

# POLICY

## PERFORMANCE MEASUREMENT

Issued by	Chief Executive Officer
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### 1. Purpose

The purpose of this policy is to outline methodologies and processes for performance measurement. The policy is based on the framework given by the fund owners. The performance of the Government Pension Fund Global (GPFG) and the equity investments of Norges Banks foreign exchange reserves (the "funds") managed by Norges Bank Investment Management (NBIM) shall be calculated and presented in accordance with the Global Investment Performance Standards (GIPS). The performance shall be measured with a high degree of accuracy in line with industry practice.

For the purpose of performance measurement of the GPFG and its asset classes, NBIM has defined the following inception dates:

- Pension Fund: 31 December 1997
- Equity: 31 December 1998
- Fixed income: 31 December 1997
- Unlisted real estate: 31 March 2011
- Unlisted renewable infrastructure: 31 May 2021

For the purpose of performance measurement of the GPFG asset class management, NBIM has defined the following inception dates:

- Equity management: 31 December 1998
- Fixed-income management: 31 December 1997
- Real estate management: 31 March 2011
- Renewable infrastructure management: 31 May 2021

The GPFG's relative performance shall be decomposed along the investment strategies decided by the Executive Board of Norges Bank. Since 2013, the following investment strategies have been employed in the management of the GPFG: Fund allocation, security selection and asset management. For the purpose of performance measurement of the equity investments of Norges Banks foreign exchange reserves, NBIM has defined the following inception date: 31 December 2001.

### 2. Policy

NBIM is committed to measure performance according to industry practice and to ensure this, NBIM shall adhere to Global Investment Performance Standards (GIPS). To ensure fair value, the valuation of the assets shall meet relevant International Financial Reporting Standards (IFRS) and principles as set out in the policy on valuation. The return on the funds shall be calculated and presented both from the fund owner's and from an investment manager perspective.

Performance measurement processes, systems and controls shall be robust and in line with industry practice and verified to be GIPS compliant.

## 2.1 Fund net asset value

- The net asset value of the funds shall be measured at fair value, as set out in the policy on valuation.
- All transactions shall be recognised on the trade date to ensure the most accurate reflection of assets and liabilities held.
- Other items including interest income and expenses, dividends and taxes, are accounted for based on the relevant IFRS standard.

## 2.2 Performance calculation

- Returns shall be calculated based on time-weighted indices for performance measurement. When transfers to the funds and between the portfolios take place, the closing net asset value on the actual day of transfer shall be used for performance measurement purposes.
- For the funds, asset classes and asset class management, monthly return shall be calculated as the change in market value from the end of one month to the next, adjusted for contributions to or withdrawals from funds. Where contributions and withdrawals are made between month ends, the market value on the day of transfer is to be used and interim returns are to be geometrically linked. Geometric linking of monthly returns shall be used for longer periods, such as quarterly, annual and year-to-date returns
- For the investment strategies, daily return shall be calculated as the change in market value from the end of one day to the next, adjusted for contributions to or withdrawals from the investment strategies. Geometric linking of period returns shall be used for longer periods, such as monthly, quarterly, annual and year-to-date returns.
- For the equity and fixed-income asset classes, performance shall be calculated gross of management fees (including custodian fees), but net of transaction-related costs. For real estate, management costs shall be included in the performance figures. Management and custodian fees shall be documented separately.
- GPFG's percentage return shall be measured and presented in the base currency Norwegian krone (NOK) and in an international currency basket, which shall be a weighted combination of the currencies in the funds' benchmark indices for equities and fixed income. This is also referred to as the fund's currency baskets.
- The NOK return shall be calculated based on each asset's market value in local currency translated into NOK using official exchange rates as set out in the policy for valuation. The currency basket return shall be calculated using a geometric formula based on the funds' return in NOK and the returns of the currencies in their respective currency basket. The weights of the currencies in the basket correspond to the weights in the benchmark portfolio.
- Relative return shall be calculated as the arithmetic difference between the return on the actual portfolio and the benchmark portfolio for the period presented.
- Inflation-adjusted return shall be calculated based on the weighted inflation rate for the currencies in the benchmark portfolio. The weights of the currencies in the basket correspond to the currency weights in the benchmark portfolio.
- The rate of return for unlisted real estate and infrastructure investments shall be measured both on a levered and unlevered basis and shall also be presented in component returns. Appropriate disclosures regarding asset leverage amounts shall be provided.

## 2.3 Benchmarks

- The fund, asset classes, asset class management and investment strategies shall be measured versus appropriate benchmarks.
- The investment performance on fund, asset classes, asset class management and investment strategies shall be measured versus benchmarks adjusted for tax on dividends according to the funds' tax position.
- The asset classes shall be measured versus benchmarks defined in the management mandate.
- Equity and fixed-income management shall be measured versus the respective components of the strategic benchmark adjusted for the tailor-made funding to real assets.
- Benchmarks for asset classes, asset class management and investment strategies shall be set so that they sum up to the overall fund benchmark index.
- The fund allocation strategy aggregates up the fund's allocation decisions and shall be measured against their respective funding components.
- Benchmarks for the security selection investment strategy mandates shall be designed to represent the mandates' investment universe.
- The benchmark for the asset management strategy shall be the fund's benchmark index adjusted for funding benchmarks for the fund allocation strategy and benchmarks for security selection strategies.

#### **2.4 Performance measurement system and controls**

- NBIM shall ensure that robust performance measurement systems and control processes are in place for the measurement of the funds.
- Calculated performance numbers and time series shall be stored in a secure way to ensure completeness and integrity of numbers.
- Performance measurement shall be based on input data that has been subject to reconciliation. The monthly net asset value used in performance measurement shall be reconciled to the official financial figures.

#### **2.5 Verification of compliance to GIPS**

- A qualified and independent third party shall perform an assessment in order to verify adherences to GIPS. The verification involves the review of processes, procedures and reporting related to performance measurement.