Evaluating the Performance of Active Management in Norway's Sovereign Wealth Fund

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Ex-ante rationale for active management

Necessary condition: Market inefficiencies

- Information acquisition and trading are costly.
- Prices cannot be fully efficient in equilibrium.
- Growth in passive ownership increases price insensitivity and short-term dislocations.

Fama (1970); Grossman & Stiglitz (1980); Sharpe (1991); French (2008); Chinco & Sammon (2024); Sammon (2025)

Comparative advantage: NBIM's structural edge

- **Scale:** low marginal costs, internalization, capacity for large trades
- **Long horizon:** tolerance for interim volatility and slow-moving strategies
- **Limited liquidity needs:** patient capital with low forced-selling risk

Ang et al. (2009, 2014); Berk & van Binsbergen (2015); Pedersen (2018); Bauer et al. (2022)

Implication

Active management justified *ex ante* when strategies are designed to exploit comparative advantages.

Ex-post risk-adjusted performance

- **Fund's total value and return:** no risk adjustment.
- **Value-added and active return (Fund minus benchmark):** risk-adjusted for benchmark risk.
  - ▶ The owner accepts active risk subject to a tracking-error limit of 1.25%.

- We examine two additional performance measures based on more sophisticated risk models:

1. **CAPM-adjusted active return**
   - ▶ Adjusted for beta exposure relative to the benchmark.

2. **Seven-factor model–adjusted active return**, recommended by Dahlquist, Polk, Priestley, and Ødegaard (2015)
   - ▶ Adjusted using the Fama–French five-factor model plus two fixed-income factors.
   - ▶ Robustness tests also include momentum
   - ▶ "I tried telling a hedge fund manager, 'You don't have alpha. Your returns can be replicated with a value-growth, momentum, currency and term carry, and short-vol strategy.' He said, 'Exotic beta' is my alpha. I understand those systematic factors and know how to trade them. My clients don't.'"(Cochrane, 2011, p. 1087).

Problems with factor models in performance evaluation

- Arguments from Bauer, Christiansen, and Døskeland (2022):
- **Useful for risk management, less suitable for performance evaluation.**
- **Performance estimates inherit all assumptions of the risk model.**
- Potential problems:

1. **Model uncertainty:** not clear ex ante what should be included in the model (the "factor zoo").
2. **Dynamics:** static estimates do not capture time-varying factor exposures.
3. **Costs:** hard to account for transaction and implementation costs when targeting factor exposures.
4. **Investability:** managers may face constraints that prevent replication of factor portfolios.
5. **Benchmarking:** the benchmark portfolio differs from the market portfolio.
6. **Data dependence:** factor returns depend on data construction and vintage.

Implication

Focus on simple, transparent, benchmark-relative performance measures .

Cumulative value added (compounded)

Cumulative gross value added (billion NOK)

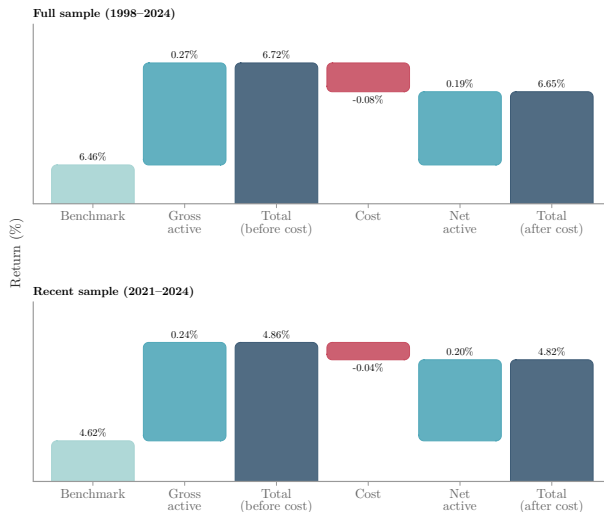Cumulative net value added (billion NOK)

293

611

178

402
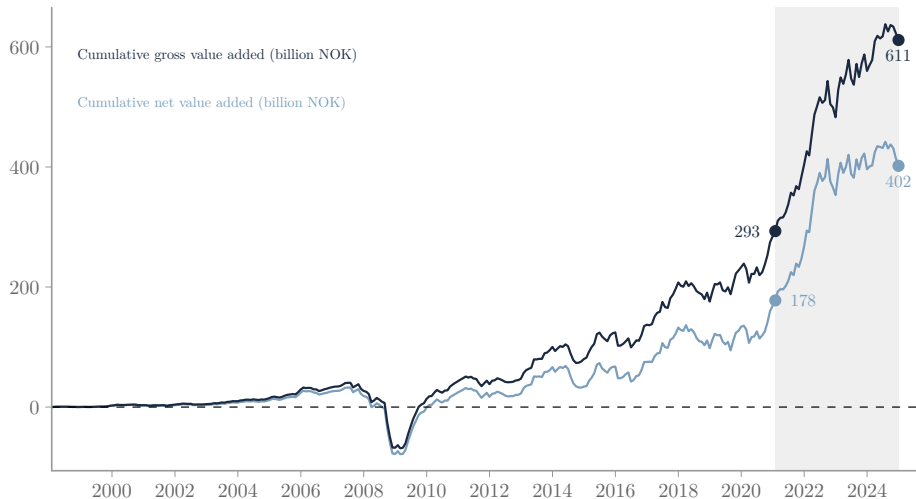
Cumulative value added constructed as a value-added wealth account, where monthly value added is reinvested and grows with the benchmark return.

Cumulative value added (simple sum)

Sum gross value added (billion NOK)

Sum net value added (billion NOK)

163

109

245

167
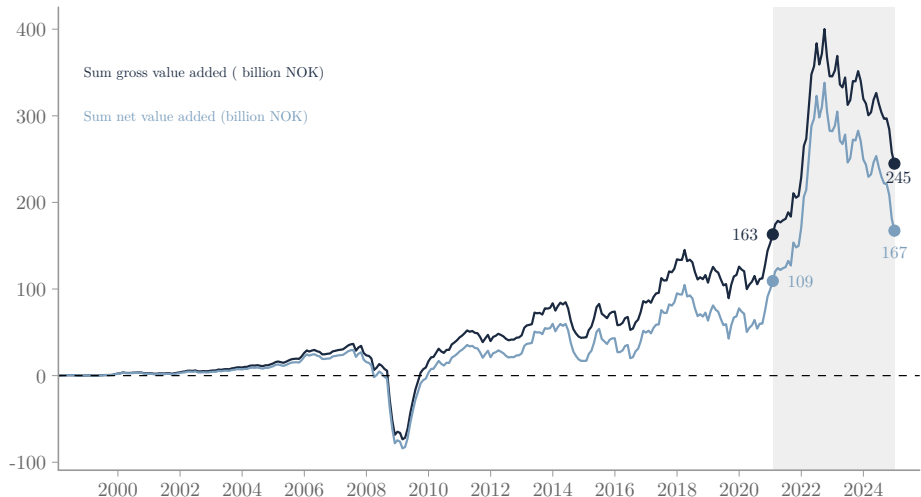
Simple sum of monthly value added over time, without reinvestment or compounding at the benchmark return.

Active returns

Full sample (1998–2024)

Benchmark: 6.46%
Gross active: 0.27%
Total (before cost): 6.72%
Cost: -0.08%
Net active: 0.19%
Total (after cost): 6.65%

Recent sample (2021–2024)

Benchmark: 4.62%
Gross active: 0.24%
Total (before cost): 4.86%
Cost: -0.04%
Net active: 0.20%
Total (after cost): 4.82%

Returns are reported as arithmetic annual means. Total returns are decomposed into benchmark, gross active, cost, and net active components.

Active return and CAPM-adjusted active return
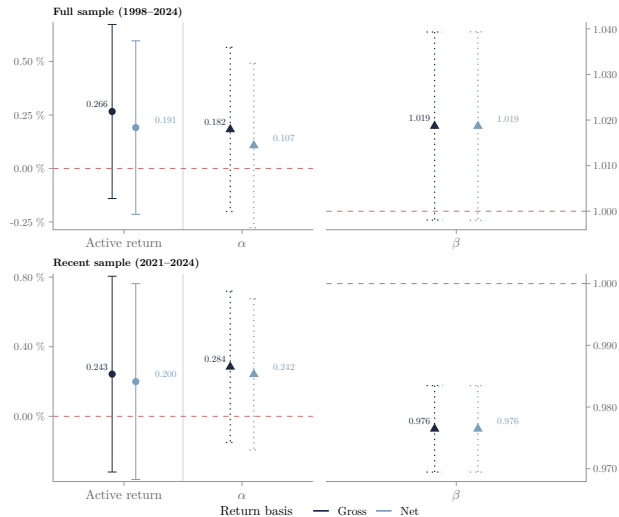
The figure reports annualized estimates of gross and net active returns and their α–β decomposition, with 95% Newey–West confidence intervals

Seven-factor model–adjusted active return
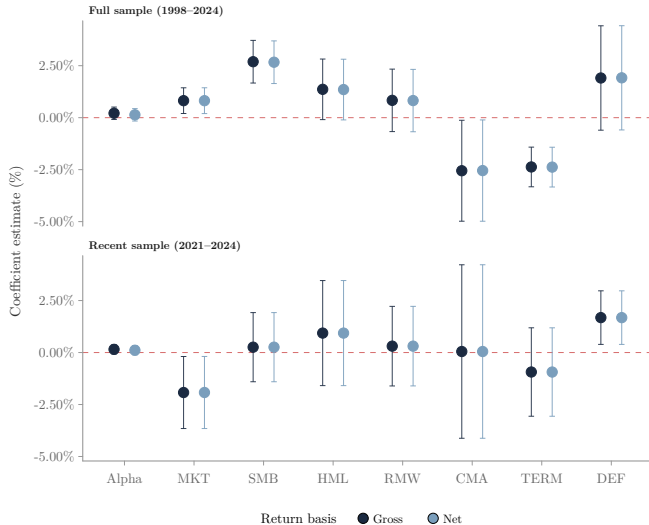
Estimated exposures to factors recommended by Dahlquist, Polk, Priestley, and Ødegaard (2015) , with 95% Newey–West confidence intervals, for gross and net returns in the full and recent samples.
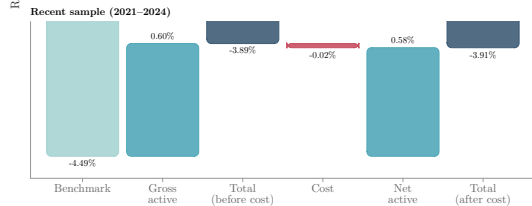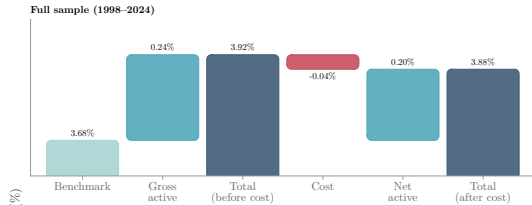
Seven-factor model–adjusted active return
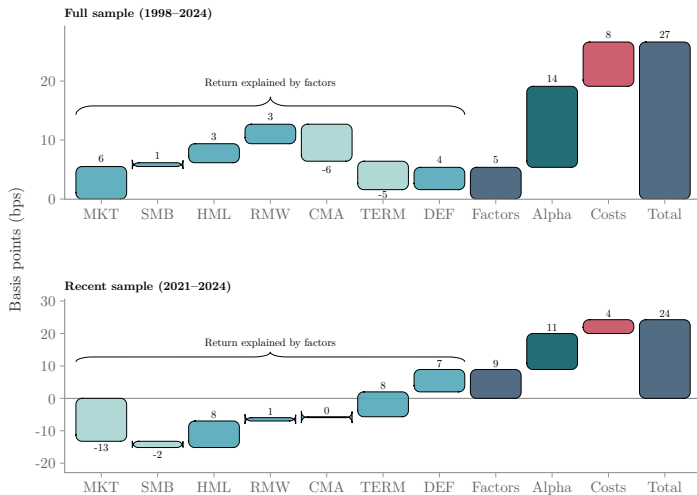
Decomposes active return into factor contributions, costs, and net alpha in basis points for the full period and the recent period.
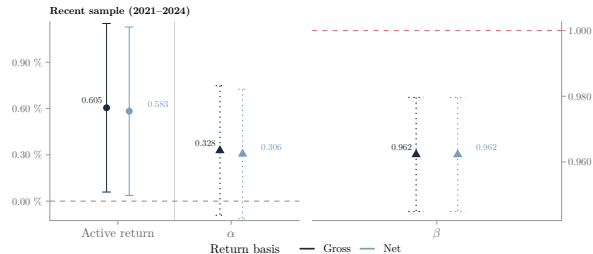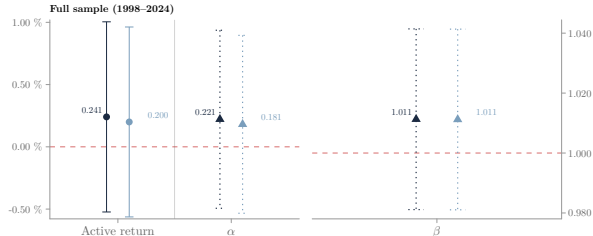
Equity portfolio
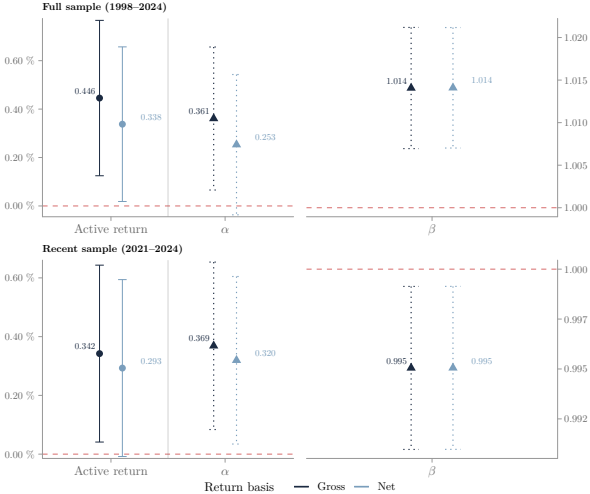
Active returns

Active return and CAPM-adjusted active return

Fixed-income portfolio
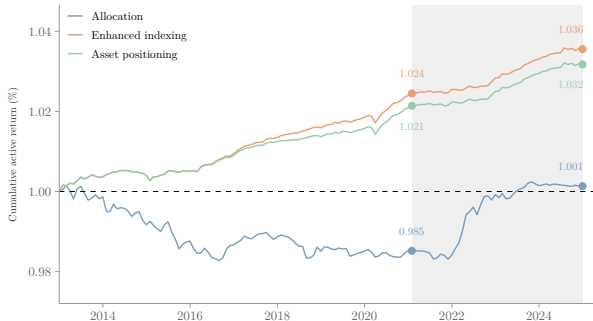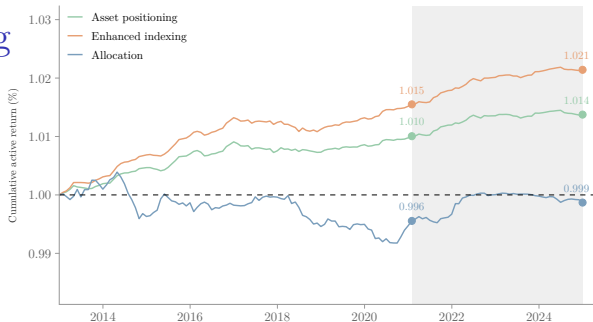

Active returns

Active return and CAPM-adjusted active return

Success 1: Enhanced indexing

Top: Equity
Bottom: Fixed income

- **Mechanism:** Positions around index events and securities lending generate small but persistent excess returns.

- **Value added:** Modest percentage gains scale into material value added due to the Fund's large capital base.

- **Structural advantage:** Scale and liquidity provision capacity fit recent evidence on passive growth, price impact, and demand elasticity.

Success 2: Security selection

Top: Equity
Bottom: Fixed income

- **Mechanism:** Selection of individual securities based on proprietary research by internal teams and external managers.

- **Value added:** Active returns are economically meaningful, with external managers delivering the majority of value added even after higher fees.

- **Structural advantage:** Scale and long horizon allow access to capacity-constrained skill, tolerance for interim underperformance, and integration with active ownership.
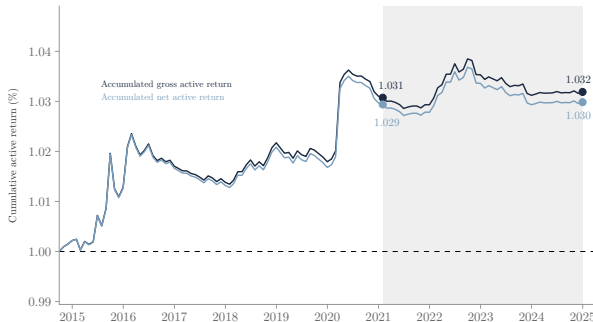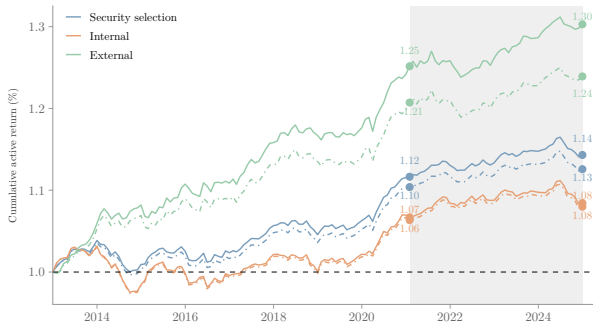
Challenge 1: Allocation strategy

- **Mechanism:** Top-down allocation bets, such as underweighting equities or positioning on interest rates.

- **Value added:** Results are mixed; gains from interest-rate positions were outweighed by losses from equity underweighting.

- **Structural advantage:** Difficult to justify based on the Fund's structural advantages, as many investors pursue similar bets; persistent equity underweights resemble costly insurance purchases.
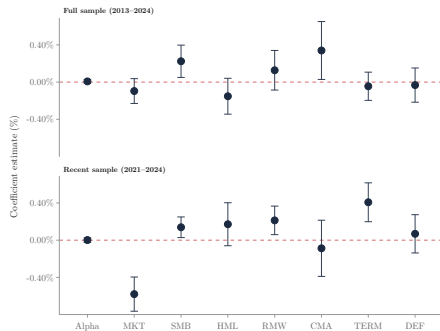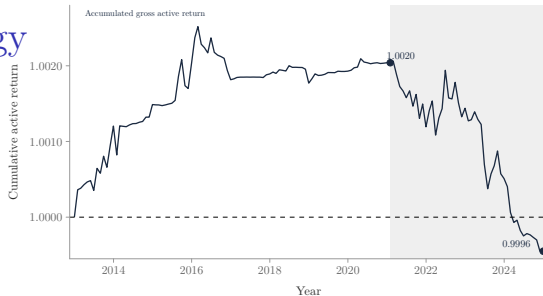
Challenge 2: Real estate

- **Mechanism:** Since 2017, real estate is evaluated against a funding benchmark combining equity and fixed income.
- **Value added:** Cumulative value added is negative (about NOK 130bn)
- **Structural advantage:** The current model encourages short-term assessment and treats diversification as active risk; for a long-horizon investor, excluding real estate is itself an active allocation choice.

Cumulative gross value added (billion NOK)

Cumulative net value added (billion NOK)

Cumulative value added (compounded)
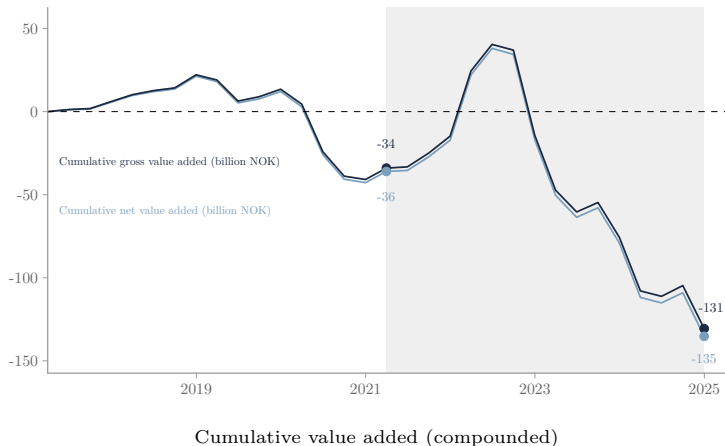
Challenge 2: Real estate

- **Two-step decision:** Real estate outcomes reflect both *allocation* and *selection* choices.
- **Allocation:** The decision to include real estate and its weight relative to equities and fixed income.
- **Selection:** Asset-level choices within the real estate portfolio.
- **Value added:** Real estate underperforms both the funding mix and broader real estate indices.
- **Implication:** Clear attribution can improve transparency and evaluation over long horizons.
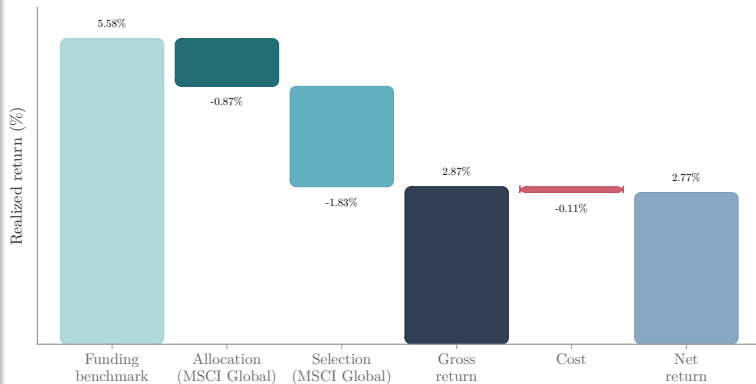
All in all
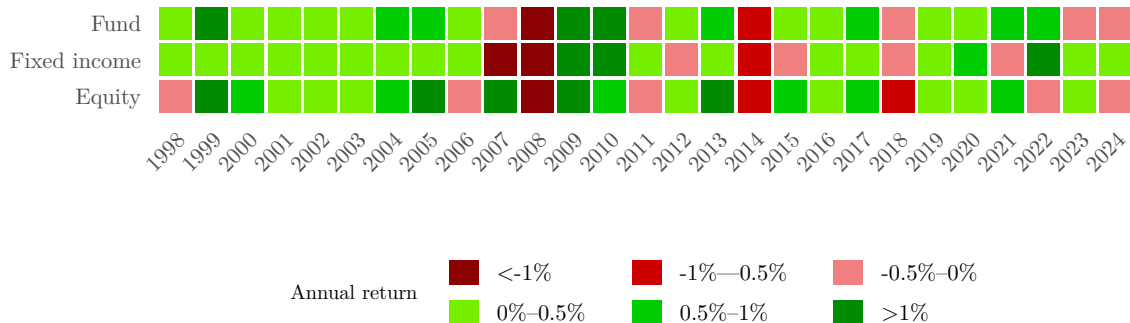
- The Fund has delivered solid overall results, but active management requires continual scrutiny, long-horizon evaluation, and disciplined interpretation in noisy environments.