Methodology for the calculation of returns

The methodology for calculating returns on the funds managed by NBIM is based on the international standard Global Investment Performance Standards (GIPS).¹

The valuation of the funds is calculated according to the market value principle – in other words, the opening and closing values of the portfolios are set at market price at the beginning and end of the calculation period. In line with the pricing hierarchy applied, index suppliers' prices are given priority for securities included in the benchmark indices.²

The market value calculated for the funds is based on the trade date – in other words, transactions affect the composition of the fund on the day on which they are agreed even though it can take a number of days for them to be settled (value date). Interest expenses and income, dividends and withholding tax are accounted for on an accrual basis when calculating returns.

Transfers to the Government Pension Fund Global and between the equity and fixed income portfolios are normally made on the last business day of each month, but can also take place during the month. The return is calculated by looking at the change in market value, adjusted for incoming and outgoing payments, since the last calculation date (month-end or date of previous transfer to the fund). The geometrical return is used for longer periods, such as quarterly, annual and year-todate returns. This means that the return indices for each sub-period are multiplied to produce a timeweighted return. Returns for periods exceeding one year are annualised. Returns are calculated in both Norwegian kroner and local currency. The kroner return is calculated on the basis of market values in local currency translated into kroner using WM/Reuters exchange rates.3

The return in local currency is calculated as the geometrical difference between the fund's return in kroner and the return on the currency basket. The currency basket corresponds to the currency weights in the benchmark portfolio, and the return indicates how much the krone has appreciated/depreciated against the currencies in the benchmark portfolio.

The excess return emerges as an arithmetical difference between the returns on the actual portfolio and the benchmark portfolio during the period in question (month, quarter, year or annualised period).

The return in kroner is not a good reflection of developments in the Government Pension Fund Global's international purchasing power. Fluctuations in the krone exchange rate affect the return in NOK, but have no bearing on the fund's international purchasing power. Norges Bank therefore gives priority to presenting return data in international currency when reporting both the return on the fund and the excess return relative to the benchmark portfolio.

Returns are calculated in a separate system and then reconciled with the accounting system. Differences between market values calculated in the return models and market values in the accounts are primarily due to different valuation principles for money market investments. Provisions are also made in the accounts to cover the fee payable to Norges Bank.

- The GIPS reports and the GIPS Compliance Manual including formulas for return calculations is available at NBIM's web site: http://www.nbim.no.
- ² The benchmark indices are delivered by FTSE Group and Barclays Capital for equities and fixed income respectively.
- 3 WM/Reuters Closing Spot Rates, fixed at 4 p.m. London time.