A DIFFERENT VIEW ON PUBLIC DEBT:
THE GOVERNMENT AS FINANCIAL INVESTOR

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Introduction

Starting in the late Sixties and early Seventies, immense oil and natural gas reserves have been discovered along Norway's long coastline and far out into the North Sea. The development of these resources was kept under rather strict governmental control, and a large part of the profits have ended up in the public coffers. Now revenues from the petroleum sector have reached their peak and will slowly dwindle for the coming decades. Coupled with rising pension and health care costs caused by ageing as in most other OECD countries, there is an obvious case for pre-funding and saving in the public sector.

This public saving is taking place in the Petroleum Fund, which by now is one of the world's biggest financial investors.

Against this backdrop, this paper sets out some of the issues that concern a government that is also a financial investor. After a brief description of the Norwegian economy, the second section below describes the budgetary mechanism that has managed to establish actual public saving. The third section depicts the structure of the Fund, the fourth its investments and the next evaluates the financial results attained. The sixth section sets out some of the political economy lessons that can be drawn. The last section concludes.

1. Setting the scene

While a small country, Norwegian GDP per capita and productivity growth are among the highest in the world (OECD, 2003). Public spending is very high in Norway, partly reflecting an extensive coverage of the welfare system and ambitious regional development objectives (Joumard and Suyker, 2002). The current population is just below 5 million, and with birth rates around 1.8 combined with positive net immigration total population is set to grow further, albeit slowly. However, population ageing will take place, driven not so much by falling fertility as by falling mortality. While strong, this pattern of ageing is thus not as severe as in many other countries.

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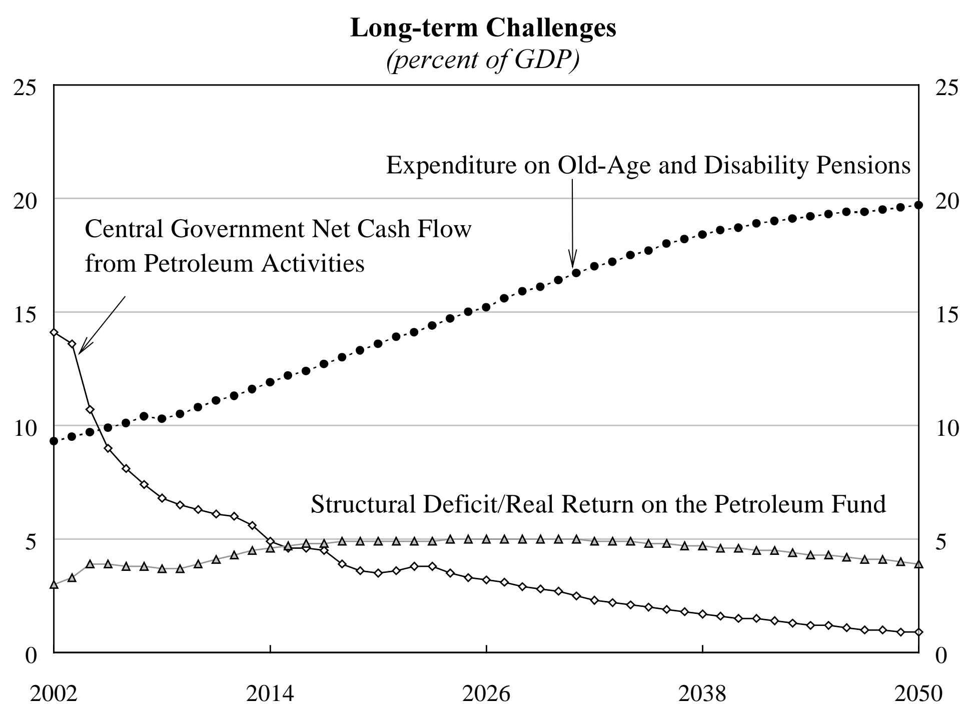
The views expressed in this paper are those of the author and do not necessarily reflect those of the Ministry or of the government of Norway.

Figure 1



Source: Ministry of Finance.

However, compared to most OECD countries, the expected growth in pension and health spending is very high (Dang *et al.*, 2001 and Pension Commission, 2004). While the average old age pension expenditure for OECD countries 7.4 per cent of GDP today, Norway is below at 4.9 per cent. However, compared to an expected average increase of 3.4 percentage points in the other OECD countries, Norway expects an increase of almost 10 percentage points (Figure 1).[1] The extensive public health and care system will raise similar challenges.

Contrary to many other resource-rich nations, the Norwegian government took steps long ago towards safeguarding this revenue stream for the future (Sachs and Warner, 2001). The Government Petroleum Fund was established in 1990. Its construction aims as helping the management of fiscal policy by making the spending of petroleum revenues more visible.

The Fund has two main purposes. First, it acts as a buffer to smooth short-term fluctuations in the oil revenues. This will make the Norwegian economy

[1] However, a politically broad-based Committee has recently proposed a set of changes to the old age pension system that may reduce total pension expenditure by as much as 20 per cent, or 3-4 per cent of GDP, in the long run.

more robust and allow greater room to manoeuvre in economic policy. Second, it will serve as a tool for coping with the financial challenges from the ageing population and the expected decline in oil revenues, by transferring wealth to future generations. The process of transforming physical petroleum reserves with financial assets in the Petroleum Fund will reduce future dependence of the oil revenues.

2. The fiscal mechanism

Formally, the Petroleum Fund is a NOK-denominated account with the central bank (Norges Bank). The corollary to this account is the investment by Norges Bank of a corresponding amount in financial instruments abroad in the Bank's own name. The return on these securities determines the return on the Petroleum Fund. By the end of September 2003, the Government Petroleum Fund amounted to NOK 845 billion (EUR 100 billion).[2] Projections indicate that the Fund will have grown from the current 54 per cent of GDP today to more than 90 per cent by the end of 2010.

The income of the Fund consists of the net cash flow from petroleum activities plus the return on the Fund's assets. The expenditures of the Fund are the transfers to the Fiscal budget to finance the non-oil budget deficit. Thus, the Fund's construction creates a direct link from the use of the Fund's capital and the non-oil budget deficit. Increased government expenditure or lower tax incomes from mainland activities result in smaller allocations to the Fund. Accordingly, the Petroleum Fund is an integrated part of the government finances, and can be seen as an accounting device (Figure 2).

In early spring 2001, the government introduced a fiscal rule for accelerated use of the State Petroleum Fund. This rule states that each year, 4 per cent of the initial balance in the State Petroleum Fund for that year should be "used"[3] The actual implementation of fiscal policy should also take into account business cycle fluctuations. As the annual inflow into the State Petroleum Fund currently is markedly higher, the fund will grow in the medium term and the annual "use" will increase accordingly. This fiscal policy rule thus implies a modest increase in the use of petroleum revenues, at the same time as it contributes to limiting expenditure growth. The rule has not stood up perfectly even in its short life; a relaxed reading taking into account the downturn in economic activity that hit Norway alongside most of the OECD area these last years is needed to be very positive on its workings.

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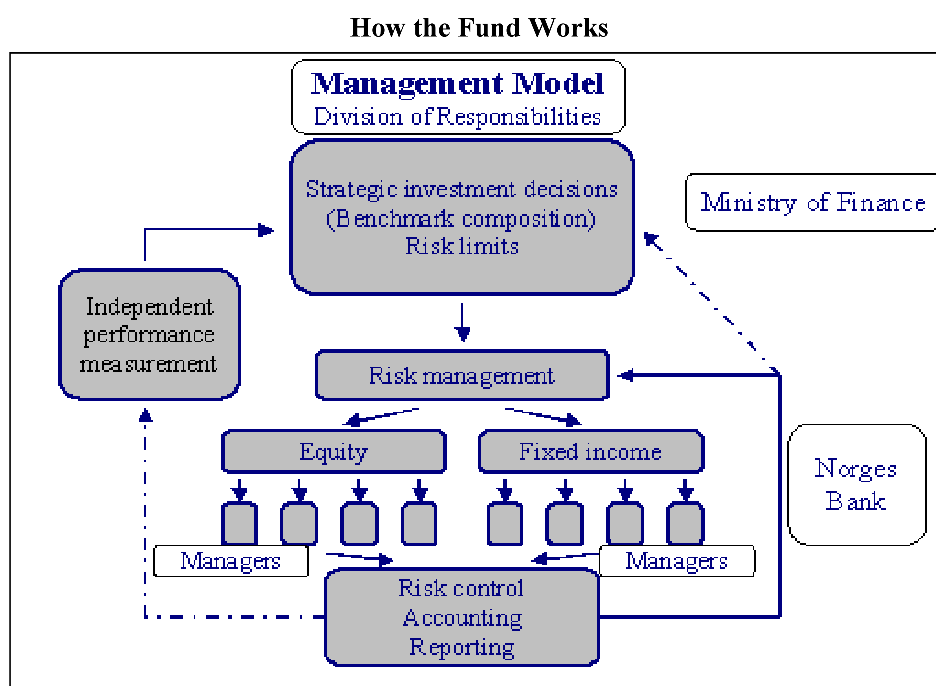
[2] The conversions presented here are based on an exchange rate between NOK and EUR of 8.43, as of December 31, 2003. In June 2004 the exchange rate also was close to this level.

[3] Formally, the rule states that the budget should balance after transfers from the State Petroleum Fund when corrected for activity (that is, the business cycle influence) and for transfers from Norges Bank and financial income in excess of "normal levels". There is no specific constraint on how the additional funds should be used; the use can consist of reduced taxes, or increased transfers or consumption.

Figure 2

How the Fund Works



Source: Ministry of Finance.

3. The organisational framework

An Act of Parliament established the Fund in 1990.[4] According to this law, the Ministry of Finance is the manager of the Fund. In the Regulation on the Management of the Government Petroleum Fund, the Ministry of Finance has delegated the responsibility for the operational management of the Government Petroleum Fund to Norges Bank. The task is further defined in a Management Agreement between the Ministry of Finance and Norges Bank and in letters from the Ministry to the Bank.

The Government and the Ministry of Finance decide the guidelines and regulations. However, the Government always consults the Parliament (Storting) before making substantial changes to the guidelines. The Government regularly informs Parliament about developments in the Fund (notably in the National Budget in October, The National Accounts in March and the Revised National Budget in May).

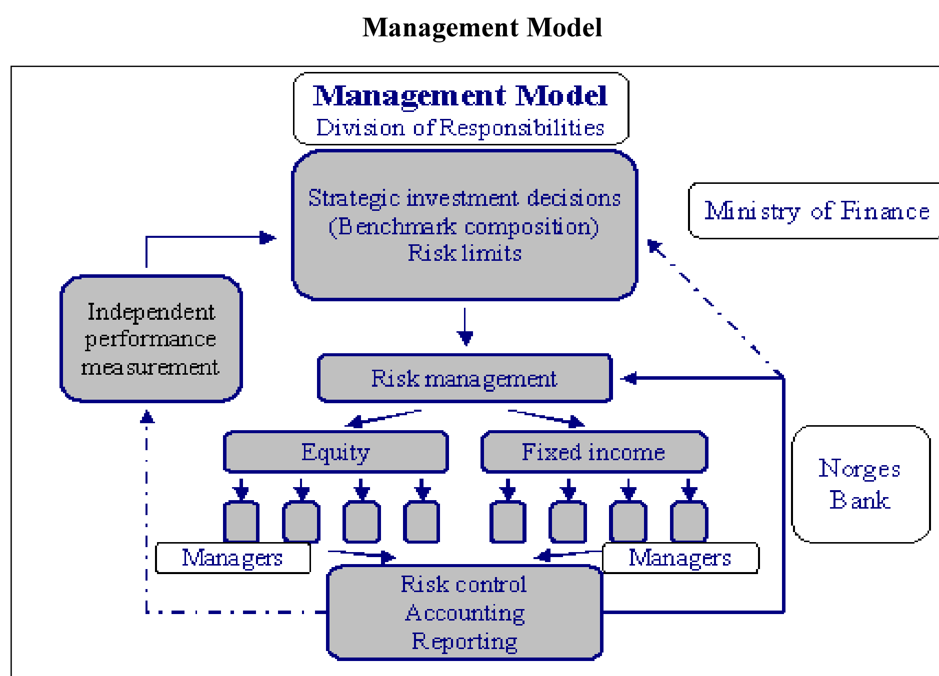
[4] This is Act No. 36 of 22 June 1990 relating to the Government Petroleum Fund, supported by Regulations from October 1997.

The division of responsibilities between the Ministry of Finance and Norges Bank follows a fixed demarcation (Figure 3). The Ministry of Finance decides the strategic investment decisions (known as the benchmark portfolio), and the risk limits. Norges Banks tasks are to carry out the investment strategy, risk management, accounting and reporting. Further, the Bank is to offer advice on strategic investment decisions to the Ministry. The office of the Auditor General has overriding responsibility for auditing the Petroleum Fund and reports to the Storting on the management of the Fund.

An important issue for the Ministry is the evaluation of Norges Bank's operational management of the Fund. The Ministry of Finance has hired external expertise to carry out independent performance reviews of the Fund's performance. In order to evaluate the performance of the Petroleum Fund, the Ministry of Finance has defined a benchmark portfolio. The benchmark is a theoretical portfolio consisting of market indices for the countries in which investments are allowed. In this way, the performance of the Petroleum Fund is compared to the benchmark. Furthermore, the Ministry has set a limit as to how much the Petroleum Fund's investments may be expected to deviate from the benchmark, illustrating that the benchmark also serves as a risk management tool.

Figure 3

Management Model



Source: Ministry of Finance.

4. The investments

All investment funds have a purpose. To what degree that purpose is uniquely defined varies across different types of funds. A fund with a clear purpose as defined by its liabilities is an autonomous pension fund. On the other hand, the Petroleum fund is an endowment fund with the full government budget as liability and profit maximation for a given risk profile as purpose. The Fund made its highest ever return in 2003, 12.6 per cent, beating its benchmark by 0.6 basis points.

The Fund is currently invested in nearly 30 different countries. It follows from the Regulation that the Fund is only to be invested abroad. Petroleum revenues are seen as too large and volatile to be absorbed by the mainland economy without creating high inflation and structural problems in the short run. An internationally invested fund alleviates this problem, as the central government contributes to the capital outflow needed to match current account surpluses. Further main considerations behind this are the following:

- The need to maintain and protect the Fiscal Budget as the central political management tool: Financing domestic investments through the Petroleum Fund, including infrastructure, know-how and businesses, the Fund would become a supplementary source of financing government expenditures. This would undermine the position of the Fiscal Budget as a management tool and weaken the budget process.
- The need for a diversified industry structure: Channelling financial investments abroad helps to ensure that the amount of oil revenues used in the economy does not result in an industry structure that cannot be sustained when oil revenues start to decline (*i.e.,* avoiding so-called “Dutch Disease”). The optimal level of domestic fixed investments should not be affected by the size of petroleum revenues in a given year. Increased domestic investment carries the risk of a lower return on investment.

The typical textbook approach to investing will suggest that the return on a portfolio essentially is determined by the strategy and framework laid down for its management. The most important strategic decisions concern the distribution of investments among various asset classes, such as bonds and equities, and the distribution by country. These decisions can determine as much as 90-95 per cent of the return. The remaining 5-10 per cent of the differences in return is a result of the manager's choice of equities and bonds.

Initially, the Fund’s capital was invested more or less in line with Norges Bank’s foreign exchange reserves, *i.e.* primarily in low-risk interest-bearing securities. Later, prospects of a substantial Fund and a longer investment horizon led the government to conclude that a longer-term investment horizon was warranted and that equity instruments should be included in the portfolio. Credit bonds were included in the benchmark and the portfolio from 2002, and further expansion to other and less liquid asset classes may lie ahead. The equity portfolio is now invested in some emerging markets. Private equity and real estate are examples of

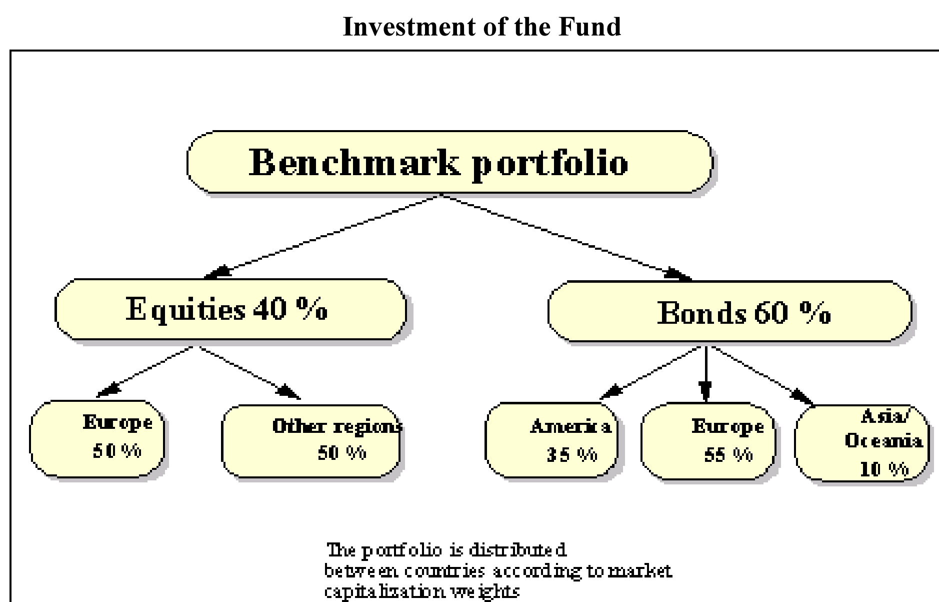
classes that have been discussed but where decisions have been put off. Such alternative investment classes raise question both for the management organisation in terms of competence and need of manpower in the day-to-day management of the fund, and in terms of control and reporting for the Ministry, as the return is hard to establish for assets that are infrequently traded.

From 1 January 1998 the diversification strategy of the Fund has been based on an asset allocation in the benchmark portfolio set to 60 per cent bonds and 40 per cent equities (Figure 4). The equity portfolio has a geographical split of 50 per cent in Europe and 50 per cent in other regions according to market capitalisation weights. For the fixed income portfolio, 55 per cent is invested in Europe, 35 per cent in America and 10 per cent in Asia/Oceania. Within each region, the portfolios are invested according to the market capitalisation weights for each country and market shares are not rebalanced. The Fund is invested in all developed markets. The rules further stipulate that the investments in any one company may not exceed 3 per cent of the voting shares or share capital. Similar rules are in place for individual bond issues.

The active management of the equity portfolio is increasingly centred on sector mandates, where bets are taken within a specific sector but across countries. Portfolio manager overlap increases the risk of breaches of the ownership restrictions. The active management of the fixed income portfolio involves both bets

Figure 4

Investment of the Fund



Source: Ministry of Finance.

on interest rates in different currencies and on exchange rates, in addition to sovereign issuers with different standings in the market.

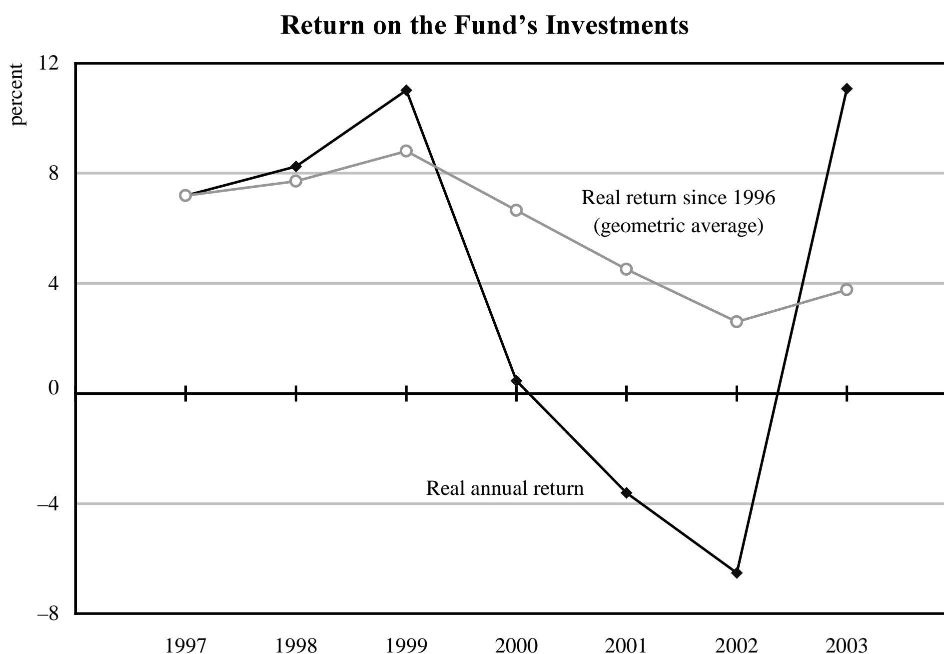
5. The return on the fund

Since the beginning of 1998 nominal return on the Fund's assets, measured in the funds currency basket, has averaged 5.3 per cent per annum (Figure 5). It is the return in foreign currency that is relevant for measuring the development in the funds international purchasing power. The average annual real return, *i.e.* after deductions for management costs and inflation, has been 3.7 per cent from the beginning of 1998 until the end of 2003. Remarkably, the running cost of the Fund has been kept at or below 0.1 per cent of total assets.

The long-term real return represents the marginal funding cost for the Norwegian government. It has been rather close to the 4 per cent that often has been used in international economic exercises (see projections in the OECD or the EU, e.g. EU, 2003). It is close to the after-tax real return that has prevailed in the United

Figure 5

Return on the Fund's Investments



Note: Annual real return in the Fund's currency basket and geometric average of annual returns over the whole period. Equities have been included in the benchmark portfolio since March 1997.
Source: Norges Bank and Ministry of Finance.

States in the 1880-2002 period according to McGrattan and Prescott (2003) and also for a somewhat shorter period according to Kotlikoff and Summers (1981). However, the treatment of risk in such exercises raises further issues.

The Regulation on the Fund defines limits for duration and credit risk connected with the investments in fixed income instruments. The modified duration of the total portfolio of fixed income instruments and associated derivatives should be between 3 and 7. The credit risk is regulated by a minimum rating for fixed income instruments, bank deposits and for counterparties in derivatives transactions. The risk limit relative to the funds benchmark, defined as tracking error, has been set to maximum 1.5 percentage points. A 1.5 per cent tracking error implies that the actual return is expected to deviate by less than 1.5 percentage points from the benchmark return in two out of three years. That the actual deviations have been far smaller indicates that the manager has not made full use of the risk limits.

In 2003, the manager achieved a return that was 0.59 percentage points higher than that on the benchmark portfolio. This is the sixth consecutive year since equities were introduced into the portfolio in 1998 that Norges Bank has outperformed the benchmark as defined by the Ministry of Finance. The annual excess return has averaged 0.43 per cent. The total excess return over this period has been just over NOK 9 billion (EUR 1.1 billion).

6. The political economy of the Fund

First, there is political risk to the Fund construction consisting of a pure spending spree. Even with a fiscal rule that is not followed in any strict sense, it is hard to argue that this has happened. However, there is more subtle risk in the sense that non-economic issues may enter the purpose of the fund. Such issues have certainly appeared, through the introduction of environmental concern, ethically motivated investing and a broadening of the investment universe.

The Environmental Fund that was established with NOK 1 billion of assets on 31 January 2001, and was increased by another billion in 2002. The Environmental Fund's assets are only to be invested in shares in companies that satisfy certain environmental criteria, including environmental reporting and environmental certification. This implies that *all* companies that fulfil these requirements will be included. In addition, companies that are considered to have inherently little negative influence on the environment are included, even if they do not fulfil the requirements to reporting and certification. The environmental and financial aspects of the Environmental Fund were evaluated in the Revised National Budget in May 2004, without much evidence found in support of this approach.

A further development recently came from a public commission appointed to propose ethical guidelines for the Petroleum Fund. After a public consultation process, the Government proposed a set of ethical guidelines for the Petroleum Fund based on the commission's report and the submissions received in the Revised National Budget for 2004. These guidelines comprise three elements:

exercise of ownership rights, negative screening and exclusion. Norges Bank is to be responsible for the implementation of the corporate governance policy, while the Ministry of Finance will be responsible for decisions about the ethical constraints on the Fund's investment universe. The Ministry will also establish an external council to advice on negative screening and exclusion. The Parliament supported introducing these guidelines in June 2004. As a corollary to the increased focus on ethical issues, Parliament supported discontinuing the Environment Fund.

The benchmark portfolio, as set by the Ministry of Finance, governs the diversification across countries. Beside the industrialised countries, it also includes quite a number of emerging markets. Being small, these hardly affect the overall risk profile of the fund. However, such recent inclusions as that of South Africa appear to be more of a political issue than motivated from a professional diversification or active management viewpoints.

Although uncertain in their future developments, these issues do probably have a rather small effect on the Petroleum Fund's return. The ones described above have not grown after having been introduced. Rather they have been calmly evaluated for goal attainment and been scaled accordingly. It is not obvious that further such proposals are eliminated in the current strategy, though. These could be for a specific geographical distribution or for specific projects, perhaps including infrastructure projects that had failed the ordinary process for setting priorities in the National Budget negotiations. Indeed, proposals on "using the public financial strength to assist national industries abroad" have recently been demanded from Parliament.[5]

The operation of the Fund and the management of its capital are governed by law, regulations and detailed guidelines. The Fund was established when the Parliament adopted the Act relating to the Petroleum Fund in 1990. The Act formally gave the King authority to issue further guidelines for the Fund, and this authority was delegated to the Ministry of Finance as is regular practice. The Ministry has issued two regulations, and a number of guidelines have been communicated to Norges Bank in the form of letters from the Ministry. The Parliament is always informed and expresses its opinions when amendments to the formal framework for the operation of the Fund are made. Comprehensive discussion in Parliament has been a part of the strategy since the Fund's infancy. This approach to decision-making supports responsible participation.

As is well known, recent years have constituted a very volatile period in the world's financial markets. The Fund's asset allocation mix is partly motivated by the need to avoid political unrest from large swings in its value. However, as Figure 5 above illustrated, these swings have been very strong. Focussing on the equity part

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[5] A recent discussion on such issues can be found in the recent report from an Expert group headed by economics professor Agnar Sandmo from the Norwegian School of Economics and Business Administration (Expert group, 2004).

of the portfolio, the return has been negative for successive years. Actually, overall the fixed-income part of the portfolio has been the money earner since the Fund's inception. Viewed in a political economy perspective, it is rather surprising to note that the political basis for the Fund have been left unscathed by these financial waves.

There is political risk in the sense that non-economic issues may enter the purpose of the fund. There is at the same time risks to the political system. For the parties in power, there is a clear risk of being associated with volatile results. Recent experience suggests that this issue may have been exaggerated, though. Through the falling stock markets that appeared in the new century, the level of acceptable risk well judged. One could also argue that the experience suggests that the political system will weather even higher volatility, consistent with a higher exposure to equity and hopefully, rewarded by higher risk premiums.

7. Final remarks

There is no single policy measure that can eliminate the long-term pressures on the welfare system caused by the demographic outlook, a still maturing pension system and decreasing petroleum revenues. The Norwegian government has chosen a broad strategy to meet these challenges. The main message in this strategy is to strengthen the economic basis for the future welfare by measures to promote a well-functioning economy, high employment and solid public finances. Especially, to meet the demographic development with a declining share of the population in the working ages and a related increase in the share of pensioners, it becomes even more important to keep the labour force as large and well qualified as possible. Steps to reduce future pension expenditures were taken as early as in the beginning of the Nineties and a new reform of the pension system is now in the process of being presented to Parliament.

The current budget policy approach consists of a coherent and simultaneous treatment of all budgets items. Taxes should not be earmarked for expenditures considered to be integrated parts of the public tasks, as the social security system is. By earmarking, it is difficult to give all budget items the consistent, stable and visible budgetary treatment over time that is central to ensure sustainability. A coherent discussion in the Government and the Parliament of public income, expenditure and policy priorities during the annual budget process are important. It has been seen as essential to avoid building a pension fund while at the same time running deficits in other public sectors.

This may be called general funding in contrast to earmarked funding. The Petroleum Fund was established as a fiscal mechanism in 1990, to enhance the transparency of the spending of petroleum revenues. All oil revenues are accumulated in the Fund, and transfers from the Fund will finance any non-oil deficit on the government budget. Such transfers require explicit voting in Parliament. Thus a general fund, not isolated from the budget process, is established

through the Petroleum Fund. Accumulation of assets in the Petroleum Fund through budget surpluses will among other things be used to meet long term challenges related to the demographic development and increased pension expenditures. Thus, public net saving will automatically create financial assets in the public sector.

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