The Government Pension Fund Global (GPFG)

Long-Horizon Investments in Infrastructure

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Discovery of oil in 1969 – the Ekofisk oil field

Photo: Kjetil Alsvik/Conoco Phillips
Historical Development
NOK billion

1969
Discovery of oil

1990
Government Pension Fund Act

May 1996
First capital transfer

1998
40 % Equities

2001
Fiscal Policy Guideline

2002
Non-government bonds

2004
Ethical Guidelines

2007
60 % Equities Small-cap

2008
"All" emerging equity markets

2010
Real estate

2011
Reduced overweight to European markets
More Emerging markets

2010
Reduced overweight to European markets
More Emerging markets

Investment strategy objective is to maximise financial return over time, given a moderate level of risk
Governance structure marked by clear lines of responsibilities

The Storting – Norwegian Parliament
Government Pension Fund Act
National Budget
Annual Report to the Storting
Material changes presented to Parliament prior to implementation

Ministry of Finance
Management mandate
Regulation on risk management, reporting and responsible investments
Quarterly and annual reports
Investment strategy advice

Norges Bank (NBIM)
Operational manager
Investment strategy derived from investment beliefs and Fund characteristics

**Investment beliefs**
- Well-functioning markets
- Risk premia
- Size constraints
- Economies of scale
- Principal-Agent problems

**Fund characteristics**
- Large
- Long-term
- State-owned
- No immediate liquidity needs
- No explicit liabilities

**Investment strategy**
- Harvesting risk premia over time
- Reducing risk through diversification
- Building on long investment horizon
- Emphasising role as responsible investor
- Emphasising cost efficiency
- Moderate element of active management
- Clear governance structure
Benchmark index composition

Strategic Benchmark Index

- Global Equities (60%)
  - FTSE Group
    - Index provider
    - Global All-Cap

- Global Fixed Income (35-40%)
  - Barclays
    - Index provider
    - Global Treasury GDP weighted by country
    - Global Inflation-Linked
    - Global Aggregate

- Global Real Estate (0-5%)
  - IPD
    - Index provider
    - Global Property Benchmark
Large funds are large in private markets

<table>
<thead>
<tr>
<th></th>
<th>GPFG</th>
<th>CPPIB</th>
<th>GIC</th>
<th>APFC</th>
<th>ADIA</th>
<th>CEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>60 %</td>
<td>41 %</td>
<td>51 %</td>
<td>36 %</td>
<td>46–70 %</td>
<td>46 %</td>
</tr>
<tr>
<td>Bond</td>
<td>35-40 %</td>
<td>32 %</td>
<td>20 %</td>
<td>17 %</td>
<td>15–30 %</td>
<td>38 %</td>
</tr>
<tr>
<td>Real Estate</td>
<td>0-5 %</td>
<td>6 %</td>
<td>9 %</td>
<td>12 %</td>
<td>5–10 %</td>
<td>6 %</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>—</td>
<td>5 %</td>
<td>3 %</td>
<td>3 %</td>
<td>1–5 %</td>
<td>2 %</td>
</tr>
<tr>
<td>Private equity</td>
<td>—</td>
<td>13 %</td>
<td>7 %</td>
<td>6 %</td>
<td>2–8 %</td>
<td>5 %</td>
</tr>
<tr>
<td>Alternatives</td>
<td>—</td>
<td>n/a</td>
<td>10 %</td>
<td>26 %</td>
<td>5–10 %</td>
<td>3 %</td>
</tr>
<tr>
<td>AUM (USD billion)</td>
<td>430</td>
<td>136</td>
<td>&gt;200</td>
<td>37</td>
<td>&gt;400</td>
<td>106</td>
</tr>
</tbody>
</table>

Source: Strategirådet 2010 and CEM 2010

GPFG = Government Pension Fund Global
CPPIB = Canada Pension Plan Investment Board
GIC = Government of Singapore Investment Corporation
APFC = Alaska Permanent Fund Corporation
ADIA = Abu Dhabi Investment Authority
CEM = 19 large pension plans in Europe and North-America
Benefits with private market investments

- **Increased diversification**
  - PE, RE and Infrastructure are large markets

- **Potential exposure to factors not available in public markets**
  - RE returns cannot be fully replicated by equity and bond indexes

- **Opportunity for security selection**
  - Managers have wide dispersion of and high persistence in returns
Reports made by or for the MoF on private markets

Ministry of Finance - Report to Parliament in 2012 - Listed real estate investments

Ministry of Finance - Report to Parliament in 2010 - Private equity and infrastructure

NBIM 2013 – Discussion note on Infrastructure Investments

Andrew Ang, Michael W. Brandt og David F. Denison 2014 - Review of the Active Management of the Norwegian Government Pension Fund Global

Frank de Jong og Joost Driessen 2013 – The Norwegian Government Pension Fund’s potential for capturing illiquidity premiums

Ludovic Phalippou 2010 - An evaluation of the potential for GPFG to achieve above average returns from investments in private equity and recommendations regarding benchmarking
Report to Parliament in 2010

- Ministry of Finance decided not to open up for private equity and infrastructure investments

- Given SPU’s distinctive characteristics, it will be natural to return to the question of private equity and infrastructure later
NBIM’s discussion note from 2013

- Infrastructure covers a set of heterogeneous investment opportunities

- Infrastructure investments can exhibit bond, real estate or equity characteristics

- Listed infrastructure returns very much resemble general equity risk
Infrastructure EBITDA is stable but varies between sectors

Figure 1: Indices of Annual Cash Flows for American Infrastructure Sub-sectors against American CPI, 1986–2012 (1986 = 100)

Ang, Brandt and Denison recomends the opportunity cost model

• Takes advantage of a long investment horizon (natural comparative advantage) and skill (developed comparative advantage)
• Used by CPPIB and GIC
• All active decisions to deviate from benchmark are evaluated by the foregone opportunities to cheaply invest in the passive benchmark portfolio
• While conceptually simple, it is challenging to operationalize
Bigger is better in private markets

Annual net return for large relative to small plans

Source: Dyck and Pomorski (2010)
Data: CEM 1990-2009

Net Returns by Size Quintile

Source: Dyck and Pomorski (2010)
Data: CEM 1990-2009
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Links

Ministry of Finance
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Government Pension Fund
www.government.no/gpf

Norges Bank Investment Management
www.nbim.no

Council on Ethics
www.etikkradet.no