Jarle Bergo: Best practice in structuring stabilization and commodity wealth funds

Presentation by Mr Jarle Bergo, Deputy Governor of Norges Bank (Central Bank of Norway), at the European Institute's Sovereign Funds Roundtable, London, 8-9 May 2007.

Please note that the text below may differ slightly from the actual presentation.

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Let me begin by thanking the organizers for this opportunity to share with you some of the most important features of our Government Pension Fund – Global, formerly known as the Government Petroleum Fund.

Any discussion on how to invest funds must depart from an understanding of when, and for what purpose, the funds are to be used. That is how we can distinguish between relevant risk and less relevant risk. We need to be aware of the risks of not reaching the objectives of the fund. All funds have an objective, but not all objectives can be translated into precise and clear-cut solutions for how to invest the funds. Many commodity wealth funds belong to this category, where liabilities have to be thought of in a very broad sense.

The Norwegian Pension Fund has always been more similar to an endowment than to a stabilization fund, but even more so in later years as the Fund has grown faster than expected and has become very large relative to the Norwegian economy.

Today I would like to focus on some of the major structures and principles supporting the Norwegian model. I will look at both the underlying economics of the Fund, and on how we have structured our management model. As our "liabilities" are rather intangible, a broad approach is necessary in order to convey the major principles behind our model.

The source of our Fund is commodity wealth. So let me start by putting the petroleum sector in Norway into perspective.

In 2006 government oil revenue amounted to 36 per cent of total government revenues. That is a high figure, but it also implies that Norway has a substantial tax base (64 per cent) in addition to our natural resources.

The Government Pension Fund has two main objectives: One is to serve as a savings instrument with an aim to distribute our national wealth in an equitable manner across generations. The petroleum resources are part of our national wealth and belong not only to the current generation but also to future generations.

Second, even though Norway has a fairly diversified tax-base, the large variability in the price of oil would have caused large demand fluctuations in the Norwegian economy, if petroleum revenues were to be used as they accrue. Moreover, internationally exposed industries would suffer a negative impact from high-level spending of petroleum revenues through a deterioration in competitiveness.

Hence, an important objective for the Fund is to shield the economy from fluctuations in prices and extraction rates in the petroleum sector, which is one reason why the Fund is not allowed to invest in Norway. The Fund serves as a buffer between current petroleum revenues and the spending of these revenues in the Norwegian economy.

It is important to note that the entire petroleum revenues, as well as the return on the Fund, go into the Government Pension Fund. Then, an amount equal to the non-oil budget deficit is transferred into the fiscal budget. This mechanism ensures three objectives: First, the variability in petroleum revenues is isolated to the growth rate of the Fund. Second, any use of the Fund is integrated into the ordinary budget routine and does not undermine the fiscal budget as a single instrument for assigning priority to different needs. And third, the amount of spending of petroleum revenues, that is the size of the non-oil budget deficit, can be aligned with the needs of fiscal policy as well as with the targeted intergenerational distribution.

Note that this setup for the Fund can work with different fiscal rules or guidelines for how large the non-oil budget deficit should be. In Norway, the Storting (Norwegian parliament) has approved a fiscal guideline that implies that the annual non-oil deficit should, on average over time, be limited to 4 per

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cent of the Pension Fund. This is equal to the long-term expected real return on the Fund. Such a quideline provides predictability in the level of spending.

If the government disregards the guideline, enterprises will loose an important reference in gauging the expansiveness in fiscal policy. Thus, three successive governments have been loyal to this guideline and it still enjoys a substantial majority backing in the Norwegian parliament. Adherence to this policy is also scrutinized closely by the public who have developed a sense of ownership of the Fund.

Another important feature of the model is that there is consistency between the size of the Fund and Norway's net financial wealth. This is ensured by the Act relating to the Government Pension Fund where it is stated that the government cannot borrow as long as the balance of the Fund is positive.

The Fund has become large and is still growing very rapidly. It is projected to reach 200 per cent of Norway's GDP around the year 2010. The huge cash flow into the Fund has posed an operational challenge, which I will return to later.

In 2006, the name of the fund was changed from the Government Petroleum Fund to the Government Pension Fund – Global. But the name change did not imply any operational changes and the return (the 4 per cent) continues to be a general support to the budget, not ear-marked for any specific purpose. This reflects that the Fund has no formal link to a liability side.

Let me turn to the management of the Fund. The Fund is formally owned by the Ministry of Finance, while operational management is delegated to Norges Bank. This arrangement is formalised through a management mandate given to the Bank by the Ministry. The Ministry submits an annual White Paper to the Norwegian parliament where the management of the Fund, both strategic allocations as well as active management, is reviewed. The Office of the Auditor General performs independent reviews of the management.

There is a clear division of responsibilities between the Ministry and the Bank. The owner decides on the long-term strategic allocation, represented by a benchmark portfolio, and this choice of strategic allocation for the Fund is the main determinant of the expected absolute return of the Fund.

The Bank's main responsibility is to maximise expected return relative to the benchmark – within risk limits formulated in the mandate. Hence, Norges Bank has a mandate to engage in active portfolio management in addition to providing a cost-effective conversion of incoming petroleum wealth into financial assets.

The Bank's mandate has increasingly been adapted to the "future generations"-objective of the Fund with a stronger focus on tracking error as the sole risk limit. Some earlier restrictions on credit quality have been lifted, in light of the increased investment horizon of the Fund.

Important decisions are presented to the Norwegian parliament in a White Paper before decisions are implemented. A recent example of such a decision is a proposal to increase the share allocated to equities from 40 per cent to 60 per cent, again reflecting the transition to an endowment fund with a very long horizon.

Note that the absence of a formal liability side has an impact on how we go about constructing the strategic allocation. The fiscal guideline, that is how much of the Fund that should be used every year, is what most closely resembles liabilities. However, since the guideline is formulated as a percentage of the Fund itself, it yields little guidance to the risk characteristics of the allocation. Thus, the process of establishing a strategic allocation is still more similar to that of an endowment than to that of a pension fund – despite the recent change in the name of the Fund.

Let me move on to the management of the Fund within Norges Bank.

Norges Bank's contribution to the Fund's return has been positive. Total returns have fluctuated considerably since the Fund made its first investments in equity markets in 1998, while excess returns have been relatively stable.

As a financial investor, we have three main tasks. Invest incoming cash as efficiently as possible in capital markets (transition), stay invested in markets broadly in accordance with the strategy that is defined by the Ministry of Finance and endorsed by the Norwegian parliament (beta management) and finally to achieve a higher return where markets provide opportunities for this and where we have an advantage in terms of specialist skills (alpha management) by diverging from the benchmark portfolio.

With respect to the first task we are different from many investors. Simply maintaining the financial exposure is a demanding task with the size of our inflow. We have therefore dedicated substantial resources to this activity.

There are economies of scale in the beta function. We see commercial managers that are providers of beta-exposure that are up to 15 times the size of the Government Pension Fund. Yet we are able to perform these tasks more cost-efficiently in-house. Hence we believe we now are sufficiently large so as to harvest most of the benefits of scale.

Economies of scale are more elusive when it comes to active management. On the one hand the excess return potential is reduced because there will be a higher degree of market impact. On the other hand, size can be an advantage in obtaining access to information and in active positions where the objective is to reap the benefits of being a liquidity provider. The setting for the Government Pension Fund with its long investment horizon is well suited for such an objective.

All of the passive investment (enhanced indexing) is done internally both for equities and fixed income. On the active side however, we use a large number of external managers. The split differs between equities and fixed income. On the fixed income side, most of the active risk is taken internally while the opposite is the case for equities.

In total, about 60 per cent of the active risk stems from external managers. The guiding principle behind this choice is an assessment of expected returns after costs, and a strong belief in diversification among managers. There is no favouring of internal (or external) managers.

There is a clear investment philosophy behind risk taking in Norges Bank. First and foremost, it is important to have a clear separation between activities directed towards achieving beta-exposure and activities linked to active risk taking. In that way, a true assessment of realised returns as well as costs associated with active management is possible.

Moreover, active risk taking is done with humility and with a strong belief in the effectiveness of markets. Hence, we mostly apply active bets when we think we, either internally or through our external managers, possess an informational advantage. Such an advantage is sought through a high degree of specialization.

Another type of active position is based on collecting risk premiums where we as an investor have a comparative advantage to bear the risk. An example of this is liquidity premiums.

It has been a challenge to us to establish a professional and vigilant business culture within the central bank. I think we have succeeded. An important instrument in this respect has been performance-based remuneration for the Bank's investment managers. The investment management wing of the bank now resembles a private investment manager rather than a typical central bank investment office. In particular, all investments are delegated to professionals in a clear line structure.

But recruiting and keeping skilled human capital requires more than competitive wages. Whether we succeed will depend on our ability to create an environment where such capital can thrive and prosper. Our philosophy is to stimulate ownership of decisions and empowerment in the investment process – and that is appreciated by our managers.

Moreover, the mere importance of the mission, as formulated by our Board, "... to safeguard and grow financial wealth for future generations through highly professional management coupled with strict integrity", is attracting resources in and of itself.

To wed a business culture to a central bank, with its civil service responsibilities, has posed a challenge in terms of adapting the Bank's governance system to the increased importance of professional investment management. Elements in addressing this include a strengthened focus on accountability by a clear division of responsibilities and a system of checks and balances.

Maybe the most important element in our governance system is the establishment of a high degree of transparency for the public by providing open information on performance, risks, costs and investments on a timely basis.

All in all, we feel the challenge of managing the Fund has enriched the organisation by forcing the central bank to think outside of the box. And perhaps the central bank perspective and values have added to the depth and long-term horizon of the investment organisation.

Let me round off this presentation by recapitulating some of the main insights we have gained in the decade the Fund has existed.

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An important key to the success of the Fund so far has been the clear separation between investment decisions by professionals in a performance-oriented environment, and the economic policy role of the Fund. We have been able to establish a setting where investments are made in a business-like manner.

Another essential insight is the importance of political support for strategic allocation. There was a broad consensus in parliament behind the choice of investing in equities in 1997. This was important in order to navigate through the turbulent waters of equity markets in the beginning of this century – and such turbulence will certainly return.

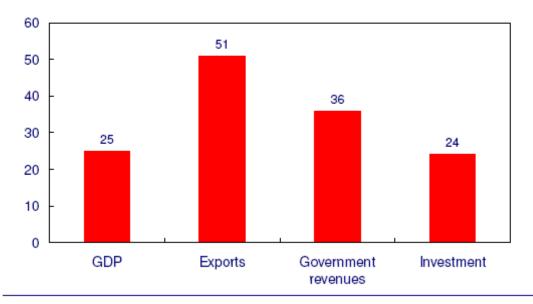
Perhaps most importantly, the Government Pension Fund and our fiscal guideline have helped us to avoid the common pitfalls in resource rich economies, e.g. lack of fiscal discipline and loss of focus in structural policy. We have managed to avoid creating a subversive second fiscal budget. The Fund has shielded the mainland economy from excessive variability and has to a large extent reduced the oil-price dependency of the exchange rate.

Yet, I would like to end with a word of caution: The model we have chosen in Norway has evolved in a Norwegian setting and is not necessarily suited as a blueprint for other countries. But it is important to understand the basic, and maybe universal, principles underlying the model and adapt them to the particular fiscal situation and the particular political tradition of the country in question. Hopefully, I have managed to shed light on some of those principles today. Thank you for your attention.

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The size of the Norwegian petroleum sector

As a share of selected macroeconomic variables, 2006, Per cent



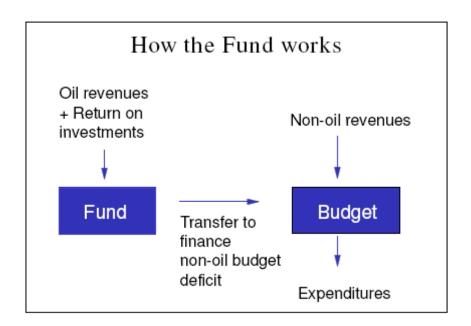
Sources: MPE, Statistics Norway and Ministry of Finance

The National Challenges

- Ensure a fair distribution of oil wealth across generations
 - as oil wealth is transformed into financial wealth;
 do not spend the principal, only the expected real return
- Avoid pronounced cyclical fluctuations in the mainland economy due to variations in oil revenues
 - invest in financial assets abroad only

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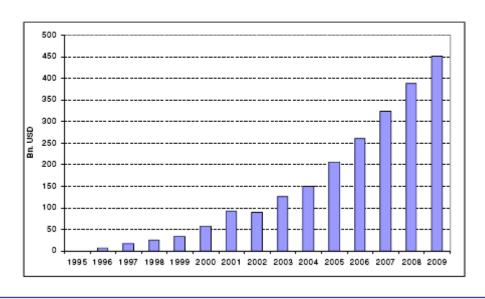
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Source: The Ministry of Finance

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Size of the Government Pension Fund – Global



Source: Ministry of Finance

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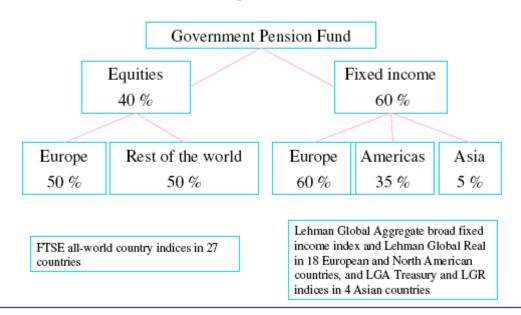
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Division of responsibilities

- Ministry of Finance
 - decides on the strategic asset allocation
 - defines the benchmark portfolio
 - sets limit for deviations from the benchmark portfolio (scope for active management)
 - reports to the Norwegian parliament
- Norges Bank
 - cost-effective transitions and market exposure
 - active management to achieve excess return
 - risk control and reporting
 - provides professional advice on investment strategy

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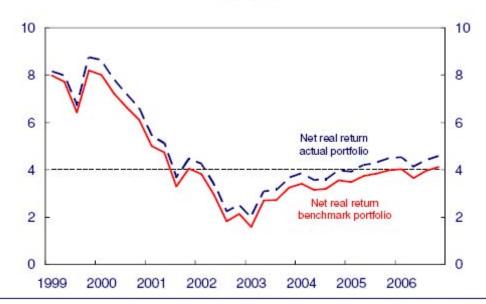
Current strategic asset allocation



Source: Norges Bank

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Average annual net real return since 1997 Per cent

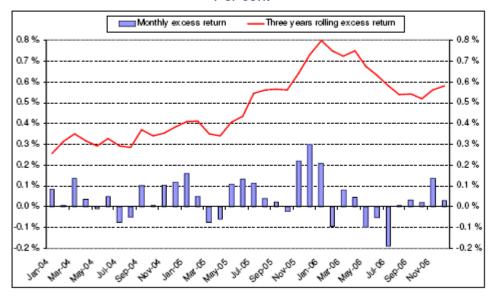


Source: Norges Bank

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Excess return past three years



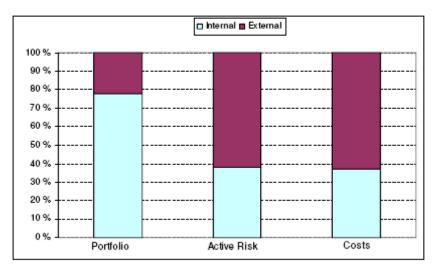
Source: Norges Bank

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Beta, alpha and total net return

- Total net return
 - Beta: The strategic portfolio return
 - Alpha: The active management return
 - Cost: Transition and management cost
- The bulk of the expected return and risk is provided by the strategic portfolio return
 - Responsibility of the Ministry of Finance (fund owner)

Distribution of portfolio, active risk and management costs between internal and external management



50 external fund managers are responsible for close to 60 percent of the active risk (80 different mandates)

Source: Norges Bank

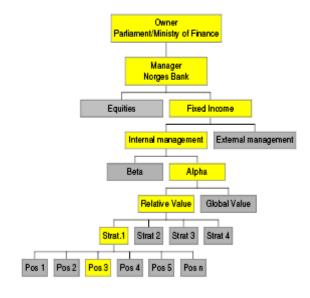
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Principles supporting active management

- Clear separation between beta and alpha exposure
- Very high respect for the market. Applying financial theory. Humility and discipline
- Active management only where there may be somewhat lower market efficiency and where we find/develop managers with unique expertise
- · Specialization. More than 100 sub-portfolios
- Extensive delegation. No committee structure
- · Incentives linked to performance

Delegation, line management, measurement, control



- Clear division of responsibilities
- · Trading within defined risk limits
- Periodic assessment of performance and investment guideline compliance
- Portfolio trading is strictly delegated
 - to more than 80 external mandates
 - to 15 20 internal teams

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Empowerment and ownership

- Individual investment mandates
- Individual incentive structure
 - · clearly defined and measured
 - · 'managing own money'
- Ownership in all other processes
 - · operations included in the business units
 - · division of responsibilities, defined work task
- Independence in team structure
 - · optimal size for flexibility and communication
 - accountability and visibility without 'atomization'
 - blending competition and support
 - · avoiding 'group think'

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Transparency

- Performance, risk and costs are reported by NBIM every quarter. Focus on contribution to value added in operational management
- Quarterly reports published on website
- Press conference on a quarterly basis
- Annual report listing all investments, both equities and fixed income





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Key insights

- The owner must set clear objectives:
 - The strategic asset allocation, i.e. the total risk return trade-off
 - The tracking error and the required value added from active management
- The risk return trade-off must be taken by the political authorities to ensure time-consistency in adverse market environments
- The operational management must be carried out by investment professionals
 - To avoid a mixture of politics with investments, investment mandates must be defined very clearly
- A commercially vigilant performance culture can be fostered within a public sector institution
 - Empowerment and compensation system are key ingredients