The Equity Share of the Government Pension Fund Global

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Unofficial translation of chapter 1. For informational purposes only. If discrepancy in meaning the Norwegian version applies.

Report from Government appointed Commission

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Chapter 1
Assessments and main conclusions of the Commission

The terms of reference called upon the Commission to assess the equity share of the Government Pension Fund Global (GPFG). The terms noted, inter alia, the steep growth in the Fund's capital and contribution to fiscal budget funding. Reference was also made to changes in the investment strategy over time and to the low bond yields internationally. The Commission was requested to analyse expected risk and return in the Fund for different equity shares. The objective, time horizon and size of, as well as expected outflows from the Fund were to be taken into consideration. The Commission was also requested to examine whether any change to the equity share should have implications for other key investment strategy choices.

The majority of the Commission's members recommend that the equity share of the strategic benchmark index for the GPFG be increased from 60 percent to 70 percent, whereas a minority comprised of the Chairperson of the Commission recommends that the equity share be reduced to 50 percent.

The main conclusions of the Commission are as follows:

1. *The choice of equity share represents a trade-off between the preference for high expected return and the preference for low risk. The trade-off needs to reflect the risk of loss of wealth, the level of overall risk in the nation's total wealth and the fiscal policy role of the Fund*:
   - *Expected return*: Equities carry higher expected return than bonds. A higher share of equities will increase the expected return on the GPFG and its contribution to the fiscal budget, according to the fiscal rule.
   - *Preservation of wealth*: At the same time, equities entail more volatility in the value of the Fund and a higher probability of a permanent loss of wealth. This may conflict with the desire to preserve the revenues from oil and gas for future generations.
   - *The GPFG as part of the nation's total wealth*: The trade-off between expected risk and return applies primarily to overall national wealth. In assessing the equity share of the GPFG, one should therefore consider the risk associated with other parts of the national wealth. A significant part of the value of the petroleum wealth in the ground has over the last few decades been converted into financial wealth, which entitles us to a small slice of future global economic output. At the same time, Norway carries part of the global equity risk. Other things equal, the conversion from oil and gas in the ground indicates a higher ability to absorb risk in the GPFG.

- *Fiscal policy*: The level of taxes and public services should be reasonably stable over time. Other things equal, this suggests that the underlying balance of the fiscal budget and the withdrawals from the Fund should not fluctuate excessively over time. A high equity share will increase the expected volatility of the value of the Fund and require fiscal policy flexibility, given the size of the Fund. A steep, prolonged stock market slump may require significant fiscal policy tightening to avoid depleting the wealth over time. This may be particularly unfortunate in the event of a simultaneous recession in the Norwegian economy.

2. *The expected real return on the GPFG has decreased.* Long-term, near risk-free real yields have declined in recent years. The Commission has not assumed that the expected excess return from investing in equities, the so-called equity premium, has changed significantly. The expected real rate of return on the GPFG is now considerably lower than 4 percent. With the current equity share, the Commission is assuming an expected, annual real rate of return on the Fund of 2.3 percent over the next 30 years.

3. *Lower expected return is not a reason to increase risk.* Search for yield may make it tempting to take on more risk than one is able to absorb, with the risk of major losses. However, lower expected, near risk-free yields should not influence risk taking, including the equity share of the GPFG.

4. *Model simulations illustrate the trade-off between expected risk and return.* The Commission has examined equity shares in the range of 40-80 percent of the Fund over the next 30 years. One must, irrespective of the equity share chosen, be prepared for considerable volatility in the value of the Fund. An increase in the equity share of 10 percentage points is estimated, in the simulations, to increase the annual, expected real return by about NOK 15-30 billion. When the equity share is increased, the volatility of the value of the Fund, and thus the number of years of fiscal policy tightening, as the result of a decline in the value of the Fund, is expected to increase somewhat. At the same time, there is a marginal increase in the probability that the wealth has declined markedly by the end of the period. A reduction in the equity share will have the opposite effects. Such simulations are uncertain and will vary with the assumptions made and the model used.

The majority of the Commission (everyone, apart from the Chairperson) have the following recommendations:

5. *The equity share of the strategic benchmark index should be increased from 60 percent to 70 percent.*

   - A higher share of equities increases the expected return, and the contribution to the fiscal budget, but also entails more volatility in the value of the Fund and a higher risk of a decline in value in the long run. The majority is of the view that the said risk is acceptable, provided that there is political will and ability to adapt economic policy to the accompanying increase in risk, in both the short and long run.

Furthermore, the majority underlines the following:

- The equity share of the Fund has been increased gradually, and one has gained more experience with, and political understanding of, the management of the Fund. The ability to adhere to the chosen investment strategy has thus far been good, also during periods of financial market turmoil.
- Since the previous assessment of the equity share, the petroleum wealth has become better diversified, following the conversion of oil and gas in the ground into financial wealth abroad. This increases the risk-bearing capacity of the Fund.
- The strategy for the Fund is predominantly based on open knowledge and exposure to systematic risk premiums, thus implying that operational risk is low. This makes it easier to communicate and gain acceptance for the risk taken. Other things equal, this increases the ability to absorb risk.

6. *Fiscal policy must be conducted flexibly and be capable of cutting through fluctuations in the value of the Fund.* The fiscal framework has helped Norway to handle high, unstable and temporary revenues from oil and gas. At the same time, the Fund has become a new source of fiscal volatility as it has grown large and the fluctuations in its value have become significant relative to the Norwegian economy and public finances. The model simulations suggest that practising fiscal policy will become more challenging in coming years, irrespective of the equity share chosen. The fiscal rule should continue to be practised flexibly in order to manage such fluctuations. One potential approach, which the Commission illustrates in its simulations, may be to increase spending somewhat slower when the value of the Fund has increased, whilst reducing spending somewhat faster when the Fund value has declined. The equity share of the Fund should be considered in the context of the follow-up of the advice from the Thøgersen Commission, which considered how to apply the fiscal rule for use of oil revenues.
7. *It is important to avoid overspending.* If withdrawals from the Fund exceed its real return over time, the financial wealth will be depleted, irrespective of the equity share. One potential adaptation may be to base withdrawals on a cautious estimate as to the expected real return. This provides a margin of safety that reduces the risk of depleting the Fund, and will be especially important when the petroleum wealth in the ground declines.

A minority (the Chairperson) has the following recommendation:

8. *The equity share of the strategic benchmark index should be reduced to 50 percent*
   - Fiscal policy needs sufficiently secure access to a smooth and predictable flow of transfers from the Fund in normal times, as well as funds to cover automatic stabilisers and discretional fiscal policy measures during recessions. This argument appears to have been essentially absent from the debate leading up to the decision to increase the equity share from 40 percent to 60 percent in 2007, probably because the transfers from the Fund then represented a much smaller fraction of the fiscal budget.
   - The minority recognises the reduction in the oil and gas remaining in the ground over the last decade as an argument in favour of a higher equity share, but considers this to be of less importance than the fiscal policy need for predictability in budget contributions from the Fund.
   - A lower equity share will naturally translate into a lower expected return for the Fund as a whole. Fiscal policy needs to adapt to this fact. The need for a margin of safety is reduced with a lower equity share, but not eliminated.
   - The strategy for the Fund of predominantly relying on open knowledge and exposure to systematic risk premiums cannot, in the minority's view, be accorded weight as a change that merits increased risk taking.

The entire Commission bases its conclusions on the following premises:

9. *The GPFG contributes to the long-term management of society's revenues from the extraction of oil and gas.* Net central government cash flows from the petroleum activities are allocated to the Fund as they accrue. The fiscal rule adopted in 2001 requires the spending of such revenues over time to be in line with the expected real return on the Fund. This framework facilitates preservation of the wealth from a non-renewable resource over time, thus enabling it to benefit future generations. It also serves to shelter fiscal policy and the mainland economy from fluctuating petroleum revenues.

10. *The GPFG forms part of the national wealth of Norway.* The nation's wealth consists of human capital, real capital, net foreign assets in the GPFG and future economic rent from oil and gas in the ground. The net present value of future labour output, the human capital, is by far the most important wealth component, accounting for more than 80 percent. The GPFG accounts for about 5 percent, and the value of oil and gas in the ground accounts for about 3 percent. When considering the level of risk in the Fund, one should consider the risk in other components of the national wealth. By diversifying the risk in the petroleum wealth, the Fund serves to enable the overall national wealth to be managed in the best possible manner.

11. *The Fund is an integrated part of the fiscal budget…* Withdrawals from the Fund are intended to fully fund the deficit in the fiscal budget, exclusive of net petroleum revenues (the non-oil deficit), and will therefore fluctuate with cyclical developments in the mainland economy, as intended by the fiscal rule and the flexible application of this rule. In the event of major changes to the fund value, the change in spending shall be spread across a number of years.

12. *... but does not in itself ensure the long-term sustainability of government finances.* A marked increase in public expenditure on pensions, health and care services for an aging population is expected over the coming decades. Withdrawals from the Fund will contribute towards funding such expenditures, but estimates suggest that these will fall far short of the level needed to close the gradually rising gap between central government revenues and expenditures. The fiscal rule assumes that this gap will be closed through necessary reforms rather than via withdrawals from the Fund until depletion.

13. *The GPFG receives international attention.* The listed investments of the Fund are distributed across small ownership stakes in a large number of companies and bonds. This diversifies risk and implies that the Fund closely traces developments in global financial markets. The adopted strategy also implies that the operational risk is lower than that of many other funds. The strategy has been developed gradually and is based on open knowledge. The strategy is met with international acclaim for its transparency, responsibility, accountability, professionalism and low costs.

14. *The Fund has now entered a new phase in which its value to a much greater extent will be determined by the financial markets than by oil and gas revenues.* The Fund has grown rapidly since the first capital was committed in 1996 and its value is now equivalent to almost three times the size of mainland GDP. Following a period of high production and high oil and gas prices, and thus large transfers to the Fund, central government petroleum revenues have recently declined markedly. Spending via the fiscal budget has, at the same time, increased over time, and this year exceeds, for the first time in the history of the Fund, the concurrent oil and gas revenues. In the absence of significant net inflows, measured as a fraction of the Fund, returns in the financial markets will largely determine developments in the value of the Fund. Estimates, assuming continued growth in the mainland economy, suggest that the ratio between the value of the Fund and the mainland economy is now about to peak.

15. *The equity share of the Fund has increased over time.* The inclusion of equities in the Fund was initiated in 1998, with the share then being put at 40 percent. In 2007, it was decided to increase the share to 60 percent. It is of importance to the legitimacy of the Fund that its risk profile is subject to public debate and endorsed by the Storting (the Norwegian Parliament).

16. *The Fund has a number of distinctive characteristics, such as size, a long time horizon, as well as being government-owned.* The Fund is managed on behalf of future generations. As a large and government-owned fund, the management of which is

premised on democratic legitimacy and transparency, the Fund is in a special position. There are few lessons to be learned from comparisons with other funds, as far as assessment of the equity share is concerned.

17. *It is not possible to increase the expected return on the Fund without taking on more risk.* The analysis of the Commission is based on the premise that international financial markets are characterised by a high degree of competition. This does not mean that markets are perfect, but that it is not possible to achieve a higher expected return without at the same time increasing the probability of low or negative returns. Meanwhile, there are certain types of overarching risk, such a climate risk, which merit close monitoring.

18. *There has, since the establishment of the Fund, been major progress in research on, and in the understanding of, the relationships between financial markets and the rest of the economy*. Of particular relevance is the progress in clarifying risk premiums in financial markets and in the understanding of the ability of investors to absorb risk. Many of the challenges facing the GPFG are at the research frontier in financial economics.

19. *The return outlook in financial markets has changed markedly in recent years.* International interest rates are at an historic low in the wake of the financial crisis, even for long-term bonds. Long-term sovereign bonds with the highest credit ratings currently offer an expected real return near zero or lower. The Commission has based its simulations on an expected annual real rate of return of 2.3 percent over the next 30 years, given the current equity share of the GPFG. The underlying assumptions are a 0.5 percent rate of return on bonds and an equity premium of 3 percentage points. Such estimates are uncertain. Other estimates are also examined in the simulations.

20. *A change in the equity premium may merit a different equity share.* The equity premium is the excess return from investing in equities rather than bonds. It is a risk premium, and the expected return will not necessarily be realised. Some research finds that the equity premium has increased in step with the decline in real interest rates over many years, but this is uncertain.

21. *The Commission has used a model to show potential outcomes for the value of and withdrawals from the Fund.*

    - Financial market investments entail risk. Simulations performed by the Commission show that the risk of losing parts of the wealth is significant, even with the current equity share. This risk increases with various forms of overspending, including withdrawals that exceed the expected real return over time. One must, at the same time, be prepared for the value of the Fund to fluctuate or decline over time. Simulations performed by the Commission suggest that such reductions will result in a marked need for fiscal policy tightening on a fairly frequent basis.
    - It is estimated, based on the assumptions made by the Commission, that increasing the equity share by 10 percentage points will somewhat increase the

risk of a decline in the real value of the wealth, and also increase fluctuations in the value of the Fund from one year to the next. The number of years with a need for marked fiscal policy tightening will furthermore increase somewhat. This is expected to occur in one of every three years with the current equity share. Reducing the equity share by 10 percentage points will have corresponding, although reverse, implications.

- The model simulations performed by the Commission are based on the assumption that adjustments to withdrawals in response to major changes in the value of the Fund will be made over a number of years, irrespective of whether the value of the Fund increases or declines. Such gradual adjustment will to a considerable extent shelter annual budgets from the readily anticipated short-term fluctuations in financial markets and Norwegian kroner exchange rates, without any significantly increased risk of severely depleting the Fund. Nevertheless, the fiscal budget and the national economy cannot be fully sheltered in the event of permanent changes to the value of the Fund, irrespective of what gradual adaptation path one opts for.

22. *If the equity share is changed, this may also have other implications for the composition of the benchmark index*. Issues the Commission believes merit further attention are the composition of the fixed-income benchmark index, various deviations from market weights, rebalancing, as well as financial risk from climate change and the risk of a permanent decline in oil and gas revenues. At the same time, the Commission emphasises the importance of retaining the Fund’s role as a long-term financial investor.