Review of Active Management of the Norwegian Pension Fund – Global

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Review of
Active Management
Active Management since 2008

- Simpler instruments and less leverage
- Fewer external asset managers
- Lower tracking error
  - 1% expected tracking versus 1.5% hard limit
- Operational Reference Portfolio (ORP)
  - Improved diversification
  - Systematic factor exposures
  - Smart rebalancing

Preliminaries

- Three distinct subsample periods
  - Pre-crisis: Jan 1998 - Dec 2006
  - Post-crisis: Jan 2009 - Jun 2013 (“last 5 years”)
- Small sample especially post crisis
- Real estate excluded from analysis
Fund Active Returns

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>StdDev</th>
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<tbody>
<tr>
<td>Full Sample</td>
<td>Coefficient 0.03</td>
<td>0.22</td>
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<tr>
<td></td>
<td>P-Value 0.04</td>
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<td>Pre Financial Crisis</td>
<td>Coefficient 0.04</td>
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<tr>
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<td>P-Value 0.00</td>
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<tr>
<td>Post Financial Crisis</td>
<td>Coefficient 0.10</td>
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<tr>
<td></td>
<td>P-Value 0.00</td>
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</table>

Figure 1: Overall Fund Cumulated Active Returns

Fixed Income Active Returns

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>StdDev</th>
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<tbody>
<tr>
<td>Full Sample</td>
<td>Coefficient 0.02</td>
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Figure 2: Fixed Income Cumulated Active Returns
Equity Active Returns

<table>
<thead>
<tr>
<th>Sample</th>
<th>Coefficient</th>
<th>Mean</th>
<th>StdDev</th>
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<tbody>
<tr>
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<td>P-Value</td>
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<tr>
<td>Pre Fin. Crisis</td>
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<td>P-Value</td>
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<tr>
<td>Post Fin. Crisis</td>
<td>Coefficient</td>
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<td>P-Value</td>
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Panel B: Equity Cumulated Active Returns

Factor Analysis

- To what extent can the active returns be attributed to exposures to established factors?
- Active returns originating from exposures to factors can be a sustainable source of value-added for a long-run investor
- Note: factor tilts are not specified in the Fund’s benchmarks
Explaining Active Returns

Operational Reference Portfolio

• Excellent development
• Purposes
  – Diversify more widely than standard benchmarks
  – Systematic factor exposure
  – Smart rebalancing
• Issues
  – Verification horizons
  – Governance
  – Tracking error
Tail Risk

PDF

CDF

Active Mandates
Comparative Advantages

• Structural
  – Long horizon, large size, tolerate illiquidity

• Developed
  – Arise from governance, organization, management
  – Dedicated fund manager
  – Transparency
  – Investment mandate
  – Professionalism

Investment Mandate

• Non-investment criteria are important
  – Taken within the context of an investment mandate

• Non-investment mandates are costly
  – Investment restrictions lead to weakly inferior portfolios potentially impairing the welfare of future generations
  – Examples of pension funds and SWFs where non-investment mandates result in diminished returns

• Exception of small environment-related mandate
Opportunity Cost Model

Responsibilities of asset owner/sponsor
• Reference portfolio (RP)
• Constraints
• Active risk appetite parameters

Opportunity Cost Model

Responsibilities of fund manager
• Policy portfolio
• Active investment programs
  – Returns exceed Reference Portfolio funding sources
  – Skill-based benchmarks, as needed
• Value added returns net of all costs
Opportunity Cost Model

Principles
• Looks through “asset class” labels
• Recognizes bond and equity factor risk exposures of alternative assets
• “Unspanned” risk not in Reference Portfolio is true active management

Opportunity Cost Model

Total Portfolio Approach
• Fund real estate by a combination of (debt + equity) from the Reference Portfolio
Opportunity Cost Model

Total Portfolio Approach

- Fund private equity by a combination of (debt + equity) from the Reference Portfolio

Recommendations
Recommendations

• Report each stage of value added
• Adopt the “Opportunity Cost Model” for active management
• Raise risk taking of active management
  – Adopt downside risk measures
  – More transparency of active risk
Benefits of Greater Transparency

- Improved diversification and factors will add value, but may result in short-term losses
- Transparency allows proper management of expectations; ability to stay the course
- Does not unfairly penalize NBIM for poor factor performance

Opportunity Cost Model: Advantages

- Plays to structural advantages
- Onus is on NBIM to cover costs and beat the Reference Portfolio—raises the bar for active management
- Scalable; includes real estate in the active return
- MoF takes the long-term view and defines the Reference Portfolio and determines risk limits
Opportunity Cost Model: Challenges

- Specifying risk limits
- Predicated on having a single, dedicated fund manager
- Maintain investment mandate
- Enhanced role of the ORP
- Ensuring internal competence—good governance is essential
- Gradual increase in Fund’s investable universe

Increase Active Risk Taking

- Higher risk taking devoted to improved diversification and factor exposure adds long-term value
- Sufficient large prudent risk buffer
- Positive historical experience
- Greater transparency of active return components
- Includes real estate as an active risk
Adopt Downside Risk Measures

• Care about the distribution of active returns
  – Benchmark deviation volatility or tracking error is a symmetric measure
• Norges Bank should give guidelines on tail behavior of active returns—for both tails, but especially for downside outcomes