. Proposed Policy on Procurement of Services, GSFA (relates also to Sections 7 and 11)	
9	(LEGAL COMPLIANCE)	
	Template Questionnaire : Questions 1 to 14. The GSFA and GSF (collectively referred to as the entities) for the year ended 30 June 2005.	
10	(MANAGER CONFIGURATION, PROCESS) Establishment Board Report See also Russell reports below	
11	(CUSTODY, TRANSITION, REBALANCING) Establishment Board Report as above Latest 4 quarterly reports, JP Morgan. *Service Review for GSF and NPF* GSFA response to question "Explain what and how the GSFA is monitoring to ensure compliance with the custody agreement and the SLA requirements"	
12	(SEPARATION KEY FUNCTIONS)	
13	(MANAGING INVESTMENT RISKS)	
	GSFA Risk Management Policy Statement	
14	(MARKET ENTRY AND EXIT STRATEGIES, INITIAL TRANSITION FROM MED TO GSFA) Letter from Minister to Chair, Establishment Board, 10 Sep, 2001. *Transition of the Government Superannuation Fund from the Ministry of Economic Development to the Government Superannuation Fund Authority/Investment Manager Configuration* GSFA Tender of New Zealand Government Bonds, Media Announcement. 14 December 2001 GSFA Tender of New Zealand Government Bonds, Media Announcement. 15 May 2002 GSFA Tender Programme closed, Media Announcement. 7 November 2002	

	Letter from GSFA to Minister, 1 October 2001. *Performance Matters – Strategic Asset Allocation and Transition Proposals* Transition Documents received 4 May 2006. GSF Portfolio from NZ fixed interest to diversified portfolio (September 2001 through November 2002) Board Minutes Meeting 3 March, 2003. Staged entry to International fixed interest markets. (Also has SAA material) Russell report #8 below.	
15	(LINKAGES TO CROWN REQUIREMENTS INCLUDING METRICS)	
16	(BUSINESS PLANNING) Strategic Planning days (Nov 2004; Nov 2005) GSFA Performance Objectives year to September 2006	
17	(SCHEMES ADMINISTRATION) Establishment Board Report Schemes Administration Management Agreement, GSFA and Datacom Employer Services Limited, 18 October, 2004 Agreement for the Provision of Disaster Recovery Services, 30 March 2005; Eagle Technology Group, GSFA, Datacom. Datacom-GSF Schemes Administration Quality Plan – version 1.3 Business Continuity Plan sample Response to query on member satisfaction survey	
18	INVESTMENT PERFORMANCE JP Morgan return sheets June 2002 to June 2005, then for period to Mar 2006. GSF Quarterly Investment Performance Report Quarter ended 30 September 2005; Sections A to G. Section H (Russell report) excluded. Recd 4 May 2006.; Extract Board Papers meeting 2 November 2005. GSF Monthly Report; Extract from Board papers 2 November 2004. SECTION 6 INVESTMENT. Clarification of different value of assets as at June, 2002, GSFA (see Annual Reports, to June 2002, and to June 2003) Net of tax comparison with NZGS since inception. Fund performances since inception GSF Manager Performance report as at 30 April 2006.	

The following reports were released for the Review by Russell Investment Group Pty Limited. A protocol governed the restricted use of certain documents.

RUSSELL REPORTS #		
#1	Asset Allocation Strategy; June 2001	
#2	Active versus Passive Equity Management; March 2001	
#3	4. Various papers considered by the Board in the Review of the Statement of Investment Policies Standards and Procedures - Strategic Asset Allocation in January/February 2003. a) Russell modelling outputs for: Base case Reduction of 2.1% in returns Equity Risk Premium of 1% Equity Risk Premium of 4% Base case using Towers Perrin volatility & correlation assumptions Base case with returns gross of tax b) Towers Perrin opinion on the outputs from the modelling c) Active v Passive Equity Management dated January 2003 [Front page, Contents page and two page Executive Summary only] d) Global v NZ Fixed Interest & Equity dated January 2003 [Front page, Contents page, Section One and Recommendation section only] e) Towers Perrin response "Portfolio Construction Issues" dated January 2003	
#4	1. NZ Fixed Interest Managers Stated Fee Schedules - AMP and Alliance 2. NZ Equities (Active managers only) Stated Fee Schedules - Alliance and Tower 3. Global Fixed Interest managers Stated Fee Schedules - Goldman Sachs - PIMCO - Wellington Asset Management	

#5	5. Papers considered at a special meeting of the Authority Board held on Monday 24 February 2003 a) Asset Allocation Strategy dated February 2003 [Front page, Contents page and Introduction only] b) Towers Perrin sample report "Risk Monitoring Service - Strategic Tilting Information package" dated February 2003.	
#6	Various papers relating to the Board's decision to increase the Strategic Hedge Ratio from 50% to 80% (and to 100%?) recd 5 May 2006	
#7	Various papers relating to reviews of Fischer Francis Trees and Watts and switch to Wellington Management	
#8	Various papers related to the staged entry into International fixed interest markets. The work on this matter commenced at a Board meeting held on 3 March, 2003. SAA was also considered at this meeting. SAA papers also included with confirmation of Treasury short term risk tolerance	
#9	Extract from GSFA Board Minutes 8 Feb 2006. SAA Review November 2005	

The following reports were provided for the Review by GSFA for a meeting between Mercer Investment Consulting and the Authority on June 14, 2006 at which GSFA provided comments on the Draft Final Report.

	GSFA documents provided on June 14, 2006	
#1	E-mails September 2001 re World Events	
#2	Letter to GSFA re GSF Investment Strategy – Recent Events, Frank Russell Company, 21 September, 2001	
#3	a) Assessment of World Events b) Down, but not out (ABN-Amro Craigs) c) Implications of the Terrorist Attacks on New York (Aon)	
#4	GSFA Board Minutes, 24 September, 2001	
#5	GSFA letter to Minister, 1 October 2001. (included in list for Section 1)	
#6	Russell letter to GSFA, Appropriateness of Investment and Funding Strategies, 28 August, 2002	
#7	Excerpt from Investment Committee Minutes, 2 September, 2002.	
#8	To GSFA memo from Annuitas; Transition Issues, 26 September 2002.	
#9	Extract from GSFA Board Minutes 30 September, 2002	
#10	To GSFA memo from Annuitas, Review of Investment Strategies, 30 October, 2002	
#11	Extract from GSFA Board Minutes 4 November, 2002	
#12	Papers re 2003 Review of Strategic Asset Allocation	
#13	GSFA Special Board Meeting, February 24, 2003	
#14	Pre-Tax or Post-tax Objectives, undated	
#15	Russell letter to GSFA, Revisions to Asset-Liability Modelling, May 21, 2001	
#16	Issues for Discussion, Wednesday 14, June 2006, Review by Mercer	

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