Ministry of Finance
Postboks 8008 Dep.
0030 Oslo

Date: 25.02.2015
Your ref.:
Our ref.:

The benchmark index for the Government Pension Fund Global

The Management Mandate for the Government Pension Fund Global requires the equity allocation in the fund's actual benchmark index to be rebalanced if it deviates by more than four percentage points from the strategic allocation on the last trading day of the month. This rebalancing returns the equity allocation in the actual benchmark index to 60 percent at the end of the following month.

In this letter, Norges Bank reports on the rebalancing that took place in autumn 2013, cf. section 1-6 (5) of the Management Mandate. Based on our experience, the Bank recommends amending the method for rebalancing the actual benchmark index. The Bank does not recommend any changes to the criteria for a rebalancing.

The rebalancing of the actual benchmark index in autumn 2013

The equity allocation in the benchmark index was 64.2 percent at the end of September 2013. In accordance with the provisions in the Management Mandate, the equity allocation in the benchmark index was returned to 60 percent on 31 October 2013, by which time it had risen further to 64.8 percent. At that time, 4.8 percent of the fund was equivalent to 231 billion kroner, and the isolated effect on expected relative volatility of such a reduction in the benchmark index's equity allocation was an estimated 56 basis points.[1]

In practice, it will not be feasible for the Bank to adjust the portfolio in the same way that the benchmark index is rebalanced. The Bank must take more time for the process to be cost-effective. We decided to carry out the bulk of the adjustments over a period of four months

[1] The effect of a change of four percentage points was estimated at 47 basis points.

POSTADRESSE
PB 1179 Sentrum,
0107 Oslo

BESØKSADRESSE
Bankplassen 2,
Oslo

Tel. 22 31 60 00
Faks 22 41 31 05
www.norges-Bank.no
central.Bank@norges-Bank.no

Organisasjons-nummer
NO 937 884 117 MVA

starting at the end of August 2013.[2] The potential for trading large volumes cost-effectively over a short period varies between regions and segments. The US stock market is normally more liquid than European markets, even though both regions are considered to be mature. The fund's strategic overweight in Europe exacerbates the challenges associated with this liquidity differential.[3] In addition, the market for government bonds in developed markets is often more liquid than the markets for corporate bonds and government bonds in emerging markets. These differences have a bearing on how the Bank can adjust the portfolio and imply that, in practice, it is difficult to pinpoint when the adjustment to a new benchmark index is completed.

The Management Mandate requires the Bank to report on the estimated cost of rebalancing. In this case, the Bank took four months to complete the adjustment. Using standard models, we estimate the transaction costs for this adjustment at approximately 600 million kroner.[4] For comparison, we have also estimated the transaction costs that would have been incurred had the Bank made the adjustment over a period of five trading days. Such an adjustment would have been closer to how the benchmark index is adjusted and would have served to reduce the relative risk in the management of the fund during the period. In this case, the transaction costs are estimated at just over 1 billion kroner. Estimates of this kind are associated with uncertainty, and the estimate of transaction costs will depend on the market situation at the time the adjustment is made. This applies particularly to estimates of transaction costs for large and repeated trades in the bond markets. The adjustment to the new actual benchmark index was carried out in a period of very good liquidity in financial markets, which helped reduce the transaction costs.

The rebalancing was carried out in the same period that several other major changes were made to the actual benchmark index, such as the implementation of new regional weights for equities and the annual adjustment of the GDP weights in the bond index. Multiple simultaneous changes to the benchmark index make it difficult to isolate portfolio changes due specifically to rebalancing. This increases the uncertainty associated with the estimate of actual transaction costs and also makes it more challenging to report any excess return or loss due to the rebalancing.

Amendment of the rebalancing rule

The equity allocation in the actual benchmark index is currently returned to 60 percent one month after rebalancing is triggered. Our experience from autumn 2013 indicates a need to amend the method for rebalancing the benchmark index.

---

[2] We considered it likely at this time that rebalancing would be triggered at the end of September 2013.

[3] The equities in the fund's benchmark index for equities are assigned factors according to their country of origin, cf. section 3-3 (2) of the mandate. Developed markets in Europe have a country factor of 2.5, the US and Canada 1, other developed markets 1.5, and emerging markets 1.5. A country factor of 2.5 for Europe against 1 for the US means that average ownership (measured as the percentage of shares readily available) of European companies is 2.5 times higher than for a company listed in the US.

[4] BECS (Best Execution Consulting Services) is a suite of software tools for analysing expected transaction costs ahead of trading in the market. BECS is based on transaction models that analyse the liquidity and volatility of individual stocks and provide an estimate of the total transaction cost. It is owned by Citigroup.

The fund has grown considerably since the current rebalancing rule was introduced in 2012, and the band for rebalancing is wider than originally recommended by the Bank. Given the current size of the fund, each individual rebalancing could mean buying and selling securities for more than 500 billion kroner. The Bank will need to take its time if it is to adjust the portfolio cost-effectively. The Bank will be less able than before to rely on inflows of new capital to make the necessary adjustments. Lower inflows, both in absolute terms and relative to the fund's market value, mean that most of the adjustment following a rebalancing will have to take the form of actual buying and selling of securities in the markets.

Deviations between the benchmark index and the portfolio during periods when the Bank is adjusting to a new benchmark index could dominate the relative risk in the management of the fund and the excess return reported. The excess return reported will not paint a true picture of whether Norges Bank has carried out the portfolio adjustments efficiently. We therefore believe that the method for setting the actual benchmark index should be brought closer to a process that can be followed in the operational management of the fund.

Our proposed new method entails adjusting the actual benchmark index in stages. The proposal means that rebalancing could take longer if the equity allocation moves outside the band of +/- four percentage points during the period. On balance, we have concluded that the method for how the actual benchmark index is rebalanced should be exempted from public disclosure. The method should be set by the Ministry based on advice from Norges Bank. If the Bank finds that there is a need to adjust the method for rebalancing the benchmark index, it can advise on this in connection with its reporting after a rebalancing.

In its letter to Norges Bank dated 24 June 2014 concerning Report to the Storting No. 19 (2013-2014), the Ministry wrote that it plans to revise the Management Mandate so that the impact on expected relative volatility of a rebalancing of the benchmark index is excluded from the allowance for deviations from the benchmark index. One requirement for this change is that the Bank reports in more detail on the effects on relative volatility and excess return. Our experience from the rebalancing in autumn 2013 is that it is difficult to isolate these effects from the Bank's other investment decisions.

<u>The Bank's recommendation</u>

The Bank recommends that section 1-6 (4) of the Management Mandate for the Government Pension Fund Global is amended to read as follows:

If the equity allocation in the actual benchmark index on the last trading day of the month deviates by more than four percentage points from the weight in the strategic benchmark index, the equity allocation is to be rebalanced to 60 percent. The Ministry will set more detailed rules for how the actual benchmark index is to be rebalanced, based on advice from Norges Bank.

The Bank's recommendation for how the actual benchmark index should be rebalanced is set out in the enclosure to this letter.

Further development of the management framework

In our letter to the Ministry of 31 January 2014, we provided recommendations on the further development of the framework for the management of the fund. At the same time, the Ministry received advice from a group of experts on possible changes to the fund's management framework.[5] These experts recommend giving the Bank somewhat greater responsibility for the fund's overall return. Under such a regime, it would be natural to consider delegating responsibility for setting the rules for rebalancing the benchmark index to the Bank. The Bank would then be able to set rules for rebalancing that take greater account of actual market conditions.

Yours faithfully

Øystein Olsen Yngve Slyngstad

Enclosure

Proposed method for rebalancing the actual benchmark index

Exempt from public disclosure

[5] Ang A., M.W. Brandt and D.F. Denison: Review of the Active Management of the Norwegian Government Pension Fund Global, January 2014.