# The international experience and future challenges for Norway

Address by Central Bank Governor Svein Gjedrem, Statoil Conference, Oslo, 7 March 2001

Thank you for the invitation to the conference.

The title of this conference is "The paradox of plenty and Norwegian management of increasing oil revenues". Increasing oil revenues do not imply increasing wealth. It is true that the estimated value of the central government's share of petroleum wealth, including the market value of the Government Petroleum Fund, is higher than one year ago. However, the last estimate[1] for the aggregate value of our petroleum wealth and the petroleum fund is not higher than the estimate made three years ago.

The increase in the value of the Petroleum Fund does not represent a wealth increase, but a deliberate conversion of petroleum wealth into financial assets.

I have been asked to discuss the international experience of resource abundant economies and future challenges. Several speakers have shed light on the international experience during the conference today. My main contribution will be to discuss the relevance of these findings for the Norwegian case, and to discuss Norwegian wealth management in the future. How to promote, and not prevent, sustainable growth and wealth creation is the difficult policy challenge.

### A summary of international experience

Empirical findings suggest a positive relationship between resource abundance on the one hand, and long-term economic deterioration on the other[2]. The reasons for this paradox have been the main topic so far today. In short, many nations blessed with rich resources have been irresistibly tempted to spend the revenues in an unproductive manner. "Dutch disease", moral hazard incentives and economic rent seeking have impaired the long- term growth potential of several economies that suddenly benefited from valuable new resources.

In an attempt to avoid mistakes of the past, several countries have set up oil stabilisation funds. The intention of such funds has been to separate the extraction of petroleum from the use of revenues. By setting aside a large share of revenues when the cash flow from the extraction of non-renewable resources is high, the countries have tried to meet two policy challenges. The first challenge has been to protect the domestic economy from the negative impact of sharp and unpredictable variations in the oil price and revenues. The second challenge has been to distribute the wealth fairly among generations.

Norway is not the first country to set up such a fund. When the Government Petroleum Fund was established in 1990, oil dependent economies in the Middle East such as Kuwait and Oman, and mineral dependent Chile already had funds with a similar purpose in place. Revenues from the extraction of natural wealth (diamonds) are the source of income for the

"Pula Fund" in Botswana. This fund is a part of the country's official exchange reserves, but is invested with the primary intention to save for the future. Alberta in Canada and Alaska in the US also have energy revenue funds with a longer history than our fund. In 1998 a similar fund was established in Venezuela. We have had a presentation of the new oil stabilisation fund in Azerbaijan. Kazakhstan has decided to set up an oil stabilisation fund. In a recent report, the Executive Board of the IMF has praised this decision, but stresses the importance of transparency and public accountability[3]. Finally, from fiscal year 2001/02, Iran intends to establish an oil stabilisation fund. If the oil price exceeds a certain reference level, resulting extra oil revenues will be accumulated in this fund[4].

Some of the existing funds do not publish the market values of their investments. In the sample of funds with publicly known values, Norway's Petroleum Fund is large. It is also expected to grow substantially in the next years.

It is interesting to review the different experiences of the Alaska Permanent Fund and the Alberta Heritage Fund[5]. Like Norway's Petroleum Fund, they were established in developed economies with long traditions of democracy and transparency. An excellent description of these funds' history may be found in a recent book by professor Ragnvaldur Hanneson. The Alaska Permanent Fund was established through a separate law in 1976. A part of mineral royalties accruing to the state of Alaska and extraordinary transfers to the fund by the Alaska legislature have been the source of income for the Permanent Fund. Legal protection of the fund's capital has been strong since the fund was established. Every year the fund pays dividends to the residents of Alaska, calculated on the basis of the long-term real return of the fund. Any other use of capital requires a change in the law. The fund's capital is invested in financial assets and real estate. Public support for the long- term wealth management approach of the fund is remarkably strong. The Alaskan population was consulted by referendum in September 1999 to decide whether some of the return from the Permanent Fund should be utilised for maintaining public services at the current level. 83 % voted "no". The electorate preferred to maintain the dividend programme. This has left the legislature of Alaska with the standard choice: If the current level of public services is not sustainable given the current inflow of "ordinary" revenues, taxes must be increased, or the standard of services must be reduced.

Before I proceed to the case of Alberta, let me make a brief comment on Alaska's dividend programme. Alaska has no personal income taxes. In that respect, the setting is very different from that of Norway. The Alaskan model is hardly relevant for Norway.

The capital in the Alberta Heritage Fund was not protected in this way. This fund was established the same year as the Alaska Fund, and its value increased gradually until 1987. Originally, a larger part of the oil revenues was set aside than was the case in Alaska. However, with deteriorating budget balances, new transfers to the fund were gradually phased down to zero. This fund became more than a savings fund. It also became a capital source for additional investments in infrastructure, education and research, supplementing the ordinary budget priorities. An important part of the fund was invested in different business activities or sectors in the province itself. While it has been impossible to measure the financial success of the infrastructure investments, the Alberta business investments in general had a disappointing performance. With an investment policy trying to satisfy partly conflicting goals, the division between saving for the future and financing of fiscal initiatives outside of the ordinary budget, became blurred. In spite of continuing oil revenues, the fund declined in real terms in the years after 1987. The province realised that when different interest groups argued for domestic "investment", the final outcome became domestic consumption. In 1995 a referendum in Alberta decided that the fund could not serve stabilisation and saving on the one hand and financing of domestic infrastructure and business development on the other. Any further use of the fund to finance domestic projects was prohibited. By 2005 at the latest, 100 % of the fund will be managed with long-term wealth maximising within pre-defined risk limits as the sole target. Seen from the outside, the Alberta Heritage Fund looks more and more like the Alaska Permanent Fund, defining long-term wealth management as the mission of the fund.

The existence of the Alberta Heritage Fund does not reflect the true financial position of the province itself. The province accumulates debt through continuing budget deficits. The existence of the fund may give a false impression of financial strength and flexibility.

Alberta is not the last example of a stabilisation - or savings fund where long-term goals are disrupted by short-term needs. In November 1998, Venezuela set up a Macroeconomic Stabilisation Fund. The main purpose of the fund was to act as a buffer against volatile oil prices. Originally the rules for saving in the fund and spending of fund capital were transparent and based on clear decision rules. However, only a couple of months after its establishment, the rules were changed, giving the executive in power more discretion to withdraw capital from the fund. In addition, more of the revenues were transferred directly to the general budget.

There is clear evidence that a stabilisation fund in itself does not guarantee stability. If the rules for transferring revenues to the fund and withdrawing capital from the fund are open for regular interventions, instability may well be the final outcome. By the same token, if the fund shall satisfy more than return and risk requirements, the long -term orientation of the fund structure may be undermined.

### Relevance to the Norwegian case

A working paper published by the IMF, recognises the Norwegian authorities' efforts to stabilise the economy through the Petroleum Fund mechanism[6]:

"The Norwegian Government Petroleum Fund can be considered a successful institutional arrangement. It has served as a tool for managing the resources needed in connection with the increase in pension outlays and helped enhance the effectiveness by facilitating the adoption of a countercyclical fiscal stance"

In the recently published country report on Norway, the IMF's Executive Board issued a positive opinion about the state of the Norwegian economy:

"Norway, [one of the world's richest economies and its second largest oil exporter,] has been a model of prudent economic management of resource wealth in recent years. The policy of investing abroad a substantial part of the government's oil and gas export revenue through the Government Petroleum Fund, pursued in the 1990s, has helped insulate the mainland (non-oil) economy from fluctuations in oil revenue. Coupled with a consensual incomes policy framework, this strategy has been generally successful in managing the economic cycle and has helped raise living standards markedly over the past quarter century".

It might be tempting, based on the IMF comment, to conclude that Norway is better suited than most other nations to deal with an abundance of resources. One might argue that Norway, being a stable democracy with long-standing traditions of transparency, unrestricted media attention and accountable political leadership, is in a better position to deal with resource wealth than many other nations with similar access to valuable non-renewable resources. However, there is no guarantee against bad strategic decisions.

A final comment on the size of the fund: the Ministry of Finance has estimated the capital in the fund to NOK 1070 billion at the end of 2004**.** Estimations of the expected growth of the fund in 2004, indicate a fund size of NOK 1200 billion in 2005. It may seem like a huge amount, and indeed, it is. Assuming a real return of 4 %, the return will be equivalent to NOK 10 400 per inhabitant. At the current tax level, the real return in 2005 is also equal to one fifteenth (1/15) of total central government tax revenues, up from approximately one fortieth (1/40) in 2001. The central government also owns other financial assets. The real return on the central government's aggregate financial wealth will therefore be somewhat higher in comparison with the tax revenues.

### Challenges for Norway

I will address four main challenges in turning petroleum wealth into a sustainable benefit for the current and future generations of Norwegians:

1. To maintain a broad internationally exposed sector in the mainland economy.
2. To avoid "moral hazard" problems.
3. To shield petroleum - and financial wealth from economic rent seeking by special interests
4. To ensure a high rate of return on petroleum wealth and financial assets in public ownership, within acceptable risk limits.

1. Maintaining a broad internationally exposed sector in the mainland

In countries with substantial revenues from natural resources, growth conditions for sectors exposed to international competition may become less favourable. The exposure of large parts of the economy to intense foreign competition provides a breeding ground for learning, innovation and development. Competitive pressures in sheltered sectors, such as internal trade and public enterprises, are normally more limited. It is essential to maintain a broad internationally exposed sector in the mainland economy, primarily because of the attendant effect on the growth capacity of the economy, but not of course by subsidising.

In the second half of the 1990s, inflation and the subsequent increase in wage costs have weakened the competitiveness of our internationally exposed companies.

In recent years, cost inflation in euro area countries and among trading partners has been relatively low. Growth in labour costs in Norway has been roughly 10 percentage points higher than among our trading partners in the past three years.

In tandem with cost inflation, labour shifts from the internationally exposed sector to the sheltered sector.

The public sector has laid claim to a large share of the increase in the labour supply in recent years. Manufacturing employment has fallen markedly every quarter since 1998.

Particularly striking is the development in public sector employment. While the number of employees has been stable in other Scandinavian countries and the larger euro area, Norway has continued to scale up public services.

Generational accounts are a tool used to shed light on the question of whether government expenditure can be sustained over time without it being necessary to increase taxes or reduce government expenditure[7]. The latest calculations indicate that the generational accounts are in balance. Taking into account demographic developments and future public pension commitments, this implies that the next generations can maintain the current level of public services, and keep the net tax burden similar to the current one. At the current tax level, in conjunction with the challenges that increased trade and globalisation pose to the tax system, there would hardly be any scope for increasing taxes.

The Nordic countries had a fairly similar point of departure in 1970, and a fairly similar social structure, but now Norway stands out because of its petroleum sector. Comparative studies of developments in the four countries may shed light on how beneficial petroleum has been for our country. The jury is still out on this point. The business sectors in Sweden and Finland now seem to have a stronger growth capacity than our own. On the other hand, the petroleum sector will continue to stimulate new technology and business growth in Norwegian enterprises. In 10 to 15 years, when oil and gas production levels off or even declines, it will be easier to see whether oil was an advantage for the Norwegian economy.

2. To avoid "moral hazard" problems, in particular within public administration

When public entities know that the central government is in a financial position to bail them out, the classical problem of "moral hazard" might arise. Moral hazard occurs when an agent lacks incentives to act in the interest of the principal, and the principal has limited opportunities to control or observe the actions of the agent. Substantial petroleum wealth can weaken financial discipline in enterprises that are financed or assume that they can be financed by the public sector. If enterprises assume that the central government will provide support, resources may be squandered and the risk of substantial losses may be given little emphasis. The organisation of public enterprises is thus important. The central government's financial responsibility for individual enterprises and for other levels of public administration must be delimited in a credible manner. The moral hazard problems associated with our "from cradle to grave" welfare systems, may also be compounded.

3. To shield the petroleum - and financial wealth from dominant influence and control exerted by special interests

Petroleum production generates a profit in excess of normal return, called economic rent. Rent seeking activities have proved to be a major obstacle in several countries with access to rich resources.

When the idea of a government petroleum fund was discussed in the Long -Term Programme 1986-89, the government at that time stressed the importance of establishing a fund structure that limited the opportunities for rent seeking behaviour:

"*The use of government petroleum revenues shall exclusively take place via the central government budget, partly for financing purchases of goods and services and transfers, and partly as a source for financing loans to state credit institutions granting loans to other sectors. Except for financing of the State's direct financial interest in the petroleum sector (SDFI), the transfers [to the fund] shall not be earmarked for particular purposes. This implies that the transfers are part of the budget's financial basis in general.*"

This point of view was repeated in the Government proposition to establish the Government Petroleum Fund in 1990[8]:

"The investment alternatives for the Petroleum Fund must be strictly limited. The Petroleum Fund shall not be an alternative source of financing for programmes that are given lower priority in the competition for budget expenditure. Fixed investment in Norway should be financed as previously, and not specifically through the Petroleum Fund. Even if this initially could be defined as a use of fund income in accordance with long- term guidelines, fixed investment financed in this way will increase domestic demand. Further, fiscal discipline would deteriorate, by reducing the constraints on the various spending programmes in the central government budget."

The risk of rent seeking is particularly high when assets including elements of economic rent are transferred from the state, and when the price is agreed in bilateral negotiations. Where a market exists, the state should generally prefer to check any price against other interested parties in the marketplace.

The transfer of economic rent directly to the state has been the key argument for maintaining significant parts of the State Direct Financial Interest (SDFI) [in the petroleum sector] in public ownership. Because of the large element of economic rent, SDFI ownership cannot be confused with the discussion about state ownership in enterprises. Varying SDFI ownership according to the size of economic rent is far simpler than varying the marginal tax between fields. Secondly, it is doubtful that the state would receive a fair price if a large part of SDFI assets were sold. The buyer should be expected to have better information than the state itself about the underlying value of these assets. The buyer will also face uncertainty about the future tax system, negatively affecting their willingness to pay.

4. To ensure a high rate of return on petroleum wealth and financial assets in public ownership

The Government Petroleum Fund is still limited in size compared with the net present value of SDFI and future royalties, taxes and tariffs in the petroleum sector. During the next years, we will see a substantial transformation of wealth from petroleum to financial assets. This represents, as I commented initially, a diversification of risk and transfer of wealth into high yielding assets. The current investment strategy of the Petroleum Fund is based on diversifying the market risk over international equities and fixed income products in twenty-seven countries in more than 1750 individual companies and more than 450 bonds. This does not protect the fund from negative portfolio effects resulting from a global downturn. However, the strategy protects the portfolio from significant problems in a single enterprise, sector or country. The basic portfolio decision is the choice between expected long- term return and short- term risk. The Ministry of Finance is responsible for this decision, primarily through the limits it has set for equities in the portfolio.

There has been opposition to the strategy of broad diversification. An alternative strategy of large and focused business investments in selected foreign companies has been suggested. In order to recommend such a strategy, one needs to be convinced that a significantly higher expected return from concentrated business investments compensates for the extra portfolio risk. However, the evidence is not compelling. The alternative to large, concentrated investments in a limited number of enterprises will at any time in the future be an investment in a broadly diversified equity portfolio. The latter portfolio entails lower risk. If a concentrated portfolio still should be preferred, this portfolio must produce an expected return above the expected return of the equity market in general.

There might be a link between the size of the capital in the Fund, and the pressure to spend part of the capital on projects where elements other than the financial return and risk level are important. While the fund is not earmarked for future pension payments, these future outlays are an obvious reason for saving significant parts of petroleum revenues today. The construction of the Government Petroleum Fund may be criticised for not making the intention to save sufficiently clear. When the Petroleum Depletion Committee first suggested a petroleum fund in 1983, the intention was to provide a buffer against short - term fluctuations in oil revenues. Later, petroleum activities were substantially expanded, based on an explicit assumption that it is possible to separate exploration from the use of revenues. The public need for saving has gradually become a more important issue for the Petroleum Fund, not least because of significant upward revisions of estimates for future welfare expenditure. It has been suggested that earmarking the Petroleum Fund assets for future retirement payments will make future use of these assets more transparent, and increase public support for saving a large part of the revenues today. Such earmarking may be accomplished either by changing the Petroleum Fund to a state pension fund, or by pre-funding a mandatory pension saving scheme outside the public sector. In the latter case, pension commitments will also be transferred from the state to pension fund suppliers. If the responsibility for saving for future supplementary pensions is moved from the state to the individual, a likely solution will be to compensate saving requirements through a reduction of compulsory pension insurance payments to the state. In their recent published economic survey of Norway, the OECD has also discussed such reforms.

A transfer of an equal amount of assets and pension commitments from the public sector to the private sector does not reduce the challenge to financing the future welfare system. On the other hand, further improvements in the part of the pension system that has been transferred will no longer be a public responsibility. Earmarking the Petroleum Fund for future pensions will reduce the government's financial flexibility. The effect on public and private saving is uncertain.

Saving takes place in a global context. Individual saving is increasingly channelled through international funds. Capital seeks potential return, and the national markets are evermore integrated into the global market scene. Norwegian enterprises will receive capital only to the extent investors are offered a competitive expected return. Any analysis of the impact of an individual based pension saving scheme should take this fact into consideration.

# Concluding remarks

Norway has an opportunity to turn petroleum wealth into a long - term advantage. A positive outcome depends on our ability to learn from the mistakes of other resource abundant nations.

A cautious phasing in of oil revenues into the Norwegian economy counteracts instability related to oil prices. By applying a cautious and long-term oriented approach to spending oil revenues, an excessive crowding out of the internationally exposed sector, resulting in a loss of growth capacity, will be avoided.

Thank you for your attention.

**Footnotes:**

1 National Budget 2001

2 See, for example, Sachs/Warner: Natural Resource Abundance and Economic Growth, NBER Working Paper no. W5398, (Harvard, 1995)

3 IMF Public Information Notice, IMF concludes Article IV 2000 Consultations with Kazakhstan, December 2000

4 IMF Staff Country report, Islamic republic of Iran, September 2000

5 Hanneson (2001): "Investing for Sustainability, The Management of Mineral Wealth".

6 Ugo Fasano: Review of the Experience with Oil Stabilization and Savings Funds in Selected Countries, IMF Working Paper WP/00/112, June 2000

7 See A.J. Auerbach and L.J. Kotlikoff (1987): Dynamic Fiscal Policy, Cambridge University Press, Cambridge and E. Steigum Jr. (1993): "Accounting for Long-Run Effects of Fiscal Policy by Means of Computable Overlapping Generations Models", in: S. Honkapohja and M. Ingberg (eds.), Macroeconomic Modelling and Policy Implications, Elsevier Science Publishers, Amsterdam.

8 Ot.prp no. 29(1989-90)