STATUTORY REVIEW 2016 – PwC Recommendations and GSF Authority Response

Effective and Efficient Investment Functions

Observation

The Board approves all policies relating to the Fund's investment arrangements and sets the ranges and limits, which are documented in the SIPSP.

Investment manager appointments and terminations are recommended by Management, and approved by the Board and/or the Investment Committee.

Management regularly undertakes the rebalancing of assets and issues currency forward instructions to a third party provider (ANZ). Provided Management operates within the investment ranges and limits set out in the SIPSP, it has flexibility to recommend and implement these decisions. The Board and/or the Investment Committee will note these transactions at the following Board meeting.

PWC Comments

Overall, we believe GSFA is effectively and efficiently performing its designated functions.

There are defined delegations, roles and responsibilities for the Board and Management. This is outlined in a matrix in Appendix C of this report. In addition, there are clear delegations within Management to sign off on any security transactions or execution of documents considered necessary or expedient in the conduct of the investment arrangements. Specifically, any two of the Chief Executive, General Manager (Investments), General Manager (Schemes) or the Chief Financial Officer is required to approve these instructions.

The Board is responsible for manager selection and Management is responsible for strategic tilting decisions (i.e. DAA and currency decisions). We have observed the potential impact of Dynamic Asset Allocation (DAA) and currency decisions may have a greater influence on performance than the contribution from manager selection. This creates an imbalance of decisions made by the Board and Management. This is evidenced by the attribution analysis in the June 2015 quarterly investment report.

The role of the Investment Committee is currently being broadened to provide additional oversight of the investment decision making process.

Recommendation

We believe reviewing and testing the rebalancing and dynamic asset allocation ranges should be a key mandate for the Investment Committee. On the basis that the Investment Committee has identified that the rebalancing and strategy tilting ranges may lead to an imbalance of the importance and impact of decisions made by the Board and Management, we recommend that the rebalancing and strategic tilting ranges be reviewed.

GSFA Response

Effective and Efficient Investment Functions

Agreed. The GSFA completed a review of its Dynamic Asset Allocation programme in November 2016. The Board approved the recommendations in the DAA report and continuation for the programme.

Appropriateness of GSF’s Investment Policies, Standards and Procedures

Observation

We have reviewed GSF’s policies, standards and procedures related to investments. This includes:

- Government Superannuation Fund Authority Corporate Governance Statement;
- Statement of Investment Policies, Standards and Procedures (SIPSP);
- Management Services Agreement;
- Investment Committee Terms of Reference
- Responsible Investment Policy;
- Privacy Policy;
- ANN1: Acceptable Conduct Policy for Employees and Annuitas Contractors;
- GSF1: Board Member and Management Expenditure;
- GSF2: Acceptable Conduct Policy for Board Members and Management;
- GSF3: Procurement of Services;
- GSF4: Fraud Minimisation; and
- Investment Operations Manual.

PWC Comments

Overall, we believe GSF’s policies, standards and procedures related to investments are appropriate and fit for purpose.

The SIPSP provides a comprehensive documentation of the key investment decisions involved with the Fund. We have also reviewed the ‘Policy Review Schedule’ and believe there is an appropriate frequency of reviews.

Recommendation

Further to GSF’s existing documentation, we recommend establishing an over-arching document architecture to connect all the relevant policies, procedures and operational manuals associated with investments to make the structure and location of documents clearer.

This overarching document could be incorporated as part of the ‘Corporate Governance Statement’ or as a separate document.

GSFA Response

Appropriateness of GSF’s Investment Policies, Standards and Procedures
Agreed. GSFA developed an over-arching document with a diagram showing policies, procedures and operational manuals with all the relevant links.

Fit for Purpose

Observation

As part of this review, we have assessed the GSFA's investment governance framework against the key governance factors to determine whether the framework is fit for purpose for GSFA's investment operations (taking into account both current operations and expected future state following the recommendations of the Independent Review). Appendix A provides a summary of our assessment against the key governance factors, noting the strengths that we observed, as well as the opportunities for improvement.

GSFA's organisational structure can be described as a fully outsourced model (i.e. investments are outsourced to external investment managers). The Board sets the policies, procedures, limits and investment ranges, and it is up to Management to continuously monitor and operate within these ranges.

Given this organisation structure, our expectation for the Fund of this size should demonstrate:

- Clarity on the investment strategy, investment beliefs and philosophy;
- Clarity on delegations, roles and responsibilities; and
- Ability to access relevant expertise.

PWC Comments

Overall, we believe that GSFA's governance framework is appropriate and is fit for purpose given the size of the Fund.

Based on our comments in Section 4: Effective and Efficient Teams and Appendix A: Summary of Findings and Recommendations, we believe the GSFA's current governance framework is appropriate and is fit for purpose given the size of the Fund.

In addition, we believe GSFA is operating generally in line with our expectations of a Fund this size with a similar organisational structure.

Recommendation

The Investment Committee is currently undergoing changes to adopt a more prominent role in filtering and summarising investment decisions before progressing to the Board. As recommended by the Independent Review, we agree the Investment Committee should have a greater mandate under its Terms of Reference and it should meet more regularly as a result.

We believe the roles that potentially could be considered for the Investment Committee are:

- Reviewing an appropriate investment risk budget;
- Reviewing dynamic asset allocation ranges;
- Reviewing derivatives exposures and counterparty risks; and
- Reviewing the appointment and termination of investment managers.

This will enhance GSFA's investment governance framework.

Fit for Purpose
GSFA Response
Agreed. Investment Committee's Terms of Reference have been broadened following the Independent Review. Investment Committee now has the option to meet before every Board meeting. The Chairman of the Committee decides whether to meet based on the content of board papers. The Investment Committee is now performing the functions recommended above. GSFA added these items to the Terms of Reference in December 2016.

Investment Performance

Observations

The Fund's performance as at 31 December 2015 (before New Zealand tax and after investment fees) is provided in the table below:

Performance (before New Zealand tax and after investment fees)	Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception
Fund Return	3.7%	5.2%	11.8%	9.1%	6.2%	6.8%
Reference Portfolio	3.9%	4.2%	10.8%	8.9%	6.1%	6.8%
Outperformance	*-0.2%*	*1.0%*	*1.0%*	*0.2%*	*0.1%*	*0.0%*
NZ Government Stock	-0.4%	5.4%	3.7%	5.8%	6.1%	6.2%
Outperformance	*4.1%*	*-0.2%*	*8.1%*	*3.3%*	*0.1%*	*0.6%*

The Fund return of 6.2% (before New Zealand tax and after investment fees) over the past 10 years was slightly above the Reference Portfolio and New Zealand Government Stock return of 6.1%.

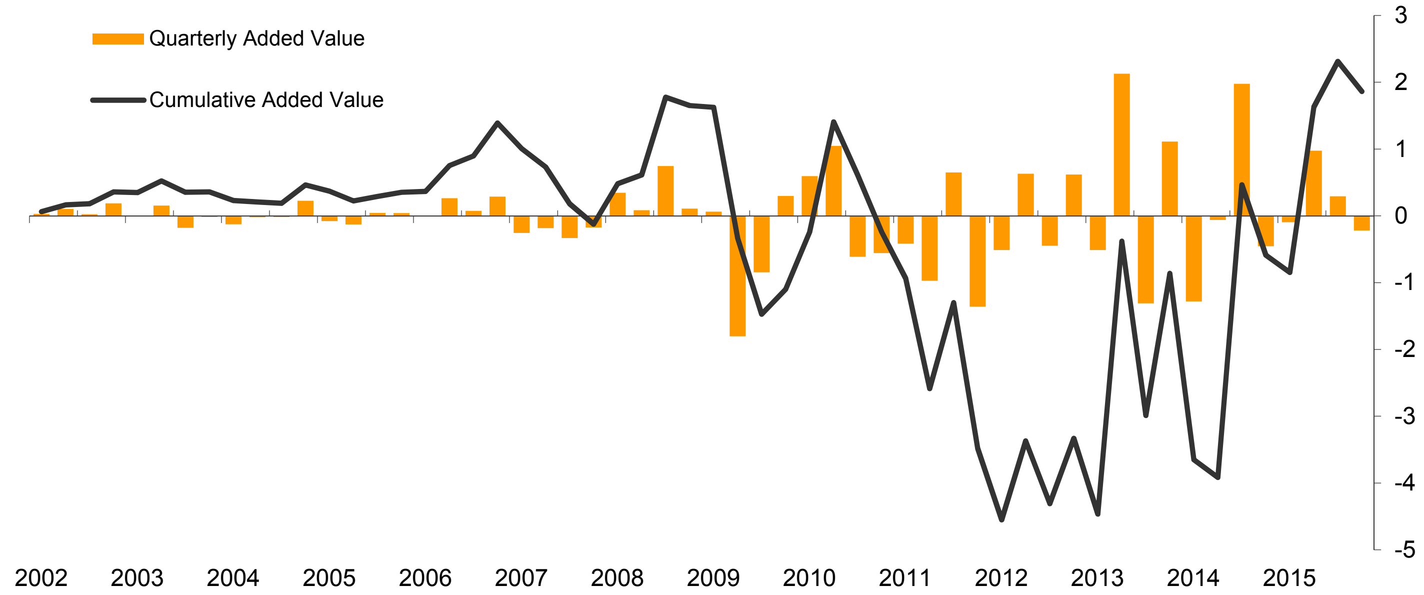
We note the Fund's expected excess return of the Reference Portfolio over 10 years is 1.0% per annum, which was not achieved. However, the Fund did not have material active management until 2008, so it was not structured to achieve the 1.0% excess return between 2006 and 2007. The Fund underperformed the Reference Portfolio from 2009 to 2012, but recent performance has been stronger and the Fund has outperformed the Reference Portfolio over the last three years. Over ten years, positive contributions from manager selection have been offset by losses from currency hedging.

The currency tilting position (which was an underweight to the NZD) was closed out in June 2015. The currency tilt made a positive contribution in the financial year 2014/15, but over the full duration of the currency tilting (June 2010 to June 2015) it made a negative contribution of -0.95%pa.

Performance relative to the New Zealand Government Stock was also hindered by the strategic currency tilting from 2010 to 2014.

Performance against the reference portfolio on a quarterly and cumulative basis is shown in the following chart:-

Investment Performance



This chart shows the transition from a passive to a more active strategy after 2009, the difficult period from 2009 to 2012, and the better performance since 2013. The longer term picture does not provide much evidence of consistent outperformance of the Reference Portfolio, and even less evidence that a target of 1.0% p.a. over the Reference Portfolio has been achieved. However, we note the substantial negative impact of currency tilting and if this impact was removed, active management has added value.

The Fund's underlying asset class performance as at 31 December 2015 is provided below.

Value Added Performance over benchmark (before New Zealand tax and after investment fees)	**1 Year**	**3 Years**	**5 Years**	**Since Inception (of asset class)**	**Benchmark**
Global Fixed Interest	-3.1%	-1.4%	+0.2%	+0.2%	Barclays Global Aggregate Index
Global Equities	+2.2%	+2.0%	+1.0%	+1.4%	MSCI All Countries World Index
New Zealand Equities	-0.3%	+2.1%	+1.1%	+1.0%	NZX50 Gross Index including imputation credits
Multi-Asset Class [1]	+3.1%	+1.5%	+1.0%	+1.6%	Reference Portfolio (unhedged)

Investment Performance

Global Tactical Asset Allocation (GTAA)	+3.0%	-0.9%	+0.2%	+1.3%	US 3 month T-bill + 6%
Natural Catastrophe Risk	-0.3%	-1.3%	-1.9%	-1.9%	Swiss Reinsurance Catastrophe Bond Total Return Index
Life Settlements (i.e. longevity risk) [2]	*-4.6%*	*-1.2%*	-	*-0.9%*	*n/a*
Commodities	-	-	-	+1.0%	Bloomberg Commodity Index
GSF Total Fund	**+1.0%**	**+0.9%**	**+0.2%**	**+0.1%**	**Reference Portfolio**

1. *Multi-Asset Class includes a range of asset types on an opportunistic basis. These are often alternative assets, but not always, and include global hedge funds, private equity and private real estate.*
2. *Actual Return is provided because there are no appropriate benchmarks available for Life Settlements.*

Manager selection in New Zealand and Global Equities has generated outperformance compared to their respective benchmarks (before New Zealand tax and after investment fees) over 3 and 5 years to 31 December 2015. However, manager selection in Global Fixed Interest has detracted over the 3 years, mainly due to the underlying managers having an overweight tilt toward emerging markets. Natural catastrophe risk has also underperformed its benchmark (before New Zealand tax and after investment fees) over 1, 3 and 5 years to 31 December 2015. Life settlements does not have a benchmark so the returns shown in the table are total returns (not value added); however, the returns have been negative over 1 and 3 years to 31 December 2015, so this asset class has detracted value at the total fund level.

PWC Comments

Overall, we believe that performance has been satisfactory, in a period which has been difficult for active management.

At 30 September 2015, the Fund was roughly 15.8% underweight global fixed interest and 5.3% underweight global equity compared to the Reference Portfolio. These allocations were instead allocated to asset classes not in the Reference Portfolio; namely, commodities, multi-asset class, GTAA, catastrophe risks and life settlements. These asset classes provide additional risk premia for the Fund and also provide diversification benefits. The returns from these asset classes have been mixed, but in general they have outperformed global fixed interest, but underperformed global equity over the five years to 31 December 2015.

The risk profile of the Fund is less volatile than the Reference Portfolio, but this is largely due to the investments in uncorrelated and illiquid asset classes that are not included in the Reference Portfolio.

Recommendation

There is no benchmark specified for life settlements on the basis that there is no reliable benchmark. However, we believe that a proxy benchmark should be introduced that reflects the risks and illiquidity associated with this type of investment. As a guide, life settlements generate return from premium received from underlying life insurance contracts, less any money paid out for insurance claims. Life insurance contracts behave similarly to a long maturity bond with an illiquidity premium, longevity premium, and demographic change. Therefore, the starting point for an appropriate benchmark should be the global fixed interest index, plus a risk margin that is commensurate with the risk of the asset.

Investment Performance

Natural catastrophe risk has underperformed its benchmark over 1, 3 and 5 years to 31 December 2015. Life settlements does not have a benchmark; however, the returns have been negative over 1 and 3 years to 31 December 2015. We are cognisant of that fact that these investments are generally illiquid and may not be able to be redeemed at a reasonable price. However, given both of these asset classes have detracted value at the total fund level over 1 and 3 years to 31 December 2015, we recommend the Board should review the business case to maintain or exit this asset class with consideration of the issues and costs associated with exiting this asset class.

Within New Zealand and Global Equities, GSFA has generally selected active managers which have outperformed their respective benchmarks. GSFA invests with active managers within global fixed interest, and the Fund's Global Fixed Interest portfolio has underperformed the benchmark (Barclays Global Aggregate Index) over the 1 and 3 years to 31 December 2015 (before New Zealand tax and after investment fees). In the latest CEM report, GSFA identified that the overall higher fees were in part due to the global fixed interest sector, where a number of peers have a higher exposure to global fixed interest, which has a lower cost than most other asset classes. In addition, GSFA has a dedicated Emerging Markets manager which attracted a higher base fee.

The Board should therefore seek appropriate information to revisit the business case to determine whether paying active fees for some of these asset classes is justified. PwC's view is that some activities like DAA and currency management have proven to be very difficult areas to consistently add value. Therefore, unless there is a well-considered view that GSFA can add value, the asset class should be passively managed or exited, and activities like DAA and currency tilting should be constrained or not undertaken.

In particular, currency tilting has had a negative impact on the performance of the Fund and we recommend that the Board reviews the business case to engage in currency tilting and forms a view on whether this is an area that the Fund can add value on a consistent basis.

In addition, given both natural catastrophe risk and life settlement investments have detracted value at the total fund level over 1 and 3 years to 31 December 2015, we recommend the Board should review the business case to maintain or exit this asset class with consideration of the issues and costs associated with exiting this asset class.

Finally, we recommend Treasury consider benchmarking the asset class returns across CFIs. However, we are cognisant that each CFI has different liability profiles and investment strategies. On this basis, peer comparison should be undertaken where possible and should be used to facilitate discussion across CFIs.

Overall, we believe that performance has been satisfactory, in a period which has been difficult for active management. We recommend that the Board continues to monitor the value added by asset class, with a view to only taking active risk in asset classes and areas where the Board thinks the Fund has a reasonable prospect of adding value.

GSFA Response

Investment Performance

GSFA agrees with the overall recommendation that asset classes should be reviewed regularly and active management should be engaged only where conviction is established in internal and/or external capability where value can be added on a net of fees basis. That is the GSFA's existing policy and practice.

GSFA reviews the business case for each asset class regularly as part of its normal review cycle. The Authority's assets are performing as expected overall. For those asset classes that have experienced performance below expectations, the Board understands the reasons well and has appropriate plans. For example, the Board is reviewing the case for active management of global bonds and reviewed DAA in 2016.

The investment in catastrophe risk is primarily to capture the general market return and the asset class has delivered the expected diversification benefits. The managers' performance is also within the range of expectation given the limitations of the available market benchmarks. The Board does not consider catastrophe risk investments warrant additional review outside the regular review cycle.

With regard to the benchmark of life settlements investments, the Board has considered and trialled several alternative benchmarks, including the initial purchase yield and a general bond index, and found that none were satisfactory for short term monitoring purposes. The best known life settlements index is not a reliable measure of market returns in the short run. The Board concluded that the current arrangement of no benchmark is satisfactory. Life settlements are affected by several factors other than bond yields, notably mortality experience.

The Board benchmarks the Fund's asset class returns and costs against global peers annually through the CEM benchmarking survey to ensure the Fund is delivering returns that demonstrate reasonable value for money. The latest survey confirms the Fund's investment fees are in line with peers.

Benchmark of Fees

Observation

The following table outlines the Fund's base fees for each asset class based on the 31 December 2015 quarterly report:

	Asset Allocation (as at 31 Dec 2015)	Base Fee (excl. performance fees)	Fee Contribution
Global Fixed Interest	14%	0.34%	0.05%
Global Equities	53%	0.56%	0.30%
New Zealand Equities	11%	0.65%	0.07%
Multi-Asset Class	7%	0.50%	0.03%
GTAA	3%	1.00%	0.03%
Natural Catastrophe Risk	7%	1.45%	0.10%
Life Settlements	3%	0.32%	0.01%
Commodities	2%	0.50%	0.01%
GSF Total Fund	**100%**	**0.61%**	**0.61%**

The fees shown in the table above are base fees only (i.e. it excludes performance fees).

We note that the GSFA participates in the annual CEM benchmarking report, which compares the GSFA to a group of 19 peers with similar assets, in addition to 291 global respondents, comprising 150 in US, 74 in Canada, 59 in Europe, 6 in Asia-Pacific and 2 in the Gulf region funds. The median size of peers is $3.8 billion. CEM's fee comparison across peers is based on total fees (i.e. it includes performance fees).

In the 2014 CEM report, GSF's total fees were 0.757%, which was higher than the peer fees of 0.516%, mainly due to differences in benchmark (i.e. peer group had a higher exposure to fixed interest). If the impact of asset allocation was removed, GSF's fees were still higher than the benchmark fee of 0.733%.

The following table shows GSF's estimated performance fees over the past 5 years by asset class and in aggregate:

Estimated Performance Fees (%)	2011/12	2012/13	2013/14	2014/15	2015/16 FYTD
Global Fixed Interest	-	0.02%	-	-	-
Global Equities	0.08%	0.22%	0.08%	-	-
New Zealand Equities[3]	-	-	-	-	2.15%
Multi-Asset Class	-	0.08%	-0.08%	-	-

Benchmark of Fees

GTAA	0.11%	1.10%	0.70%	-	-
Natural Catastrophe Risk[4]	-	0.28%	0.74%	0.46%	0.14%
Life Settlements	-	-	-	-	-
Commodities	0.58%	0.35%	-	-	-
Total Fund	**0.06%**	**0.17%**	**0.10%**	**0.03%**	**0.22%**

1. *Estimated performance fees based on performance fees paid over the financial year (30 June YY) divided by the start of period asset balance.*
2. *Performance fees are paid over multi-year averages so the negative numbers reflect weaker performance after good years.*
3. *The fee for New Zealand Equities relates to Direct Capital investment in Private Equity. The fee is based on the cumulative performance of the investment over a number of years. The investment return was very high, which led to the high performance fee.*
4. *The underlying managers in this asset class uses a different benchmark for performance fee calculations compared to the benchmark stated in Section 7 of this report.*

PWC Comments

Overall, we believe that savings could potentially be made on fees.

As outlined previously, manager selection in New Zealand and Global Equities has generated manager outperformance. In contrast, natural catastrophe risk has a reasonably high fee contribution but has underperformed the benchmark (Swiss Reinsurance Catastrophe Bond Total Return Index) over 1, 3 and 5 years to 31 December 2015 (before New Zealand tax and after investment fees).

Based on our discussions with key stakeholders, Management noted there have been some instances where investment manager fee negotiations were unsuccessful when undertaken at the completion of the manager search process. This is mainly due to the fact that investment managers are unlikely to negotiate on fees if they already they know the outcome of the RFP search.

Recommendation

We recommend that the Board continues to monitor the value added by asset class, with a view to only taking active manager risk in asset classes where the Board thinks the Fund has a reasonable prospect of adding value after taxes and fees.

We recommend bringing the fee negotiations earlier in the RFP process, and in renegotiating fees in conjunction with increased mandate size and/or periods of manager underperformance.

In addition, we note the Independent Review recommended that fee negotiations could be undertaken by the CFO or the Chief Executive, whose roles are generally independent of the investment team. Fee negotiations can be difficult and once a decision is made on a preferred provider it becomes harder to pursue negotiations further. We therefore agree that fee negotiations are often better performed by someone outside the investment team, although these individuals need to be familiar with the negotiating protocols and have an awareness of the level of fees available in the marketplace.

Benchmark of Fees
GSFA Response
GSFA agrees on the importance of assessing investments' value added net of costs. GSFA's existing policy and practice is to evaluate and monitor its active investment strategies to ensure they contribute to performance net of incremental costs. As the Minister alluded to in the latest Annual Letter of Expectation, GSFA will also ensure that the costs incurred in implementing its investment strategies are appropriate in the context of managing Crown assets. Fees are reviewed at the time of a manager's appointment to ensure fees do not take excessive proportions of excess returns. The Board also reviews the Fund's and managers' performance net of fees quarterly. Management is incentivised on the basis of performance net of fees. Management benchmarks manager fees to ensure the share of return paid in fees is appropriate to the source of return. Thus traditional broad market risk premia warrant the lowest fee, alternative risk premia a somewhat higher fee, and genuine skill, which is rare, the highest fee. Management compares its fees to global peers via the CEM Benchmarking Survey annually and the Mercer Global Asset Manager Fee Survey biennially, and believes the Fund's fees are competitive on a like-for-like basis. Management has re-negotiated the fees down for strategies that were considered uncompetitive in the past. However, it is not as practical to negotiate during periods of underperformance and the contract can be terminated if conviction fades. The majority of the Fund's managers have a tiered fee structure, which means fees in percentage reduce when the mandate size increases. GSFA initial RFPs explicitly request fee quotes but finds negotiation is more effective when it is down to final two or three candidates. The Board acknowledges the potential benefits of having someone outside the investment team negotiate fees but believes the negotiator must have a very sound understanding of the strategy, including its peers and competitors. The Board uses an independent consultant for most manager appointments who can provide an independent gauge of fees.

Appropriateness of the Derivatives Strategy

Observation

GSFA's policies, standards and procedures for the use of derivatives are set out in the SIPSP, and its operational procedures are further outlined in the Investment Operations Manual. Further requirements with respect to counterparties, credit ratings and concentration are specified in the Investment Management Agreements. GSFA does not use derivatives extensively in the day-to-day management of the Fund. The only derivatives currently managed are a life insurance swap with Credit Suisse and forward currency contracts for hedging purposes. This is managed through ANZ Bank for global bonds and State Street Global Advisors (SSgA) for global equities.

The custodian, JP Morgan, manages the Credit Support Annex and calls collateral on behalf of GSFA for the life insurance swap with Credit Suisse. There is a one way Credit Support Annex with ANZ, whereby ANZ provides cash collateral to GSF if profits exceed a certain limit. The currency swaps for global bonds are managed on a formulaic basis, with JPM (custodian) sending ANZ portfolio valuations on a monthly basis. The hedge ratio on the global equity portfolio is set so that the foreign currency exposure of the whole fund is 20%. SSgA use a proxy basket of currencies based on the MSCI AC World index to hedge back to the New Zealand dollar. GSFA informs SSgA each month end of the balance so they remain within the pre-determined range. As part of the mandate, SSgA holds cash equal to 3-10% of the assets to meet margin calls. The level of cash is reviewed monthly by GSFA.

Therefore, the execution of derivatives is effectively outsourced to external investment managers and banks and the involvement by GSFA in operational matters is limited.

PWC Comments

Overall, we believe the policies documented in the SIPSP are appropriate.

We note however that the SIPSP is very general in terms of the usage of derivatives. Further requirements with respect to counterparties and other limits are specified in the Investment Management Agreements with SSgA; however, those requirements are not specified in the SIPSP. The use of multiple counterparties to reduce risk is appropriate.

Is the derivatives strategy appropriate for the Authority?
For a fund with assets and an internal investment team the size of GSFA, we believe that an outsourced model is appropriate. The Annual Health Check by the Asset Consultant also reviews policies and procedures in regard to derivatives.

We note that the largest component of the hedging is global equities and that the tilting is based on a proxy basket of 11 currencies with weightings based on the MSCI AC World Index. This allows the benchmark exposures to be hedged back to New Zealand dollars but any currency positions taken by the investment managers to remain.

Are the operational procedures for managing derivatives exposure appropriate?
GSFA has outsourced most of the operational matters for derivatives to its service providers. The mandate with SSgA is self-contained in that as long as the cash stays within certain limits GSFA is not involved, and the hedging of the fixed interest portfolio is a formula-driven process managed by JPM (custodian) and ANZ (provider of the currency forward contract). 100% of the fixed interest portfolio is hedged, so GSFA is not involved operationally. If the ANZ hedging or the Credit Suisse life settlements swap move in GSFA's favour, cash collateral is paid to GSFA. If the reverse is true, GSFA has to provide cash collateral.

How is the Authority measuring derivative exposure and is it being done in an appropriate manner?
GSFA receives reporting from ANZ, Credit Suisse, and SSgA regarding valuations and transactions, including any calls for collateral. GSFA is not itself measuring derivative exposure. We believe that this approach is appropriate for GSFA.

Appropriateness of the Derivatives Strategy

GSFA also invests with a number of external managers and some of them may use derivatives, subject to limits in each investment mandate. We note that there is no reporting at the total fund level for aggregate exposure to derivatives and counterparties.

What methodologies are used to calculate the market risk related to derivatives and is it appropriate for the Authority?
The derivatives used by GSFA are swaps and forward contracts. The level of market risk with these types of derivatives is the face value of the contract. Given the nature of the derivatives being used, we believe that the approach is appropriate.

How are other non-market derivative risks (e.g. counterparty risks) calculated and are the methodologies appropriate for the Authority?
The counterparty risk is the value of the contract minus any cash collateral. GSFA has a unilateral 'Credit Support Annex' in place with ANZ and Credit Suisse where if the profit on the contract exceeds a certain amount, cash collateral is provided back to GSFA.

Does the Authority calculate non-market risk limits related to derivative exposure and is the methodology prudent for GSFA?
GSFA has non-market risk limits at the mandate level, which is a prudent approach. The risk measurement could be improved by monitoring counterparty exposures at the Fund level, as long as this can be done in a cost-effective manner. We agree with Management that derivative and counter-party risks are expected to be relatively small, but quantifying them as part of the risk budgeting process would be a worthwhile exercise.

Is cash collateral and the resulting credit risk exposure to the Fund appropriately managed?
GSFA provides and receives cash collateral on derivative contracts. The 'Credit Support Annex' limits the extent of credit exposure to the counterparty, and the risk limits on counterparty risk spread the risk. We believe that the credit risk exposure is appropriately managed, but as stated previously, we believe it could be improved by greater monitoring at the total fund level.

How is concentration of counterparty risk managed and how is the Fund exposed to this?
GSFA is exposed to counterparty risk when a derivative contract is in a profit position creating an asset for GSFA and a liability for the counterparty. These risks are managed by cash collateral paid to GSFA through the 'Credit Support Annex' agreements, and the spreading of the risk amongst multiple counterparties.

Recommendation

We recommend that the SIPSP is updated to specifically address the requirements that should be included in the Investment Manager Agreement (IMA), and specifically addresses the permitted usage of derivatives. This could include the assessment criteria for the suitability of expected derivative usage.
GSFA should look into monitoring derivatives and counter-party exposure at the Fund level to ensure that risks are not aggregating within the Fund.

A more sophisticated approach to derivative risk management would also incorporate the credit rating of the counterparty. Large, sophisticated investors typically do this and we recommend that GSFA look into whether it would be worthwhile for the Fund. It is likely that the aggregated counterparty risk exposures are not too high, and the credit quality of counterparties is sufficient, but we recommend that this be quantified as part of the risk budgeting process.

GSFA Response

Appropriateness of the Derivatives Strategy

GSFA has reviewed and updated the SIPSP with respect to the usage of derivatives.

The main users of derivatives for the Fund are bond managers, who all have Credit Support Annexes in place and call collateral daily on those derivatives to limit counterparty exposures to low levels. In GSFA's view, uncollateralised exposure poses real risk but the Fund has very little such exposure.

Use of Fund Investment Vehicles

Observation

GSFA is proposing a legislative bid that, if successful, would allow them to use Fund Investment Vehicles ("FIV") as part of their investment operations. A similar bid in 2015 by Guardians of New Zealand Superannuation has enabled them to use FIVs and the GSFA is seeking the same outcome. FIVs are similar to Special Purpose Vehicles and are entities formed or controlled by a fund for the purpose of holding, facilitating or managing investments in the Fund. They are used to structure and access investments more efficiently and help minimise the liability and risk.

The current legislation also prohibits GSFA from owning more than 50% of an entity. Therefore, GSFA is currently required to find a 50% joint venture partner in order to invest in these types of vehicles.

PWC Comments

Overall, we believe that the use of FIVs may be appropriate if sufficient safeguards are in place.

The use of FIVs is reasonably common practice for large investors. They are legal structures that often provide tax benefits (when set up in other jurisdictions), isolate investment risk, and provide some privacy for the underlying investments and investors.

The key risks are the reputational risk owing to increased media scrutiny and criticism on the use of FIVs. FIVs can be vulnerable to misuse (e.g. mismanagement of underlying assets) with potentially devastating consequences (e.g. resulting in fraud or loss of control) if the use and purpose are not appropriately considered.

The requirement that GSFA does not control an entity should be viewed on a look-through basis – that is, the underlying investments should be required to comply with section 15K of the Government Superannuation Fund Act 1956, but a holding company that is only used to manage investments should be exempt.

Recommendation

We believe the use of FIVs may be appropriate provided that the GSFA develops policies and procedures to manage any risks arising from the incorporation of FIVs. In addition, the Treasury will need to satisfy itself that the Fund's use of FIVs is appropriate. This includes:

- The purpose of the FIVs should be reconsidered throughout the life of the vehicle to ensure they continue to be maintained for allowable investment purposes;
- There should be regular oversight and ongoing monitoring of the use of FIVs;
- GSFA will need to develop reporting capabilities to assess and report on a continual basis and report on the overall Fund-level risks; and
- There should be a clear governance process to ensure the use of the FIV is commensurate with the complexity of the structure and allow for active intervention to reduce risk to the overall Fund.

Provided the appropriate safeguards are in place, we do not see any reason why GSFA should not have access to these vehicles.

The Government Superannuation Fund Act 1956 will need to be amended so that the restrictions on control in section 15K do not apply to Fund Investment Vehicles.

Use of Fund Investment Vehicles
GSFA Response
GSFA agrees with the recommendations and is awaiting the pending legislation to be resolved.

Increased Reporting to Treasury

Observation

In the latest Annual Letter of Expectations, the Minister of Finance noted that the aggregate funds managed within the CFI portfolio continues to grow as a percentage of the overall Crown's balance sheet. As a result, there is an increased focus from Treasury to ensure the Crown's investments are prudently and responsibly managed.

PWC Comments

Overall, as the key stakeholder of the CFI portfolio, we believe Treasury should develop comparative reporting capabilities across CFIs.

We have reviewed GSFA's quarterly reporting to Treasury. The information contains the market values for each asset class, investment returns and benchmark returns for the quarter and financial year to date, and a light commentary on the Fund's performance over the quarter.

We have observed that the information currently exchanged with Treasury could be expanded. We believe this additional reporting would enable Treasury to better assess the collective risk across all CFIs. We have put forward a recommendation on an appropriate framework for the Treasury to consider.

In addition, as the ultimate stakeholder and beneficiary of the Fund, we believe Treasury should be engaged in setting the Fund's investment objectives and the development of the investment strategy.

At a minimum, we believe the Treasury should receive reporting on the following items on a quarterly basis:

- Commentary on investment markets;
- Reporting and commentary of the Fund's performance against agreed benchmarks and objectives for the quarter, financial year to date, medium and long term;
- Reporting of the Fund's standard risk metrics for the overall portfolio, include volatility, VaR, CVaR and volatility decomposition;
- Reporting of the average credit ratings where applicable (e.g. the Fund's fixed interest portfolio);
- Reporting of the Fund's investments, including market values of each asset class, summary of derivative positions, market values of each asset class on an effective basis (i.e. outline of total and net exposure including the impact of derivatives);
- Reporting of the liquidity position of the Fund;
- Reporting of asset allocation relative to benchmark and strategic asset allocation ranges for the Fund; and
- Confirmation of compliance with all aspects of the investment governance

We believe there is merit for the Treasury to request the above information across all CFIs, which can then be aggregated to identify the key risks for Treasury's balance sheet.

The initial step should be focused on reporting and monitoring. However, if Treasury has identified and is concerned about a consistent trend across all CFIs, Treasury should have the authority to impose certain investment restrictions. In our experience working with other government Treasury operations with similar oversight responsibilities, we have observed that the Treasury could impose a number of restrictions, including:

- Maximum exposure to sub-investment grade bonds;

Increased Reporting to Treasury

- Minimum credit rating for organisations engaged in providing over-the-counter derivative contracts;
- Maximum exposure to any one investment manager;
- Asset allocation ranges;
- Maximum exposure to foreign currency;
- Liquidity requirements; and
- Allowable investments.

Recommendation

We recommend that Treasury should:

- Request increased reporting from GSFA (and other CFI's) on a quarterly basis (as outlined above);
- Be engaged and participate in setting the Fund's investment objectives and investment strategy;
- Sign off on the investment objectives and investment strategy employed, which can be completed as part of the Annual Letter of Expectations; and
- If the need arises, develop a set of prudential guidelines on investments applied to all CFIs.

GSFA Response

GSFA agrees that the Treasury should have all the information it needs to advise the Minister on whether the Authority is performing its functions under the Act. The Board and Management cooperates with Treasury and can provide any information to assist with its monitoring of CFIs. Management's quarterly investment report to the Board includes the majority of the recommended information and can be provided to Treasury on request.

The Minister approves material changes to the risk profile and objectives as part of approving the GSFA s Statement of Intent.

GSFA would be pleased to provide comment on any proposed prudential guidelines on investments to be applied to all CFIs however it notes, that the CFIs have different investment objectives, strategies and operating models and this needs to be recognised when applying common guidelines.

GSFA will work proactively with Treasury in their new "Treasury Information Capability Programme"

OPPORTUNITIES FOR IMPROVEMENT

Factors Considered	Strengths	Development Opportunities	GSFA Response
1.0 Strategy			
1.2 Investment principles	Investment principles and beliefs are clearly documented in the SIPSP and the Statement of Intent. Based on our conversations with the Board and Management, both stakeholders are able to accurately articulate the key investment principles and beliefs. The Responsible Investments policy was rewritten in 2012 to specifically exclude: • Manufacture of cluster munitions • Testing of nuclear explosive devices • Manufacture of anti-personnel mines • Manufacture of tobacco • Processing of whale meat The policy also includes the use of Collective Investment Vehicles (CIVs) and the practicalities of implementing Environmental, Social and Governance (ESG) considerations in these investments. We believe this was a positive development.	Based on our conversations with the Board and Management, both stakeholders are able to clearly articulate GSF's views on active management (i.e. GSF will engage active managers where they believe managers can add value on an after-fee basis). We note that active versus passive management is an important investment strategy that is not currently well documented in the SIPSP. We recommend that the SIPSP should be updated to reflect the Board and Management's views above. GSFA invests with active managers for global fixed interest. The Fund's Global Fixed Interest portfolio underperformed the benchmark (Barclays Global Aggregate Index) over the 1 and 3 years to 31 December 2015 (before New Zealand tax and after investment fees). In the latest CEM report, GSFA identified that the overall higher fees were due to the global fixed interest sector, where a number of peers are passively managing global fixed interest. In addition, GSFA has a dedicated Emerging Markets manager which attracted a higher base fee. At some point, the Board should revisit these decisions, determine which asset classes should continue to be actively managed to add value and whether GSFA can capture manager alpha if it exists. The Board should therefore seek appropriate information to revisit the business case to determine whether paying active fees for some of these asset classes is justified.	Agreed. SIPSP was updated in May 2017. Note this is also part of Russell's Health Check. Refer to response to recommendations in the 'Investment Performance' section above. Refer to response to recommendations in the 'Investment Performance' section above

Factors Considered	Strengths	Development Opportunities	GSFA Response
1.3 Formulate appropriate investment strategy	The establishment of the investment objectives are clear and well documented in the SIPSP. The use of a Reference Portfolio and Target Portfolio are clearly defined and well documented. A brief overview of the Reference Portfolio and the Target Portfolio is outlined in Section 1: Background. In our view, the assets are appropriate for the liabilities. The annual health check is undertaken by an external provider.	The Authority is aware that the Fund is significantly underfunded (i.e. liabilities exceed assets). As a result, asset/liability modelling is not considered in formulating the investment strategy. Our view is that whilst asset projections are not considered at this stage, the Fund's assets are expected to decline over time. As a result, the asset classes appropriate for the current Fund may not be appropriate for a smaller or declining Fund. For example, the Fund is currently invested in Private Equity, where diversifying across sectors and vintage years is important to capture illiquidity premium and develop a well balanced portfolio from a risk/return perspective. The Fund's assets are expected to decline over time, which is not an issue right now. However, it will become more of an issue over time, and it is prudent to consider the asset term of maturity over the next five to twenty years. We believe this needs to be considered prior to any further investment in illiquid assets. On this basis, the Authority should consider incorporating actuarial asset projections when formulating the investment strategy.	GSFA acknowledges that when the assets run down starting in 15-20 years' time, tests of liquidity will become more critical. GSFA will monitor this to ensure the asset allocation is not distorted unduly. . At its December 2016 meeting the Board was shown projections and they noted that the Fund is expected to be able to tolerate at least one 10 – 12 year cycle of private market investments and that GSFA intends to monitor the Fund's illiquidity capacity using actuarial projections of benefits and contributions on a three-yearly cycle or if a major financial markets event occurs. GSFA will incorporate asset term of maturity into consideration for any further illiquid investments should opportunities arise.

Factors Considered	Strengths	Development Opportunities	GSFA Response
1.4 Portfolio construction	The Management team attends a large number of investment manager meetings and these meetings are documented in the Board papers. In addition, the team supplements their internal research with the Mercer GIMD software and seek the advice of the Asset Consultant on an ad-hoc basis. We believe GSFA is well covered in the manager research space. In addition, we believe the Fund's range of investment managers is appropriate for a fund with $4 billion in assets.	Based on our discussions with key stakeholders, Management noted there have been some instances where investment manager fee negotiations were unsuccessful when undertaken at the completion of the manager search process. This is mainly due to the fact that investment managers are unlikely to negotiate on fees if they already they know the outcome of the RFP search. We recommend bringing the fee negotiations earlier in the RFP process, and in renegotiating fees in conjunction with increased mandate size and/or in periods of manager underperformance In addition, we note the Independent Review recommended that fee negotiations could be undertaken by the CFO or the Chief Executive, whose roles are generally independent of the investment team. We therefore agree that fee negotiations are often better performed by someone outside the investment team. Although these individuals need to be familiar with the negotiating protocols and have an awareness of the level of fees available in the marketplace.	Refer to response to recommendations in the "Benchmarking of Fees" section above.

Factors Considered	Strengths	Development Opportunities	GSFA Response
1.5 Stress testing	The Asset Consultant undertakes the stress testing of market events on a semi-annual basis. These results are included in the Board papers. We have reviewed the outputs in the September 2015 quarterly investment report and believe the scenarios used are appropriate and in line with industry practice.	We note, however, that there is little usage for the market stress testing. There are no clear ‘trigger points’ (i.e. warning signals) for interim reviews or action points documented in the SIPSP and/or the Investments Operations Manual.	Stress tests are currently undertaken as part of the GSFA’s regular reviews of portfolio risk and setting objectives. Risk tolerances are tested as part of the process of setting the Reference Portfolio and defining the acceptable active risk limits arising from deviations in the actual portfolio, including the dynamic asset allocation regime. As a long horizon investor GSFA believes it is not necessarily appropriate to react to adverse events by reducing risk. In many cases, these can be opportunities to take on risk from other investors. Reactions to short term market movements based on ‘trigger points’ run the risk of permanent losses.
		Stress testing should be used in formulating an appropriate investment strategy. The selected scenarios should be used to determine the total impact to performance and assess how well diversified the strategy is during extreme conditions.	GSFA undertakes stress testing as part of formulating the Reference Portfolio. The Board approves the policy portfolio based on its risk appetite and return expectations. The next Reference Portfolio review is due in 2018.
		The actual trigger points will depend on the Board’s risk appetite. For example, if the stress testing results show a 30% decline in the Fund’s assets, then the Board may wish to undertake a review of the Reference Portfolio and Target Portfolio.	Refer to above.

Factors Considered	Strengths	Development Opportunities	GSFA Response
1.6 Liquidity testing	Fund liquidity profile is now reported to the Board on a quarterly basis, following a recommendation from the 2011 Statutory Review. The liquidity test assesses the required liquidity in Global Bonds for 30% depreciation in the NZD/USD and the available liquidity. We have noted the Fund liquidity test in the September 2015 quarterly investment report. We do not have any issues regarding the liquidity testing process.	We note there is little documentation on liquidity stress testing in the SIPSP and/or the Investment Operations Manual. We recommend the SIPSP and/or the Investment Operations Manual should be updated to describe the purpose of the Fund Liquidity Test: • -Ensure sufficient liquidity is maintained to meet the Fund's liquidity needs; and • -Ensure the Fund remains within the strategic asset allocation ranges.	. Agreed. SIPSP / Operations Manual was updated in May 2017.
2.0 People			
2.1 Roles and responsibilities	There are clear roles and responsibilities between the Board, Investment Committee and Management. The Board approves all investment manager selection and termination decisions. In terms of DAA and currency tilting decisions, the Board set limits and ranges and Management works within the confines of these ranges.	The Board is responsible for manager selection and Management is responsible for strategic tilting decisions (i.e. DAA and currency decisions). The potential impact of DAA and currency decisions (i.e. +/- 10% weighting times an asset class return differential of up to 20%) may have a greater influence on performance than the contribution from manager selection (i.e. +/- 3% alpha times a manager weighting of 5-10%). This creates an imbalance of decisions made by the Board and Management. As a result, there may be a disconnection between Board and Management's decisions and delegations. The rebalancing and strategic tilting ranges could potentially be reviewed (if necessary); however, the role of the Investment Committee is currently being broadened in order to address these issues.	Refer to response to recommendations in the 'Effective and Efficient Investment Functions' section above.

Factors Considered	Strengths	Development Opportunities	GSFA Response
2.3 Investment Committee		Under the current Terms of Reference, the Investment Committee is only required to meet once a year to approve proposed changes to the SIPSP and other relevant policies. All other investment related decisions are brought directly to the Board. The Investment Committee is currently undergoing changes to adopt a more prominent role in filtering and summarising investment decisions before progressing to the Board for approval. As recommended by the Independent Review, we agree there is merit in the Investment Committee meeting more often and having a greater mandate under its Terms of Reference. We believe the roles that potentially could be considered for the Investment Committee are: • Reviewing an appropriate investment risk budget; • Reviewing dynamic asset allocation ranges; • Reviewing derivatives exposures and counterparty risks; and • Reviewing the appointment and termination of investment managers. This will enhance GSFA's governance framework.	Refer to response to recommendations in the 'Fit for Purpose' section above.
2.4 Quality and sufficiency of resources of in-house investment team		Based on our conversations with key stakeholders, there is some recognition that there is a key man risk in the investments team. We recognise that GSF is a relatively small Fund compared to other sovereign wealth funds, therefore it is unrealistic to hire an additional resource with the intention to succeed key staff members. However, we believe having a succession plan for key staff (i.e. a documented process on how to deal with short term staff losses)	Noted ,Agreed and completed.

Factors Considered	Strengths	Development Opportunities	GSFA Response
		would be beneficial. An example of a succession plan would be to give the Asset Consultant a greater involvement in the investment process until a suitable candidate has been appointed and adequately trained.	
2.7 Asset Consultant		The Board has access to its own independent advisor. However, we note over the past 5 years, the Board has minimised the reliance on the use of external advisors. For specific issues, we encourage the Board to obtain advice of an independent advisor to help ensure that fully informed decisions are made. This independent advisor may be required to attend Board meetings on an ad-hoc basis. The role of the advisor should be clearly documented.	Noted and Agreed
3.0 Conflict of Interest Management			

Factors Considered	Strengths	Development Opportunities	GSFA Response
3.5 Service provider conflicts of interest		We have observed that an external advisor provides dynamic asset allocation advice and economic signals for GSF's internal team. This external advisor also offers a commercial product which incorporates this advice. Based on conversations with Management and the Board, there have been instances where the external advisor did not implement their own investment signals. When this occurs, Management will provide a full report to the Board documenting the reasons behind these decisions. We believe this is evidence of good governance; however, we believe this is not currently documented in the SIPSP or the Investments Operation Manual. We recommend these policies should be updated to reflect Management's approach to managing these conflicts. For example, in connection with the external advisor's input to dynamic asset allocation, there should be a clear statement in these policies stating that Management will outline the advice provided by the advisor, including economic signals as well as the dynamic asset allocation positions implemented for the advisor's commercial product and Management's overall views and recommendations.	This is no longer applicable as the DAA advice is now performed in house
4.0 Assessment of Risks			
4.1 Risk assessment appetite	There are defined delegations for reporting GSFA's operational risk and investment risk. Operational risk, and other risks impacting financial statements, is reported to the Audit & Risk Committee. Investment risk is reported directly to the Board in the quarterly reports. Management is responsible for calculating a number of risk metrics (e.g. volatility, return/volatility, Sharpe ratio, beta to global equities, tracking error and information ratio).	As reported previously, the asset projections are not significant inputs in formulating the investment strategy. In some circumstances, such as the investment in private equity, this may expose the Fund to illiquidity risk in the future. Within private equity, diversifying across sectors and vintage years is important to capture illiquidity premium and develop a well balanced portfolio from a risk/return perspective. Without considering the Fund's asset projections, the Fund may be exposed to illiquidity risk in the future.	

Factors Considered	Strengths	Development Opportunities	GSFA Response
	The Asset Consultant is responsible for forward looking risk assessments, which includes analysis using the RiskMetrics software, return distributions, volatility decomposition CVaR and stress testing. We have reviewed the quarterly reports containing this information. We do not have any issues regarding the metrics shown in these reports.	The Fund's assets are expected to decline over time, which is not an issue right now. However, it will become more of an issue over time, and it is prudent to consider the asset term of maturity over the next five to twenty years. We believe this should be considered prior to any further investment in illiquid assets. On this basis, the Authority should consider incorporating actuarial asset projections as part of the risk assessment for individual asset class reviews. Risk budgeting is a process for the Board to deduce and allocate an acceptable level of risk for individual investment managers and different types of decisions (e.g. currency hedging, dynamic asset allocation etc.). We recommend the Board should adopt a policy on risk budgeting. Specifically, this will assist the Board to: • Identify an appropriate risk appetite; • Determine where to allocate the risk budget (e.g. asset allocation, dynamic asset allocation, manager selection etc.); • Ensure the risk budgets are aligned to the Board, Investment Committee and Management's collective views; and • Document these investment principles and procedures.	Agreed. Ongoing. At its December 2016 meeting the projections were shown to the Board and they noted that the Fund is expected to be able to tolerate at least one 10 – 12 year cycle of private market investments and that GSFA intends to monitor the Fund's illiquidity capacity using actuarial projections of benefits and contributions on a three-yearly cycle or if a major financial markets event occurs. Actuarial asset projections will be incorporated into future risk appetite assessments. GSFA believes all the elements of risk budgeting are in place as follows, therefore an explicit risk budgeting policy may not be necessary: • Investment risk estimates are embedded in the Reference Portfolio and are reviewed and approved by the Board. • Active risk limits are also taken into account in setting the Target Portfolio,

Factors Considered	Strengths	Development Opportunities	GSFA Response
			DAA limits and individual manager risk. • These estimates and stress tests are reviewed annually as part of the review of the Target Portfolio to ensure it conforms to the Board's risk tolerance as expressed in the Investment Objective.
5.0 Reporting to Board/Committee			
5.2 One off reports	One-off reports to the Board have a consistent format with clear recommendations to the Board. All papers, with the exception of the Annual Health Check, are prepared by Management for the Board. This is to ensure that the investment team is held fully accountable for any recommendations and the performance outcomes of the Fund. Management may request input from the Asset Consultant, external advisor or other CFIs on an ad-hoc basis.	Where the Asset Consultant or external advisor has been used, we believe there are circumstances when their reports and recommendations should be included in the Appendix section of the Board papers. This enables the Board and/or Investment Committee to have a greater level of insight into the decision making process, and any difference in views and any difference in views. We believe the circumstances where this is appropriate are: • There are differences in views between Management and the Asset Consultant or external advisor and it is in the Board's best interest to be made aware of these differences in views; and • The Board's expectation that expert advice is required on specialised topics.	Agreed GSFA is doing this already by testing investment proposals involving significant risk with the asset consultant and including their reports in Board papers as required.
7.0 Compliance			
7.2 Policy documentation	Overall, we believe GSF's policies, standards and procedures are appropriate and fit for purpose.	We believe an overarching document should be established to connect all the relevant policies, procedures and operational manuals associated with investments to make the structure and location of documents clearer.	Refer to response to recommendations in the 'Appropriateness of GSF's investment policies, standards and procedures' section above.

Factors Considered	Strengths	Development Opportunities	GSFA Response
		This overarching document could be incorporated as part of the 'Corporate Governance Statement' or as a separate document.	
8.0 Outcomes			
8.3 Reporting to Treasury		As the key stakeholder and the ultimate beneficiary of the CFI portfolio, we believe Treasury should develop comparative reporting capabilities across CFIs to adequately assess the collective risk across all CFIs. Further details are provided in Section 11.	Refer to response to recommendations in the 'Increased Reporting to Treasury' section above.
Fund Benchmark	Note this item was listed in "Key Findings" and "Material changes since the 2011 Statutory Review", but was not included in the subsequent recommendations and areas for development sections.	The rationale to change from a post-tax benchmark to a pre-tax benchmark was based on the fact that GSFA is a government entity, and therefore any tax position of the Fund would be offset by Crown tax receipts. Pre-tax measurement of the Fund's return is also simpler to calculate. While we largely agree with the reasons given, we note that after-tax management and after-tax return measurement are becoming increasingly common, as it incentivises investment managers to operate in a tax efficient manner. Good investment management should seek to maximise the after-tax return for the investor or sponsor through not incurring higher tax than necessary. Also, foreign withholding taxes on dividends are retained by the source country and not by the New Zealand government. We recommend that the assessment of the Fund's return against the Reference Portfolio is also done on an after-tax basis in order to minimise any tax leakages in relation to overseas investments.	GSFA considers its focus should be on pre-NZ tax returns and the Investment Objective is expressed accordingly. The reported returns (both gross and net of fees) are already net of foreign taxes. With regard to foreign taxes GSFA has been working with the Authority's tax advisor and Custodian on an ongoing basis to review foreign withholding taxes deducted to ensure these are minimised