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### The Government Pension Fund – Global

The Government Pension Fund was established on 1<sup>st</sup> January 2006. The Government Pension Fund comprises: The Government Pension Fund – Global (previously the Government Petroleum Fund, established in 1990) and The Government Pension Fund – Norway (The National Insurance Fund, established in 1967). This report only relates to The Government Pension Fund - Global.

## Introduction

At the request of the Ministry of Finance, WM Performance Services, a State Street business, has carried out an evaluation of the investment returns and associated investment risk of the Government Pension Fund – Global. The evaluation is conducted at three levels, Total Assets, Total Bonds and Total Equities

To provide context to the evaluation, the Fund's results have been placed against backdrops that comprise the outcomes for other large multi-asset institutional investors. These investors are drawn from WM's extensive base of European (including UK) funds. The aggregate market value of all the funds is NOK 12,075 billion; 68% of the funds are based in the UK and 32% in the Netherlands; 75% of the value comprises pension funds and 25% life insurance companies.

### **Chart Interpretation – Scatter-Grams**

In the scatter-grams, each fund's result is represented by a circle. The green circles show the position of the fifteen largest funds<sup>1</sup>, ranging in size from NOK 116 billion to NOK 1,500 billion, with an average value of NOK 337 billion. Red circles cover funds with values ranging from NOK 22 billion to NOK 115 billion; the average value is NOK 33 billion. The open circles are other, smaller, investors.

The risk and return scatter-grams plot the three year annualised results for each of the backdrop funds relative to their individual strategic benchmarks. The strategic benchmarks are quite diverse in terms of the mix of assets (bonds, equity, real estate etc.).

Strategic benchmarks are unique to each fund and define approximately 90% of their absolute investment return and associated risk. The benchmark relative risk and return captures the effect of the asset allocation and investment selection decisions made by each fund.

As the scatter-grams show, most funds take a limited amount of risk against their benchmark; three-quarters of the funds had relative risk of 1.5% or less. Converting relative risk to extra return is not automatic; half of the funds underperformed their benchmarks. It is notable that there is more clustering for very large investors, diversity of assets and managers reduces the probability of large deviations from the benchmark in either investment return or risk.

The table below the scatter-grams provides the Fund's rolling three year annualised absolute and benchmark relative return and risk details for a series of periods including the latest. Additionally, the information ratio (IR) is also shown, this ratio can be either positive or negative. The IR expresses benchmark relative return as a proportion of benchmark relative risk - it is often considered a measure of 'skill'. From research conducted by WM an IR of 0.3 usually equates to upper quartile performance. Higher IR's are seen but not normally maintained – a period of relative out-performance is likely to be eroded by subsequent underperformance.

At the overall fund level high IR's are achievable as a result of either tactical asset allocation at the highest level (the bond/equity split) or the ability to select a set of portfolio managers

<sup>&</sup>lt;sup>1</sup> 11 of the 15 largest funds have so far reported their figures for 2006.

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that in aggregate reduce overall benchmark relative volatility and add value over the benchmark. However, here too the maintenance of high IR's is rare with successful outcomes normally in the range 0.3 to 0.5.

The IR statistic must be treated with caution, if relative risk is very low a small variance in return will give a large IR, either positive or negative.

## **Chart Interpretation – Bar Charts**

The bar charts summarise the dispersion of benchmark relative returns for all the funds in the backdrop over each of the last five years and also give the ranges of annualised benchmark relative returns and risk for the three and five year periods ending December 2006. The '0' on the x axis represents each fund's unique strategic benchmark and is the base point around which the dispersion of relative return and relative risk is displayed. The charts show the range of results from 5<sup>th</sup> to 95<sup>th</sup> percentiles with the interquartile range (25<sup>th</sup> to 75<sup>th</sup> percentiles) shaded.

For Total Assets, the benchmark relative annual returns are quite evenly distributed around '0' (the benchmark). However, for Bonds there is evidence that funds can find it easier to add value over the benchmark. We believe that this is due to both the use of duration and the scope given to bond managers to invest out-with the strict confines of the benchmark. Many benchmarks are set with reference to Government bonds but the actual mandate will permit investment in credit, emerging market debt and other higher yielding issues. In the case of Equities, the dispersion is again centred on the benchmark indicating greater prescription and more use of indexation.

### **Investment Return and Risk Evaluation**

#### **Total Assets**

The Fund's overall investment return and risk are largely dictated by the 60:40% Bond to Equity investment strategy. This strategy has allowed the Fund to benefit from strong equity markets in the last four years while mitigating the effect of the equity market slump of 2000 to 2003. The Fund's three year annualised return to the end of 2006, 9.3% per annum, is well ahead of the benchmark and accompanied by an absolute level of risk that is similar to the benchmark's.

In risk terms the Fund's results are quite similar to the benchmark. However, the Fund has been successful in adding return relative to the benchmark over all of the rolling three year periods shown. The degree of relative out-performance is significant particularly if the Fund's growth is also taken into consideration. In 2006, for example, the Fund received NOK 288.3 billion of new money from the Government, this represented 20.6% of the value of the Fund at end December 2005 (NOK 1397.9 billion) – by comparison, most large funds have cash flows that are less than 5% of initial value. Investing significant cash flow, both as a percentage of the Fund and in terms of the absolute amount, presents a challenge in identifying suitable investment opportunities and in covering the physical transaction costs.

The Fund's incremental return has come without any significant benchmark relative investment risk. As the scatter-gram shows, the level of investment risk is lower than the majority of the backdrop but the relative return, +0.5% p.a., is higher – this can be interpreted as the Fund occupying the 'ideal' space of low risk with high return. This position is emphasised by the three year return and risk bar charts. The success of converting risk to excess return is given by the information ratio; an IR of 0.5 is often cited as a good risk/reward trade-off, the Fund's sustained run of IR's in excess of 1.0 is both commendable and unusual.

A State Street Business A few of the very largest funds, green circles, show surprising risk/return profiles. These funds have asset allocations that differ from their currently stated benchmarks. The result is indicative of the challenges faced by very large funds in altering strategic direction.

In benchmark relative terms, the bar charts show a steady improvement in performance in each of the years to 2005. In 2006 the Fund's monetary growth of NOK 95.9 billion, the aggregate of capital appreciation and income generated, translates to a return in international currency of 7.9% for the year, much in-line with the benchmark increase of 7.8%. Over both the three and five year periods ending in December 2006, the Fund shows near upper quartile relative performance with relative risk in the bottom 5% of observations. This is a highly desirable risk/reward trade-off although its sustainability must be open to question.

## **Total Bonds**

The Fund and benchmark returns are stable and positive over all the rolling three year periods shown. Absolute bond volatility reflects local market conditions as currency effects are largely excluded.

Relative to other bond investors, the scatter-gram shows that the Fund has a very low risk investment profile, almost index tracking. In theory, low risk limits the ability to add significant value over the benchmark so the steady flow of incremental return in recent years, 0.3% to 0.4% p.a., gives rise to an exceptionally high information ratio.

As the scatter-gram and bar charts show, the majority of bond portfolios display low risk relative to benchmark and widely different ability to generate excess return. Return and risk variations are a function of the scope given to bond managers to invest outside the strict confines of their benchmarks; these are frequently based on high quality government bonds. Many managers are using their investment discretion to access higher bond returns through duration as well as positions in credit and emerging market debt.

The scatter-gram also shows that there is a skew in the results for larger funds, solid circles, with most having outperformed their respective benchmarks in the three years to end 2006. There is a more consistent appetite for non-benchmark investment amongst this group of funds.

## **Total Equities**

The recovery in equity markets is clearly evident in the Fund's absolute equity performance of 17.4% p.a. for the three years to the end of December 2006. This is in stark contrast to the negative investment returns for periods dominated by the 'bear' markets of 2000 to 2003.

Investment risk for both the benchmark and the Fund peaked at the end of 2003 and has subsequently declined sharply. This pattern of risk is common across all large investors. The Fund's relative investment risk fell as absolute volatility converged with the benchmark but there is currently some evidence of increasing relative risk.

Relative to the benchmark, the Fund's investment performance steadily improved until 2005. Part of the high relative performance in 2005 was attributable to a change in benchmark construction. The Fund's benchmark is constructed on a net of withholding tax basis whereas most funds (circa 95%) set their benchmark as the gross return. Based on global withholding tax rates, the Fund has a relative performance advantage of circa 0.2% p.a. over other funds.

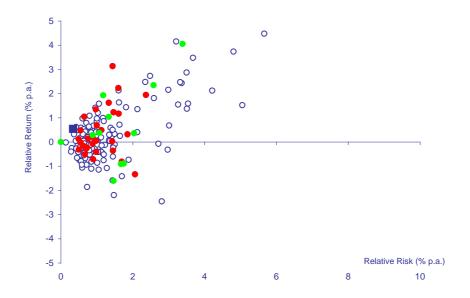
For 2006 the Fund's return of 17.0% is broadly in-line with the 17.1% uplift on the benchmark. The bar graphs illustrate that on average funds tend to under-perform their equity benchmarks; this is a function of dealing expenses, which are a charge on fund returns, and the use of gross indices in benchmark construction.

A State Street Business In the last three and five years the benchmark relative return is in the top quartile of results. In obtaining the superior returns, the Fund's relative investment risk is lower quartile over three years and at the bottom of the range (lowest 5%) over five. For the last three rolling three year periods, the Fund has enjoyed large excess returns in relation to the risk taken; indicated by the information ratios exceeding 0.7. More normal and sustainable information ratios are considered to lie in the range 0.25 to 0.5.

## **The Government Pension Fund - Global**

Backdrop: Large Fund Total Assets

3 Year Annualised Relative Return and Risk to End December 2006

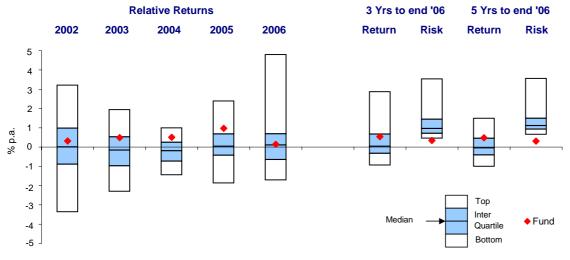


O Each circle in the risk/return space represents a fund relative to its own benchmark.

Fund

Total Assets	Three Year Annualised figures as at end						
	Dec 01	Dec 02	Dec 03	Dec 04	Dec 05	Dec 06	
Absolute Risk & Return							
Fund Absolute Return	4.0	-1.6	1.5	5.3	10.9	9.3	
Fund Absolute Risk	5.9	5.9	6.3	5.3	4.0	3.3	
Benchmark Absolute Return	3.4	-1.9	1.2	4.9	10.1	8.7	
Benchmark Absolute Risk	5.7	5.8	6.2	5.3	3.9	3.2	
Benchmark Relative							
Return	0.5	0.2	0.3	0.4	0.7	0.5	
Risk	0.5	0.4	0.3	0.2	0.3	0.3	
Information Ratio	1.1	0.6	1.2	1.8	2.3	1.6	

Ranges of Relative Return and Risk

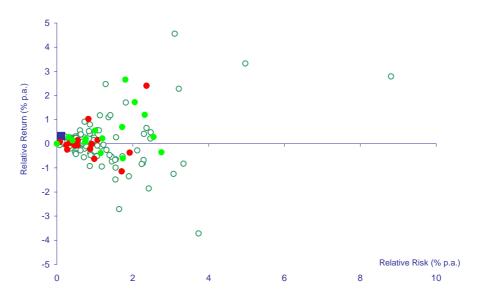


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## **The Government Pension Fund - Global**

Backdrop: Large Fund Total Bonds

3 Year Annualised Relative Return and Risk to End December 2006

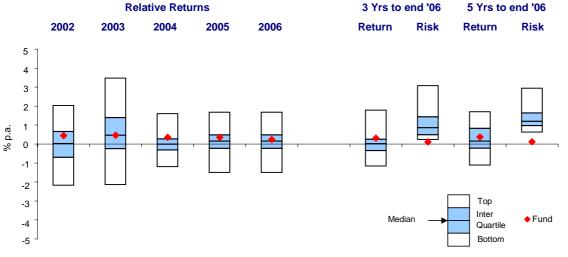


O Each circle in the risk/return space represents a fund relative to its own benchmark.

Fund

Total Bonds	Three Year Annualised figures as at end						
	Dec 01	Dec 02	Dec 03	Dec 04	Dec 05	Dec 06	
Absolute Risk & Return							
Fund Absolute Return	4.1	7.8	6.7	7.1	5.1	3.9	
Fund Absolute Risk	2.9	3.1	3.9	3.7	3.4	2.6	
Benchmark Absolute Return	4.0	7.6	6.4	6.6	4.6	3.6	
Benchmark Absolute Risk	2.9	3.1	3.9	3.7	3.4	2.7	
Benchmark Relative							
Return	0.1	0.2	0.3	0.4	0.4	0.3	
Risk	0.1	0.1	0.1	0.1	0.1	0.1	
Information Ratio	0.5	1.5	2.4	3.6	3.1	2.8	

Ranges of Relative Return and Risk

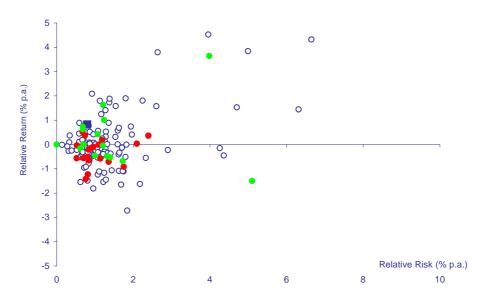


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# **The Government Pension Fund - Global**

Backdrop: Large Fund Total Equities

3 Year Annualised Relative Return and Risk to End December 2006

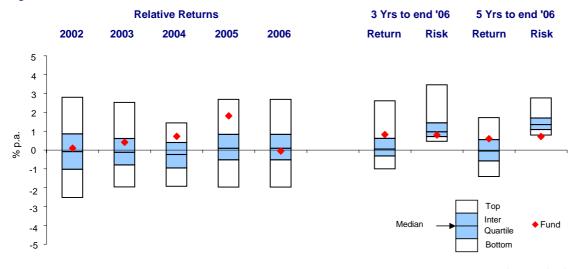


O Each circle in the risk/return space represents a fund relative to its own benchmark.

Func

Total Equities	Three Year Annualised figures as at end						
	Dec 01	Dec 02	Dec 03	Dec 04	Dec 05	Dec 06	
Absolute Risk & Return							
Fund Absolute Return	2.7	-15.3	-7.4	1.6	19.4	17.4	
Fund Absolute Risk	15.3	17.3	18.4	15.5	9.6	7.6	
Benchmark Absolute Return	1.6	-15.5	-7.6	1.2	18.2	16.5	
Benchmark Absolute Risk	14.9	17.1	18.3	15.5	9.4	7.1	
Benchmark Relative							
Return	1.1	0.2	0.2	0.4	1.0	0.8	
Risk	1.1	0.9	0.6	0.6	0.7	0.8	
Information Ratio	1.0	0.2	0.3	0.7	1.5	1.0	

Ranges of Relative Return and Risk



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