The long-term investment strategy of the Norwegian Petroleum Fund

Governor Svein Gjedrem. Address at the Argentum Conference, 30 September 2004

The purpose of the Petroleum Fund

The Government Petroleum Fund is an important instrument in Norway's economic policy. It is designed to ensure that petroleum revenues are used not only by the current generation but also by future generations.

The Fund serves as a buffer between current petroleum revenues and the use of these revenues in the Norwegian economy. In this way, the economy is shielded from fluctuations in prices and extraction rates in the petroleum sector. Petroleum revenues may be gradually phased into the Norwegian economy.

The Fund is also a savings fund. In a few years, the increase in the elderly as a share of the total population will require public disbursements that are too large to be financed by current tax levels. The indirect costs associated with a level of taxes that is substantially higher than the current level would be considerable. It is therefore important that the central government has savings on which to draw.

Construction of the Fund

These two purposes imply that the Petroleum Fund must be invested outside the Norwegian economy. The Act relating to the Government Petroleum Fund stipulates that the Petroleum Fund shall receive all central government revenues from petroleum operations and that the capital from the Fund shall only be used over the central government budget. The act prohibits using capital from the Fund in any other way.

This stipulation ensures that once a year the government authorities make a decision about how much of the Fund can reasonably be used. This also ensures that all use of central government funds is subject to the same assessment and that alternative uses must be weighed against one another. It is evident from the background material for the Act relating to the Petroleum Fund that the Fund shall not be a second central government budget, and by implication it shall not be used for investments in financial assets that did not receive priority in the budget.

The Storting (Norwegian parliament) has approved a guideline for the use of petroleum revenues. It states that in general, the use shall be limited to 4 per cent, or the expected annual real return on the Petroleum Fund over time. This fiscal rule shall ensure the use of revenues in the Norwegian economy at a level that can be sustained over time. The chart shows actual use each year. In the last few years, the central government's use of petroleum revenues has been equivalent to somewhat more than 4 per cent of the Fund, in part because of unexpected shortfalls in other government revenues.

Government saving

Saving in the Petroleum Fund is the most important component of the government's financial saving. The Ministry of Trade and Industry[1] has estimated that the Fund accounts for more than half of the government's investments in capital markets. Investments in pure public corporations, national health enterprises and most wholly-owned government enterprises are excluded. Large enterprises such as Statkraft and Norway Post are thus not included. However, these two enterprises, with an estimated combined market value of between NOK 50 and NOK 100 billion, do not change the overall picture.

The capital in the Petroleum Fund has been invested in the international capital markets. The chart shows, however, that the government also invests substantial funds in the domestic markets. The Ministry of Trade and Industry and the National Insurance Fund are responsible for the two most important items. The Ministry of Trade and Industry manage government assets in a number of companies that are either engaged in business activities in Norway or that invest in companies that are engaged in such activities. The National Insurance Fund has a large portfolio of investments in listed Norwegian companies. Ownership shares that are managed by other ministries come in addition. All told, this amounts to considerable transfers of government capital to the Norwegian capital market.

The government's investments in the domestic capital market cannot be viewed, however, as particularly important for companies' financing possibilities in this market. The capital market has what economists call a separation effect. The government can construct its portfolio of financial investments without regard for the financing needs of Norwegian companies. By the same token, companies can choose their financing structure independently of the government's financial investments. The capital market is situated between the government as investor and companies' capital needs and ensures that the government's and companies' choices may be separated. The Norwegian capital market is part of a Nordic market and increasingly also a part of a larger international market. Capital markets are generally very efficient instruments for channelling funds from savers to investors.

Capital supply[2]

In the market, a price for capital is set. Companies that believe that they can, with sufficiently high probability, achieve an excess return on capital compared to what it costs in the market, will invest. A company acquires capital by using its ploughed-back profits or by raising a loan. In both cases, the market price of the capital is the price actually paid by the company.

A short supply of capital in the market could result in a market price that is too high. The required real return on investments could be higher than is socially desirable. But there is hardly a basis for claiming that market prices and required return in the Norwegian capital market are higher than in other countries. The level of fixed investment is also relatively high. This indicates that the supply of capital in the Norwegian market is satisfactory.

We know that market failure and efficiency losses are common phenomena in any real economy. A lack of information and transparency concerning investment projects is an

important reason for this. Investors in capital markets very seldom have the same information about project profitability as the company that will actually implement the project.

Asymmetric information of this kind may mean that companies must pay more for capital than would have been the case if external investors had also had access to solid and reliable information about the profitability of an investment. It may also mean that some companies with solid projects do not acquire financing at all. This is a well-known argument that the supply of capital may be inadequate for some groups of companies. In particular, this may be the case for newly established companies. Potential investors in these types of companies usually have a more limited basis for assessing expected profitability and risk than they have when they invest in established companies.

There are a number of things to be said about this argument. First, asymmetric information among different market participants is not a particularly Norwegian phenomenon. This is a type of market failure which is found in all capital markets around the world.

Second, this is not an argument for a general increase in capital supply. If we tried to solve the problem in this way, the result could be considerable capital outflows. Other investors could move their capital to markets with higher expected returns. If they did not do this, the economy could incur substantial costs because projects that are not socially profitable would nevertheless acquire financing. The most efficient way of remedying market failure is through selective instruments, especially aimed at those who are affected by market failure.

The government has therefore established special funds or companies to provide financing to private companies, either by injecting equity capital or by providing loans that are not available in the ordinary capital market. It is difficult to acquire a complete overview of the scope of this type of government capital supply. A rough estimate is that government capital amounting to at least NOK 20 billion is currently invested in development projects in private companies.

Supplying capital on terms that are more favourable than those available in the ordinary capital market has been a regional policy instrument for a long time. It has gradually become a nationwide instrument. It is not easy to evaluate how successful this policy has been. However, the information provided by ordinary performance measures for business activities should not be underestimated. Supplying risk capital involves a considerable probability of loss. For the supply to be called successful, it must also involve a strong probability of unusually high profitability. Investments in development capital should on average generate a positive return for investors, including the government. If the government on average earns money, one can with great certainty say that the government remedies market failure. If on the other hand, the government loses money over time, it is more likely that the government contributes to wasting capital.

Selective support can easily conflict with international rules and regulations which Norway has a legal obligation to follow in accordance with the EEA agreement and its membership in the World Trade Organisation (WTO). The rules and regulations shall ensure a level playing field for companies from different countries. Therefore, most forms of direct and indirect government support are prohibited. Government loans on more favourable terms than

offered in the market would be a form of indirect government support which may only be used to a limited degree. It is in the interest of Norway to safeguard these rules and regulations in order to protect Norwegian companies in foreign markets.

Tax measures may also be adopted that affect the supply of capital, also for development projects. The publicly appointed committee which earlier this year evaluated the relationship between capital supply and economic developments pointed out that removing the wealth tax would have such a positive effect.

The rule stating that the Petroleum Fund may only be invested in foreign securities is primarily aimed at keeping the capital completely outside the Norwegian economy. This simplifies the conduct of economic policy. However, the rule also prevents the Fund's managers from being exposed to pressures from domestic market participants in need of capital.

The Petroleum Fund's investment strategy

The Petroleum Fund accounts for the dominant portion of government assets abroad. The Petroleum Fund is also the wealth component that is growing most rapidly. However, whether it is correct to call this saving can be debated. The petroleum wealth already exists in the North Sea. The government has direct ownership shares in this wealth and also has the right to an additional share in form of future tax claims.

The extraction of petroleum involves a conversion of government wealth, from petroleum wealth to financial investments. Through this conversion, the wealth becomes far more liquid and it is invested is a less risky manner. The chart shows experience from the last 18 years. The data indicate that expected return rises when petroleum wealth is converted to financial assets. In addition, risk is reduced.

In the years ahead, the capital in the Petroleum Fund will probably increase considerably. The chart shows the Ministry of Finance's estimates for growth until the end of 2009. The estimates are based on assumptions concerning oil and gas prices which at present appear to be conservative.

The current investment strategy is based on analyses conducted in 1997-1998 when it became clear that the Fund might become substantial. Since then, the investment strategy has remained unchanged, with 40 per cent of the Fund invested in equity instruments and 60 per cent in fixed income instruments. This 40/60 relationship is primarily responsible for determining both expected return on the Fund and the risk connected with the return over different time horizons.

A number of other changes have been made, however, that have resulted in a larger and more diversified investment universe for the Fund. The chart shows the main characteristics of the Petroleum Fund's current benchmark portfolio.

Management performance

Norges Bank manages the Petroleum Fund on behalf of the Ministry of Finance. Until now, the results have been relatively favourable, with an average real return on the Fund's investments since 1997of 3.6 per cent, after deductions for all management costs. The relatively secure return on interest-bearing government bonds provides a solid foundation. To achieve a higher return, part of the Fund is also invested in non-government-guaranteed bonds and in equities. The equity investments in particular have been responsible for wide fluctuations in returns from one quarter to another.

The fall in the equity markets from 2000 to 2003 is reflected in the chart. This is the main reason that average returns have not been higher. On the other hand, the fall in global interest rate levels has resulted in high returns on fixed income investments.

The return on the Petroleum Fund is primarily determined by the benchmark portfolio defined by the Ministry of Finance. However, Norges Bank also contributes through active management. Active management consists of a large number of small deviations from the benchmark portfolio. The Fund is managed through a range of individual mandates, both in Norges Bank and at external managers. The chart shows that risk-taking is broadly spread over many different managers.

Norges Bank's objective is to achieve an excess return of at least 0.25 percentage point each year. This assumes an excess return on considerably more than half of the positions taken. So far, the average annual excess return has been more than 0.4 percentage point. In monetary terms, the cumulative excess return is approximately NOK 12 billion, which is equivalent to roughly 8 percent of the total return on the Fund. The chart shows that this excess return has been achieved without increasing the risk associated with the Fund's investments. This is because the active management takes other kinds of risk than that which is inherent in the benchmark portfolio.

The excess return has been positive for most quarters. The trade-off between return and risk has been high, with a ratio over one. Of course, there is no guarantee that results will be as positive in the period ahead. The sharp growth in the Fund makes it more difficult to take sufficiently large positions in the active management.

Liabilities

The Pension Commission suggested that the Petroleum Fund be merged with the National Insurance Fund to form a new Government Pension Fund. Ordinary pension funds have clearly defined obligations in the form of future pension payments. The funds' objective is to meet these obligations with a reasonable degree of certainty. The authorities regulate the funds' activities, e.g. by requiring that the funds have capital that is most likely sufficient to cover future obligations.

Formulating objectives in this manner has a considerable impact on the choice of investment strategy in ordinary pension funds. In recent years, returns in capital markets have been weak, and in many countries, the value of pension funds' capital has decreased in relation to

the funds' obligations. The decline in the pension fund's capital/obligations ratio has resulted in changes in the composition of portfolios in a number of funds.

The Pension Commission suggested that the Government Pension Fund should not be an ordinary pension fund. The government has substantial current tax revenues and can therefore use sources other than the proposed Government Pension Fund to cover pension obligations. As a result of the government's right to impose taxes, it would not be optimal to allow the investment strategy of such a fund to be governed by pension obligations. We can view a Government Pension Fund as part of the government's general assets, and the government's pension obligations as part of the government's general obligations.

The government has the possibility of maintaining a long investment horizon even if coverage of a future Government Pension Fund should fall below the desired level. This does not mean that the investment strategy will be completely unaffected by developments in pension obligations. In a few years, it will become necessary to use the return on the Petroleum Fund in addition to current petroleum revenues. It may then become more desirable to have requirements that ensure a more stable rise in the value of the Fund. On the other hand, the proposed fund is intended to be a permanent fund. We do not envision placing considerably more emphasis on short-term risk than is currently the case with the Government Petroleum Fund's investment strategy. Perhaps just the opposite.

Alternative investments

The Petroleum Fund's geographical diversification is unusually broad - the Fund's portfolio includes many countries and currencies. Other large funds' investments usually include more asset classes than the Petroleum Fund has. It is common, for example, for pension funds to invest a portion of their capital in real estate and private equity. Some pension funds also invest in the commodities markets.

The conclusion so far is that the Petroleum Fund shall not invest portions of the Fund in such alternative asset classes.

This assessment is based on two fundamental requirements for including new asset classes in the Petroleum Fund's portfolio. First, the asset class must contribute to improving the trade-off between expected return and risk. This means that returns on the new asset class must not fluctuate in pace with returns on the asset classes in which the Fund has already invested. The Fund must be able to diversify risk by investing in the new asset class.

Second, the markets in the new asset class must be of a certain size. The Petroleum Fund should not be the dominant investor in any market, because if it is, the investment would easily become illiquid and difficult to value. Given this restriction, the market's size must make it possible to invest a sufficient portion of the Petroleum Fund in the asset class that the effect on the Fund's return and risk is noticeable.

A new asset class involves a number of costs that are incurred regardless of the size of the investment. These fixed costs can only be justified if the investment is of a certain size. Investments in small asset classes will easily involve costs that are substantial in relation to the potential advantages in terms of greater risk diversification.

Private equity

Management of private equity requires expertise in active ownership of enterprises. Even large pension funds seldom find it profitable to build up this kind of special expertise within their own organisation. There are exceptions, but pension funds usually make investments indirectly through various types of partnerships. The funds must then commit to investing a specific amount, while in each partnership there is an operations manager, or leading partner, who decides when the investment is actually made. The funds pay an annual management fee to the leading partner and must also monitor the partnership to some degree.

The overall management costs for the funds are considerably higher than costs associated with investments in listed markets. The investment is usually difficult to value and as a result it is also difficult to sell. In the secondary market, prices are usually so low that a sale is not profitable. The pension fund must plan to have the investment in its portfolio until the agreed termination of the partnership. This will usually take about 10 years.

We do not have an adequate basis for estimating expected returns on any investments the Petroleum Fund might make in private equity. Returns may depend strongly on the leading partner in the partnerships entered into. It will be important to choose and gain access to the right partnerships. It will be demanding and costly to invest a sum of money in private equity that is so large that it noticeably affects the fund's total return and risk.

In the Petroleum Fund, transparency concerning management is important. This means that it should be possible for the principals and professionals outside the management organisation to assess the management performance of Norges Bank. This is important in order to maintain a high level of confidence in the Petroleum Fund as an instrument for investing government capital. When the benchmark index consists solely of listed instruments, it is easy for third parties to assess the returns in relation to average market returns. If the portfolio contained private equity, the fund might appear to be less transparent.

Private equity has not, however, been excluded conclusively as an investment instrument. Norges Bank regularly reviews the basis for the investment strategy. Part of this review is to evaluate whether the Petroleum Fund's current management structure can be adapted to investments in alternative asset classes. One option may be to report returns separately for that part of the Petroleum Fund that is invested in listed markets. These returns can then be assessed as they are today. Another option may be to provide thorough information to the public concerning investments in unlisted markets and the evaluations underlying these investments. However, even if the Petroleum Fund is allowed to invest in private equity at some later time, these investments will be made outside Norway.

There are a number of reasons that the government should become involved in markets that provide capital to development projects in ways other than through the Petroleum Fund. The government then has the possibility of reducing the effect of market failure that undoubtedly exists. Until now, however, history has taught us that government financial investments in these markets have often resulted in losses to the economy. The name

Argentum, which is the Latin word for silver or silver heirlooms, can thus be interpreted as a positive signal.

Footnotes

[1]From the Ministry of Trade and Industry's report on government ownership in 2003.

[2]The presentation is based in part on the expert report concerning "Capital supply and economic development" from the Sandmo Committee.