NORWEGIAN MINISTRY OF FINANCE

Report No. 24 (2006–2007) to the Storting

On the Management of the Government Pension Fund in 2006

Translation from Norwegian. For information only.

Contents

On the Management of the Government Pension Fund in 2006

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Recommendation of 13 April 2007 from the Ministry of Finance, approved by the Council of State on the same date. (the Stoltenberg II Government)

1 Background

When the Bratteli Government submitted the first comprehensive report to the Storting concerning the inclusion of the petroleum activities in the Norwegian economy, Report No. 25 (1973–74) to the Storting, *The role of the petroleum activities in Norwegian society*, the defined ambition was for the oil revenues to be used primarily in the development of “a qualitatively better society”. Weight was attached to “avoiding an outcome characterised only by fast and uncontrolled growth in the use of material resources, without any other changes to society”. Our large current petroleum revenues offer us considerable room for manoeuvre in terms of economic policy, compared to most other countries. However, high wealth is accompanied by large management responsibility.

Long-term management of petroleum wealth reflects a fundamental social perspective, and is an overarching priority for the Government. Such management implies that this wealth can benefit all generations. At the same time, it makes an important contribution to stability in output and employment. These are necessary prerequisites for realising the vision of a qualitatively better society, characterised by security for individuals and inter-generational solidarity.

If we had planned to consume all oil wealth within a generation or two, it would have given rise to major changes in the industrial structure, and in particular for those employed in the sector exposed to international competition. In the short run, these transitional problems could to a large extent have been compensated through government financial contributions to those affected. Such an arrangement for the spending of oil revenues would have given Norwegians even more scope for consumer spending in coming decades, although we already have one of the highest consumption levels in the world. However, after a couple of decades we would have had to reduce the high consumption level again, in line with falling proceeds from oil activities. Without considerable assets accumulated abroad, declining oil revenues would have occasioned an increasing need for internationally competitive business activities in order to fund imports from abroad. This would have resulted in additional restructuring, now by way of manpower having to be withdrawn from businesses in the sector sheltered from international competition, and without high oil revenues to smoothen the transition. Consequently, saving a major part of such oil wealth as it is transformed into a cash flow every year, is based on the best traditions of solidarity within Norwegian politics.

The Government Pension Fund was established with effect from 1 January 2006, encompassing the former Government Petroleum Fund and National Insurance Scheme Fund. The purpose of the Government Pension Fund is to support government savings to finance the pension expenditure of the National Insurance Scheme and long-term considerations in the application of government petroleum revenues. To ensure that the petroleum revenues are contributing to the stable development of the Norwegian economy, the revenues shall be phased into the economy gradually, whilst the savings shall be invested outside Norway. The Government Pension Fund – Global contributes, by investing a significant part of the petroleum revenues abroad, to a capital outflow that offsets the impact on the Norwegian krone exchange rate of large and varying foreign exchange inflows from the petroleum sector.

The savings of the Pension Fund take the form of general fund accumulation. The Fund is fully integrated with the Fiscal Budget, in order to facilitate growth in the fund being a reflection of the State's actual accumulation of financial assets, cf. Box 1.1. The Government Pension Fund does not have its own Executive Board or administrative staff.

Under the Pension Fund Act, the Ministry of Finance has been charged with managing the Fund. The Ministry determines the general investment strategy of the Pension Fund, as well as its ethical and corporate governance principles, and follows up on its operational management. The Government Pension Fund adopts a long investment horizon. Our management responsibility includes responsibility for ensuring that the Fund is managed with a view to maximizing return, given a moderate level of risk. This enables future generations to draw the maximum possible benefit from our savings as well. At the same time, we share responsibility, as investors, for the conduct of the companies in which the Fund invests. The Government therefore emphasises that ownership interests in the companies in which the Fund invests is exercised with a view to promoting good and responsible conduct, showing respect for human rights and the environment.

The Pension Fund is invested in securities issued by many different states and by companies in many different countries. Consequently, the risks facing the Fund are well diversified. The expected return and risk of the Pension Fund is in large part determined by the Ministry's guidelines on how the funds shall be invested. Norges Bank and Folketrygdfondet (also known as the National Insurance Scheme Fund) have been charged with the operational management of the

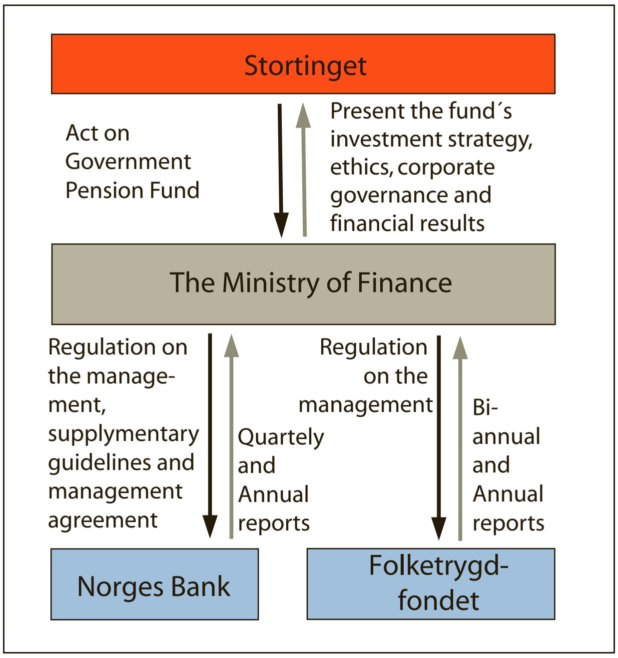

Figure 1.1 The main aspects of the distribution of responsibility between the Storting, the Ministry of Finance, Norges Bank and Folketrygdfondet

Government Pension Fund – Global and the Government Pension Fund – Norway, respectively, within the guidelines laid down by the Ministry.

The management of the Government Pension Fund is subject to a high degree of openness. The Storting is apprised of the investment framework and the Ministry's follow-up of the Pension Fund on a regular basis. Operational management performance is also reported by Norges Bank and Folketrygdfondet on a regular basis. This is emphasised by the Ministry for purposes of strengthening the credibility of, and confidence in, the Fund and the fund structure.

The main aspects of the distribution of responsibility between the Storting, the Ministry of Finance, Norges Bank and Folketrygdfondet are described in Figure 1.1.

The Government aims for the Government Pension Fund to be the best managed fund in the world. This implies that one shall seek to adopt best practise within international asset management in efforts relating to the Fund. Material deviances from recognised international practise should be justified specifically. Efforts relating to the Government Pension Fund require specialised qualifications. Demands are imposed on both the resources of the Ministry and the external assistance used.

Norway's handling of its petroleum revenues is often invoked as a benchmark internationally. This pertains, in particular, to the role of the Government Pension Fund as part of the framework for a long-term, sustainable fiscal policy, which facilitates stable economic development. The Ministry assists, through the rendering of advice in this area, several other countries in the organisation of their natural resource management. This effort takes place through bilateral cooperation, the "Oil for Development" programme under the auspices of Norad, as well as international organisations like, *inter alia*, the IMF, the World Bank and the UN.

The Government Pension Fund is one of the largest funds in the world, and its assets are growing rapidly. The Fund is large relative to the size of the Norwegian economy, and the return on the Fund will make considerable contributions to the funding of State expenditure in coming years. Focus on the management of the Fund has increased in line with the growth in its size. This underscores the importance of ensuring that the investment strategy of the Pension Fund, and its ethical and corporate governance guidelines, have the firm backing of the Storting, and that the Ministry reports thoroughly on its follow-up of operational management. From now on, the Ministry of Finance will be able to report in a more comprehensive manner to the Storting, by way of an annual report, on the management of the Government Pension Fund. In addition, important matters relating to the management of the Pension Fund may be presented to the Storting in the National Budgets in the autumn. The present Report primarily addresses matters relating to the management of the capital of the Government Pension Fund. More general issues relating to the management of the petroleum revenues, the position of the Fund within overall economic policy, as well as how much of the oil revenues we should spend are discussed in the National Budget documents.

The Report is structured as follows: An overview of the management performance is provided in Chapter 2. A separate Appendix to this Chapter presents more detailed analyses of the Fund's return and risk.

Chapter 3 outlines the investment strategy of the Pension Fund, and explains that the Government intends to increase the equity portion of the Government Pension Fund – Global from the current 40 pct. to 60 pct. At the same time, one intends to increase the number of companies in the Pension Fund – Global by including the segment comprising small listed companies in the benchmark portfolio. One also intends to change the regulation of recognised markets and currencies. This Chapter also includes a discussion of the status of the Ministry's effort to evaluate the possible inclusion of real estate and infrastructure as a new asset class under the Pension Fund – Global.

Chapter 4 addresses ethics and corporate governance, and contains, *inter alia*, a more detailed discussion of the corporate governance policies pursued by Norges Bank and Folketrygdfondet. This Chapter explains that in future the Government will be applying any decisions to exclude Nordic companies from the portfolio of the Government Pension Fund – Global to the Government Pension Fund – Norway as well. Chapter 4 also contains a discussion of the impending evaluation of the Ethical Guidelines of the Government Pension Fund – Global, which the Government intends to complete during the course of the present Storting period.

Chapter 5 refers to the effort to develop and follow up the general framework governing asset management. The Ministry is also submitting, in connection with the present Report, a proposal to the effect that Folketrygdfondet be organised as a separate legal entity pursuant to a designated special act, cf. Proposition No. 49 (2006–2007) to the Odelsting.

The Act relating to the Government Pension Fund and the Regulations relating to the management of the Fund, with supplementary provisions, are appended to the present Report. The recommendations and assessments of Norges Bank, the Strategy Council and the Council on Ethics regarding the proposed changes to the investment strategy of the Government Pension Fund – Global are also appended. The annual reports of Norges Bank and Folketrygdfondet concerning the management of the Government Pension Fund in 2006 are appended by reference.

Box 1.1 The fund structure

The Government Pension Fund comprises the Government Pension Fund – Global and the Government Pension Fund – Norway. The accumulation of capital in the Government Pension Fund – Global does in large part reflect the conversion of oil and gas resources in the North Sea to financial assets abroad. Consequently, the ongoing proceeds from the petroleum activities are of a different nature than the other revenues of the State, since they partly correspond to a reduction in the petroleum wealth of the State. The proceeds also vary considerably in line with, *inter alia*, fluctuations in the oil price.

Figure 1.2 shows the relationship between the Government Pension Fund – Global and the Fiscal Budget. The revenues of the Government Pension Fund – Global comprise the cash flow from the petroleum activities, which are transferred from the Fiscal Budget, net financial transactions relating to the petroleum activities and the return on the Fund's assets. The assets of the Fund may only be allocated to transfers to the Fiscal Budget pursuant to a resolution passed by the Storting. The transfer covers the oil-adjusted budget deficit. Consequently, the net allocation to the fund forms part of an integrated budgetary process, and renders visible the State's use of petroleum revenues. The fund accumulation thereby reflects the actual surplus of the Fiscal Budget.

The budget policy guidelines (the fiscal rule) imply that the structural, oil-adjusted budget deficit shall over time correspond to the expected real return on the capital of the Government Pension Fund – Global. This facilitates predictable spending of the petroleum revenues, which is uncoupled from ongoing revenue flows. This results in the Fiscal Budget and the mainland economy being sheltered from effects of fluctuations in oil revenues. At the same time, the fiscal rule supports preservation of the wealth over time, in order that it may contribute to maintaining the welfare of coming generations as well. Whilst the capital of the Fund can only be spent once, the real return may finance a permanently higher level of government expenditure.

The basic capital of the Government Pension Fund – Norway originates primarily from surpluses in the national insurance accounts from the introduction of the National Insurance Scheme in 1967 and until the late 1970s. The return on the assets of the Government Pension Fund – Norway is not transferred to the treasury, but is added to this part of the Fund on an ongoing basis. There are no transfers of capital between the two parts of the Government Pension Fund.

When the accounts pertaining to central government's net cash flow from the petroleum activities are available, these will normally differ from what has been resolved by the Storting in the newly balanced Budget. The difference is classified as a balancing item between the Government Pension Fund – Global and the treasury. One will, in line with regular practise, offset this balancing item in connection with the transfers for the subsequent year, cf. the more detailed description hereof in the Central Government Accounts. The present Report refers to the value of the Government Pension Fund – Global as set out in Norges Bank's annual report for the management of the Government Pension Fund – Global in 2006. The Central Government Accounts for 2006 will be presented in late April 2007.

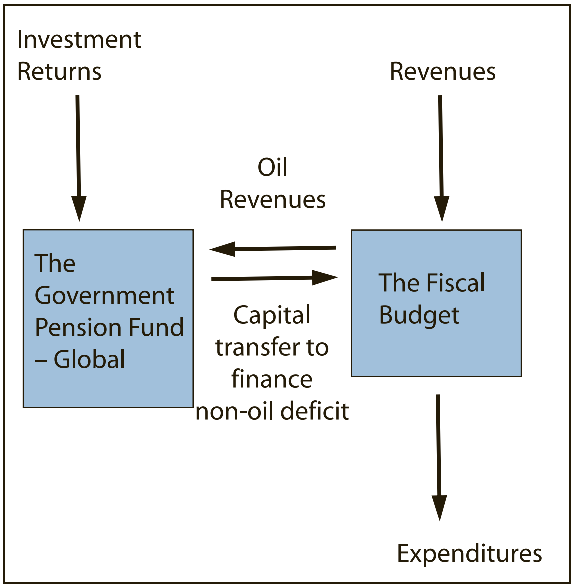

Figure 1.2 The relationship between the Government Pension Fund – Global and the Fiscal Budget.

2 Management performance

2.1 Overview

The value of the Government Pension Fund was NOK 1,890.6 billion as per yearend 2006. The NOK 309.1 billion increase from the previous year was caused by the inflow of new funds, very favourable returns in the fixed-income markets, relatively low returns in the bond markets and excess returns from operational management.

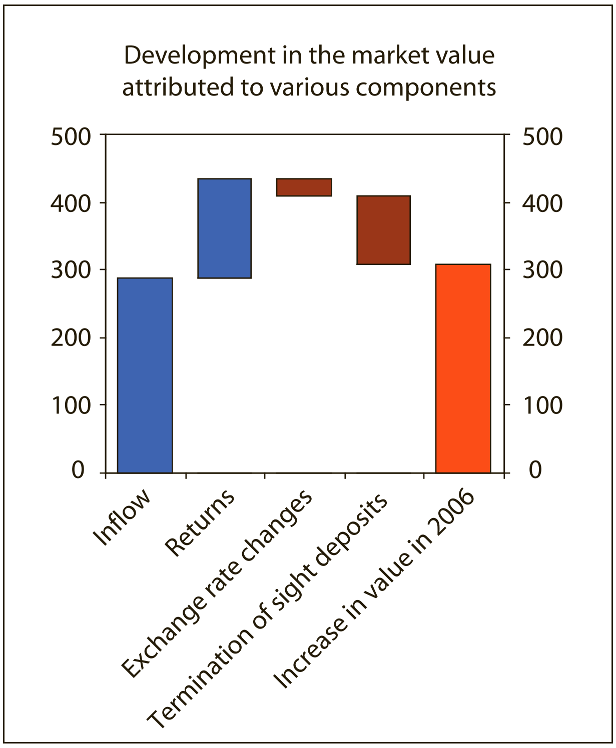

Figure 2.1 Development in the market value of the Government Pension Fund during 2006, as attributed to various components. NOK billion.[1]

[1] In line with the resolution passed by the Storting in connection with the balancing of the Fiscal Budget for 2006, NOK 111.8 billion of the fund capital (measured by market value) were written down on 29 December 2006, as part of the termination of the arrangement whereby fund liquidity was held in the form of sight deposits with the treasury. At the same time, NOK 10 billion of the funds held in sight deposits were repaid, thus enabling a strengthening, through the Government Pension Fund – Norway, of long-term state ownership in the Norwegian business sector in line with the Soria Moria Declaration. The transaction is described in more detail in Proposition No. 31 (2006-2007) to the Storting, New balancing of the Fiscal Budget for 2006.

Source: Ministry of Finance

A certain appreciation of the Norwegian krone, as measured against the currency basket of the Government Pension Fund – Global, contributed negatively, but the Norwegian krone exchange rate is not relevant as far as developments in terms of international purchasing power are concerned. In Figure 2.1, the increase in value during 2006 is decomposed across various factors.

Figure 2.2 shows developments in the market value of the Government Pension Fund since 1996. The value of the Government Pension Fund – Global and the Government Pension Fund – Norway was NOK 1,783.7 and 106.9 billion, respectively, as per yearend 2006.[1] This repre-

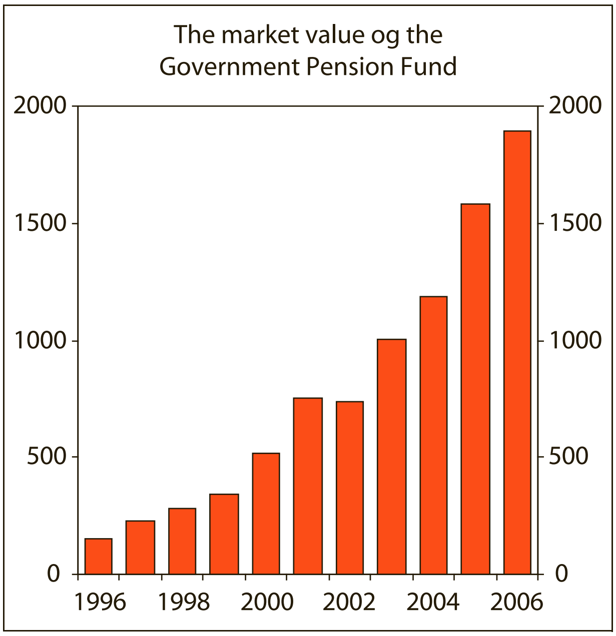

Figure 2.2 The market value of the Government Pension Fund. 1996-2006.[1]

[1] The Government Pension Fund was created in 2006 as a general framework encompassing the Petroleum Fund and the National Insurance Scheme Fund. The value of the two Funds has, for purposes of illustration, been aggregated for previous years as well.

Source: Ministry of Finance

[1] The value of the Government Pension Fund – Global is calculated before the deduction of management costs. In 2006, management costs amounted to about NOK 1.5 billion, which will be reimbursed to Norges Bank during the course of the 1st quarter 2007.

sents a NOK 393.6 billion increase since yearend 2005 as far as the Global part of the Fund is concerned, whilst the value of the Government Pension Fund – Norway as per yearend 2006 was less than at the beginning of the year as the result of the termination of the sight deposits with the treasury. NOK 288.3 billion of the increase in the value of the Government Pension Fund – Global is caused by the inflow of new capital from the Fiscal Budget. Total inflow to the Pension Fund – Global over the years 1996–2006 was NOK 1,440.6 billion.[2]

The highly favourable development in the value of the Government Pension Fund during 2006 is influenced by a number of factors. The significant easing of monetary policy in many countries during the period 2000–2003 has, together with the increased participation of countries like

[2] The estimated increases in the value of the Government Pension Fund and the Government Pension Fund – Global in Sub-chapter 2.1 are based on figures from the Central Government Accounts up to and including 2005 and from Norges Bank's annual report for 2006. See also Box 1.1.

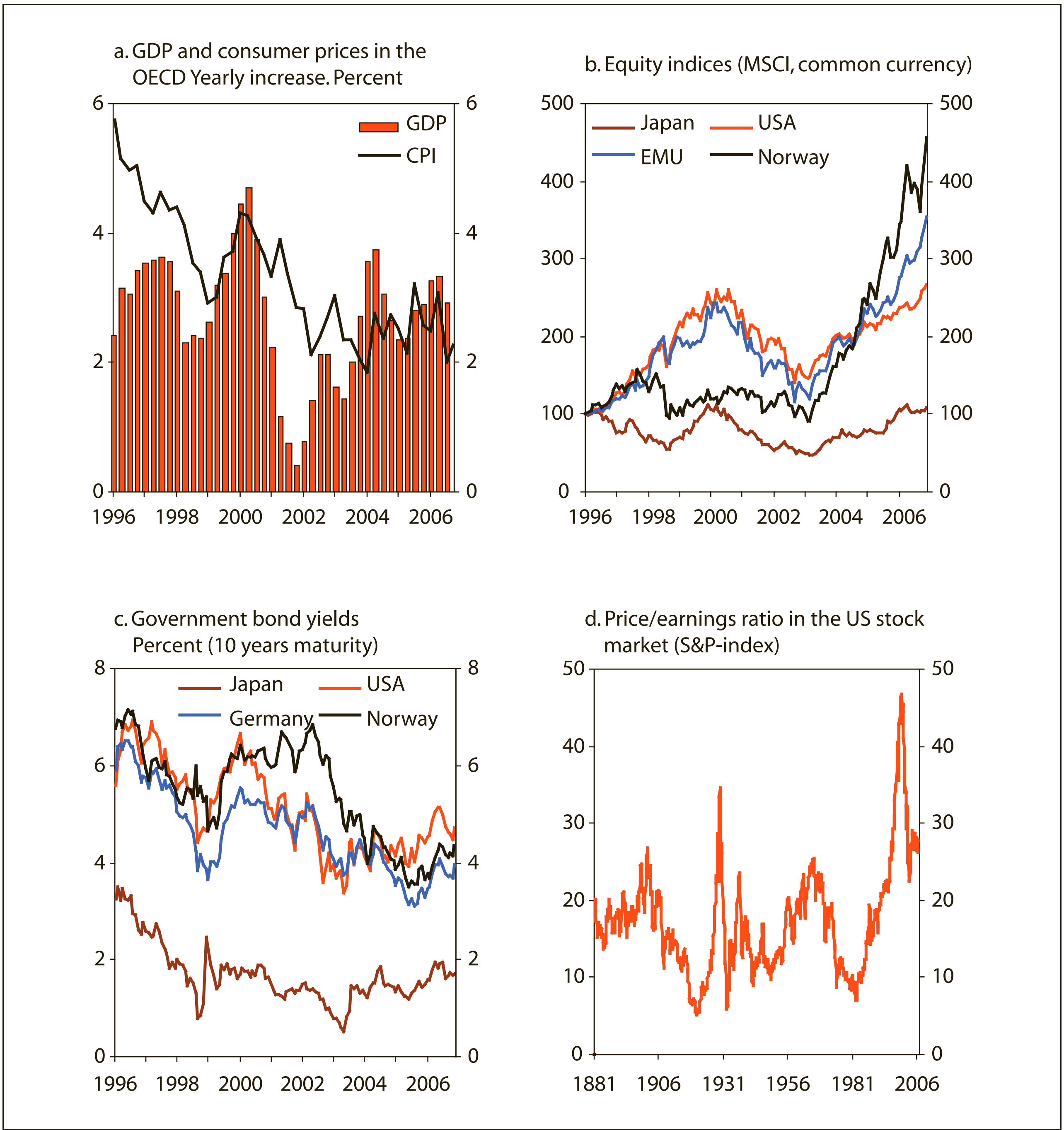

Figure 2.3 Market developments

Source: EcoWin, Norges Bank and www.econ.yale.edu/shiller

China and India in world trade, stimulated economic growth, and enterprises have registered high earnings. At the same time, inflation has remained low, cf. Figure 2.3a. This has paved the way for a broad stock market upturn, cf. Figure 2.3b. The upturn on the Oslo Stock Exchange in recent years has been particularly strong, and needs to be seen in the context of, *inter alia*, higher oil prices. However, in the last couple of years there has been a gradual tightening of US and European monetary policy, and bond yields have increased, cf. Figure 2.3c.

The expected excess return on equities relative to risk-free investments (the "equity premium") now appears, in line with the assumptions outlined in Chapter 3, to be relatively low from a historical perspective. Figure 2.3d shows that the ratio between price and earnings in the US stock market remains at a relatively high level from a historical perspective (adjusted for inflation and smoothed across business cycles). This may indicate a relatively low expected equity premium, although the current interest rate level and expected earnings growth also contribute to increasing the ratio between price and earnings. Returns in the global stock market in recent years have been significantly higher than the long-term estimates for return on equities adopted in Chapter 3.

2.2 The return on the Government Pension Fund

2.2.1 Introduction

A thorough discussion of the return on the Government Pension Fund is provided below. A more detailed analysis of return and risk in the Fund is appended to the present Chapter. The analysis distinguishes between the return resulting from general developments in the markets where the Fund is invested and the return resulting from the investment choices made by Norges Bank and Folketrygdfondet (also known as the National Insurance Scheme Fund). The analysis shows that both the returns on the Fund and the variations in such returns are primarily determined by the general investment strategy of the Pension Fund as laid down by the Ministry. Moreover, the analysis shows that Norges Bank has generated excess return through the management of the Government Pension Fund – Global every year since 1998. Folketrygdfondet's management performance in respect of the Government Pension Fund – Norway has been more or less in line with the Fund's benchmark portfolio over the period 1998–2006. Key performance evaluation terms are explained in Box 2.1.

Table 2.1 shows the real returns, net of management costs, on the two parts of the Government Pension Fund over the years 1997–2006.

It follows from Table 2.1 that the annual real return on the Government Pension Fund – Global was 4.6 pct. over the period 1997–2006, as measured in foreign currency. The real return is what is of relevance under the fiscal rule adopted for budget policy purposes, cf. Box 1.1. There are also analyses of historical real returns on equities and bonds, and expectations as to future real returns (as measured in foreign currency), which are used in the investment strategy discussion in Chapter 3. The subsequent analysis of return and risk on the part of the Government Pension Fund in Chapter 2 is based on nominal return data. For purposes of these analyses, which compare, *inter alia*, management performance to the return on a benchmark portfolio, not much information would have been added by adjusting the return data for inflation.[3]

[3] The real return is approximately the same as the nominal return less inflation.

Table 2.1 Annual real returns on the Govern,ment Pension Fund – Global[1] and the Government Pension Fund – Norway,[2] less management costs. 1997–2006. Percent

Net real return	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1997–2006
Pension Fund – Global	7.15	8.20	10.93	0.35	-3.66	-6.62	10.75	6.30	8.46	5.55	4.58
Pension Fund – Norway	5.60	-2.29	6.24	3.08	0.97	0.49	13.31	10.12	7.28	8.55	5.24

[1] Geometric real return in international currency calculated on the basis of a weighted average of retail price growth in the countries included in the Fund's benchmark portfolio. Average management costs were 0.09 pct. of the assets under management over this period.

[2] Geometric real return in Norwegian kroner. Management costs are assumed, for technical calculation purposes, to have been 0.05 pct. of assets under management, which is higher than historical management costs because a significant portion of the assets managed by Folketrygdfondet was held in the form of sight deposits with the treasury.

Source: Norges Bank, Folketrygdfondet and the Ministry of Finance

Box 2.1 Important performance evaluation terms

- For purposes of evaluating the operational management of the Government Pension Fund, its actual return is compared to what could alternatively have been achieved through a fairly similar investment of its funds. It is common to express an alternative investment in the form of a *benchmark portfolio*. The composition of the benchmark portfolio may be said to reflect the owner's general choice of investment strategy.
- *Index management* aims for the return on the actual portfolio to closely match the return on the benchmark portfolio. If the indices making up the benchmark portfolio encompass most of the market-traded securities, one will through index management achieve about the same return as the overall market. Return achieved through broad exposure to the securities markets is often termed *beta-return* in financial literature.
- So-called *active management* involves the manager choosing a composition of the actual portfolio that deviates from the benchmark portfolio. The intent behind such deviations is to achieve an excess return relative to the benchmark portfolio. This excess return is termed *alpha-return* in financial literature.
- The standard deviation is a measure of the fluctuations in returns over a period. The higher is the standard deviation, the more *volatility* (fluctuations) relative to the average return.
- *Market risk* is the risk that the value of a securities portfolio will change as the result of changes in equity prices, exchange rates and interest rates, cf. Box 3.2.
- *The normal distribution* is a probability distribution frequently used in statistical methods. If it is assumed that the rates of return follow a normal distribution, their probability distribution will be exhaustively characterised by the expected return and the standard deviation of the return. If a security has an expected return of 5 pct. and a standard deviation of 10 pct., the return thereon is expected to fall within the range from -5 to 15 pct. in two out of every three years.
- The benchmark portfolio is also used as a risk management tool for operational management purposes, by way of the definition of a limit as to what deviation is accepted between the actual investments and the benchmark portfolio. The difference between actual investments and the benchmark portfolio may be defined as a difference portfolio. The standard deviation of the return on the difference portfolio, which is labelled *relative volatility* or *tracking error*, is a measure of the market risk involved in operational management, cf. Box 3.2. The Ministry has fixed a limit of 1.5 pct. for the expected tracking error of the Government Pension Fund – Global. This means, somewhat simplified, that over time the difference between the return on the Fund and the return on the benchmark portfolio will in two out of every three years not exceed 1.5 pct. As far as the management of the Government Pension Fund – Norway is concerned, the Executive Board of Folketrygdfondet has for 2007 fixed an upper limit of 3.5 pct. on expected tracking error. Reference is made to the National Budget for 2002 for a more detailed discussion of tracking error.
- The return on the benchmark portfolio is calculated as a weighted sum of the return on the benchmark portfolio for equities and the benchmark portfolio for fixed-income securities, respectively. However, the risk associated with the benchmark portfolio is normally lower than a weighted sum of the risk associated with the equity benchmark and the risk associated with the fixed-income benchmark. The reason for this is that returns in the stock and fixed-income markets are not fully correlated. A measure of the degree of (linear) covariation between rates of return is *the correlation coefficient*. This is a statistical measure that can range between -1 and +1, with -1 denoting perfect negative correlation and +1 denoting perfect positive correlation. Only in the case of perfect positive correlation will the risk associated with the overall benchmark portfolio of the Fund be equal to the weighted sun of the risks associated with the equity and fixed-income benchmarks. In all other cases, the risk will be lower. The risk reduction achieved by spreading the investments across different assets in this manner is labelled a *diversification benefit*, cf. Box 2.7.

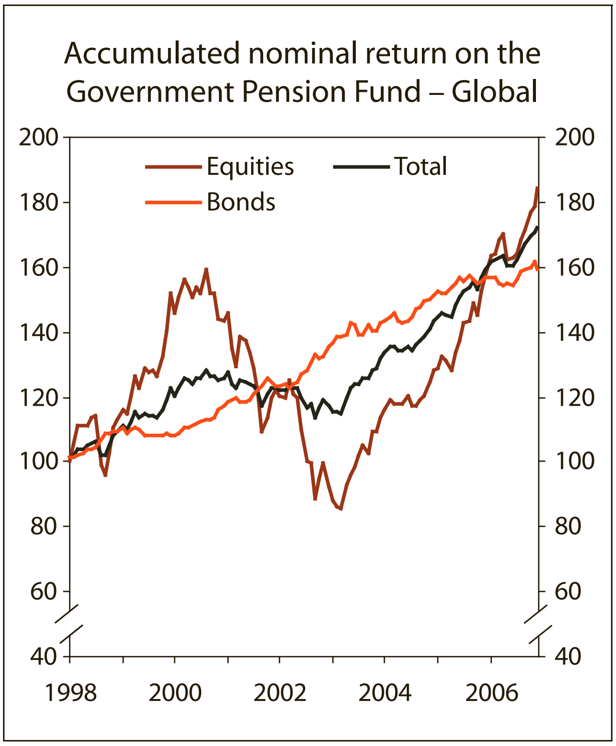

Figure 2.4 Accumulated nominal return on the sub-portfolios of the Government Pension Fund – Global, as measured in the Fund's currency basket. Index as per yearend 1997 = 100

Source: Norges Bank and the Ministry of Finance

2.2.2 The return on the Government Pension Fund – Global

The Government Pension Fund – Global amounted to NOK 1,783.7 billion as per yearend 2006. The value of the equity portfolio was NOK 725.9 billion, whilst NOK 1,057.8 billion was invested in fixed-income securities. This corresponded to an allocation of 40.7 and 59.3 pct., respectively, of the overall portfolio of the Government Pension Fund – Global. The nominal return on the sub-portfolios of the Government Pension Fund – Global since the beginning of 1998 is illustrated in Figure 2.4.

In 2006, the return on the Government Pension Fund – Global was 7.9 pct., as measured in foreign currency when the returns in individual currencies are weighted in accordance with Fund's benchmark portfolio. The return on the equity portfolio was 17.0 pct., and the return on the fixed-income portfolio was 1.9 pct. When measured in Norwegian kroner, the Fund last year generated a return of 5.9 pct. The difference in return and risk as measured in international currency and in Norwegian kroner is described in more detail in Box 2.6 of the performance analysis. From 1997 until yearend 2006, the average annual return was 6.5 pct. as measured in foreign currency, whilst the real return net of management costs was 4.6 pct., cf. Table 2.1.

The return on the Government Pension Fund – Global depends in large part on market developments in terms of the benchmark portfolio established by the Ministry, cf. Chapter 3. The benchmark portfolio is a broadly based portfolio of equities and bonds that are spread across many regions and sectors. Consequently, the return on the benchmark portfolio reflects general developments in the international securities markets. The performance analysis appended to the present Chapter shows that the decisions relating to the establishment of the Fund's strategy, as operationalised through the design of the benchmark portfolio, have determined between 90 and 95 pct. of the return on the Fund.

Norges Bank may, in its management of the Fund, deviate from the benchmark portfolio within a risk limit, cf. Box 2.1. The contribution from such active management is measured on an ongoing basis, by way of developments in the value of the Fund being compared to developments in the benchmark portfolio. In 2006, the return on the Pension Fund – Global was 0.15 percentage points higher than the return on the benchmark portfolio. This represents about NOK 2.5 billion. When taken in isolation, the equity portfolio delivered a negative excess return of 0.05 percentage points, whilst the fixed-income portfolio generated a positive excess return of 0.24 percentage points. The actual deviation from the benchmark portfolio in 2006 corresponded to 0.37 pct. tracking error (or relative volatility).

When evaluating the performance of an asset manager, it is customary to adopt a time horizon of several years, and the Ministry has in its performance analysis examined both the excess return over the last three years and over the period 1998–2006, i.e. the entire period during which the Fund has been permitted to invest in equities. On average over the period 2004–2006, the excess return on the Government Pension Fund – Global was 0.58 percentage points, whilst the average excess return on the Fund since 1998 was 0.48 percentage points. Since the beginning of 1998, equity management has contributed about two thirds of the overall excess return. Total accumulated excess return was NOK 29 bil-

Box 2.2 Annual report from Mercer on Norges Bank's management of the Government Pension Fund – Global in 2006

Since 2003, the Ministry of Finance has had an agreement with the consultancy firm Mercer Investment Consulting for verification and analysis of the return on the Government Pension Fund – Global on a regular basis. Mercer uses Mellon Analytical Solutions (MAS) as a subcontractor as far as the return and value measurements are concerned.[1] There are prepared simple monthly reports and a more extensive annual rapport that is published on the website of the Ministry of Finance (www.finansdepartementet.no).

The annual report from Mercer shows that the market value of the Fund and the return data for 2006 are in conformity with Norges Bank's annual report for 2006. Such very limited deviations as have been identified through the year, are explained in the report. One aims for Mercer's verification to be as independent from Norges Bank's computations as possible. MAS therefore receives data directly from Norges Bank's custodian banks and index providers.[2] MAS calculates the asset, regional and sectoral weights itself, and performs control calculations of the weights of the rebalancing portfolio. The control procedures are described in more details in the appendix to the report.

Mercer's annual report contains analyses of the Fund's return and excess return. Mercer has, inter alia, prepared a style analysis of the equity portfolio, which shows that the portfolio has featured several overweights toward certain management styles. The analysis, which is carried out at the end of each quarter, shows that the equity portfolio has in 2006 been characterised by overweight in "growth companies" and underweight in "value companies".[3] This was also the case in 2005, but the overweight is even more pronounced in 2006. The style analyses also show that the equity portfolio has featured, on an ongoing basis, an overweight in companies with a beta in excess of the average for the benchmark portfolio. Beta is a measure of companies' covariation with market developments, cf. Box 2.8.

Mercer's sectoral analysis of the equity portfolio shows that Norges Bank does not establish significant sectoral positions relative to the benchmark portfolio. Furthermore, the analyses show that the Fund has over several years been invested in small, listed limited companies ("small-cap"), which have formed part of the Fund's investment universe, but not of the benchmark portfolio, cf. the discussion in Chapter 3.3. As per yearend 2006, the equity portfolio was invested in about 3,400 companies, whilst the benchmark portfolio comprised in excess of 2,400 companies. This difference is primarily caused by the Fund's "small-cap" investments.

Mercer's report indicates that part of the excess return achieved by Norges Bank can be explained by certain factors, like market developments, "small-cap" and "growth and value companies".

1 Mellon Analytical Services was previously named CAPS. This company has carried out value and return computations for the Government Pension Fund – Global since 1998.

2 Custodian institutions are usually banks. The most important duty of a custodian institution is to ensure that the securities of each customer are duly registered and "kept" in securities depositories in the various countries wherein which such securities are issued. A custodian performs important functions in the settlement of securities trades, and also provides accounting services. Moreover, various supplementary services may be agreed, like for example the monitoring of external managers and the lending of securities.

3 Listed equities are often grouped into two categories; value and growth companies, based on several key financial ratios like turnover growth, market value relative to earnings or book value, etc.

lion. The annual tracking error of the Government Pension Fund – Global over the same period was 0.38 pct.

The risk associated with the Government Pension Fund – Global, as measured by the annual standard deviation of returns, has since 1998 been 5.3 pct. as measured nominally in local currency, cf. the appended performance analysis. Variations in the return on the benchmark portfolio have explained more than 99 pct. of the variations in the return on the Fund. Consequently, Norges Bank's active management has made almost no contribution towards increasing risk on the part of the Fund, cf. Box 2.1. The relationship between

Box 2.3 Comparison of the returns and costs associated with the management of the Government Pension Fund – Global and those associated with other pension funds

The Ministry of Finance has commissioned CEM Benchmarking Inc. ("CEM") to prepare an extensive annual rapport that compares the returns, excess returns and management costs associated with the Pension Fund – Global and those associated with other large funds. The reference group comprises the largest funds in the CEM survey (i.e. 14 US, 2 Canadian and 3 European funds). Since the Pension Fund holds a portion of investments in Europe that is well above the average for this group, the return on the Fund is also compared to the return on 23 European funds. The median size of European funds is about NOK 150 billion, as compared to about NOK 680 billion for the reference group. The data set is based on self-reporting from the funds that purchase services from CEM.

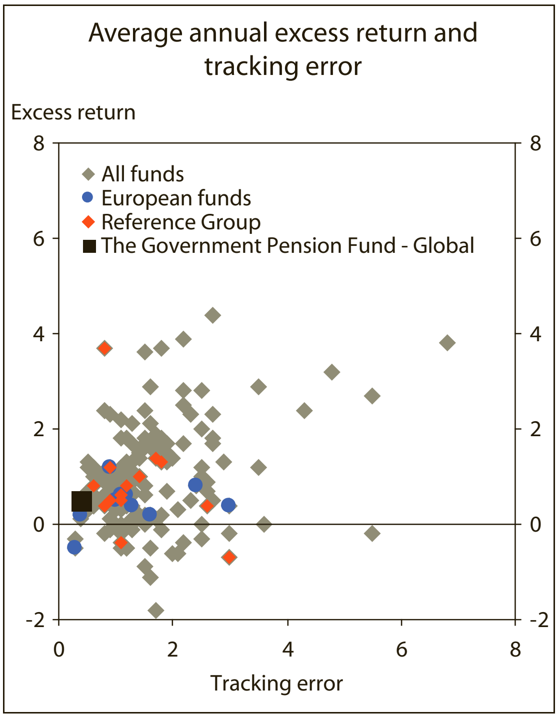

Figure 2.5 Average annual excess return on, and tracking error of, the Government Pension Fund – Global and other funds. 2001– 2005. Percent.

Source: CEM Benchmarking Inc.

Excess return

A comparison over time of the actual return on the Government Pension Fund – Global and the return on the benchmark portfolio shows the excess return generated by Norges Bank. Figure 2.5. shows the average excess return on, and tracking error of, the Government Pension Fund – Global and the various reference groups over the 5-year period 2001– 2005. It follows from the Figure that the Pension Fund – Global has, like the majority of the other funds, achieved positive excess returns over this period. It may also be noted that the Pension Fund – Global differs from most other funds inasmuch as there is less variation in its excess return, i.e. less tracking error.

CEM has calculated that the Pension Fund – Global achieved, over the 5-year period until 2005, an average annual excess return of 0.5 percentage point. In comparison, the most typical excess return (the median) was 0.5 percentage point for the European funds and 0.6 percentage point for the reference group. At the same time, the analyses show that the excess return on the Pension Fund – Global has been generated by assuming considerably less active risk (tracking error) than the other funds.

Both the reference group and the European funds have generated excess returns in asset classes in which the Pension Fund – Global is not invested. For the chosen 5-year period, the excess return has been especially high within real estate. This means that Norges Bank's excess return is better, relative to that of comparable funds, than can be inferred directly from the CEM report.

Management costs

The CEM report shows that Norges Bank's overall management costs in 2005 for the Government Pension Fund – Global were 0.11 pct. of the average capital under management. These are the lowest management costs of all the funds from which CEM gathers data. Since the overall management costs in large part reflect the asset structure of the funds, which as far as the Pension Fund – Global is concerned follows from the Ministry of Finance's investment strategy, such comparisons do not fully clarify whether Norges Bank's management effort is cost effective.

Boks 2.3 (cont.)

CEM has therefore prepared a cost benchmark based on the asset structure of the Pension Fund – Global. The cost benchmark indicates which costs the reference group – the world's largest pension funds – would have incurred with the same asset structure as the Pension Fund. The analysis shows that actual management costs in 2005 were 0.03 percentage point less than the cost benchmark. This is primarily caused by Norges Bank having chosen more internal management than has the reference group. Internal management is considerably less expensive than external management.

The return on the benchmark portfolio

The Ministry of Finance has established a benchmark portfolio for the Government Pension Fund – Global. The analyses of CEM show that the average annual return on the benchmark portfolio of the Pension Fund – Global over the 5-year period until 2005 was 4.3 pct. as measured in the currency basket of the benchmark portfolio. Correspondingly, the median return was 4.5 pct. and 5 pct. for the reference group and the European funds, as measured in USD and Euros, respectively.

Comparison of aggregate returns between funds is difficult because different funds hold assets denominated in different currencies and have different benchmark currencies. Exchange rate fluctuations imply that the return will depend on the benchmark currency one uses. For example, the return on the Fund's benchmark portfolio was 2.0 pct. as measured in Euros, whilst it was 6.8 pct. as measured in USD, over the 5-year period until 2005. The large difference was caused by a significant depreciation of USD against Euros over this period.

Differences in the returns on the benchmark portfolios will also result from differences in terms of asset classes and regional composition. The Pension Fund – Global has thus far differed from other large pension funds by way of a lower equity portion and by way of the Fund not being invested in real estate and unlisted equities. CEM has calculated that if the other funds had featured the same assets class composition as the Pension Fund over the 5-year period until 2005, their annual indexed return would have been reduced by 0.8 percentage point for the reference group and 0.5 percentage point for the European funds. This is primarily attributable to the fact that the Pension Fund has not been invested in real estate, whilst the other funds have held an average real estate allocation of 8 pct. This 5-year period has been a historically good period as far as the property market is concerned. The Pension Fund – Global also differs from other funds inasmuch as its investments are spread across many markets and currencies, whilst most of the pension funds in the reference group hold the main part of their investments in their domestic markets.

The investment strategy underpinning the composition of the benchmark portfolio is based on trade-offs between long-term expectations concerning return and risk in the capital markets, cf. Chapter 3. In such a perspective, a 5-year period is short. If the comparisons had been made for a different 5-year period, the findings might have been different.

A summary of the analyses for 2005 is published on the Internet (www.finansdepartementet.no)

the average excess return generated by Norges Bank and the increase in risk resulting from such investment choices, indicates good performance as far as Norges Bank's active management is concerned.

The Ministry receives reports from Mercer Investment Consulting, CEM Benchmarking Inc. and WM Performance Services regarding the management of the Government Pension Fund – Global on annual basis, cf. Boxes 2.2 – 2.4. The Ministry has commissioned Mercer to verify and analyse the return on the Pension Fund – Global. In the annual report for 2006, Mercer shows that its independent computations of return and market value for the Fund are in conformity with the computations of Norges Bank. The return analyses indicate, *inter alia*, that parts of the excess return achieved by Norges Bank may be explained by certain factors, like market development, returns on small-cap stocks and on "growth and value" stocks. The Ministry of Finance will on the basis of, *inter alia*, these findings, refine factor

Box 2.4 Comparison of the excess return on the Government Pension Fund – Global and the excess returns on other funds

WM Performance Services ("WM") has for 2006 prepared a report that compares the excess return on the Government Pension Fund – Global to the excess returns on pension funds and life insurance companies domiciled in the Netherlands and the United Kingdom. As per yearend 2006, the aggregate market value of the funds was NOK 12,075 billion, and their average market value was NOK 31.5 billion. In comparison, the market value of the Pension Fund – Global was NOK 1,572 billion in 2006, calculated as a monthly average.

Figure 2.6. shows the average excess returns on, and tracking error of, the Government Pension Fund – Global and other funds over the last three years. The Figure also shows the findings for the 15 and 50 largest funds. In 2006, these two groups had an average market value of NOK 337 and 33 billion, respectively.

The Figure shows that the Pension Fund – Global has had a positive excess return, and distinguishes itself from the majority of other funds by less variation in its excess return, i.e. a lower tracking error. WM points out that the excess returns on the large funds are more concentrated around zero, and their explanation for this is that when active management is spread across more assets and more types of management, the probability of large deviations from the return on the benchmark portfolio is reduced.

WM has calculated that the most typical excess return (the median) for all funds included in the survey is zero for both the 3-year and the 5-year period until yearend 2006. The excess return on the Government Pension Fund – Global has been close to those on the 25 pct. best funds for both of these periods, whilst the tracking error has been amongst the 5 pct. lowest observations. This results, according to WM, in a very attractive and unusual trade-off between excess return and tracking error.

The ratio between excess return and tracking error is often referred to as the information ratio (IR). WM points out that care should be exercised in interpreting IR. If tracking error is very low, even minor return differences relative to the return on the benchmark portfolio may result in a high IR, either negative or positive. WM writes that an IR of 0.5 is often characterised as good, and points out that the Pension Fund – Global has over several years achieved an IR in excess of 1, which is unusual.

In the comparison with other funds, WM points out that most large funds have a capital inflow of less than 5 pct. of their opening value during the course of a year, whilst the Pension Fund – Global in 2006 received more than 20 pct. of its value as per the beginning of the year. WM Performance Services writes that having to invest that much capital, both in absolute terms and relative to the size of the Fund, makes it more challenging to generate excess return.

The report from WM also contains a comparison of the excess returns on the equity and fixed-income portfolios of other funds. In the main, these analyses yield the same conclusions as those pertaining to the Fund as a whole. The report for 2006 is published on the Internet (www.finansdepartementet.no).

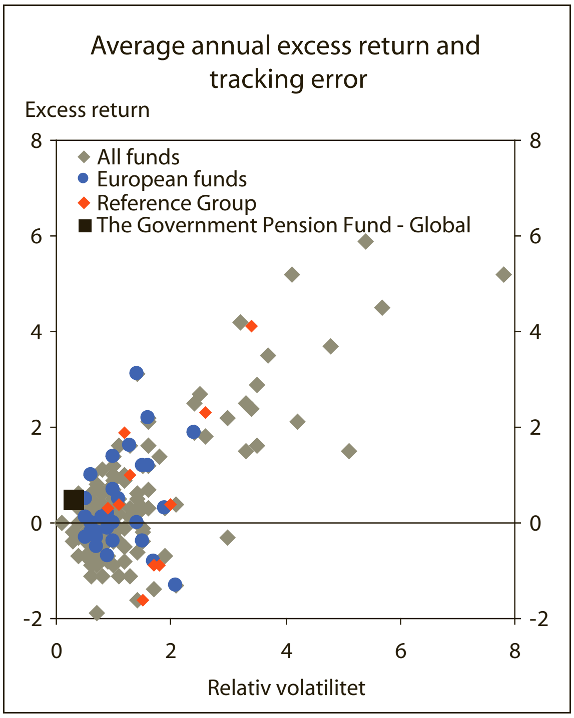

Figure 2.6 Average annual excess return on, and tracking error of, the Government Pension Fund – Global and other funds. 2004–2006. Percent

Source: WM Performance Services.

analyses in the effort to evaluate the management of the Government Pension Fund.

Comparison of the performance of the Pension Fund – Global and that of other large institutional managers forms an important part of the analyses of Norges Bank's active management. According to the analyses from CEM, the excess return on the Pension Fund – Global is in line with that of comparable funds, whilst the analyses from WM Performance Services conclude that the excess return is higher than that of other funds. Both analyses show that the tracking error is clearly less than that of other funds. Such comparisons are difficult because the scope for generating excess return will vary with the investment limits and guidelines laid down in respect of the funds. Both the Pension Fund – Global and other funds have benchmark portfolios that do not include all the types of assets in which the funds may invest. Normally, it is easier to achieve excess return relative to such a benchmark than if one were to measure returns against a more comprehensive benchmark that more accurately reflects developments in the value of all types of assets in which the Fund may invest.

It is also difficult to find the most relevant reference group. The data sets used by both WM Performance Services and CEM are extensive, but different. For example, CEM does not cover funds in the United Kingdom, whilst these account for the bulk of the funds encompassed by the data set of WM Performance Services. A second difference is that most of the world's large pension funds are included in the CEM study. Consequently, in terms of market value the CEM funds are larger and more comparable to the Pension Fund – Global. A third difference is that more than 25 pct. of the funds covered by WM Performance Services are life insurance companies, whilst this type of fund is not encompassed by the CEM study. Different types of funds may perform differently. For example, a CEM survey shows that US pension funds generated higher excess returns than did US mutual funds between 1992 and 2004.[4]

A peculiar characteristic of the Pension Fund – Global, as compared to other funds is its large inflow of new capital. WM Performance Services points out that most large funds have an inflow of less than 5 pct. of its opening value during the course of one year, whilst in 2006 the Pension Fund – Global registered an inflow in excess of 20 pct. of its value as per the beginning of the year. WM Performance Services writes that being charged with investing this much capital, in both absolute terms and relative to the size of the Fund, makes it more demanding to generate excess return.

2.2.3 The return on the Government Pension Fund – Norway

The value of the Government Pension Fund – Norway was NOK 106.9 billion as per yearend 2006. The value of the equity and fixed-income portfolio was NOK 63.4 and 43.5 billion, respectively, as per yearend.[5] This corresponded to an allocation of 59.3 and 40.7 pct., respectively, of the overall portfolio of the Government Pension Fund – Norway. The nominal return on the sub-portfolios of the Government Pension Fund – Norway since the beginning of 1998 is illustrated in Figure 2.7.

The return on the Government Pension Fund – Norway was 11.7 pct. in 2006. The return on the

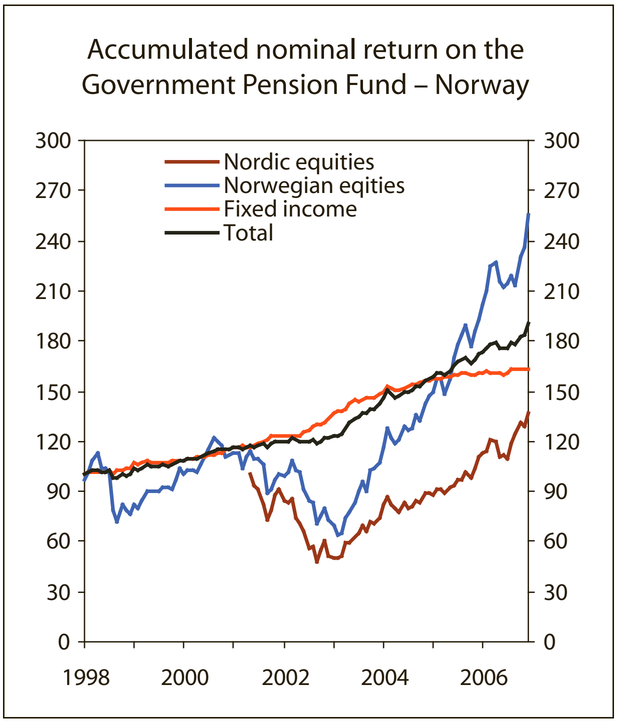

Figure 2.7 Accumulated nominal return on the Government Pension Fund – Norway's sub-portfolios, as measured in Norwegian kroner. Index as per the beginning of 1997 = 100

Source: Folketrygdfondet and the Ministry of Finance

4 "Economies of Scale, Lack of Skill or Misalignment of Interest? A Study on Pension and Mutual Fund Performance." (Working paper that will be published)

5 Folketrygdfondet had liabilities of NOK 2.2 billion in relation to, *inter alia*, repo trades drawn from the fixed-income investments of Folketrygdfondet, cf. Folketrygdfondet's annual report on the management of the Government Pension Fund – Norway in 2006.

Fund's Norwegian and Nordic equity investments was 32.1 pct. and 24.1 pct., respectively, whilst the return on the fixed-income investments was 1.3 pct. Between 1997 and yearend 2006, the average annual return was 7.1 pct.

The Ministry has defined general investment limits for the Government Pension Fund – Norway, whilst the more detailed benchmark portfolio of the measurement of return and risk is established by the Executive Board of Folketrygdfondet, cf. the discussion in Chapter 5.3. The return on the Government Pension Fund – Norway, which is primarily invested in the Norwegian securities market, is highly dependent on market developments as far as the benchmark portfolio is concerned.

The discrepancy between the return on the actual portfolio and that on the benchmark portfolio can mainly be attributed to the investment decisions of Folketrygdfondet. In 2006, the return on the Pension Fund – Norway was 1.13 percentage points higher than the return on the benchmark portfolio. The excess return mainly relates to the Fund having exposed the portfolio to less interest rate risk (duration) during a period of increasing market interest rates, and having held a higher portion of equities than suggested by the benchmark index, cf. Box 3.2. When taken in isolation, the fixed-income portfolio achieved an excess return of 0.62 percentage points last year, whilst the Norwegian and the Nordic equity portfolio generated a negative excess return of 0.36 and 1.14 percentage points, respectively. The actual deviation from the benchmark portfolio in 2006 corresponded to 0.8 pct. tracking error. The Pension Fund's fixed-income portfolio has changed considerably in character since 2006, as the result of the termination of the sight deposits with the tresury, and the Ministry is aware that Folketrygdfondet has made changes to its operational management structure for Nordic equities with a view to improving performance.

The Government Pension Fund – Norway adopts a long investment horizon. The Fund is a long-term investor, and will hold a large portfolio of equities in the Norwegian market, the composition of which Folketrygdfondet must examine. In line herewith, the Ministry focuses on performance developments over time in its follow-up of Folketrygdfondet's performance.

Over the period 1998–2006, the performance of Folketrygdfondet has on the whole been satisfactory, and more or less in line with the benchmark portfolio of the Pension Fund – Norway. Positive excess return has been generated through the management of Norwegian equities, whilst negative excess returns have resulted from fixed-income management and the management of Nordic equities.[6] Over the three-year period 2004–2006, the annual negative excess return on the overall portfolio has been 0.97 percentage points on average. Annual tracking error over the periods 1998–2006 and 2004–2006 was 1.3 pct., cf. the appended performance analysis.

When taken in isolation, the Norwegian equity portfolio has generated a positive average annual excess return of 1.0 percentage point over the period 1998–2006, whilst this portfolio has registered negative average annual excess return over the period 2004–2006 to the order of 3.62 percentage points. The performance analyses set out in the Appendix to the present Chapter shows that the Norwegian equity portfolio of Folketrygdfondet tends to outperform the benchmark portfolio during periods of weak performance on the Oslo Stock Exchange, and to underperform somewhat relative to the benchmark portfolio during those periods characterised by a strong upturn in equity prices. The analysis also shows that the variations in the return on the benchmark portfolio explain about 93 pct. of the variations in the return on the Fund. The risk associated with the Government Pension Fund – Norway, as measured by the annual standard deviation of returns, has been 4.3 pct. since 1998, as measured nominally in Norwegian kroner.

In the same manner as in its follow-up of Norges Bank's management, the Ministry will be contemplating the use of external consultants to review various aspects of Folketrygdfondet's management of the Government Pension Fund – Norway.

Following the termination of the sight deposits with the treasury, the equity portfolio accounts for a higher portion of the overall portfolio than was previously the case. Consequently, one needs to be prepared for more pronounced annual fluctuations in the overall return on the Pension Fund – Norway in coming years than have been experienced thus far.

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6 Folketrygdfondet has managed a Nordic equity portfolio since 2001. Parts of the negative excess return on such portfolio needs to be seen in the context of withholding tax paid on equity dividend over the period 2001-2004.

2.3 Management costs

The management agreement between the Ministry of Finance and Norges Bank in respect of the Pension Fund – Global lays down principles governing the compensation to be received by Norges Bank in return for managing the Fund. According to the agreement, the compensation payable to Norges Bank shall cover the actual management costs, up to a maximum limit, which for 2006 has been fixed at 0.1 pct. of the average market value of the Fund. The maximum compensation limit is determined on the basis of, *inter alia*, information on the costs associated with this type of management in pension funds of corresponding size. The Ministry of Finance commissions the Canadian company CEM Benchmarking Inc. to prepare the analyses on which the cost comparisons are based. In addition to the reimbursement of costs up to the maximum limit, Norges Bank is compensated for such part of the fees of external managers as are incurred as a result of the excess return achieved.

Management costs for 2006, exclusive of performance-related fees, were NOK 1,138 million. This represented an increase of 24 pct. over 2005. The average size of the Fund increased by 33 pct., thus implying that costs measured as a share of the average portfolio were reduced from 0.08 pct. in 2005 to 0.07 pct. in 2006. Consequently, management costs exclusive of performance-related fees are well below the maximum limit. Inclusive of performance-related fees to external managers, the costs amounted to NOK 1,526 million, which is 0.1 pct. of the average market value when calculated as an annual rate.

The costs incurred by Folketrygdfondet in its management of the Government Pension Fund – Norway represent (following the termination of the sight deposits with the treasury) about 0.05 pct. of the assets under management. The management costs associated with the Government Pension Fund – Norway are not entirely comparable to the costs associated with the management of the Government Pension Fund – Global. Norges Bank has opted to use external management mandates, which when taken in isolation are more expensive than internal management. Furthermore, the asset management carried out by Norges Bank is more extensive because, *inter alia*, the assets of the Pension Fund – Global are spread across many more countries and companies than those of the Pension Fund – Norway. On the other hand, asset management is subject to economies of scale, and Norges Bank is amongst those benefiting therefrom.

The Ministry intends to enter into a management agreement with Folketrygdfondet that would lay down the principles governing the compensation to be received by Folketrygdfondet in return for managing the Government Pension Fund – Norway, cf. the discussion in Chapter 5.

2.4 More detailed analysis of return and risk in the Government Pension Fund (Appendix)

II.1 Introduction

In the analysis of the return on the Government Pension Fund, a distinction is made between the return resulting from general developments in the markets where the Fund is invested, and the return resulting from the investment choices made by Norges Bank and Folketrygdfondet. Norges Bank's management of the Government Pension Fund – Global is premised on the general investment strategy as expressed in a benchmark portfolio established by the Ministry. The strategy of the Government Pension Fund – Norway is defined by the Ministry in the form of general limits on investments in equities and fixed-income securities, whilst the detailed benchmark portfolio of the measurement of return and risk is established by the Executive Board of Folketrygdfondet. The analysis below demonstrates that the Ministry's decisions as to the investment strategy of the Funds are the main determinants of both the returns on the Funds and the variations in such returns.

In their management of the Government Pension Fund, Norges Bank and Folketrygdfondet may deviate from the benchmark portfolio for purposes of generating excess return, within defined risk limits. The analysis shows that Norges Bank has generated excess return through its management of the Government Pension Fund – Global every year since 1998. Folketrygdfondet's management performance in respect of the Government Pension Fund – Norway has been more or less in line with the Fund's benchmark portfolio over the period 1998–2006.

Out of concern for the statistical analyses in the performance discussion below, the average return is in the present Appendix to Chapter 2 calculated as an arithmetic average based on monthly return data. The conversion to annual returns is done by multiplying by a factor of 12. In the main part of Chapter 2, the return was calculated geometrically, in line with the return data reported in the annual reports of Norges Bank and Folketrygdfondet concerning the management of the Government Pension Fund – Global and the Government Pension Fund – Norway, respectively. Chapter 3 also uses a geometrically calculated average return, since this is often deemed to better reflect the long-term expected growth rate of an investment, cf. Box 2.5.

Sub-chapters II.2 – II.4 analyse the return on the Government Pension Fund – Global in more detail, whilst the analysis of the return on the Government Pension Fund – Norway is to be found in Sub-chapters II.5 – II.7.

II.2 Developments in the benchmark portfolio of the Government Pension Fund – Global

The return on the Government Pension Fund – Global depends in large part on market developments in the benchmark portfolio established by the Ministry. The benchmark portfolio is a broadly composed portfolio of equities and bonds that is spread across many regions and sectors. Consequently, the return on the benchmark portfolio reflects general developments in the international securities markets. Indices from the providers FTSE and Lehman Brothers are adopted for equities and bonds, respectively.

Table 2.2 shows the return on the Fund's benchmark portfolio in local currency. The difference between returns in local currency and returns in Norwegian kroner is explained in Box 2.6. As illustrated in Table 2.2, returns have been both considerably higher and less variable in recent years than over the period 1998 – 2006 as a whole.

The benchmark portfolio of the Government Pension Fund – Global comprises two benchmark sub-portfolios; one covering the international stock markets and one covering the international fixed-income markets. Equities account for 40 pct. of the benchmark portfolio of the Fund, whilst fixed-income securities account for 60 pct., cf. Chapter 3.

The very high return on the benchmark portfolio for equities in recent years reflects the international increase in equity prices. Fluctuations in the stock market have been abnormally low during this period. Calculations based on return sets that cover long time periods, indicate that the nor-

Box 2.5 On average real return and its relationship to the real value of the Fund

There are different measures for an average value. The two most common measures are the arithmetic and the geometric average. A simple numerical example illustrates the difference between them. Assume that an investment of NOK 100 has after one year doubled its value to NOK 200 (up 100 pct.), and has thereafter been halved the subsequent year, to NOK 100 (down 50 pct.). The arithmetic average return will in such a case be 25 pct., whilst the geometrically calculated average return will be 0 pct.[1] Consequently, the arithmetic average represents the mean value of the returns, whilst the geometric average denotes the average growth rate of the investment.

It can be demonstrated that the geometric average is always less than, or as a special case identical to, the arithmetic average. Which average is the most relevant one will depend on the purpose of the calculations. In projections of long-term expected annual percentage real returns it is common to focus on a geometric average return, which also best expresses the historical return. In its quarterly and annual report, Norges Bank reports the real return on the fund capital as a geometric average.

The economic policy guidelines imply that the petroleum revenues are phased gradually into the economy, more or less in line with the expected real return on the Global part of the Government Pension Fund. The fiscal rule assumes that a real return of 4 pct. represents a reasonable expectation as to the annual percentage return over time for the Pension Fund – Global, cf. Report No. 29 (2000-2001) to the Storting. One intention behind the policy rule is to preserve the real value of the fund capital. If the expected geometric average real return on the Fund is close to four pct., one will more or less preserve the real value of the Pension Fund through annual withdrawals equal to 4 pct. of the Fund's value.

[1] The arithmetic average is calculated as $(100\,\% - 50\,\%)/2 = 25\,\%$.
The geometric average is calculated as $((1+1)(1-0.5))^{1/2}-1=0$.

mal volatility of the stock market is in the range of 14 to 16 pct. (as measured by the standard deviation of the return). However, the benchmark portfolio for fixed-income securities has registered relatively low returns in recent years, as compared to normal returns in the fixed-income markets and as compared to returns in the stock markets. Whilst returns in the fixed-income markets have been low, there has been little return volatility.

The return on the Fund's benchmark portfolio is calculated as the sum of the return on the equity benchmark, as weighted by the equity portion (40 pct.), and the return on the fixed-income benchmark, as weighted by the fixed-income portion (60 pct.). However, the risk of the benchmark portfolio is less than a weighted sum of the risk associated with the equity benchmark and the risk associated with the fixed-income benchmark. The reason for this is that there has been a relatively low degree of covariation between returns in the stock and fixed-income markets. This effect is classified as a diversification benefit, cf. Box 2.7.

II.3 Developments in the actual portfolio of the Government Pension Fund – Global

The actual portfolio deviates somewhat from the benchmark portfolio. The deviations mainly reflect active investment decisions on the part of Norges Bank. The Ministry of Finance has established a limit defining the maximum permitted deviation, cf. Box 2.1. The objective of Norges Bank is to achieve a higher return on the actual portfolio than that on the benchmark portfolio, within the risk limit laid down by the Ministry. The return on, and the risk associated with, the actual portfolio will therefore deviate somewhat from those of the benchmark portfolio. The Fund's return and risk are presented in Table 2.4. It follows from Tables 2.2 and 2.4 that the average return on the actual portfolio is somewhat higher than that on the benchmark portfolio, whilst the risk figures for the two portfolios are about the same. The excess return on the Fund, which is the difference between the return on the actual portfolio and that on the benchmark portfolio, is discussed in more detail in Sub-chapter II.4.

The high degree of correlation between the return and risk associated with the Fund and the return and risk associated with the benchmark portfolio is illustrated in Charts 2.13 and 2.14. Both the level of returns and the variations in returns are about the same for the two portfolios. These analyses show that both the return and the variation in the Fund's return are mainly determined by the decisions relating to the establishment of the general investment strategy of the Fund, as operationalised through the formulation of the benchmark portfolio. Between 90 and 95 pct. of the return on the Fund may be attributed to the choices made by the Ministry in designing the investment strategy of the Fund, whilst the remaining 5-10 pct. may be attributed to the investment choices made by Norges Bank within the guidelines laid down by the Ministry. Moreover, the correlation between the return on the Fund and the return on the benchmark portfolio has been very close to 1 (perfect positive correlation), and the variations in returns on the bench-

Table 2.2 Average annual return and annual standard deviation of the return on the benchmark portfolio of the Government Pension Fund – Global, measured nominally in local currency. Percent

	1998 – 2006	2004 – 2006	2006
The benchmark portfolio			
Average return per year	5.72	8.44	7.54
Standard deviation	5.18	3.18	3.13
The equity benchmark			
Average return per year	7.24	15.60	16.14
Standard deviation	14.39	7.17	7.40
The fixed-income benchmark			
Average return per year	5.04	3.58	1.70
Standard deviation.	3.13	2.67	2.63

Box 2.6 Fund return measured in Norwegian kroner and in local currency

A country's savings are the sum of fixed capital formation domestically and the surplus of the current account of the balance of payments, i.e. net financial investments abroad. The surplus on the current account corresponds to the sum of net financial investments in the various domestic sectors. Consequently, individual sectors in Norway may increase their financial assets and liabilities as against other domestic sectors. However, for the country as a whole, financial assets can only be accumulated as against other countries. In Norway, the State accounts for a considerable share of these savings, by way of its investment of a large share of the petroleum revenues abroad through the Government Pension Fund – Global.

The fund capital and the returns thereon enable the funding of increased net imports, thereby freeing up factors of production from businesses exposed to international competition. How large imports can be funded on the basis of the Fund depend only on the foreign exchange holdings of the Fund, and not on the value of the Fund in Norwegian kroner. The allocation of the Fund's investments between Europe, the Americas and Asia is based on, *inter alia*, Norway's import weights, for reasons of preserving the international purchasing power of the Fund.

The return on the Government Pension Fund – Global may be measured in both Norwegian kroner and in the Fund's currency basket.[1] Since the international purchasing power of the Fund remains unaffected by changes to the Norwegian krone exchange rate, the focus in the performance reporting of the Fund is often on the return as measured in the Fund's currency basket (or, in other words, in local currency). Figure 2.8 shows the monthly return on the benchmark portfolio of the Government Pension Fund – Global as measured in Norwegian kroner and in local currency. .

In the same way that the return on the Fund may be measured in both Norwegian kroner and in local currency, the variations in such returns may be measured in Norwegian kroner and in local currency. The variations in returns as measured in local currency are the important measure for purposes of assessing the risk associated with developments in the Fund's purchasing power. The variations in returns as measured in NOK have been higher than the variations in returns as measured in local currency, cf. Figure 2.9. This is because variations in returns in NOK are caused by both variations in returns in local currency and by fluctuations in the Norwegian krone exchange rate. If the fluctuations in the Norwegian krone exchange rate had been perfectly correlated with returns in the international markets, the standard deviation of the return in NOK would have been equal to the sum of the standard deviation of returns in local currency and the standard deviation of the fluctuations of the Norwegian krone exchange rate. Computations show that the correlation (the covariation) between returns in Norwegian kroner and returns in the local securities markets is close to nil. This implies that the variation in the return as measured in NOK has been considerably less than the sum of the two standard deviations. The standard deviation of the fluctuations in the Norwegian krone exchange rate has been less than 7 pct. over the period 1998 – 2006. It follows from Figure 2.9 that the risk (the volatility) as measured in Norwegian kroner is considerably higher than the risk as measured in local currency, and that the difference increases during those periods when exchange rate volatility is higher.

[1] The return measured in Norwegian kroner is influenced by how the Norwegian krone exchange rate develops relative to the currencies in which the Fund is invested. If the Norwegian krone exchange rate depreciates, on average, as against these currencies, the return on the Fund as measured in NOK will be higher than the return on the Fund as measured in the Fund's currency basket. This is because there will arise, when converting the foreign exchange value of the Fund to Norwegian kroner, a gain as measured in NOK as the result of the depreciation of the Norwegian krone.

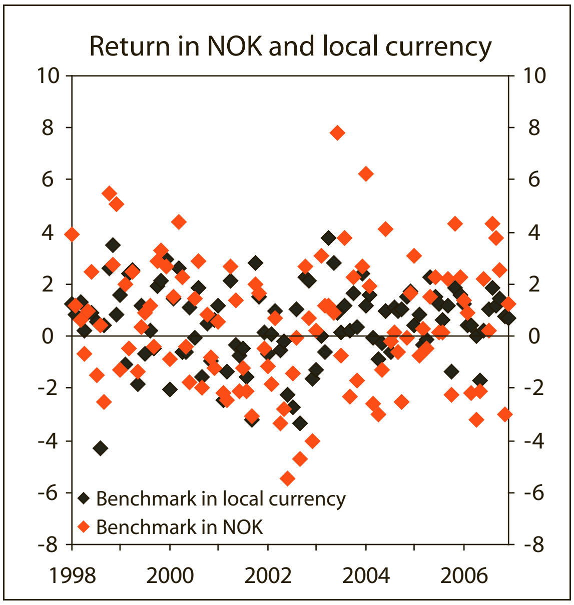

Figure 2.8 Return on the benchmark portfolio for a given month as measured in Norwegian kroner and in local currency. 1998–2006. Percent

Source: Norges Bank and the Ministry of Finance

Box 2.6 (cont.)

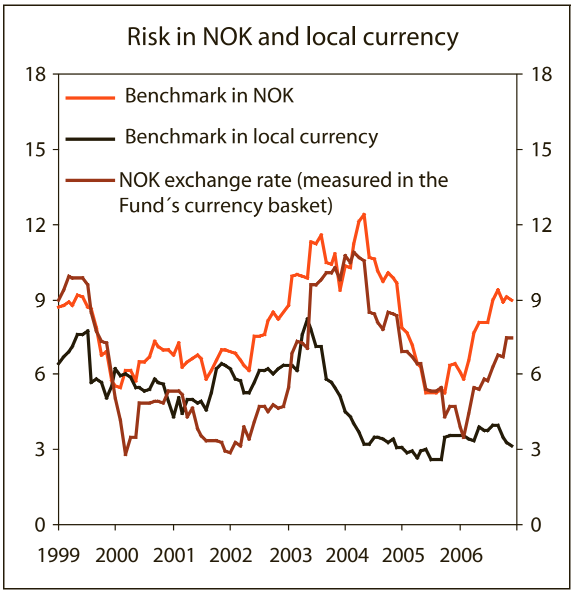

Figure 2.9 Rolling twelve-month standard deviation of returns on the benchmark portfolio, as measured in Norwegian kroner and in local currency. 1998–2006. Percent

Source: Norges Bank and the Ministry of Finance

Table 2.3 shows the average annual return and the standard deviation of returns on the actual portfolio, the benchmark portfolio and the difference portfolio, as measured in Norwegian kroner and in local currency.

It follows from the Table that there has over the period 1998 to 2006 been little difference in average annual returns as measured in Norwegian kroner and in local currency. However, the standard deviation of the actual portfolio and of the benchmark portfolio as measured in Norwegian kroner has been about 3 percentage points higher than the standard deviation in local currency.

The difference in volatility as measured in Norwegian kroner and in local currency is more pronounced for the fixed-income portfolio than for the equity portfolio. This has to do with the volatility in the stock markets as measured in local currency having been markedly higher than the volatility in the fixed-income markets. The volatility of the return as calculated in Norwegian kroner for the equity benchmark portfolio is driven by the volatility in the local stock markets to a much greater extent than what is the case for the benchmark portfolio for fixed-income securities. For the latter portfolio, variations in the Norwegian krone exchange rate has had a much greater impact on variations in returns as measured in NOK. The variation in the Norwegian krone exchange rate explains, based on somewhat approximate computations, about 60 pct. of the overall variations in returns on the benchmark portfolio of the Fund, as measured in Norwegian kroner. The corresponding figures for the equity and fixed-income benchmark portfolios are about 20 and 80 pct., respectively.

It follows from Table 2.3 that the return difference (or excess return) and the relative risk as measured in NOK has not been markedly different from the excess return and the relative risk as measured in local currency. This shows that the active management effort of Norges Bank has not been exposed to changes in the value of the Norwegian krone relative to the Fund's currency basket. However, this analysis does not show whether the active management effort has resulted in an actual portfolio with a different foreign exchange exposure within the investment universe than that of the benchmark portfolio.

Table 2.3 Average annual return and annual standard deviation of returns on the actual portfolio, benchmark portfolio and difference portfolio of the Government Pension Fund – Global, as measured in Norwegian kroner and in local currency. 1998–2006. Percentages and percentage points

	Actual portfolio	Benchmark portfolio	Difference portfolio
Returns in Norwegian kroner (1)			
Average return per year	6.13	5.67	0.46
Standard deviation	8.51	8.45	0.38
Returns in local currency (2)			
Average return per year	6.18	5.72	0.46
Standard deviation	5.29	5.18	0.38
Return difference between (1) and (2)			
Average return per year	-0.05	-0.05	
Standard deviation	3.22	3.26	

Source: Norges Bank and the Ministry of Finance

Box 2.7 Calculation of the diversification benefit for the Government Pension Fund – Global

The benchmark portfolio of the Government Pension Fund – Global comprises equities and bonds. The overall risk associated with the portfolio is determined by the risk associated with each benchmark sub-portfolio and by the degree of covariation between the return in the equity and bond markets. The first bar in Figure 2.10 shows what risk would have been associated with the Fund if returns in the stock and bond markets had been perfectly correlated. The second bar shows the magnitude of the diversification benefit, whilst the third one shows the realised risk associated with the Fund. The diversification benefit has been in excess of 2 percentage points.

Figure 2.11 emphasises the importance of the correlation between returns in the stock and fixed-income markets in terms of the overall risk associated with the benchmark. The historical standard deviation of the overall benchmark has been about 5.2 pct., whilst the correlation between returns in the stock and fixed-income markets over the period 1998-2006 was about -0.4. Based on this correlation it would follow from the graph that the risk associated with the overall benchmark is about 5.3 pct., which provides a good match with historical experience. Under the assumption of perfect positive correlation, the risk associated with the overall benchmark is calculated to be 7.6 pct. Consequently, the difference of 2.3 percentage points indicates the diversification benefit that has been achieved during the period, cf. Figure 2.10.

Figure 2.12 shows that there are relatively large variations in the correlation between returns in the equity and fixed-income markets over time. This means that the diversification benefit also varies over time. Historically, the correlation between equity and bond returns has been weakly positive for longer return sets, which reduces the diversification benefit somewhat compared to the last ten years.

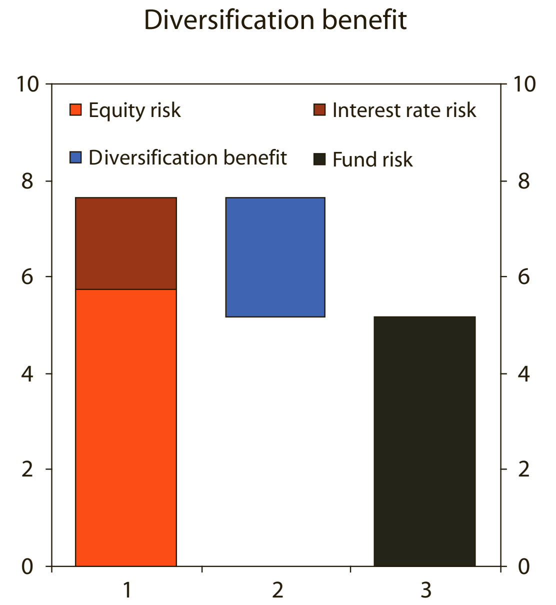

Figure 2.10 Annual standard deviation for equities, bonds and the Government Pension Fund – Global as a whole. 1998-2006. Local currency. Percent

Source: Norges Bank and the Ministry of Finance

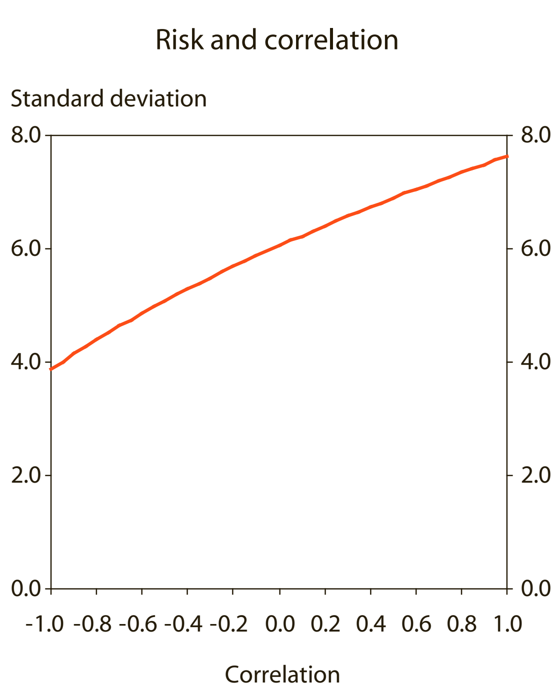

Figure 2.11 The overall risk associated with the Fund as a function of the correlation between equity and fixed-income returns. Percent[1]

[1] The standard deviation of returns on the Fund's benchmark portfolio is a function of the standard deviations of returns on the equity and fixed-income benchmarks, the correlation between returns on the equity and fixed-income benchmarks, and the portion of equities in the overall benchmark. The standard deviations of returns on the equity and fixed-income benchmarks are based on historical data for purposes of drawing the Chart. An equity portion of 40 pct. has been assumed, which corresponds to the current equity portion. The risk associated with the Fund can then be calculated as a function of the correlation between returns on the equity and fixed-income benchmarks. Correlation coefficients will always fall into the range from minus one to plus one.

Source: Norges Bank and the Ministry of Finance

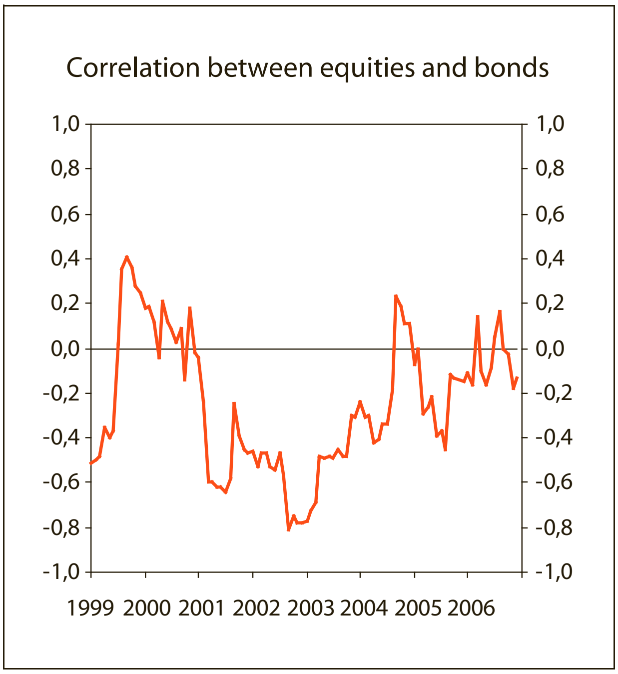

Figure 2.12 Rolling twelve-month correlation between the equity and fixed-income return on the benchmark portfolios. 1998–2006.

Source: Norges Bank and the Ministry of Finance

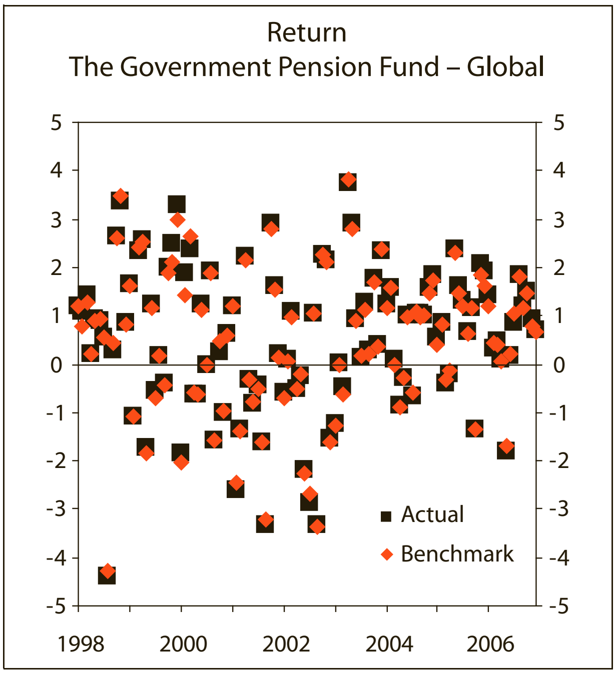

Figure 2.13 Returns on the Government Pension Fund – Global and on the Fund's benchmark portfolio. Monthly return data 1998–2006. Percent

Source: Norges Bank and the Ministry of Finance

mark portfolio have explained more than 99 pct. of the variations in returns on the Fund.

In Figure 2.15, the information in Figure 2.13 is organised differently. Here, the deviations are not sorted by when the return arose. Each dot shows the return on the benchmark portfolio and on the actual portfolio for the same month, as sorted by the level of return. The dot at the north-eastern end of the Figure signifies the return on the Fund and on the benchmark portfolio in May 2003, whilst the dot at the south-western end signifies the same in relation to August 1998. The intervening dots represent combinations of returns on the benchmark portfolio and on the actual portfolio for the other months over the period 1998–2006.

These combinations of rates of return are clustered quite closely along a straight line, as drawn in the Chart. Somewhat simplified, one may say that the straight line has been located such as to minimise the "distance" between the dots and the line. The slope of the line is termed the "beta" of the portfolio whilst the intercept with the y-axis is termed the "alpha" of the portfolio.[7] The beta of the Fund is calculated as 1.018. In statistical terms, this estimate is significantly higher than 1. This implies that there would be a low probability of observing this combination of returns on the actual portfolio and returns on the benchmark portfolio if the beta of the Fund had been 1, cf. Box 2.8.

When the beta exceeds 1, it means that the return on the actual portfolio will on average be

[7] Standard statistical methods are adopted for purposes of calculating the alpha and beta.

Table 2.4 Average annual return and annual standard deviation of the return on the Government Pension Fund – Global, measured nominally in local currency. Percent

	1998 – 2006	2004 – 2006	2006
Actual portfolio			
Average return per year	6.18	8.99	7.69
Standard deviation	5.29	3.36	3.27

Source: Norges Bank and the Ministry of Finance.

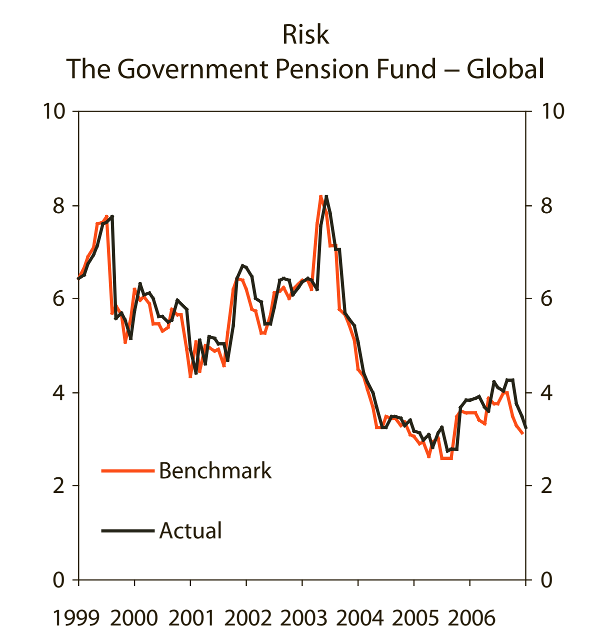

Figure 2.14 Rolling twelve-month standard deviation of the return on the Government Pension Fund – Global and on the Fund's benchmark portfolio. 1998–2006. Percent

Source: Norges Bank and the Ministry of Finance

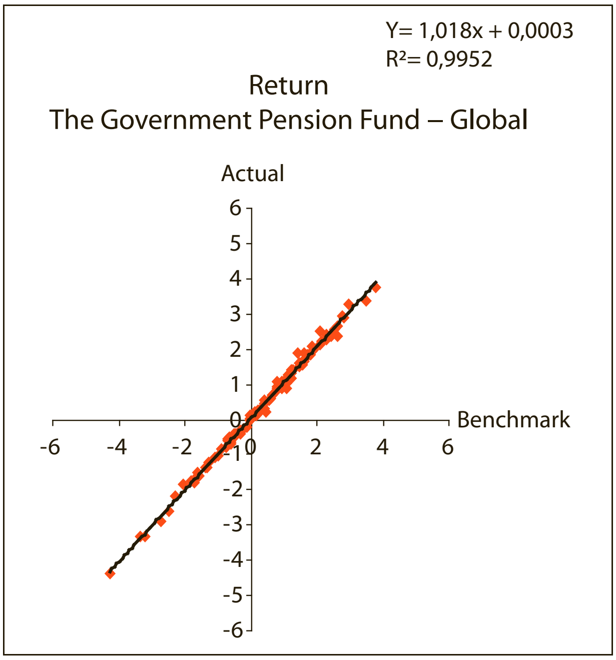

Figure 2.15 Correlation between the return on the Government Pension Fund – Global and on the Fund's benchmark portfolio. 1998–2006. Percent

Source: Norges Bank and the Ministry of Finance

higher than the return on the benchmark portfolio during periods of positive returns in the securities market. In periods of negative returns, one would expect that the return on the Fund would on average be even weaker.[8] This may be illustrated by a numerical example: Assume that the benchmark portfolio registers a return of 5 pct one year. The Fund may then be expected to register a return of 5.09 pct., i.e. a excess return of 0.09 percentage point.[9] However, if the return on the benchmark portfolio was minus 5 pct., one would expect a 5.09 pct. decline in the value of the Fund, which represents a negative excess return of 0.09 percentage point.

In the analysis of the return on the actual portfolio, one has adopted the return on the benchmark portfolio as the only explanatory factor. However, financial literature argues that the difference between the returns on various securities and various securities portfolios may be attributed to more than one factor. For example, empirical studies of the stock market indicate that the return depends on the portfolio's exposure to small companies, as well as its exposure to so-called "growth companies", in addition to its exposure to the market in general (in the above analysis this is expressed through the benchmark portfolio). The Ministry will be refining the analyses with a view to including more explanatory factors.

The beta exposure has varied over time, cf. Figure 2.17. The data set indicates that the average beta over the last three-year period has been higher than during the initial part of the Fund's history.

[8] The statement is strictly correct if the intercept (alpha) equals zero for purposes of the regression analysis.
[9] 5.09 pct. corresponds to 5 pct. multiplied by a beta of 1.018.

Box 2.8 Expected return and beta exposure

It is commonly assumed that market players are risk averse. This means that they will for a given return choose the investment alternative carrying the lowest risk. In efficient markets, the prices of securities will reflect the risk aversion of investors. The expected return in the stock market is, for example, higher than that in the bond market. The difference in expected returns reflects the difference in risk and the risk aversion of investors.

The beta of a portfolio is a measure of the systematic risk associated with such a portfolio. Systematic risk is the part of the risk that relates to developments in a broadly composed and well-diversified securities portfolio. The unsystematic risk is the part of the risk that is diversified away by investing in a large number of securities. Because investors may relieve themselves of the unsystematic risk at virtually no additional cost, they receive no compensation in the form of higher expected returns when carrying such risk. However, the systematic risk does not disappear. When investing in the securities markets, one will always be exposed to changes in value as the result of general market fluctuations. Higher systematic risk is compensated by way of higher expected returns.[1]

The risk measure beta is constructed in such a manner that a beta value of one represents the average systematic risk in the market. The benchmark portfolio of the Government Pension Fund is composed of representative market indices. It will therefore, by definition, have a beta of 1. A well-diversified portfolio with a beta in excess of one will on average experience a greater variation in returns than will a portfolio with a beta of 1. The expected return thereon will be correspondingly higher. If the beta of a portfolio is less than one, its return variations and expected return will be lower.

The expected return on a securities portfolio equals the risk-free rate of interest plus a risk premium, which compensates for the systematic risk the investor chooses to assume. Figure 2.16 is based on the assumptions that the risk-free rate of interest is 3 pct. and that the risk premium in the stock market is 3 pct. Consequently, the expected return on a portfolio with a beta of 1 will be 6 pct.

The relationship between beta and expected return is linear. An investor who divides his or her assets equally between a risk-free investment (with a beta of 0) and a portfolio of risky investments with a beta of 1, will have a beta for the overall portfolio that equals 0.5. Consequently, the portfolio is half as risky as the benchmark portfolio. The expected return on this portfolio will be equal to 4.5 pct., which is midway between 3 and 6 pct., cf. Figure 2.16. The price of reducing the risk is reflected in the 1.5-percentage point reduction in the expected return, compared to the expected return on the benchmark portfolio.

[1] Systematic risk is discussed in-depth in financial literature. It has over time become common to relate systematic risk to several risk factors (not only to market beta). Consequently, the type of analyses presented here may be broadened. The illustration used here is based on the assumptions underpinning the Capital Asset Pricing Model (CAPM). The purpose of the example is only to illustrate interrelationships.

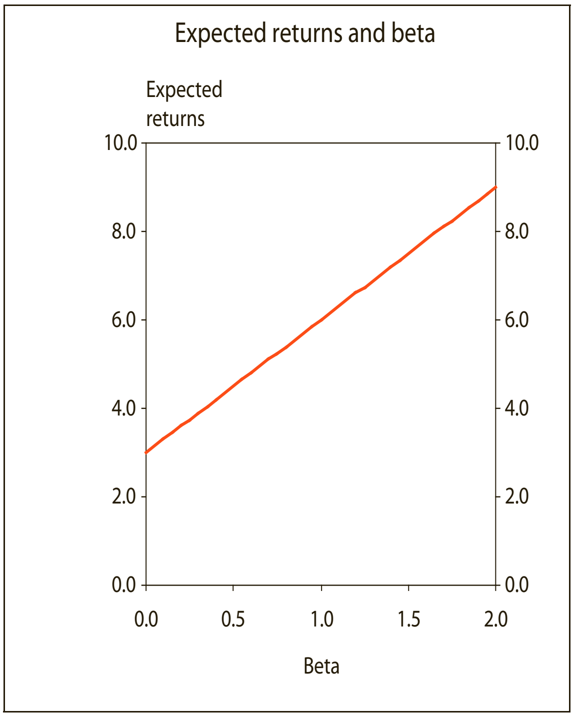

Figure 2.16 The relationship between the expected return, in percent, and the beta of the portfolio

Source: Ministry of Finance

Box 2.8 (cont.)

It is demonstrated, in the discussion of performance developments on the part of Folketrygdfondet, that the beta of the Government Pension Fund – Norway, relative to the benchmark portfolio, has been 0.88 over the period 1998–2006. Reduced risk implies a lower expected return. One may separate, for purposes of assessing the performance realised through the management effort, the positive or negative excess return achieved relative to the benchmark portfolio into two parts: One part that reflects the manager having adopted a different risk level than that of the benchmark portfolio (i.e. a beta of more or less than 1), and one part that may be attributed to the manager having achieved positive or negative excess return relative to the expected return pertaining to the relevant risk level. The latter component is termed alpha in financial literature.

Folketrygdfondet has delivered a negative excess return over the period 1998–2006, but when taking into consideration the low beta it turns out that the risk-adjusted excess return ("alpha") has been positive. In terms of the Chart, this means that the return on the Government Pension Fund – Norway is on the upper side of the straight line, at the point where beta equals 0.88.

The beta of the Government Pension Fund – Global is calculated as 1.018, and is consequently much closer to 1 than that of the Government Pension Fund – Norway. In this simple example, the expected return on a portfolio with a beta of 1.018 would have been 6.05 pct., which is marginally higher than the expected return on the benchmark portfolio.

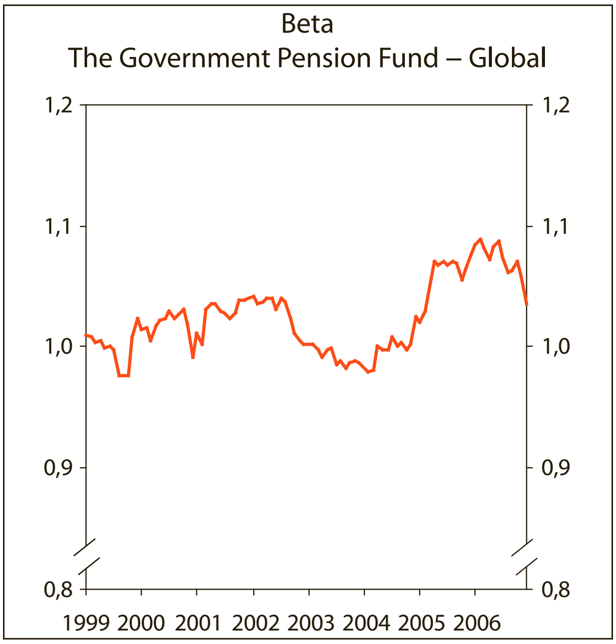

Figure 2.17 Beta developments for the Government Pension Fund – Global. Rolling twelve-month calculations. 1998–2006.

Source: Norges Bank and the Ministry of Finance

II.4 Developments in the difference portfolio of the Government Pension Fund – Global

As discussed, Norges Bank may deviate from the benchmark portfolio in its management of the Government Pension Fund – Global, within a risk limit. The excess return provides a measure for the magnitude of the contribution to the overall return on the Fund that originates from Norges Bank's active management effort. Table 2.5 shows the average excess return and the standard deviation of the excess return (actual tracking error) over the period 1998–2006, over the last three years and over the last year.

The information ratio, as set out in Table 2.5, is calculated as the ratio between the average excess return and the tracking error. The information ratio is in some contexts used as an indicator of the quality of active management. The ratio expresses how large the excess return has been for each unit of risk involved. The information ratio is used for comparing different managers, and for assessing developments over time for the same manager. The information ratio of the Government Pension Fund – Global is high compared to that of other funds, cf. Box 2.4.

The information ratio needs to be interpreted with care. A manager with a portfolio that does not deviate much from the benchmark portfolio will register low relative risk, and even a small excess return may result in a high information ratio. It is also the case that one would expect the information ratio to vary across different types of active management. An investor should primarily be concerned with maximising the excess return in NOK or in pct. at a given risk level, and not with maximising the information ratio.

Norges Bank has achieved excess return both for the period as a whole and for each individual year of the period. The excess return was less in

Table 2.5 The excess return on and tracking error of the Government Pension Fund – Global, measured nominally in local currency. Percentage points and percentages[1]

	1998 – 2006	2004 – 2006	2006
The overall portfolio			
Average excess return per year	0.46	0.55	0.15
Standard deviation	0.38	0.34	0.37
The information ratio	1.2	1.6	0.4
The equity portfolio			
Average excess return per year	0.70	0.87	-0.01
Standard deviation	0.89	0.81	0.90
The information ratio	0.79	1.07	-0.01
The fixed-income portfolio			
Average excess return per year	0.22	0.31	0.24
Standard deviation	0.24	0.11	0.09
The information ratio	0.91	2.80	2.64

[1] The annual excess return is calculated as the difference between the average monthly return on the Fund and on the benchmark portfolio, which is annualised by multiplying it by 12. This is given in percentage points in the Table. Actual tracking error is calculated as the standard deviation of the monthly excess return, which is annualised by multiplying it with the square root of 12. This is given in percentages in the Table.

Source: Source: Norges Bank and the Ministry of Finance

2006 than in the preceding periods. The average excess return over the period from 1998 is, in statistical terms, significantly higher than nil. Consequently, there is a low probability that this performance was achieved as the result of pure coincidence or luck. The accumulated gross excess return is about NOK 29 billion.[10]

Alpha provides a measure of the excess return, as corrected for the beta exposure. For the Fund, alpha is estimated to be higher than nil, cf. Box 2.8. The difference between the excess return and alpha is calculated by multiplying the beta deviation (from 1) with the average return on the benchmark portfolio over the period. The intuition would be to expect a higher return on a portfolio with a beta in excess of 1, as compared to a benchmark portfolio (which by definition will have a beta of 1). Computations of alpha compare two portfolios; the return on the actual portfolio and the return on a "beta-adjusted" benchmark portfolio. Incidentally, the alpha of the Government Pension Fund – Global is, in statistical terms, significantly higher than nil.

Developments in actual tracking error are shown in Figure 2.18. Over the period from January 2000 and until December 2005, the Fund had a tracking error of about 0.25 pct. During the course of 2006, the tracking error increased somewhat, and reached 0.5 pct for a brief period in the summer of 2006. For the period as a whole, actual tracking error is calculated as 0.38 pct. Part of this risk may be attributed to a beta that differs somewhat from 1, cf. the above discussion. The contribution made by the beta deviation to the relative risk of the Fund is about 6 pct.

The expected tracking error shall not exceed 1.5 pct., cf. the limit stipulated by the Ministry of Finance. Thus far, Norges Bank has exploited less than one third of the allocated limit. This has to do with the orientation of the active management effort of Norges Bank, which is characterised by a large number of positions relative to the benchmark portfolio, and by the returns on such positions being mutually independent, both at a given point of time and over time. This type of active management strategy reaps major diversification benefits, thus implying a fairly low level of tracking error.

The actual portfolio of the Government Pension Fund – Global may be analysed as comprising two portfolios; the benchmark portfolio and the difference portfolio. Consequently, the risk of the Fund will depend on the risk of the benchmark portfolio, the risk of the difference portfolio (tracking error) and the covariation between the return on the benchmark portfolio and that on the difference portfolio.

[10] The term gross excess return does not reflect, *inter alia*, transaction and management costs associated with index management, or additional management costs associated with active management.

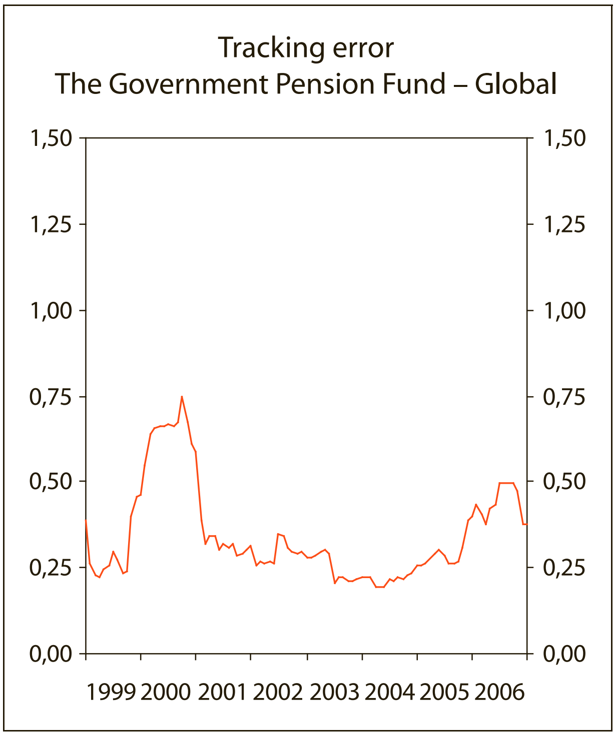

Figure 2.18 Developments in actual tracking error. Rolling twelve-month standard deviation of the excess return. 1998–2006. Percent.

Source: Norges Bank and the Ministry of Finance

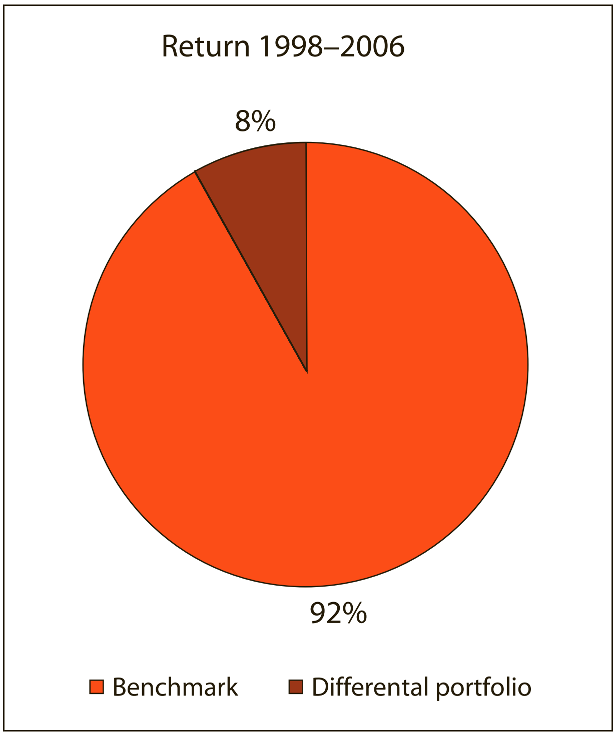

Figure 2.19 Overall return contribution from the benchmark portfolio and from the difference portfolio. 1998–2006. Percent.

Source: Norges Bank and the Ministry of Finance

The small difference between the absolute risk of the Fund and that of the benchmark portfolio as presented in Figure 2.14 is caused, *inter alia*, by a low correlation between the excess return and the return on the benchmark portfolio. For the period 1998–2006, this correlation coefficient is calculated as 0.25, cf. Box 2.1.

Charts 2.19 and 2.20 summarise parts of the above discussion. Figure 2.19 shows that the excess return for the period 1998 – 2006 has represented about 8 pct. of the overall return on the Fund. This illustrates the observation that the strategy of the Fund determines between 90 and 95 pct. of the return on the portfolio. For 2006, the excess return accounted for about 2 pct. of the overall return on the Fund. Figure 2.20 shows that the risk associated with active management resulted in an increase of about 2 pct. (2/98ths) in the overall risk of the Fund over the period 1998 – 2006 as a whole. For 2006 alone, the corresponding figure was 4 pct. Consequently, Norges Bank's active management has made a significant positive contribution to the return on the Fund, without much impact on the risk of the Fund.

Table 2.5 also shows the excess return from equity and fixed-income management, respectively. Equity management has delivered a positive excess return over the period 1998–2006 and over the last three years, whilst there was a negative excess return for 2006. Tracking error has been calculated at about 0.90 pct., and has remained fairly stable over the various periods. Active fixed-income management has also delivered a positive excess return, when looking at the period as a whole. Fixed-income management achieved a positive excess return in 2006, which also resulted in a positive excess return for the Fund as a whole for that year. The relative risk associated with the fixed-income portfolio has been calculated as 0.24 pct. for the period as a whole, whilst the risk during the period since 2000 has remained stable, in the region of 0.10 pct. Higher risk during the first part of the period can mainly be attributed to two subsequent months in 1998, when the excess return was very high and very low, respectively. The information ratio associated with fixed-income management has been very high in recent years.

Active equity management has proven to be significantly more risky than active fixed-income management. Calculations show that the relative risk associated with equity management accounts

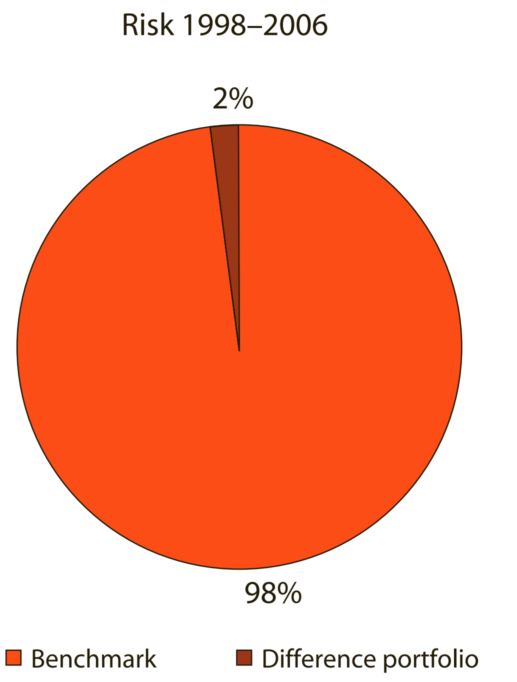

Figure 2.20 Overall risk contribution from the benchmark portfolio and the difference portfolio. 1998–2006. Percent.

Source: Norges Bank and the Ministry of Finance

for close to 90 pct. of the overall relative risk of the Fund. In other words, the variations in the Fund's excess return are mainly driven by the variations in the equity portfolio's excess return.

The Fund's overall tracking error for the period as a whole has been 0.38 pct. This is significantly less than the weighted average of the relative risk of the equity portfolio and the fixed-income portfolio, respectively, which is about 0.5 pct. The explanation for this is low covariation between the rates of excess return from equity and fixed-income management, respectively. The correlation has been negative for the period as a whole. This is primarily caused by developments during the first two years. Since then, the correlation has on average been nil.

When using the return on the benchmark portfolio to assess the outcomes from Norges Bank's active management, one has to be aware that one would not necessarily have managed to achieve the return on the benchmark portfolio by just managing the Fund close to index, cf. Box 2.1. Pure index management would incur transaction costs whenever the composition of securities in the benchmark portfolio changed, when there was an inflow of capital to the Fund and when there were changes to the Fund's investment strategy. At the same time, index management may generate relatively high lending income from securities in the portfolio. Such lending income may in large part cancel out the regular transaction costs associated with index management.

II.5 Developments in the benchmark portfolio of the Government Pension Fund – Norway

The Ministry has stipulated general investment limits for the Government Pension Fund – Norway, whilst the more detailed benchmark portfolio for measurement of return and risk is defined by the Executive Board of Folketrygdfondet. The return on the Government Pension Fund – Norway, which is primarily invested in the Norwegian securities market, depends in large part of market developments in the benchmark portfolio. The benchmark portfolio for the equity investments in Norway is the main index of the Oslo Stock Exchange, whilst FTSE NOREX 30 has been adopted as the benchmark portfolio for the equity investments in Denmark, Finland and Sweden.[11] The fixed-income benchmark portfolio has been a composite index reflecting developments in the Norwegian fixed-income market.

Returns and risks associated with the overall benchmark and the sub-benchmarks for various periods are set out in Table 2.6. The return on the overall benchmark portfolio over the last three-year period has been significantly higher than the average return for the period 1998–2006 as a whole. The risk, as measured by the standard deviation of the return, has been somewhat higher during the last part of the period than for the period as a whole.

Returns in the Norwegian stock market have been considerably higher than returns in the Nordic stock market, as measured by developments in the two indices. However, risk has been fairly similar in the two markets over this period. Since 2004, returns in the stock markets in Norway and the Nordic region have been very high.

Returns in the Norwegian bond market, as measured by the return on the fixed-income benchmark of the Fund, have been favourable when looking at the period as a whole, but were very low in 2006. The risk associated with invest-

[11] The index comprises the 30 largest and most liquid companies in the Nordic region. The Norwegian companies encompassed by the index have been excluded for purposes of composing the Fund's benchmark portfolio.

Table 2.6 Average annual return and annual standard deviation of the return on the benchmark portfolio of the Government Pension Fund – Norway, measured nominally in Norwegian kroner. Percent[1]

	1998 – 2006	2004 – 2006	2006
The benchmark portfolio			
Average return per year	7.38	10.81	9.64
Standard deviation	4.71	5.09	4.33
Equity benchmark – Norway			
Average return per year	12.02	33.29	29.56
Standard deviation	22.49	16.67	15.83
Equity benchmark – the Nordic region			
Average return per year	8.85	22.06	23.98
Standard deviation	23.54	14.96	16.21
The fixed-income benchmark			
Average return per year	5.81	3.80	0.74
Standard deviation	3.05	3.13	1.88

[1] For the equity investments in the Nordic region, the time period is June 2001-2006.

Source: Folketrygdfondet and the Ministry of Finance

ments in the Norwegian bond market was also low in 2006.

The overall benchmark portfolio of the Government Pension Fund – Norway is a composite of the abovementioned benchmark sub-portfolios. As per the end of November 2006, the benchmark portfolio for investments in Norwegian equities carried a weight of close to 23 pct. in the overall portfolio, the benchmark portfolio for investments in Nordic equities carried a weight of 4 pct., whilst the fixed-income benchmark carried a weight of 73 pct. In December 2006, the sight deposits with the treasury were terminated, and the equity portfolio therefore represents a larger portion of the overall portfolio than was previously the case. Consequently, one should be prepared for larger annual fluctuations in the return on the Pension Fund – Norway in future than have been registered historically. Some simple calculations indicate that the writedown of the sight deposits results in the risk associated with the Fund being more or less doubled, and that the standard deviation of the overall portfolio may be expected to increase from about 5 to 10 pct.

II.6 Developments in the actual portfolio of the Government Pension Fund – Norway

The benchmark portfolio largely determines how the capital is invested. The deviation between the actual portfolio and the benchmark portfolio can mainly be attributed to the investment decisions of Folketrygdfondet. The return on, and the risk associated with, the actual portfolio is shown in Table 2.7. The average return on the actual portfolio has been less than that on the benchmark portfolio, with the exception of 2006. For 2006, the opposite is the case. As shown in Table 2.7, the risk associated with the actual portfolio has been somewhat less than the risk associated with the benchmark portfolio, with the exception of 2006. This is also shown in Charts 2.21 and 2.22.

Table 2.7 Average annual return and annual standard deviation of the return on the Government Pension Fund – Norway, measured nominally in Norwegian kroner. Percent.

	1998 – 2006	2004 – 2006	2006
Actual portfolio			
Average return per year	7.29	9.90	10.68
Standard deviation	4.26	4.60	4.92

Source: Folketrygdfondet and the Ministry of Finance

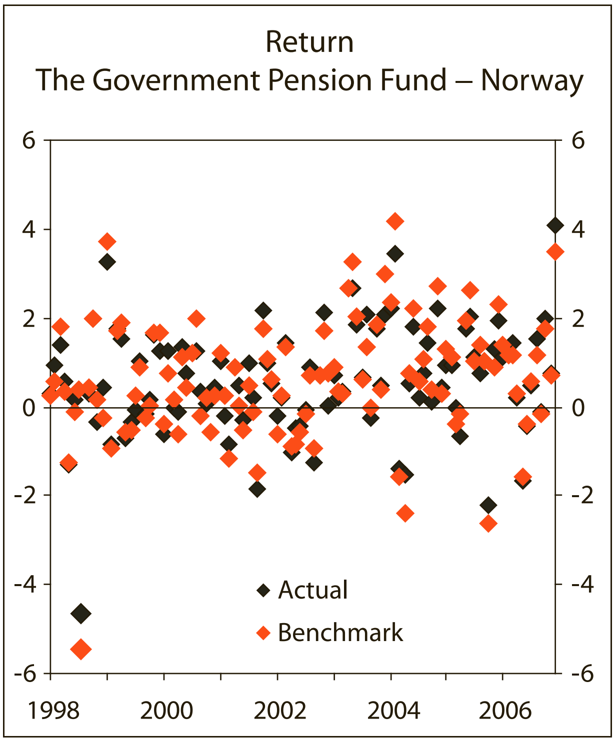

Figure 2.21 Return on the Government Pension Fund – Norway and on the Fund's benchmark portfolio. Monthly return data 1998–2006. Percent

Source: Folketrygdfondet and the Ministry of Finance

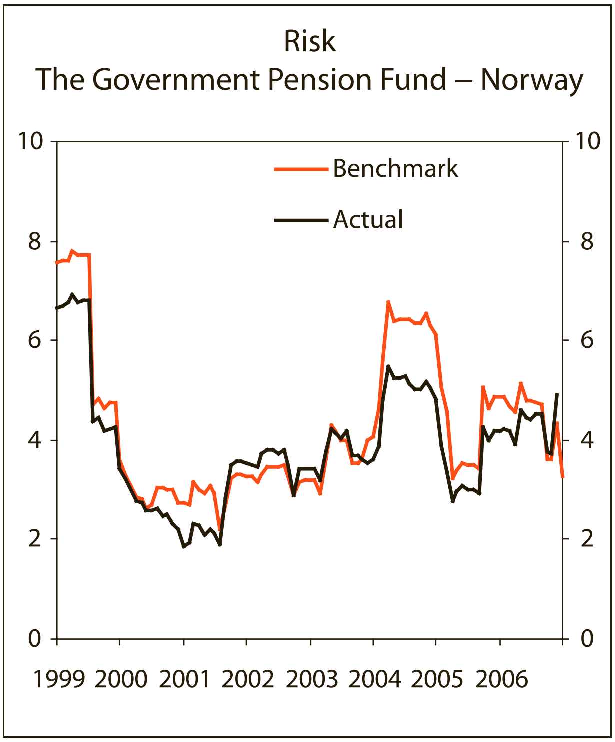

Figure 2.22 Rolling twelve-month standard deviation of the return on the Government Pension Fund – Norway and on the Fund's benchmark portfolio. 1998–2006. Percent

Source: Folketrygdfondet and the Ministry of Finance

The excess return on the Fund, i.e. the difference between the return on the actual portfolio and on the benchmark portfolio, is discussed in II.7 for the various sub-portfolios.

The Ministry's calculations show that the variations in the return on the benchmark portfolio explain about 93 pct. of the variations in the Fund's return. This illustrates that the Ministry's general investment strategy, as expressed through the investment limits laid down in the Regulations governing the management of the Government Pension Fund – Norway and as operationalised in the benchmark portfolio selected for the Fund by the Executive Board, largely determine developments in the return on the actual portfolio.

In Figure 2.23, the information in Figure 2.21 is organised somewhat differently. Each dot shows the return on the benchmark portfolio and on the actual portfolio for the same month, as sorted by the level of return. The dots are clustered closely along a straight line, as drawn in the Chart. The slope of this line, which is termed the "beta" of the portfolio, is calculated to be 0.875, which in statistical terms is significantly less than 1, cf. Box 2.8.[12] When the beta is less than 1, it means that the return on the actual portfolio will on average be less than the return on the benchmark portfolio during periods of positive market developments.[13] The Norwegian equity portfolio has featured a beta of about 0.92 for this period, whilst it has been about 1 for the Nordic equity investments. Consequently, this reaffirms the observation that the Norwegian equity portfolio of Folketrygdfondet tends to outperform the benchmark portfolio during periods of weak developments on the Oslo Stock Exchange, and to somewhat underperform the benchmark portfolio during periods characterised by a particularly strong upturn in equity prices. Folketrygdfondet is a large player in the Norwegian stock market. The portfolio of the Government Pension Fund – Norway is concentrated on a smaller number of companies than those included in the benchmark portfolio (the main index of the Oslo Stock Exchange). The main reason why the beta is less

[12] Standard statistical methods have been adopted in calculating alpha and beta.

[13] The statement is strictly correct if the intercept (alpha) equals zero for purposes of the regression analysis.

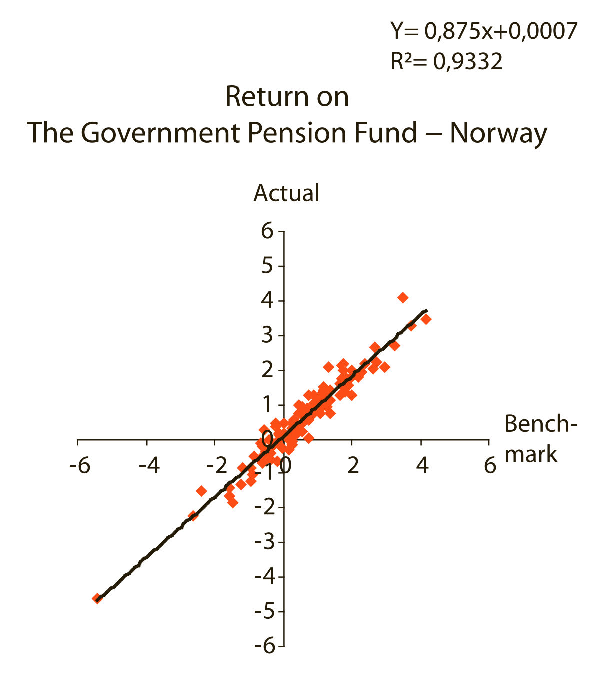

Figure 2.23 Correlation between the return on the Government Pension Fund – Norway and on the Fund's benchmark portfolio. 1998–2006. Percent.

Source: Folketrygdfondet and the Ministry of Finance

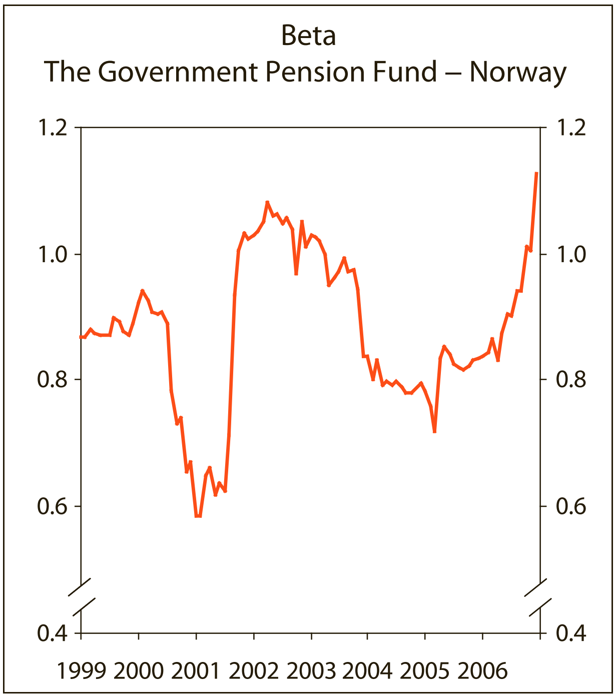

Figure 2.24 The Government Pension Fund – Norway. Rolling twelve-month calculations. 1999-2006.

Source: Folketrygdfondet and the Ministry of Finance

than 1 is that Folketrygdfondet has opted to refrain from investing in certain companies carrying a particularly high risk relative to the average risk of the benchmark portfolio.

Figure 2.24 shows developments in the portfolio's beta over time. As may be seen from the Chart, the beta has been less than 1 for long periods of time. This means that the systematic risk associated with the benchmark portfolio has been higher than the risk associated with the actual portfolio of the Government Pension Fund – Norway.

The fluctuations in the portfolio's beta during 2000–2002 need to be analysed in the context of the steep decline in the equity prices of technology companies, which impacted considerably less on the actual equity portfolio of Folketrygdfondets than on the benchmark portfolio. The lower beta during 2003–2005 has to do with, *inter alia*, Folketrygdfondet reducing the duration of its fixed-income portfolio compared to that of the benchmark portfolio, cf. Box 3.2. Throughout 2006, the difference in duration between the fixed-income portfolio and the benchmark portfolio has been reduced. At the same time, Folketrygdfondet has featured a higher equity portion than suggested by the Fund's benchmark portfolio. Both these factors have contributed to increasing the beta of the portfolio.

II.7 Developments in the difference portfolio of the Government Pension Fund – Norway

In its management of the Government Pension Fund – Norway, Folketrygdfondet may, within a risk limit, deviate from the benchmark portfolio. The contribution from such active management is measured on an ongoing basis, by way of developments in the value of the Fund being compared to developments in the benchmark portfolio.

Table 2.8 shows average excess returns, the standard deviation of excess returns (actual tracking error) and the information ratio over the periods 1998–2006, the last 3 years and the last year, in respect of the Fund as a whole, the equity portfolios of Norway and the Nordic region, respectively, as well as the fixed-income portfolio.

The excess return attributable to Folketrygdfondet was negative over the period 1998–2006. Performance over the last three-year period was weaker than for the period as a whole. However, this changed in 2006, and the Fund achieved a positive excess return as the result of, *inter alia*,

Table 2.8 Excess return and tracking error of the Government Pension Fund – Norway, measured nominally in Norwegian kroner. Percentage points and percent[1]

	1998 – 2006	2004 – 2006	2006
The overall portfolio			
Average excess return per year	-0.09	-0.91	1.04
Standard deviation	1.25	1.25	0.83
The information ratio	-0.1	-0.7	1.3
The Norwegian equity portfolio[2]			
Average excess return per year	0.69	-2.96	-0.44
Standard deviation	4.68	3.93	4.22
The information ratio	0.15	-0.75	-0.10
The Nordic equity portfolio[3]			
Average excess return per year	-0.40	-0.36	-0.97
Standard deviation	0.54	0.55	0.62
The information ratio	-0.74	-0.65	-1.57
The fixed-income portfolio			
Average excess return per year	-0.34	-0.75	0.59
Standard deviation	0.83	1.20	0.42
The information ratio	-0.41	-0.62	1.40

1 The annual excess return is calculated as the difference between the average monthly return on the Fund and on the benchmark portfolio, and is annualised by multiplying by 12. It is reported in percentage points in the Table. The actual tracking error is calculated as the standard deviation of the monthly excess return, and is annualised by multiplying by the square root of 12. It is reported in pct. in the Table.
2 In 2006, the Norwegian equity portfolio included equities in the company General Electric, which Folketrygdfondet received in settlement in connection with the sale of Nycomed Amersham. The value of these equities underperformed relative to the main index of the Oslo Stock Exchange last year, thus contributing to the negative excess return.
3 The figures for the Nordic equity portfolio cover the period from May 2001 until the end of 2006.

Source: Folketrygdfondet and the Ministry of Finance

good performance as far as fixed-income management was concerned.

The excess return on the Fund deviates from a weighted average of the excess return on the three sub-portfolios. This can be attributed to tactical allocation decisions, i.e. that Folketrygdfondet has at times been over- or underweighted in the various asset classes (Norwegian equities, Nordic equities, Norwegian fixed-income securities) relative to the asset class weights featured by the overall benchmark portfolio.

Alpha provides a measure of the excess return as adjusted for the low beta exposure of Folketrygdfondet. Alpha is estimated to be higher than nil, cf. Box 2.8. The reason why alpha is positive, despite the excess return having been negative, is that this calculation “compensates” the return on the actual portfolio for a beta of less than 1. Subchapter II.4 contains a more detailed discussion of how caution needs to be exercised in interpreting the information ratio, and how it may vary across different styles of active management.

The Government Pension Fund – Norway adopts a long investment horizon. The Fund is a long-term investor, and will maintain a large portfolio of equities in the Norwegian market. In its investment strategy, Folketrygdfondet shall emphasise the long-term growth potential of the companies, based on an assessment of fundamental factors and developments. Consequently, short-term market fluctuations are of less importance. In line with this perspective, the Ministry focuses on developments in the Pension Fund over time in its follow-up of Folketrygdfondet’s performance. Over the period 1998–2006, Folketrygdfondet has achieved a return that is more or less in line with the return on the benchmark portfolio. When taken in isolation, Folketrygdfondet has achieved a positive excess return in its management of Norwegian equities over this period.

Since Folketrygdfondet began investing in Denmark, Finland and Sweden in 2001, its management of the Nordic equity portfolio has, in aggregate over these years, contributed a negative excess return. Some of the negative excess return from this part of the portfolio reflects the fact that Folketrygdfondet pays withholding tax on equity dividends. The Ministry is aware that Folketrygdfondet has made changes to its operational management arrangements as far as Nordic equities are concerned, with a view to improving performance. Fixed-income management performed well in 2006. This was because the portfolio assumed less interest rate risk (as measured by duration, cf. Box 3.2) than did the benchmark portfolio, during a period when market interest rates were on the increase. The weaker performance in the preceding years was caused by the portfolio having less interest rate exposure during a period of declining market interest rates.

The difference in return between the actual portfolio and the benchmark portfolio has been most pronounced for the asset class Norwegian equities. It follows from Table 2.8 that this asset class has also exhibited the highest tracking error by far.

Developments in the actual tracking error of the overall portfolio are shown in Figure 2.25. For the period as a whole, actual tracking error is calculated at 1.25 pct., which is somewhat lower than the upper limit of 2.0 pct. defined by the Executive Board for the overall portfolio. Tracking error declined somewhat during the course of 2006, and was about 0.8 pct towards the end of the year. For the period as a whole, actual tracking error is calculated at 1.25 pct. Much of this risk may be attributed to a beta that deviates somewhat from 1, cf. the above discussion over. The beta deviation accounts for about 22 pct. of the Fund's relative risk.

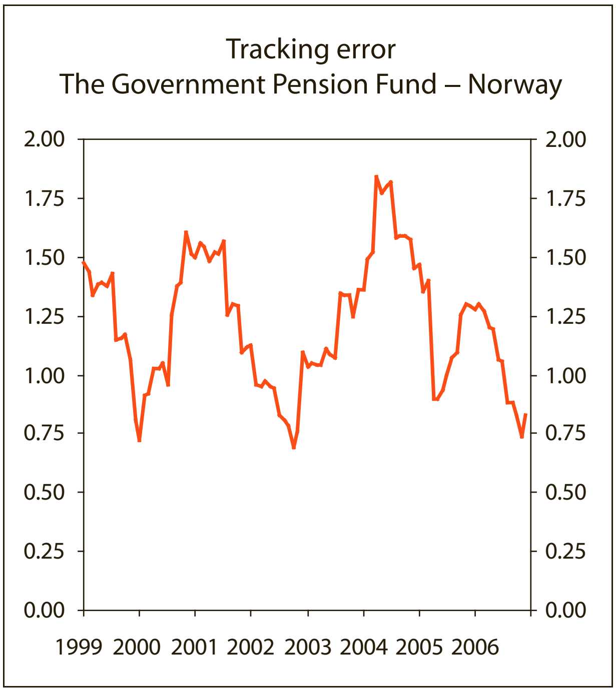

Figure 2.25 Developments in actual tracking error. Rolling twelve-month standard deviation of the excess return. 1998–2006. Percent.

Source: Folketrygdfondet and the Ministry of Finance

The Fund's overall tracking error for the period as a whole is less than the weighted average of the tracking error of the equity and fixed-income portfolios, which may under certain simplified assumptions be estimated at 1.7 pct. This is explained by low covariation between the rates of excess return from equity and fixed-income management, respectively.

3 Investment strategy

3.1 Introduction

The Government Pension Fund was established in 2006, encompassing the former Government Petroleum Fund and National Insurance Scheme Fund. The purpose of the Government Pension Fund is to support government savings to finance the pension expenditure of the National Insurance Scheme and long-term considerations in the application of government petroleum revenues. To ensure that the petroleum revenues are contributing to the stable development of the Norwegian economy, the revenues shall be phased into the economy gradually, whilst the savings shall be invested outside Norway. The savings of the Pension Fund take the form of general fund accumulation. The Fund is fully integrated with the Fiscal Budget, in order to facilitate growth in the fund being a reflection of the State's actual accumulation of financial assets. Consequently, there is no requirement that the capital of the Pension Fund should at all times equal a specific share of state pension liabilities under the National Insurance Scheme. This means that the Pension Fund is better placed to withstand short-term return fluctuations in the securities market than are many other funds.

Whilst the capital of the Government Pension Fund may only be spent once, the real return thereon may be spent every year without reducing its value. The fiscal rule for budget policy dictates that state petroleum revenues should be phased into the economy more or less in line with developments in the expected real return on the Government Pension Fund – Global, cf. Box 1.1. This contributes to maintaining the purchasing power of the Pension Fund over time, and enables a long time horizon to be adopted for the investments of the Fund.

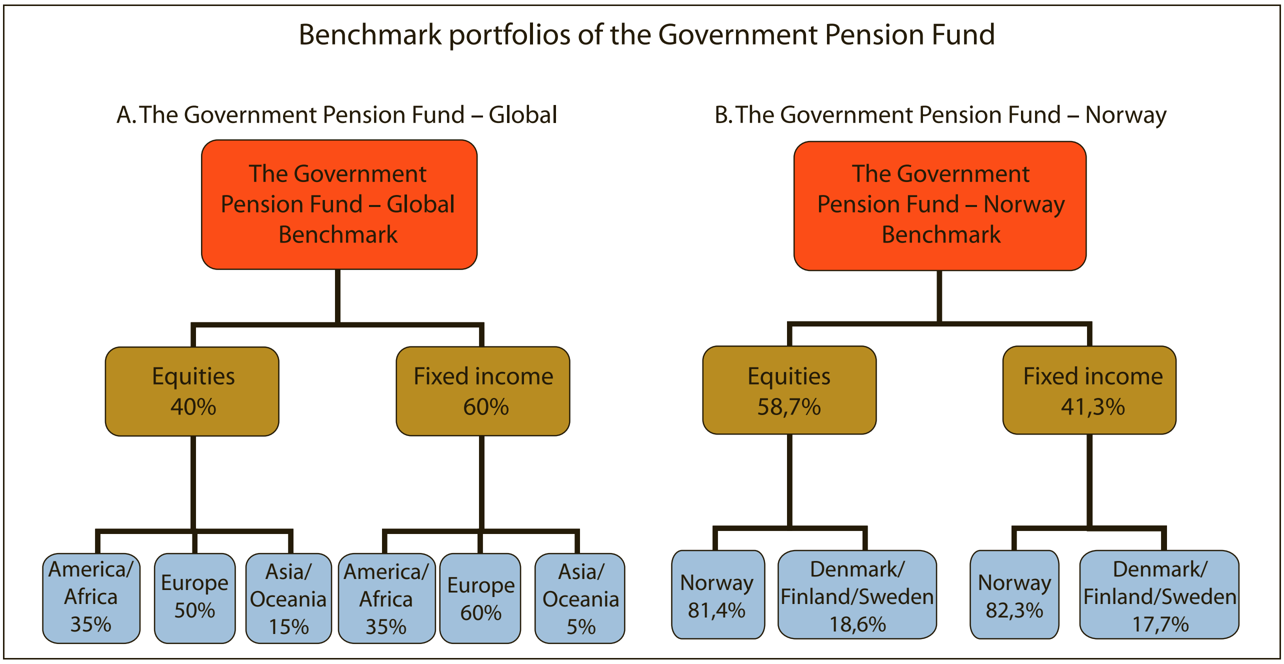

Figure 3.1 The benchmark portfolios of the Government Pension Fund[1]

1 The Ministry of Finance has designed the benchmark portfolio of the Government Pension Fund – Global. In choosing the regional weights, one has taken into consideration, *inter alia*, Norway's import weights. The composition of the benchmark portfolio within each region is determined by the inter-country market value weights. The benchmark portfolio of the Government Pension Fund – Norway is designed by the Executive Board of Folketrygdfondet within investment limits laid down by the Ministry. The investment limits are specified as a percentage of acquisition cost, whilst the benchmark portfolio is specified as a percentage of market values.

Source: Ministry of Finance

There is a broad political consensus that the Pension Fund should be managed with a view to achieving the maximum possible return within a moderate level of risk. The Ministry of Finance has formulated a long-term investment strategy ensuring that the capital is invested in a broadly based portfolio comprising securities from many countries. The long investment horizon of the Fund means that the portions invested in various asset classes and geographical regions can be determined on the basis of assessments of expected long-term returns and risks.

The investment strategy chosen by the Ministry of Finance is a decisive influence on the Pension Fund's expected return and risk, and reflects a trade-off between these two characteristics. The Pension Fund shall act as a financial investor, and not as a tool for exercising strategic ownership in individual companies. The Fund is characterised by good diversification of risk, as a result of it being invested in securities issued by many different states and by companies in many different countries. Priority is accorded to achieving broad political agreement as to the investment strategy of the Fund, and a high degree of openness as far as the management of its capital is concerned. This strengthens the credibility of, and confidence in, the Fund.

The investment strategy of the Government Pension Fund is defined by the general investment limits and the benchmark portfolios of the Government Pension Fund – Global and the Government Pension Fund – Norway, respectively. The benchmark portfolios of the Government Pension Fund comprise equity and bond indices from different countries, cf. Figure 3.1. These indices include representative security samples, and developments in such indices reflect, in large part, market developments in the relevant countries. The return on the Government Pension Fund will, to a large extent, mirror market developments for the securities included in the benchmark portfolios. Calculations in Chapter 2 show that 90–95 pct. of the return on the Government Pension Fund – Global has been determined by the choices made by the Ministry of Finance when designing the benchmark portfolio, whilst the remaining 5–10 pct. has been determined by the investment choice made by Norges Bank within the guidelines laid down by the Ministry. A

Box 3.1 The composition of the benchmark portfolio of the Government Pension Fund – Global

Figure 3.2 shows that the benchmark portfolio chosen by the Ministry of Finances is of decisive importance in determining the actual investments of the Government Pension Fund – Global. The benchmark portfolio for equities comprised in excess of 2,400 companies as per yearend 2006. Each of these carried a specific weight in the benchmark portfolio.

The Fund's strategic benchmark portfolio comprises 40 pct. equities. The benchmark portfolio for equities is divided into three regions, of which Europe accounts for 50 pct. These weights follow from the Regulations laid down by the Ministry. Guidelines for the rebalancing of the Fund have been introduced, pursuant to which the actual benchmark portfolio of the Fund is permitted to "drift" away, to some extent, from the weights of strategic benchmark portfolio. Consequently, the equity portion of the actual benchmark portfolio was 40.6 pct. as per yearend, with European equities accounting for 50.8 pct. of the benchmark portfolio for equities. The more detailed allocation within each geographical region follows from the relative size, as measured by the market value, of each individual company.

As per yearend 2006, the benchmark portfolio for European equities comprised equities listed in 15 countries, with equities in the United Kingdom accounting for 33 pct. Equities listed in the United Kingdom were then divided into ten main sectors, of which equities within the consumer services sectors accounted for 11.5 pct. This sectors contained 37 companies in the United Kingdom, and the company Marks & Spencer accounted for 6.8 pct. thereof.

Marks & Spencer equities therefore accounted for 0.13 pct. of the overall benchmark portfolio for equities. If Norges Bank as per yearend 2006 had invested more or less than 0.13 pct. of the equity portfolio in Marks & Spencer equities, this would have contributed to the actual return on the Fund deviating from the return on the benchmark portfolio. The Ministry of Finance has fixed an upper limit on the magnitude of such return differences, expressed as a maximum limit of 1.5 percentage points as far as expected tracking error is concerned, cf. Box 2.1.

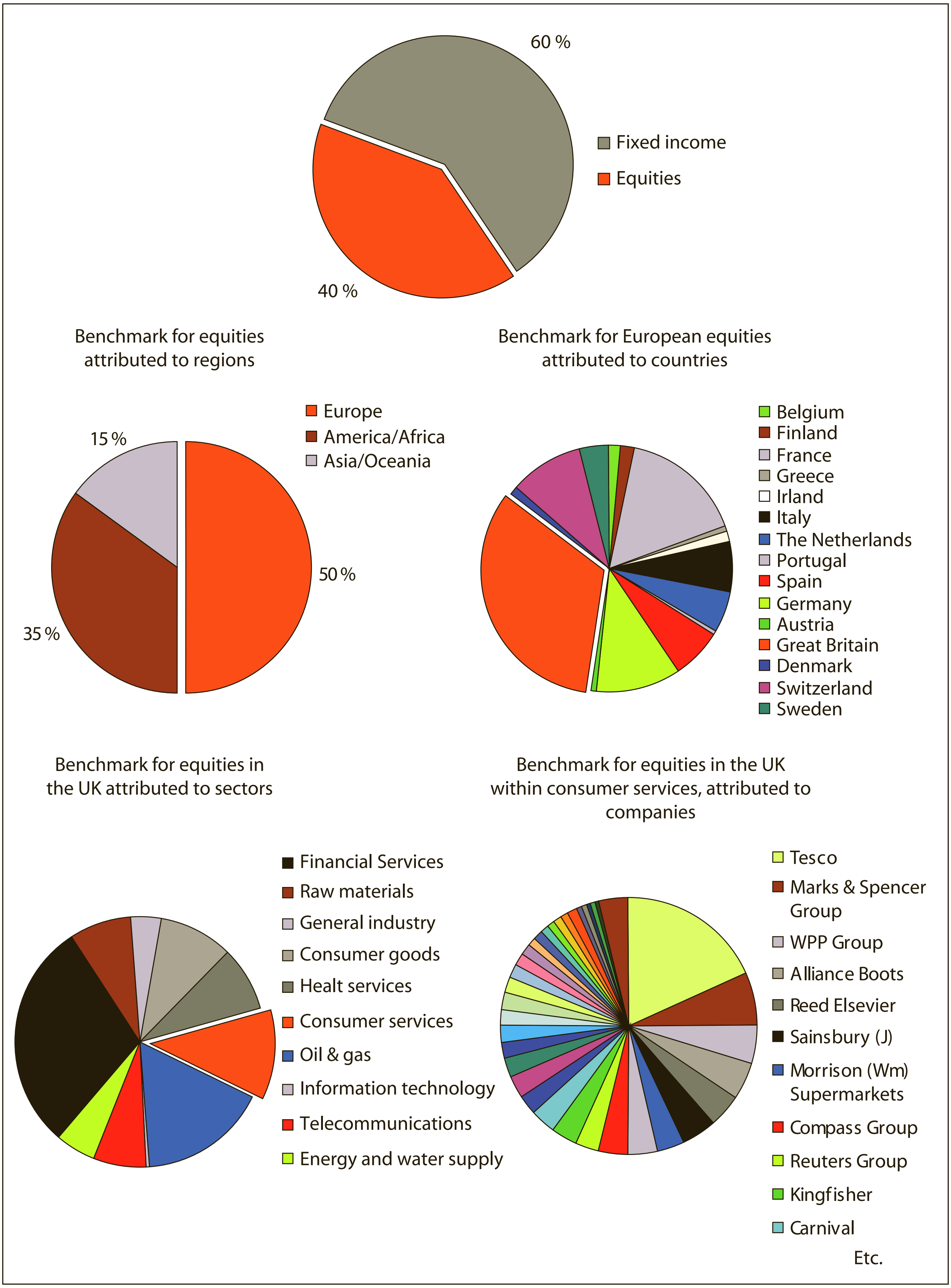

Figure 3.2 The benchmark portfolio of the Government Pension Fund – Global as per 31 December 2006

Source: Ministry of Finance

more detailed description of how a benchmark portfolio is designed can be found in Box 3.1.

The Government Pension Fund is mainly invested in listed equities and bonds. Equity investments represent ownership interests in the production of goods and services, and the value of such investments will therefore reflect, *inter alia*, expectations as to the future profits of businesses. Bond investments involve the granting of a loan to the issuer, to be repaid to the bondholder together with a predetermined interest payment. As shown in Figure 3.1, the Government Pension Fund – Global holds all its investments abroad, and its return in international currency is the relevant measure of developments in the Fund's international purchasing power. The Government Pension Fund – Norway is primarily invested domestically, and its return is measured in Norwegian kroner. Norges Bank and Folketrygdfondet (also known as the National Insurance Scheme Fund) seek to achieve a higher return than dictated by the benchmark portfolios of the Government Pension Fund – Global and the Government Pension Fund – Norway, respectively.

The Ministry of Finance has defined an investment universe for the Government Pension Fund that is wider in scope than the benchmark portfolios. At the same time, there has been established a limit as to how much the managers may deviate from the benchmark portfolio, in the form of an upper limit on tracking error, cf. Box 2.1. By making investments in securities that fall outside the scope of the benchmark portfolio, Norges Bank and Folketrygdfondet are exploiting their permitted tracking error leverage for purposes of achieving excess return. The risk assumed through active management has only to a limited extent increased the risk of the Fund beyond the level implied by the benchmark portfolios of the two parts of the Government Pension Fund, cf. Box 3.2. Analyses in Chapter 2 show that about 99 pct. of the fluctuations in the return on the Government Pension Fund – Global may be attributed to the chosen benchmark portfolio. For the Government Pension Fund – Norway, the variations in the return on the benchmark portfolio have explained about 93 pct. of the variations in the return on the Fund.

The Ministry of Finance conducts regular reviews of the Pension Fund's investment strategy. These regular reviews examine any new information against the basis underpinning previous decisions, and particular weight is attached to assessing those choices with a material impact on expected returns and risks. This effort is based, *inter alia*, on expectations as to long-term returns and risks. In evolving the long-term, general investment strategy of the Government Pension Fund – Global, the Ministry of Finance is drawing on advice from, *inter alia*, Norges Bank and the Strategy Council appointed by the Ministry of Finance. The resources devoted to the Ministry of Finance's involvement with the Government Pension Fund have been expanded in recent years, and responsibility for efforts relating to the Fund's framework, its long-term investment strategy and the follow-up of Norges Bank and Folketrygdfondet, has since the autumn of 2006 been assigned to a designated Asset Management Department.

3.1.1 The strategy of the Government Pension Fund – Global

The Government Pension Fund – Global has grown rapidly since the Fund received its first capital allocation in 1996, cf. Figure 3.3. Over the last decade, the Fund has turned into one of the largest funds in the world. It is estimated, on the basis of projections in the National Budget for 2007, that its market value will increase by about 70 pct. towards 2010, to just over NOK 3,000 bil-

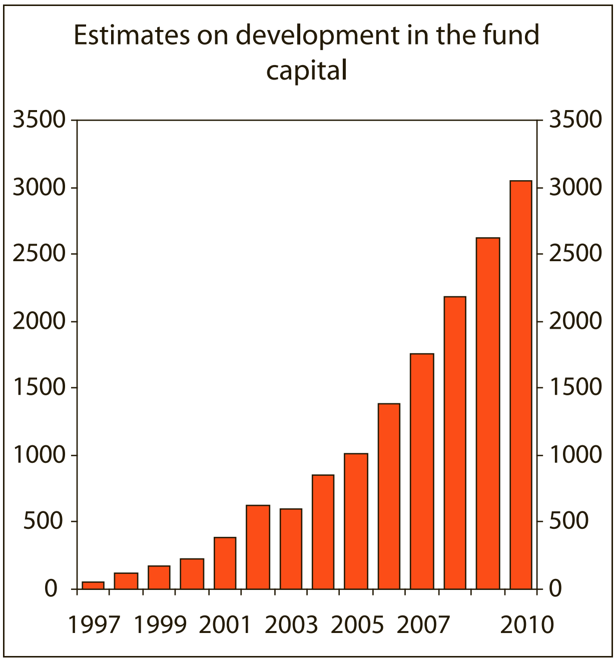

Figure 3.3 Estimates from the National Budget for 2007 concerning developments in the fund capital of the Government Pension Fund – Global. NOK billion

Source: Ministry of Finance

Box 3.2 Different risk concepts and measures of market risk

There are several types of risk. For asset management purposes it is common to distinguish between:

- Market risk, which is the risk that the value of a securities portfolio will change as the result of movements in equity prices, exchange rates and the interest rate level. It is commonly assumed that one has to accept higher market risk to achieve a higher expected return, cf. Box 2.8.
- Credit risk, which is the risk of incurring a loss as the result of the issuer of a security or a counterparty in a securities trade not meeting its obligations.
- Operational risk, which is the risk of financial loss or loss of reputation as the result of breakdown of internal processes, human failure or systems failure, or other loss caused by external factors that are not in consequence of the market risk associated with the portfolio. There is no expected return associated with operational risk. However, in managing operational risk one needs to balance the importance of keeping the probability of such losses low against the costs incurred as the result of increased control, monitoring, etc.

Credit risk and market risk are partly overlapping concepts. Credit risk normally refers to the risk that a bond issuer or securities transaction counterparty will be declared bankrupt. However, if the creditworthiness of a bond issuer is impaired, this will usually result in a reduction in the bond price, which implies that the expected return (the interest) on the bond increases. The difference between the interest rate that an enterprise has to pay and the interest rate that a state pays when issuing bonds is often labelled the "credit spread". Variations therein reflect variations in the market's assessment of the creditworthiness of the relevant enterprise. The risk relating to potential changes in the credit spread is normally included under the concept of market risk.

Risk may be operationalised in a number of ways. The standard deviation of returns on a portfolio is specified as a percentage, and is a statistical measure that says something about the magnitude of the variations one may normally expect in returns from one period to the next. By linking standard deviation to a probability distribution one may say something about the probability that the portfolio will decline in value by x percent or increase in value by y percent during the course of a given period, cf. Box 2.1.

Duration is a frequently used risk measure within fixed-income management. The issuer of bonds pays interest on an ongoing basis, and repays the loan upon maturity. If the bond matures in ten years, the investor will normally receive interest payments semi-annually or annually, whilst its face value is repaid after ten years. Duration is a different measure of residual maturity than the remaining bond term, which takes into account the fact that interest is paid on the loan throughout its term. One may say, somewhat simplified, that the duration of a bond expresses how many years it will take for half of the loan to be repaid. Modified duration is a measure of sensitivity, which is used to calculate by how much the price of a bond changes if the interest rate thereof changes marginally. This concept is an approximate expression of the percentage change in the market value of a bond in case of a one-percentage point change in market interest rates. If there is a large change in interest rates, duration is not a good measure of the interest rate risk associated with a bond or a fixed-income portfolio.

The fiscal rule for budget policy phases government petroleum revenues into the economy more or less in line with developments in expected real return. This facilitates the adoption of a long time horizon for the investments of the Fund, and annual variations in returns are therefore of less importance. It is more relevant to assess the risk over time and the probability of a negative aggregate return over a number of years, than potential losses from one year to the next.

The probability of a negative portfolio return decreases when the time horizon is extended, since one expects positive returns over time in the financial market. On the other hand, the potential decline in the value of the portfolio increases when the time horizon is extended, since one cannot rule out the possibility that one year of negative returns may be followed by more years like that. The extent to which the potential loss of value increases when the time horizon is extended depends on whether or not returns tend to revert to normal long-term levels, cf. Box 3.4.

lion. The fund capital has significantly outgrown the levels envisaged for the first few years after the initial capital allocations were made.

There has been a gradual evolvement in the investment strategy of the Government Pension Fund – Global. The Fund has invested in equities since 1998. In 2000, emerging markets were included in the benchmark portfolio for equities, whilst in 2002 the benchmark portfolio for fixed income was expanded through the inclusion of non-government-guaranteed bonds (i.e. corporate bonds and mortgage-backed bonds). In 2004, new Ethical Guidelines were laid down for the Government Pension Fund – Global. In 2006, the investment universe was further expanded by, *inter alia*, the abolition of special limits concerning the credit risk associated with bonds and concerning the duration range of the fixed-income portfolio. Furthermore, general authority was granted for the use of instruments characterised by an inherent affinity with permitted assets, hereunder commodity derivatives and mutual fund units, cf. Chapter 5.

The Government Pension Fund has been established as an integral part of Norwegian economic policy. The Global part of the Fund is intended for long-term use, with the real return thereon being spent over time. Over the Fund's first decade, valuable experience has been garnered concerning investments in listed and frequently traded securities.

In the current Report, the Ministry presents several changes to the investment strategy. Sub-chapter 3.2 discusses the equity portion of the Government Pension Fund – Global, and outlines an increase therein from the current 40 pct. to 60 pct. At the same time, one intends to increase the number of companies invested in, by including small companies in the equity benchmark, cf. Sub-chapter 3.3. Moreover, one intends to change the regulation of recognised markets and currencies, cf. Sub-chapter 3.4. Moreover, Sub-chapter 3.5 provides a discussion of the status of the Ministry's effort to evaluate the possible inclusion of real estate and infrastructure as a new asset class under the Government Pension Fund – Global.

The changes and evaluations discussed in Sub-chapters 3.3 and 3.5 should be seen in the context of an evolvement of the investment strategy, which involves assessing the scope for adding less liquid investments in the investment universe of a long-term investor like the Government Pension Fund.[1] However, the majority of the Fund's investments will continue to be held in the form of listed equities and investment-grade bonds. In a letter of 20 October 2006, Norges Bank has recommended that the Government Pension Fund – Global be permitted to invest in unlisted equities as well. The letter is appended to the present Report. The Ministry will revert with an assessment of this issue later.

3.1.2 The strategy of the Government Pension Fund – Norway

Material changes were made to the investment strategy of the Government Pension Fund – Norway during the course of 2006. The guidelines governing the investments of the Government Pension Fund – Norway were previously in the form of a set of rules laid down by the Storting. In the Revised National Budget for 2006, the Ministry presented new Regulations relating to the management of the Government Pension Fund – Norway, to replace this set of rules, in line with the discussion in Proposition No. 2 (2005–2006) to the Odelsting, On the Act relating to the Government Pension Fund. The intention was to create, *inter alia*, a more uniform system for determining the guidelines governing the two parts of the Pension Fund. The Regulations were adopted on 15 December 2006, and entered into effect on 1 January 2007.

Until the end of last year, a major part of the capital of the Government Pension Fund – Norway was held in the form of sight deposits with the treasury. The sight deposit arrangement has contributed to meeting the funding needs of the treasury, without making Folketrygdfondet, as the manager of the Government Pension Fund – Norway, a large individual player in market-traded government securities. In the Revised National Budget for 2006 it was proposed, in connection with the effort to develop the new management guidelines, that the sight deposit arrangements be terminated. It was pointed out that such arrangements were of less importance now than upon their establishment in 1967, and that they might contribute to a less transparent presentation of the net financial assets of the State. At the same time, the Government proposed that NOK 10 billion of the sight deposits be repaid in order

[1] Different securities are more or less easily tradeable. Government bonds are, for example, traded in large quantities every day in most countries, whilst it for certain bonds issued by private companies may be difficult to find a purchaser or seller quickly if one wishes to carry out a trade. In this example one would say that government bonds are more liquid than private bonds.

to strengthen long-term state ownership in the Norwegian business sector, in line with the Soria Moria Declaration. The termination of the sight deposit arrangement implied that NOK 101.8 billion of the capital of the Government Pension Fund – Norway was written down on 29 December 2006.

Pursuant to the Regulations of 15 December 2006, No. 1419, relating to the management of the Government Pension Fund – Norway, the capital shall mainly be invested in equities and primary capital certificates listed on a Norwegian exchange, or in bonds and commercial paper issued by Norwegian enterprises. The Fund's limit on investments in equity instruments corresponds to 50 pct. of its capital under management (measured at acquisition cost). Within an overall limit of 20 pct. of its capital under management, up to 10 percentage points may be invested in equities listed on exchanges in Denmark, Sweden and Finland, and bonds and commercial paper issued by enterprises domiciled in the said countries, respectively. Folketrygdfondet's authority to invest the capital of the Government Pension Fund – Norway in bonds issued in other Nordic countries was introduced with effect from 1 January 2007.

It follows from the investment guidelines set out in the Regulations that Folketrygdfondet may also use interest rate and currency derivatives in the management of its fixed-income portfolio, cf. Folketrygdfondet's letter of 10 November 2006. In its letter, Folketrygdfondet referred to the fact that interest rate swaps entered into with the State in relation to the sight deposits were used to manage the interest rate risk of the Government Pension Fund – Norway, and that the termination of the sight deposit arrangements would almost halve the duration of the fixed-income portfolio, to about two years. In order for the Executive Board of Folketrygdfondet to be able to fix a duration of the benchmark portfolio for the fixed-income investments that would be more or less in line with its previous duration, it would require permission to make use of interest rate derivatives for management purposes, and the most relevant interest rate management instrument would be interest rate swaps entered into with other investors. As far as permission to make use of currency hedging instruments is concerned, Folketrygdfondet pointed out that this would enable it to separate the interest rate exposure from the foreign exchange risk, when managing bonds issued in other Nordic countries.

The Ministry is of the view that there are good reasons for permitting Folketrygdfondet to make use of interest rate and currency derivatives in managing the interest rate and foreign exchange risk of the Government Pension Fund – Norway. It was therefore indicated, in a letter of 5 December 2006 to Folketrygdfondet, that the Ministry would grant such permission in connection with the adoption of the Regulations relating to the management of the Government Pension Fund – Norway. In its letter to Folketrygdfondet, the Ministry also writes the following:

> "In this context, the Ministry has attached considerable weight to Folketrygdfondet's undertaking to refrain from investing in interest rate derivatives or currency hedging instruments until it has been demonstrated that there exist satisfactory risk systems and control procedures for the instruments to be used in the management of GPFN, hereunder that appropriate limits for counterparty risk have been established, cf. the letter of 10 November. This implies, inter alia, that Folketrygdfondet shall ensure that formal internal procedures within areas like trading processes, limit control and the follow-up of internal instructions in general, are in place and work as intended. The letter also states that excess liquidity resulting from the interest rate derivatives contracts shall be invested in the money market or in corporate bonds with a floating rate of interest, such as not to affect the equity investments. Furthermore, Folketrygdfondet writes that there will be imposed strict reporting requirements as far as concerns the distinction between ordinary securities and derivatives products, and their separate effects in terms of the return and risk of the overall portfolio."

The termination of the sight deposit arrangements resulted in the equity portion increasing, in line with the investment limits, from 20 to just below 50 pct. of the capital under management (measured at acquisition cost). When taken in isolation, this increases the expected percentage return and the annual fluctuations in the return on Folketrygdfondet, since the equity portfolio now accounts for a larger portion of the overall portfolio than was previously the case, cf. the discussion in the Revised National Budget for 2006. The value of the equity portfolio of the Government Pension Fund – Norway was NOK 63.4 billion as per the end of last year. This represented an equity portion of 59.3 pct. (measured at market value). As per the end of last year, the investment limits defined for the Government Pension Fund –

Norway would permit it to increase its equity investments by about NOK 5 billion. If this limit had been exploited to the full, the equity portion would have been about 65 pct. as per the end of last year.

3.2 The equity portion of the Government Pension Fund – Global

3.2.1 Previous assessments of the equity portion

The Regulations relating to the management of the Government Petroleum Fund were originally presented in the Revised National Budget for 1996. The Regulations dictated that the Petroleum Fund should be invested in government bonds, pursuant to more or less the same guidelines as applied to the foreign exchange reserves of Norges Bank.

Projections of government finances in the Long-Term Programme 1998-2001 (Report No. 4 (1996-97) to the Storting) indicated that the Fund would become larger than previously estimated, and that one would not need to make drawdowns on the Fund until later than previously assumed. In the Revised National Budget for 1997, the issue of whether to adopt a longer investment horizon therefore presented itself. Against this background, one considered the scope for expanding the investment alternatives to encompass equities as well. In its Report, the Jagland Government concluded as follows:

> "Against this background, the Government will aim to open parts of the Petroleum Fund to investments in equity instruments. One intends to present new guidelines in the autumn of 1997, which will enter into effect as from 1 January 1998.
>
> It is necessary to examine in more detail what portion of the Fund should be opened for investments in equities. There is some variation amongst long-term investors internationally as to what portion of their portfolio is comprised of equities. An equity portion in the 30-70 pct. range would appear to be common amongst this type of investors. The Ministry's preliminary assessments suggest that the equity portion of the Petroleum Fund's portfolio should at this stage be in the region of 30-50 pct. The issue will be examined more closely when preparing new guidelines."

It was pointed out in the Revised National Budget for 1997 that such an assessment had to involve a trade-off between expected return and risk. It was stipulated that the objective pursued in managing the Fund should, in principle, be to invest its capital in such a way as to maximise the international purchasing power of the Fund around the time when it was likely that one would have to make drawdowns on the Fund, subject to an acceptable level of risk. Moreover, it was pointed out that variations in the return on the Fund from one year to the next are of less importance.

A majority of the members of the Storting's Standing Committee on Finance and Economic Affairs supported the principles underpinning the new guidelines for the management of the Government Petroleum Fund, as outlined in the Revised National Budget for 1997. New Regulations relating to the management of the Petroleum Fund were presented to the Storting, in the autumn of 1997, in the National Budget for 1998. The equity portion of the benchmark portfolio was fixed at 40 pct. At the same time, there was defined a permitted range of 30 – 50 pct. for the equity portion of the Fund.

Furthermore, the National Budget for 1998 discussed, *inter alia*, whether this was the appropriate time to phase equities into the Fund, given the fact that the preceding years had witnessed a strong upturn on a number of the large stock exchanges internationally. The Report went on to state that:

> "One cannot rule out the possibility that the long-term cyclical upturn may be followed by a cyclical downturn in equity prices. However, based on the premise that all available information is reflected in equity prices, the lengthy upturn on certain exchanges cannot in itself provide any information as to whether now is a good or bad time to invest. Historical experience suggests that the timing of investments is of less importance if one adopts a long investment horizon than if one operates with a short investment horizon. When entering the stock market through a number of investments spread over a long period of time, one effectively spreads the risk associated with whether one is entering the market at times that will in retrospect be perceived as favourable or unfavourable. In addition, there is the fact that the Petroleum Fund will be growing in coming years. If one was to postpone the phase-in of equities in the portfolio, this would result in one having to purchase correspondingly more equities later, without any assurance that such would be a better time. Consequently, long-term considerations may suggest that one

> should expand the equity portfolio of the Petroleum Fund gradually in line with increases in the Fund's size."

The last occasion on which the equity portion was examined was in the National Budget for 2004. The Report referred to the major fluctuations in the stock market since the Fund started investing in equities. It was emphasised that the factors taken into consideration when deciding to include equities in 1997, had not changed, and that the purpose of the Fund suggested that one should not attach much weight to short-term fluctuations in its return. The Report goes on to state that:

> "In its letter of 28 August this year, Norges Bank concludes that the premises on which the decision was based have not changed significantly, cf. above. The Ministry agrees with this assessment. Although the return fluctuations have been strong, given the information available in 1997, the return has not fallen outside the opportunity set outlined as a basis for the decision to adopt a 30-50 pct. equity portion.
>
> The previous occasion on which the equity portion of the Petroleum Fund was discussed was in the National Budget for 2002. The recommendation was then to examine this in a broader perspective. The Ministry is of the view that the current equity portion of 30-50 pct. comes close to what is perceived as an acceptable level of risk for the Fund. Although a higher equity portion will result in a higher expected return, one must when increasing such portion also accept that the risk of larger variations in such return will increase.
>
> Based on an overall assessment, the Ministry does not consider it imperative to increase the equity portion at the present point of time. One therefore intends to maintain the current 30-50 pct. portion. Within this range, Norges Bank may change the equity portion if it deems it appropriate to do so, based on an assessment of market developments, whilst at the same time keeping within its overall risk limit."

3.2.2 The recommendations of Norges Bank and the Strategy Council

The fund capital has grown well beyond the level envisaged when the equity portion was fixed in 1997, as well as the level envisaged when the equity portion was last reviewed in the National Budget for 2004. Nevertheless, the basis underpinning the investment choices of the Government Pension Fund remains the same. There is broad political agreement that the level of risk should be moderate, but also that one should seek to maximise returns. Like on previous occasions, the assessment is premised on a long time horizon for the investments. Whilst in 1997 it was envisaged that it would become necessary to make drawdowns that would reduce the real value of the Fund, the budget policy guidelines introduced in 2001 suggest that spending over time will match the real return on the Fund, cf. Box 1.1. This supports the view that the assessment of what constitutes an acceptable level of risk should emphasise the fluctuations in the return on the Fund over periods of many years, and that developments from one year to the next are of lesser importance. Like with the previous assessments, it is also now relevant to examine the investment choices facing the Government Pension Fund – Global from the perspective of the choices made by other large funds.

There has throughout been broad political agreement as to the Fund's investment strategy. Nevertheless, when the equity portion of the Fund was fixed at 40 pct. in 1997, some parties in the Storting did argue against investing in equities. At that time, the counter-arguments were centred, in particular, on the absence of ethical guidelines and on concern about the increased level of risk assumed by the Fund. The Ministry is of the view that there are several reasons why the assessment as to what constitutes an acceptable level of risk on the part of the Fund may now yield a different conclusion. Experience and knowledge gained from investments in equities may have changed perceptions as to what constitutes an acceptable level of risk for the Fund's investments. The fiscal policy guidelines are designed in such a manner that major changes in the fund capital have no direct fiscal policy impact in the short run, and the experience with equity investments since 1998 has demonstrated, *inter alia*, that one is able to handle major fluctuations in returns. Furthermore, ethical guidelines for the investments of the Fund have been adopted. The ethical underpinnings of the Fund are furthered through exclusion of individual companies, and through the promotion of corporate governance in those companies in which the Fund is invested. For purposes of a renewed assessment of the equity portion, it is also of relevance that one has gained, since the fund accumulation was initiated, considerable expertise as far as equity management is concerned, together with experience in the handling of fluctuating portfolio performance from one year to the next.

The portion of the Fund to be invested in equities is the single most important decision in determining the Fund's risk taking. Consequently, deliberation of the equity portion of the Fund is a key feature of the Ministry's efforts relating to the investment strategy of the Fund. In the Revised National Budget for 2006, the Ministry announced that one would be reverting with a new assessment of the Fund's equity portion, and that the review thereof would be based on, *inter alia*, input from Norges Bank and the Strategy Council.

In the National Budget for 2007, the Ministry of Finance discussed the two recommendations it had by then received from Norges Bank and the Strategy Council, to the effect that the equity portion of the Fund should be increased. The recommendations were made public at the same time, and are available on the Ministry's website (www.finansdepartementet.no).

In a letter of 10 February 2006, Norges Bank wrote to the Ministry of Finance that:

> "Norges Bank is of the view that an overall assessment of historical evidence and our present market perception suggests that the percentage of equities held by the Government Pension Fund – Global should be increased. The Ministry of Finance should weigh the expected gain from a 50 or 60-percent allocation to equities against the increase in risk".

In a letter of 2 June 2006, the Strategy Council wrote to the Ministry of Finance that:

> "Based on Norges Bank's own analyses and model computations, as well as our own evaluations and reviews of relevant financial literature, the Council recommends that the equity allocation allotted to the benchmark portfolio of the GPFG be increased to 60 percent".

Reference is made to the discussion in the National Budget for 2007, for a more detailed explanation of the two recommendations from Norges Bank and the Strategy Council. In this context the Ministry wrote, *inter alia*, that:

> "The recommendations are based on extensive supporting documentation, and the Ministry wishes to examine this important issue in more detail to ensure that all aspects of the matter have been sufficiently elucidated."

Based on its advisory agreement with the Ministry of Finance, Norges Bank carried out a new review of the investment strategy of the Government Pension Fund – Global in 2006. The analysis is documented in Norges Bank's Strategy Report for the Government Pension Fund – Global and in a letter of 20 October 2006 from Norges Bank to the Ministry of Finance. In its letter, Norges Bank reiterates, *inter alia*, its recommendation that the equity portion of the Fund should be increased:

> "In our letter of 10 February 2006, Norges Bank recommended that the Ministry increase the equity portion in the benchmark portfolio of the Government Pension Fund – Global. The updated analysis we have now completed confirms the findings that underpinned that recommendation: A higher equity portion will increase both expected return and return volatility. The trade-off between expected return and volatility appears to be attractive in the long term. The risk of a negative accumulated real return increases slightly, but it is highly likely that an equity portion will be profitable. If we look at a conditional probability distribution, we find that the expected loss, if an increased equity portion turns out not to be profitable, is relatively modest."

The letter from Norges Bank is appended to the present Report, and is available at www.finansdepartementet.no.

3.2.3 The Ministry's assessment

There is no definite answer to the question of what is the optimal equity portion. Instead, the choice of equity portion needs to be based on a trade-off between the expected return and risk associated with various investment choices. As far as the Pension Fund is concerned, such a trade-off is ultimately a political decision. The Ministry of Finance has gathered advice, where the expected return and risk associated with various investment choices have been explained and calculated. Calculations of consequences in terms of the returns and risks of the Pension Fund have been performed on the basis of historical returns going back to the year 1900. In addition, model computations have been carried out regarding the expected consequences over the coming 15-year period, based on other assumptions than those implied by historical returns, cf. Boxes 3.3 and 3.4. Moreover, experience with the Fund since 1998, when the Fund made its first investments in equities, is of relevance to the trade-off between expected return and risk. From a historical perspective, fluctuations in the stock market have been large during parts of this period. This is

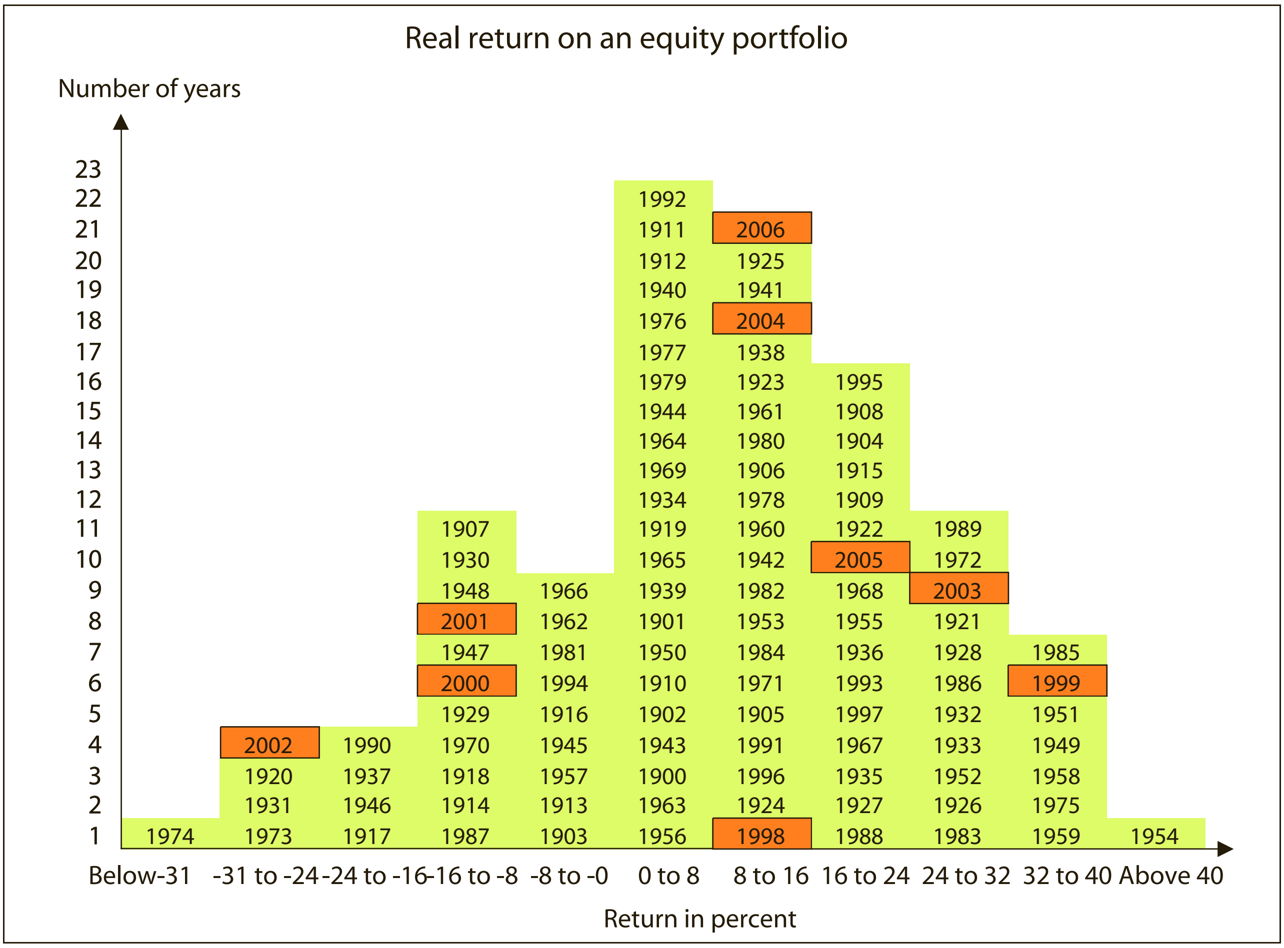

Figure 3.4 Real return for every year between 1900 and 2006, on a portfolio of equities in the US, Japan, United Kingdom, France and Germany, as weighted by the weights applicable to the Government Pension Fund – Global. Local currency

Source: Ministry of Finance/Dimson, Marsh and Staunton

illustrated in Figure 3.4. In the Figure, the years since 1998 are framed. It may be noted that 1999 was one of the best years in the stock market over the last 107 years, and that 2002 was the second worst year since 1900. Nevertheless, the experience has been that these fluctuations could be handled. A broad political foundation underpinning the chosen equity portion, and fiscal policy guidelines that offered the flexibility required to handle such situations, were important in this context.

Box 3.3 Historical return

The effect of an increase in the equity portion on the expected return on, and risk of, the Fund may be analysed by looking at historical returns. The analysis of historical returns in this Chapter is based on data published by Dimson, Marsh and Staunton of the London Business School.

Historical return sets tend to overestimate what actual returns have been like. This is caused by survival biases. This refers, for example, to the tendency to analyse those markets and time periods for which data are the most readily available, and which have not experienced equity values being written down to nil (unlike, *inter alia*, Russia, China and Poland). The data from Dimson, Marsh and Staunton avoid several such effects by gathering data for many countries, and by using observations with the same start date (1900). Nevertheless, there is reason to believe that the data reflect an element of survival bias, thus implying that the measured historical return may to a certain extent overestimate what has been the actual return. However, the data set from Dimson, Marsh and Staunton is deemed to be the best available source for analysing the historical effect on the Fund's return from increasing the equity portion.

Based on historical returns in the United States, Germany, France, the United Kingdom and Japan, annual real returns have been calculated in the currency of each country and weighted together with weights reflecting the composition of the Government Pension Fund – Global.[1] This enables us to illustrate what the return on an equity and bond portfolio corresponding to the Pension Fund would have been over the last 107 years, since 1900.

The historical return data for bonds are based on long-term bonds, whilst the bonds held by the Fund have an average effective maturity (duration) of 5-6 years. This implies that the risk reflected in the calculations of historical returns for bonds are somewhat higher than what we might expect for the bond portfolio of the Fund. On the other hand, the historical return data are based on government bonds, whilst the bond portfolio of the Government Pension Fund – Global also includes corporate bonds that carry somewhat higher risk.

The data set used in the Strategy Council's analysis of historical returns concurs, in the main, with the one presented above. However, the Council has adapted the available return sets for bonds to the maturity of the bonds included in the Fund's benchmark portfolio. The Strategy Council shows that the average annual real return on an equity portfolio like that of the Pension Fund has over the period 1900–2005 been 5.7 percentage points higher than that on bonds. The average excess return on equities was particularly high during the period from 1900 until the beginning of the 1960s.

The consensus view amongst large investors is that the realised excess return on equities relative to bonds in the 20th century was considerably higher than what investors had expected in advance. One of the explanations for this is that equity prices now are adapted to a lower level as far as the required risk premium on equities is concerned. This has resulted in a high realised excess return, but a lower expected risk premium for the future. Lower transaction and information costs and improved scope for spreading investments and risks in the capital markets have been identified as important contributions to this development.

On the other hand, increased globalisation has resulted in emerging economies participating more actively in the international exchange of goods and services. This has had positive implications for the global economy, and the future strength of this effect may influence the excess return that can be expected in the global stock market.

1 The weights used for purposes of these calculations are (in percent):

	Bonds	Equities
USA	35	35
UK	10	18
Germany	25	16
France	25	16
Japan	5	15

Box 3.4 Model computations

The effect of increasing the equity portion on the expected return on, and risk of, the Fund may be analysed by way of model computations (simulations). Such computations are based, *inter alia*, on assumptions as to how returns and risks develop within different asset classes over time, and the covariation between them. One may, on the basis thereof, simulate developments in the value of the fund capital until a selected future date, cf. Figure 3.5.[1] Figure 3.5 illustrates how developments in the value of the Fund may be stimulated by "drawing" several thousand different outcomes over 15 years. The yellow line represents the typical outcome (the median). The Figure illustrates that some of the outcomes will be considerably better/weaker than the representative outcome.

Norges Bank refers to such model computations in its letters of 10 February and 20 October 2006. The main assumptions on which the analyses are based are as follows:

- Equities are expected to render an annual return over time that is about 2 percentage points higher than on bonds (i.e. that the risk premium for equities is 2 pct.).
- A weak degree of "mean reversion" is assumed as far as equity returns are assumed. The assumption that returns will over time revert to long-term "normal levels" or equilibrium levels is based on analyses of historical returns in the US. Such an assumption implies that the risk associated with equity investments is somewhat lower than it would otherwise have been when the investment horizon is extended. However, this assumption is not of decisive importance as far as the recommendation to increase the equity portion is concerned.
- The model simulations are based on rates of return following a normal distribution. It is known that the distributions will in practise be somewhat more skewed towards the tail ends than suggested by the normal distribution, thus implying that the probabilities of extreme outcomes, in both negative and positive terms, are underestimated in the simulations.

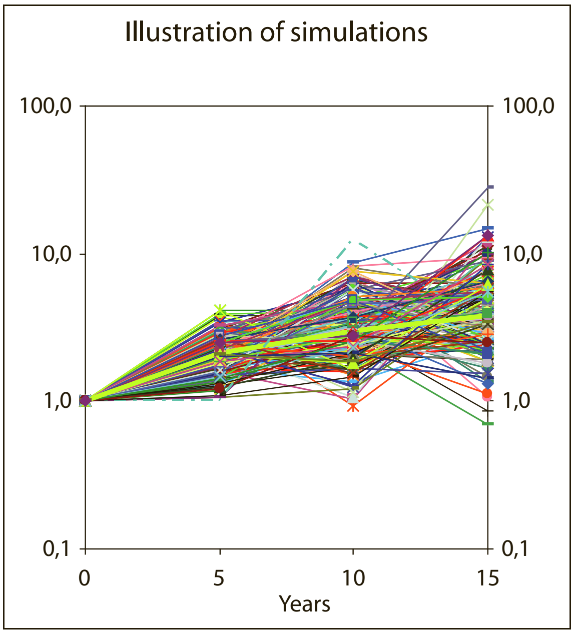

Figure 3.5 Illustration of simulations of real value of NOK 1 invested in year 0 over a 15-year period for the Government Pension Fund – Global. Simulated with the inflow of new capital based on the oil price assumptions adopted in the National Budget for 2007. The yellow line in the middle shows the most typical outcome for any given date (logarithmic scale).

Source: Ministry of Finance

However, the assumptions underpinning the respective analyses deviate somewhat as far as risk estimates are concerned. In the letter of 10 February from Norges Bank, which is also discussed in the National Budget for 2007, the calculations are made under risk assumptions based on developments since 1900. In the Strategy Report of 29 November 2006, corresponding model computations are made on the basis of three alternative scenarios. In the scenario deemed most likely by Norges Bank, the risk estimates are based on developments over the last twenty years. A deflation scenario and a stagflation scenario have also been prepared, cf. Table 3.1. The covariation between

[1] The simulation is based on a common assumption to the effect that the prices of the various asset classes follow a log-normal distribution, which ensures that asset prices cannot become negative. This implies an assumption to the effect that the return follows a normal distribution. The price processes that determine developments in the value of the asset classes over time are described by so-called geometric Brownian motions. For each asset class and exchange rate, numbers are randomly selected from a normal distribution, where the numbers represent the shocks (the surprises) influencing price developments relative to trend. This is repeated step-by-step until a chosen future date (time horizon). This generates possible "paths" for the asset price, and a corresponding portfolio return in a selected benchmark currency. This procedure is repeated a large number of times (typically 6,000 times). This generates a distribution of possible portfolio returns, which is used for studying the statistical qualities of the portfolio.

Box 3.4 (cont.)

equities and bonds is assumed to be very low in the main scenario and in the deflation scenario. However, the stagflation scenario assumes a high covariation on the basis of experience from the 1970s. Norges Bank has utilised a currency basket based on expected import weights.

Table 3.1 Annual nominal returns (geometric) and risks measured in the currency of each country/region. Percent

		Main scenario		*Deflation*		*Stagflation*	
Average global inflation rate 2006 –21		2.1		0.2		5.5	
		Return	Standard deviation	Return	Standard deviation	Return	Standard deviation
Bonds:	Americas	5.4	4	3.5	4	7.4	9
	Japan	2.9	4	1.1	4	4.8	9
	Asia/Oceania ex Japan	5.2	5	3.3	5	7.2	10
	UK	4.7	5	3.2	5	7.1	10
	Europe ex UK	4.2	3	2.6	3	6.4	8
Equities:	Americas	6.6	15	2.4	17	5.6	17
	Japan	4.7	20	1.4	22	3.8	22
	Asia/Oceania ex Japan	6.6	21	2.4	23	5.6	23
	UK	7.6	16	3.1	18	6.8	18
	Europe ex UK	5.7	18	1.6	20	5.0	20

Source: Norges Bank

The model computations concerning how an increase in the equity portion from 40 to 60 pct. may influence the expected return on, and risk of, the Fund are illustrated in Figure 3.6.

The Figure may be read to state that in about 25 pct. of the cases, the accumulated real return is 45 pct. or less irrespective of whether the equity portion is 40 pct. or 60 pct. The conclusions from the model computations may be summarised under reference to Items 1-3 of Figure 3.7:

1. There is a high probability that a 60 pct. equity portion will generate a higher accumulated return after 15 years. In some cases the return is considerably higher than in case of a 40 pct. equity portion.
2. There is a probability of about 25 pct. that a 60 pct. equity portion will generate a lower aggregate return than a 40 pct. equity portion. Even for these outcomes (all observations to the left of the vertical line), the black line is not significantly higher than the orange one. This means that the reduction in return is limited, even in the 25 pct. or so least favourable outcomes.
3. The probability that the portfolio will generate a negative accumulated real return after 15 years is low, irrespective of whether the equity portion is 40 pct. or 60 pct.

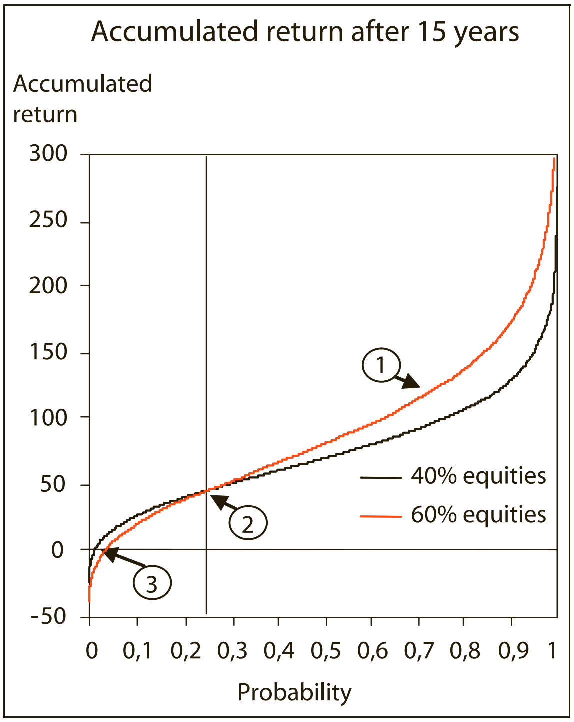

Figure 3.6 Model computations of accumulated returns in percent after 15 years, and attendant probabilities.

Source: Norges Bank and the Ministry of Finance

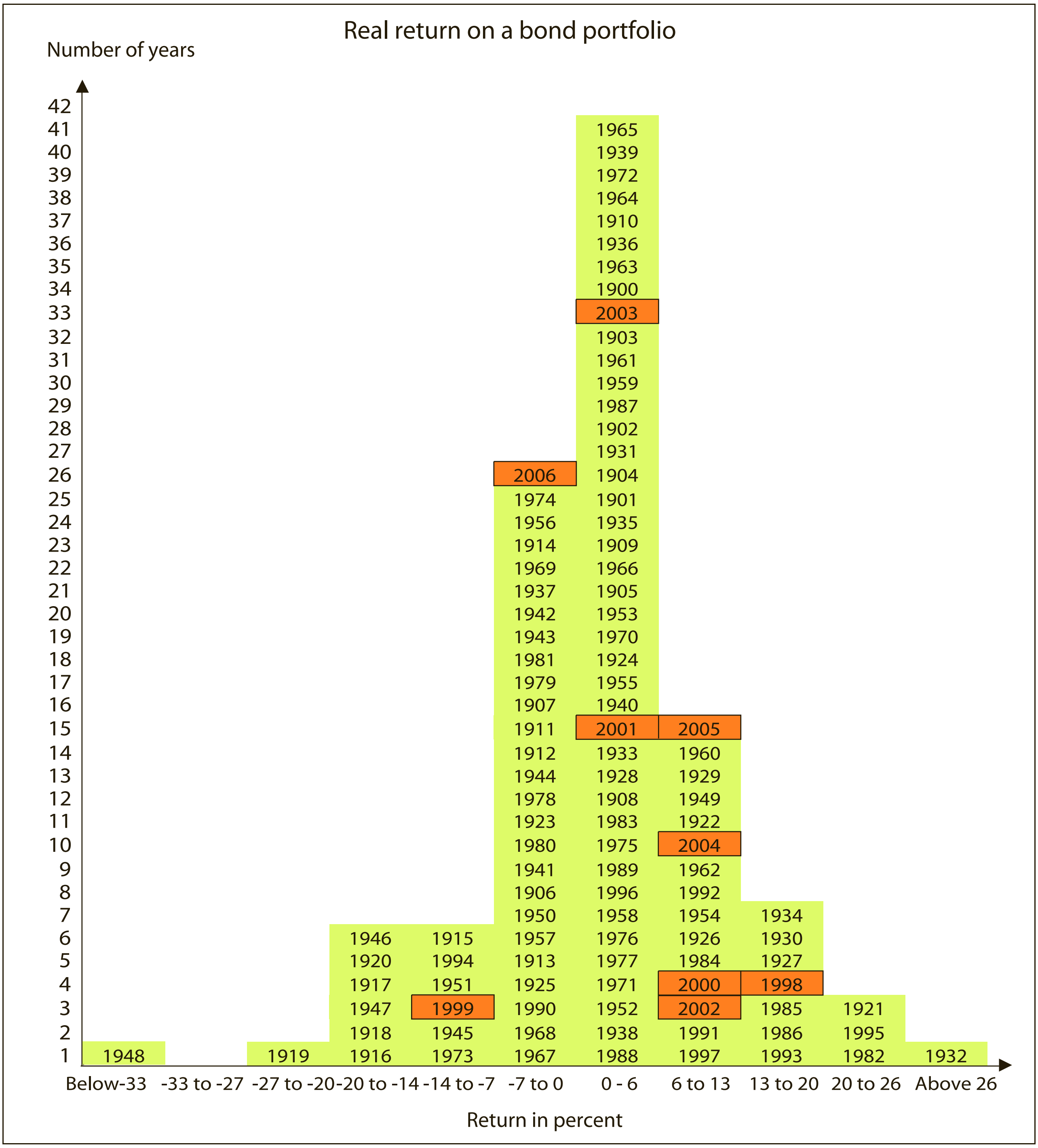

Figure 3.7 Real return for every year between 1900 and 2006, on a portfolio of bonds in the US, Japan, United Kingdom, France and Germany, as weighted by the weights applicable to the Government Pension Fund – Global. Local currency

Source: Ministry of Finance/Dimson, Marsh and Staunton

Figure 3.7 shows the annual real return on a portfolio of long-term bonds since 1900. The Figure shows that returns on bonds are less variable than those on equities. This is reflected in the fact that a much higher number of years is clustered into the two midmost bars, where returns are close to the historical average. However, the number of years with negative returns is much higher. As much as 40 of the last 107 years have registered a negative real return on bonds, as compared to 29 of the last 107 years for equities. Returns for the years 1998–2006 have been framed, and show, *inter alia*, that the Fund has since 1998 experienced some of the best years in the bond market since 1900. Nevertheless, the Fund has since 1998 made about NOK 100 billion from investing 40 pct. of the capital in equities rather than fixed income.

Consequences in terms of expected return

Expectations for a higher average return on equities than on bonds are based on both historical experience over more than 100 years and on economic theory. Investors will not be willing to assume more risk without being compensated in the form of higher expected return. Consequently, investors will not been purchasing equities until prices indicate that the expected return will be sufficiently high to compensate for the difference in risk, cf. Box 2.8. However, the magnitude of this risk premium is more uncertain. Based on the assumptions adopted in the main alternative presented by Norges Bank, as explained in more detail in Box 3.4, the effect on the Fund's return, as measured in NOK, may be illustrated by the following calculation:

- With a fund valued at NOK 1,800 billion, the expected increase in value from increasing the equity portion from 40 pct. to 60 pct is estimated at about NOK 190 billion after 15 years. If the equity portion is instead increased to 50 or 80 pct., the increase in value is estimated at NOK 100 and 340 billion, respectively.
- There will be new capital inflows to the Fund as the result of government petroleum revenues over the coming 15 years. If the return on the estimated inflow of new capital is included in the computations, the expected increase in value from investing 60 pct. in equities instead of the present 40 pct. expands to about NOK 240 billion. With an equity portion of 50 or 80 pct., the expected increase in value will in such case be NOK 130 and 450 billion, respectively.

The above estimate is based on uncertain assumptions. At the same time, there are several reasons for believing that these estimates are moderate. The calculations assume, *inter alia*, that equities offer a risk premium in the form of an average annual excess return of about 2 percentage points relative to bonds.[2] Consequently, increasing the equity portion from 40 to 60 pct. will increase the expected annual return on the Government Pension Fund – Global by about 0.4 percentage points. This expected risk premium on equities is less than half of what the excess return has been over the last 100 years, and about half a percentage point less than what many other funds assume. However, the Ministry acknowledges that there are several reasons why one should not assume that historical experience is representative of what may be expected in future. Such caution is also in line with the consensus view amongst large investors, cf. Box 3.3. Furthermore, the estimates for the effects on the Fund's return are expressed by way of the most *typical* outcome (i.e. the outcome at the middle of the set of possible outcomes), and not by the *average* outcome. This implies that the computations have attached less weight to extremely favourable outcomes that would have a low probability of occurring.

Consequences in terms of risk

Model computations showing how the returns and risks of the Fund are changed, when changing the equity portion, are presented in Tables 3.2 and 3.3. Column three shows that the fluctuations in returns from one year to the next, as measured by the standard deviation of annual returns, increase from 6.2 pct. to 8.7 pct. Given the long time horizon of the Fund, the uncertainty associated with the average return over 15-year periods is more relevant. Risk as measured in this manner increases from 1.6 pct. to 2.2 pct. if the equity portion is expanded to 60 pct. An average return of 4 pct., and an accompanying standard deviation of the average return over 15-year periods of 2.2 pct., may here be interpreted to mean that the average annual real return will in two out of three cases fall within the range of 1.8 – 6.2 pct. over a 15-year period.

Besides, the risk of overall loss over a longer time period increases somewhat when the equity portion is increased. Nevertheless, the model computations from Norges Bank show that the probability of loss over 15-year periods will remain relatively low even if the equity portion is increased, cf. column five of Table 3.2. With 60 pct. held in equities, the probability of a negative accumulated return after 15 years is estimated at 3.7 pct. The same model computations show that the expected negative excess return, assuming that increasing the equity portion turns out to be unprofitable, will be relatively modest.

[2] In the present Report, the term "excess return" is used is several contexts. In Chapter 2, excess return denotes the difference in actual return between the actual portfolio and the benchmark portfolio. In Chapter 3, excess return denotes the difference in return between equities and bonds.

Table 3.2 Model computations of real returns and risks, with assumptions taken from the main scenario in Norges Bank's analysis, where the risk estimates correspond more or less to developments over the last 20 years. Percent

Equity portion	Average annual return (geometric) over 15-year periods	Standard deviation of annual return	Standard deviation of average return over 15 years	Probability of negative accumulated return after 15 years
40	3.5	6.2	1.6	1.2
60	4.0	8.7	2.2	3.7

Source: Norges Bank

The computations in Table 3.2 are based on the main alternative from the Norges Bank analyses, cf. Box 3.4. The assessment of risk in these computations is based on the assumption that the experience from the last 20 years is of more relevance to the assessment of the outlook for the coming 15-year period than is the period 1900–2006 as a whole. This results in, *inter alia*, a lower expected risk associated with bonds than was assumed in the computations discussed in the National Budget for 2007. Norges Bank takes the view that those assumptions attributed too high a level of risk to bonds. Nevertheless, the increase in the risk level of the Fund associated with expanding the equity portion, as estimated on the basis of the assumptions adopted in the discussion in the National Budget for 2007, is presented in Table 3.3.

Comparing Tables 3.2 and 3.3 shows how changed assumptions influence the model computations of return and risk. In general, the overall risk level of the Fund, with both 40 and 60 pct. equities, is lower under the updated assumptions. For example, the risk as expressed by way of the probability of a negative accumulated aggregate return after 15 years is 3.7 pct. under the updated assumptions, as compared to 6.3 pct. under the assumptions adopted in the discussion in the National Budget for 2007. Nevertheless, both computations show a low probability of a negative accumulated return.

The National Budget for 2007 stated that the estimated probability of obtaining a lower return after 15 years with a 60 pct. equity portion, instead of a 40 pct. equity portion, was about 25 pct. Under the updated assumptions, this probability estimate remains at about 25 pct. The risk as expressed by way of the amount of the expected negative excess return in the 25 pct. least favourable cases, is now calculated at about 10 pct. on an accumulated basis, or 0.6 pct. per year. This is somewhat higher than the accumulated negative excess return as the result of the original assumptions, which was in the region of 6 pct. On the other hand, the expected aggregate return on the Fund with 60 pct. equities is now a small positive figure in even the 25 pct. least favourable cases.

The model computations are likely to somewhat underestimate the probability of loss, cf. Box 3.4. The model estimates as to how the probability of a negative accumulated return is affected by increasing the equity portion are therefore, as pointed out by Norges Bank, more reliable than the estimates as to the magnitude of such losses.

The increase in the risk of accumulated loss over a longer period of time, based on historical developments, is illustrated in Figure 3.8. There are only seven distinct 15-year periods since 1900. The Figure is therefore based on rolling 15-year periods that show the historical real return on the portfolio with a 60 pct. and 40 pct. equity portion, respectively. The portfolio featuring 60 pct. equi-

Table 3.3 Model computations of real returns and risks, with assumptions based on the risks associated with equities and bonds since 1900. Percent

Equity portion	Average annual return (geometric) over 15-year periods	Standard deviation of annual return	Standard deviation of average return over 15 years	Probability of negative accumulated return after 15 years
40	4.2	9.7	2.5	4.6
60	4.6	11.9	3.1	6.3

Source: Norges Bank

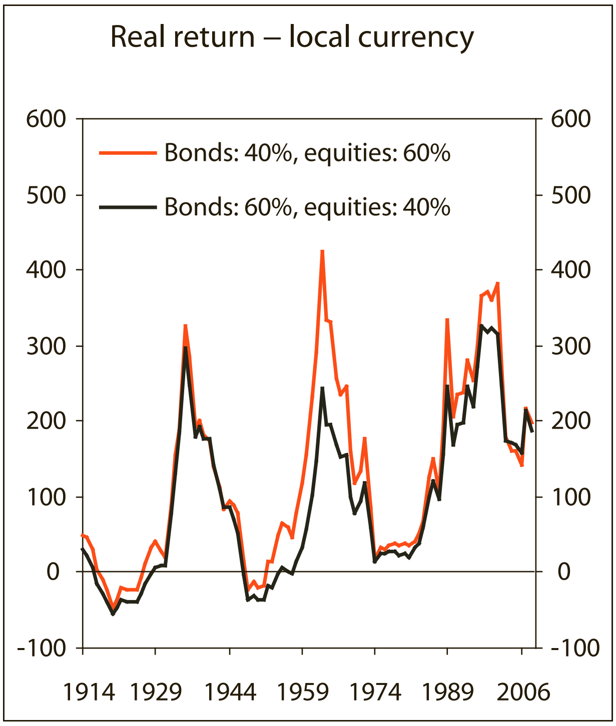

Figure 3.8 Historical real returns on portfolios holding 60 and 40 percent equities, respectively. Aggregate returns in overlapping 15-year periods since 1900. Local currency. Percent

Source: Ministry of Finance/Dimson, Marsh and Staunton

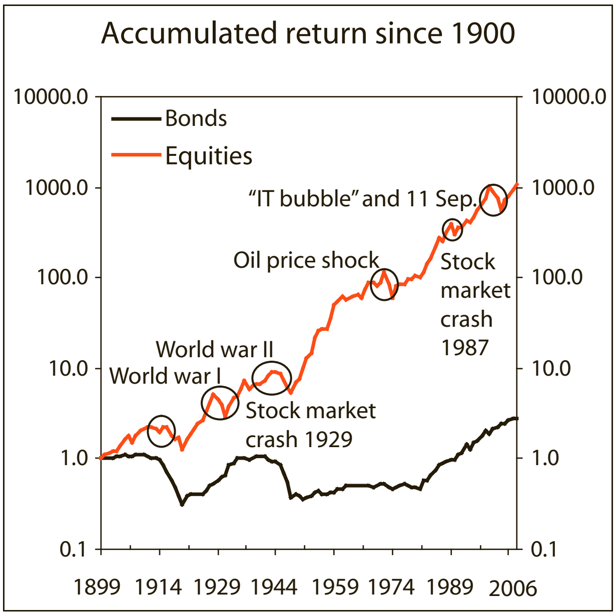

Figure 3.9 Real value of a portfolio starting with NOK 1 in 1899, up to and including 2006[1]. NOK

[1] The return is calculated on the basis of portfolio weights that are almost the same as the weights of the Government Pension Fund – Global. A logarithmic scale has been adopted. This means that losses and gains that are of the same percentage magnitude will be shown as equally large, irrespective of when these occurred over the time period covered.

Source: Ministry of Finance/Dimson, Marsh and Staunton

ties then turns out to be more profitable than the portfolio featuring 40 pct. equities over 87 of the 93 rolling 15-year periods. For the remaining six periods, the negative excess return from holding 60 pct. equities was limited. The least favourable 15-year period for equities according to these computations is the 15-year period up to and including 2004. Over this period, the portfolio comprising 60 pct. equities would have generated an accumulated return that was 15 percentage points lower than one comprising 40 pct. equities. The best 15-year period for the portfolio holding the highest equity portion was the period until 1963, when the portfolio comprising 60 pct. equities would have delivered an accumulated return that was 182 percentage points higher than the portfolio comprising 40 pct. equities. At the same time, the statistical robustness of these computations is weak, because the 15-year periods are overlapping each other in such a manner that the return from one year may be included in up to 15 of the 93 periods. Such overlapping observations therefore tend to underestimate the probability of loss.

Both historical returns and the model computations show that a higher equity portion results in more pronounced fluctuations in the return on the Fund from one year to the next, and in a somewhat higher probability of a negative accumulated return over 15 years. However, the Ministry is of the view that this increased risk remains moderate and that it can be accommodated, at least with an equity portion of 60 pct.

Given the very long investment horizon, the possibility of extreme events – e.g. relating to wars, natural disasters, climate changes and major financial breakdowns – is of relevance to the assessment of the Fund's risk. History shows that equity investments have been remarkably robust in the face of a number of major crises. Figure 3.9 shows that events like, for example, world wars, stock market crashes, etc., have in a longer time perspective only had a moderate impact on equity returns in the markets where the Fund is invested. The real value of the investment has recuperated to its level before the crisis occurred after only a few years.

One might envisage a number of alternative "crises" that may occur over the coming century. Problems relating to greenhouse emissions are an example. It is obvious that climate-related

Box 3.5 The allocations of other funds

The letter of 2 June 2006 from the Strategy Council to the Ministry of Finance includes a summary of how the capital of other funds is divided amongst equities, bonds and other asset classes. Other asset classes comprise, to a large extent, investments in real estate and infrastructure, as well as in so-called hedge funds.

Table 3.4 The investments of other funds, divided by different types of assets. Percent

Fund type	*Fixed income*	*Equities (incl. unlisted)*	*Other assets*
Large pension funds[1]	32	52.5	15.5
Reserve funds[2]	30	62.3	7.7
Endowment funds[3]	17.5	45	37.5

1 ABP, PGGM, CalPERS, New York State, Ontario Teachers' Pension Plan, Caisse des Dépôts.
2 AP1-AP4 (Sweden), Fonds de réserve pour les retraites (France), National Pension Reserve Fund (Ireland), Canada Pension Plan, New Zealand Superannuation Fund.
3 Harvard Endowment, Yale Endowment

Source: Norges Bank/Strategy Council

problems may impact on the returns on financial investments. At the same time, it must be assumed that market prices are already reflecting publicly available information concerning the possibility of such a crisis. An "environmental crisis" would have different effects on different companies. For some companies, this may present a profit opportunity. For others, it will induce losses. It is difficult to predict how this will affect the stock market as a whole. Reduced economic growth may reduce corporate earnings. At the same time, the risk premium may increase, which would reduce returns in the short run, whilst increasing expected returns, as compared to those on bonds, in the longer run. The best strategy for reducing the risk to the Government Pension Fund from such developments is therefore to spread the investments as much as possible, across different companies, industries and countries. In addition, one may exercise the Fund's ownership influence to change corporate attitudes to the environment.

As far as the returns on bonds are concerned, the key issue is how any climate problems will affect economic growth. The average duration of the bonds in the Government Pension Fund – Global is about five to six years, cf. Box 3.2. The capital currently invested in bonds therefore needs to be reinvested several times in coming decades. If climate problems result in reduced economic growth, this may also mean lower real returns on the bonds purchased by the Fund. Consequently, bonds are not risk-free in such a situation either.

Assessment of the equity portion in a broader perspective

In addition to the model computations and the analysis of historical risk, the Ministry has attached weight to certain more general considerations regarding the risk associated with the Fund's investments, which suggest that the risk resulting from an equity portion of 60 pct. may, in the view of the Ministry, be characterised as moderate:

- The overall value of the petroleum wealth comprises remaining oil and gas reserves and the current pension fund. By selling oil and gas, and investing in equities and fixed income, the petroleum wealth has been spread across more assets, and the overall risk has been reduced.
- The return on long-term investments in real interest rate bonds is now significantly lower than when the current investment strategy was established in 1997. This means that over this period it has become more challenging to achieve a real return of 4 pct. over time with the current equity portion of 40 pct.
- When assessing risk over very long time horizons, it is also an important consideration that equities and bonds are two fundamentally different investments. By purchasing equities, we purchase *ownership interests in the world's pro-*

duction capacity. By purchasing bonds we are extending a *nominal loan* to businesses and governments, as it is not possible to invest the entire Fund in real interest rate bonds, because of the Fund's size. By investing in nominal bonds we know, with a high degree of certainty, what the nominal return will be over the next few years. Nevertheless, such investments have been risky in the longer run, and the Strategy Council points out, in its letter to the Ministry of Finance, that the risk associated with bonds has increased with longer investment horizons. This has partly to do with the fact that the last 100 years included periods of very high inflation, which have resulted in negative real returns.

It is also relevant, for purposes of checking the Ministry's assessments, to look at what decisions other large funds have made in their choice of equity portion. A comparison with large pension and reserve funds shows that, whilst the Government Pension Fund – Global holds a bond portion of 60 pct., other funds more commonly feature a bond portion of 30 pct. Generally speaking, other funds also hold a higher equity portion than does the Government Pension Fund – Global. Large pension funds in Europe and the US commonly hold an equity portion in excess of 50 pct., whilst large government reserve funds commonly hold an equity portion of about 60 pct., Table 3.4 in Box 3.5.

Amendments to the guidelines

In the guidelines for the management of the Government Pension Fund – Global, it is stipulated that the Fund's strategic benchmark portfolio comprises 40 pct. equities and 60 pct. fixed income. The permitted range for the actual equity portion is 30 – 50 pct. There are two reasons for maintaining a corresponding range when increasing the equity portion.

- The stock and bond markets in the various geographical regions develop differently from one month to the next. In line with this, the portfolio's allocation between equities and fixed income will also move away from an equity portion of 40 pct. In order to avoid unnecessary transaction costs, the monthly inflows of capital are used to purchase equities or bonds in those regions that have shown the weakest development over the last month. To further reduce the need for transactions, it is permissible for the Fund's actual benchmark portfolio after the capital inflow to feature an equity portion that deviates somewhat from the strategic portion of 40 pct. over short periods.
- Another reason for permitting a range around the 40 pct. equity portion is the possibility that the manager may, based on a perception of the market situation, wish to over or underweight equities relative to fixed income, as compared to their distribution in the Fund's actual benchmark portfolio. Such deviations from the benchmark portfolio must take place within the tracking error limit, which has been fixed at 1.5 pct. by the Ministry. Thus far, Norges Bank has only to a limited extent chosen to over or underweight equities relative to fixed income, as can also be seen from the analysis of the excess returns in Chapter 2.

The Ministry is of the view that it would be appropriate, when increasing the equity portion, to maintain the current range for the permitted equity portion of +/- 10 percentage points relative to the equity portion of the strategic benchmark portfolio. A higher equity portion in the Fund will, *ceteris paribus*, somewhat increase the need for such a range. At the same time, the current guidelines for rebalancing and the large expected inflows to the Fund will, in combination with Norges Bank's strategy for achieving excess return, all contribute to preventing the equity portion held by the Fund from becoming significantly higher than the one featured by the strategic benchmark portfolio over time. One indication of this is the Fund's actual equity portion as per the end of each quarter since 2002, which has never been higher than 42.6 pct. (December 2003) or lower than 36.3 pct. (September 2002).

Conclusion

The overarching investment choices are of decisive importance to the expected return and risk of the Fund. The trade-off between risk and expected return is a political decision. Extensive and thorough documentation to underpin such a decision has now been gathered through the Ministry's own efforts and the advice obtained from Norges Bank and the Strategy Council. The Government has concluded, based on an overall assessment of such documentation, that an increase in the equity portion of the benchmark portfolio of the Government Pension Fund – Global from 40 to 60 pct. represents a good trade-off between the expected return and risk associated with the investments of the Fund. It is therefore proposed that the guidelines for the management of the Government Pension Fund – Global be amended, by way of the equity portion of the strategic benchmark portfolio of the Fund being fixed at 60 pct. At the same time, an equity portion in the range 50–70 pct. will be permitted. This implies that the bond portion of the strategic benchmark portfolio will be 40 pct. Consequently, the permitted range of the bond portion will be 30–50 pct.

Estimates as to the expected return are subject to considerable uncertainty, and historical experience shows that the return may vary a great deal. This uncertainty is so pronounced that the current estimate of 4 pct. has to encompass expectations of average real returns of 3, 4 as well as 5 pct. An increase in the equity portion does not justify an increase in the expected real return on which the economic policy guidelines are premised. Instead, the increase in the equity portion will make it more likely that a 4 pct. real return will be achieved over time. If the return turns out to be higher than expected, the amount that can be transferred to the Fiscal Budget will nevertheless be higher, because one can over time spend 4 pct. of a larger fund capital than would have otherwise been the case. Only if the achieved return over many years turns out to be significantly higher or significantly lower than 4 pct. would it be appropriate to assess whether the estimate of 4 pct. represents too high or too low an expectation as far as future returns are concerned.

The assessment of the consequences of increasing the equity portion is primarily focused on how this may influence the portfolio's return and risk in the long run. The assumption as to the expected return in the long run is based, *inter alia*, on analyses of the market's pricing of equities and bonds. At the same time, there is considerable uncertainty associated with market developments in the short run. It must therefore be acknowledged that the timing of the increase in the equity portion may in retrospect be perceived as more or less favourable. This risk is somewhat alleviated by the fact that the Fund's investments will be spread out in time, in line with the expected growth in the Fund. Besides, the Ministry will attach considerable weight to ensuring that the adjustment to a higher equity portion is implemented with low transaction costs. This implies that the adjustment may take several years.

3.3 Broadening of the benchmark portfolio of the Government Pension Fund – Global to include small-cap equities

3.3.1 Introduction

At present, shares of listed companies with low capitalisation (small-cap equities) are included in the investment universe of the Government Pension Fund – Global, but are not included in the Fund's benchmark portfolio. Equities in small listed companies form the largest individual segment amongst those listed markets that fall outside the scope of the benchmark portfolio.

The issue of investments in small-cap equities has been examined before. In a letter of 1 April 2003, Norges Bank recommended that small companies be included in the benchmark portfolio. Norges Bank pointed out that such a broadening would provide a better representation of the investment universe, and that the size and growth of the Fund calls for broad exposure to this part of the market as well. The Ministry of Finance deliberated the issue in connection with the National Budget for 2004, and concluded that one would not be including small companies in the benchmark portfolio at that point of time. The Ministry pointed out, *inter alia*, that the Graver Committee (NOU 2003: 22 Green Paper) had recently submitted its proposal on Ethical Guidelines for the Fund, and that one deemed it preferable to await the deliberation thereof before embarking on a significant expansion in the number of companies in the benchmark portfolio for equities.

In accordance with its advisory agreement with the Ministry of Finance, Norges Bank has again examined the issue of whether small, listed companies should be included in the benchmark portfolio. In its letter of 20 October, Norges Bank writes, *inter alia*, that:

> "Small-cap equities make up a substantial segment of the market. It is difficult to see why the Fund, as a large and long-term investor, should have an exposure to this segment which is substantially lower than that of the market in general. There are also moderate diversification gains to be had from including these equities. If small-cap equities are added to the benchmark portfolio, higher returns can be expected without a significant increase in volatility in the portfolio."

In a letter of 20 February 2007, the Strategy Council has also recommended that the benchmark portfolio be expanded to encompass the small-cap equity segment. The Strategy Council writes, *inter alia*, that:

> "Based on considerations relating to the overall return and risk of the Government Pension Fund – Global, the Strategy Council recommends that the Fund's benchmark portfolio for equities be expanded by inclusion of the small-cap equity segment. Although costs, when taken in isolation, will increase somewhat after such a broadening, it is likely that this will be covered by way of a better risk-adjusted expected return for the portfolio. Such a broadening will make the Fund's benchmark portfolio more representative of developments in the international stock markets. Furthermore, an expanded benchmark portfolio will offer a more appropriate basis for assessing the active management of the Fund. The Council deems the proposed broadening to be a reasonable consequence of the Fund's general investment strategy, which is to purchase a representative portfolio of the world's stock market."

3.3.2 The recommendations of Norges Bank and the Strategy Council

In its letter of 20 October, Norges Bank points out that small-cap equities may be added to the benchmark portfolio by way of the current benchmark index for equities, the FTSE All-World, which as per yearend 2006 comprised in excess of 2,400 large and medium-sized companies, being replaced by the FTSE All-Cap, which in addition contains approximately the 12 pct. smallest companies in each region as measured by market capitalisation. This means that the number of companies in the benchmark portfolio is increased to about 7,000 companies. The average capitalisation of the new companies is about 7 billion Norwegian kroner in the Americas and Europe, and about NOK 2 billion in Asia. In comparison, the average capitalisation of large and medium-sized companies in New Zealand, which is one of the smallest markets in the current benchmark portfolio, is about NOK 7 billion. Norges Bank points out that the benchmark portfolio of the Pension Fund will, following such a broadening, represent about 96 pct. of the stock markets included in the FTSE index, as compared to the current 85 pct.

Norges Bank writes that the main rationale behind the proposal is that small-cap equities form a large market segment that is excluded from the current benchmark portfolio, and that a broadening of the benchmark will give an exposure to this segment that is more in line with the market average. The Bank also attaches weight to the following arguments in favour of the benchmark index for equities being broadened to include small-cap equities as well:

- Historical returns from many countries show that small-cap equities have on average generated higher returns than the large company equities. The first studies to present this finding were published in the 1980s and in the early 1990s. Figure 3.10 illustrates that the observed excess return, also termed the "small-cap premium", varies from one period to another. The red bars in the Figure show average historical excess returns per month for small equities, as calculated in the first studies for each country. The black bars show the average premium for the period following the publication of the first findings, whilst the blue bars show average monthly excess returns on small companies for the period after 2000. The figures are not comparable across countries, because of differences in time periods and in the definitions of which companies are "small". Nevertheless, the Figure illustrates that returns on small-cap equities have been higher and lower than those on large-cap equities for periods of many years. For the markets with the longest time series, i.e. the United States and the United Kingdom, returns have been higher for small companies than for large ones throughout the period.[3]
- Returns on small-cap equities have varied more than returns on large-cap equities. Nevertheless, the risk level of broad equity portfolios comprising both large and small companies has not been significantly higher than that of portfolios including only large companies. This is because movements in the return on small companies have not been perfectly aligned with movements in the return on large companies.
- When the first studies of the return on small companies were made public, the prevailing theoretical interpretation of the functioning of the markets was that investors could only expect to be compensated for assuming one particular risk factor in the stock market, which was the risk associated with holding a

[3] Norges Bank here refers to data for the US market since 1926 and for the UK market since 1955.

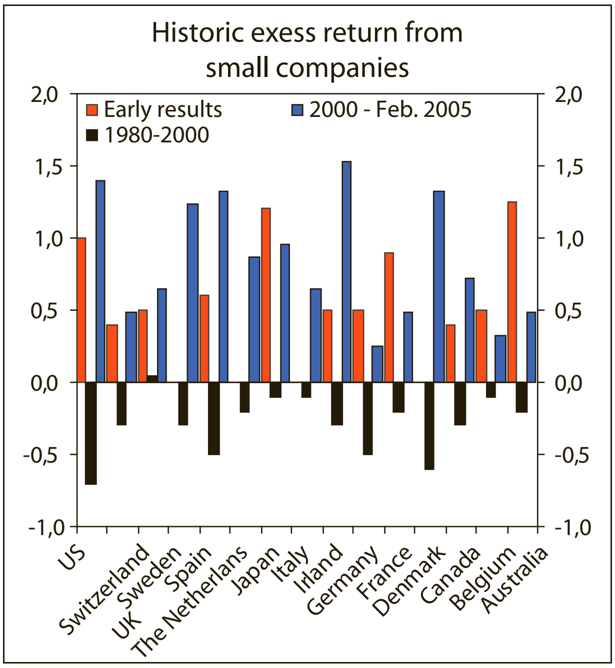

Figure 3.10 Average difference in monthly returns between large and small companies. Percent.

Source: Norges Bank

well-diversified portfolio of equities. The observations of higher historical returns on small-cap equities have therefore been labelled the best-documented deviation from the assumption of efficiently priced stock markets. Subsequently, one has sought to explain the difference in returns between small and large companies by way of multi-factor models, where the size of the companies is used as a separate risk factor to explain the returns on individual equities. In these models, small-cap equities are more risky than the equities of larger companies, which is counterbalanced by a higher expected return. A common explanation as to why equities of small companies would be more risky than other equities is that small companies will, on average, have a higher propensity for finding themselves in financial difficulties in times of weak economic development in society in general. Investors may therefore lose their capital during periods when they most need to generate a return, i.e. when the markets in general are weak. In order for investors to be willing to carry this risk, they have to be compensated by way of an additional risk premium. Norges Bank points out that this explanation is disputed in the academic literature. The Bank is of the view that the large, but varying, return differences between small and large companies over long periods of time suggest that the risk associated with small companies may constitute an independent and priced risk factor in the market. An investor like the Government Pension Fund, which is likely to have less of a need for liquidity than other investors during periods of weak economic development, should therefore, in the opinion of Norges Bank, be well placed to reap such a risk premium.

The arguments Norges Bank believes may be invoked against the inclusion of small companies are of a more operational nature:

- The costs associated with purchasing the equity portfolio will increase. Norges Bank estimates the costs incurred through the initial purchases at about 0.06 pct. of the overall equity portfolio of the Fund if such purchases are spread over ten months, such as to reduce the market impact. Additional cost reductions may be achieved through using ongoing capital inflows for equity investments, or through coordinating the phase-in of a new benchmark portfolio with an increase in the equity portion. At the same time, a gradual change in the benchmark portfolio of the many sub-portfolios of the Fund make it challenging to extend the phase-in period over a very long period of time.
- The costs associated with the maintenance of the portfolio will also increase. This is partly because the costs incurred per transaction are higher for small-cap equities, but first and foremost because there are more frequent changes in the composition of the index. Updated estimates for this cost increase suggest that the costs relating to the maintenance of the benchmark portfolio for equities will increase by 0.03 – 0.04 percentage point. Norges Bank goes on to state that investors will normally require high transaction costs to be compensated by way of higher gross returns. How realistic this is in the market for small companies depends, as pointed out by Norges Bank, on how efficiently the market actually works.
- More than 4,500 new companies in the benchmark portfolio will also require more resources to be devoted to Norges Bank's corporate governance efforts and to the Council on Ethics' assessment work concerning the potential exclusion of individual companies pursuant to the Ethical Guidelines for the management of the Government Pension Fund – Global.

– The five pct. ownership limit may, according to Norges Bank, make it more difficult to increase the current holding of small-cap equities for purposes of maintaining the desired deviations from the benchmark portfolio.

The Strategy Council has addressed the issue of small companies in a letter of 20 February 2007 to the Ministry of Finance. The Strategy Council deems the proposed broadening of the benchmark portfolio to represent a natural extension of the current investment strategy. The Council is also of the view that broadening the benchmark portfolio for equities to include the small–cap segment is likely to be favourable from the perspective of the Fund's return and risk, despite the higher costs implied by such a strategy. The Council also points out that a broadened benchmark portfolio will constitute a more appropriate comparative basis for the evaluation of Norges Bank's active management performance in relation to the Fund.

3.3.3 The Ministry's assessment

The objective of the investments of the Government Pension Fund – Global is to achieve the maximum possible return, given a moderate level of risk. To reduce the level of risk, the investments are spread across several asset classes, and each asset class contains several segments and sectors across many countries. At present, the benchmark portfolio for equities comprises in excess of 2,400 equities listed in market places in 27 countries. The value of the companies in the benchmark portfolio represents about 85 pct. of the overall value of the stock markets encompassed by the FTSE index. By including small-cap equities in the benchmark portfolio, as recommended by Norges Bank and the Strategy Council, one more segment will become included in the equity benchmark, with the result that the value of the companies included in the benchmark portfolio will represent about 96 pct. of the value of the stock markets encompassed by the FTSE index.

A practical approach to the assessment of such a broadening may be to split the life cycle of a business into the phases of growth and maturity. The growth companies are often found in the small-cap segment, whilst the largest businesses have entered a mature phase. It may be argued that a large and global fund like the Government Pension Fund – Global should be invested in broadly composed portfolio that encompasses both of these phases in the life cycle of companies.

A more theoretical perspective is that the world market portfolio, i.e. the portfolio of all equities in the world, offers the best trade-off between return and risk. The covariation between the return on small companies and that on large and medium-sized companies will be high, but they will not be fully aligned. This implies that a broadening of the benchmark portfolio will provide a somewhat more favourable ratio between average return and risk over time. This diversification benefit is expected to be moderate, but positive.

In addition to the diversification benefit as such, the recommendations from the Strategy Council and Norges Bank show that there is a possibility that the size of companies constitutes an independent and priced risk factor in the market. In such case the broadening will result in a further improvement to the Fund's risk-adjusted return, because investors can expect compensation in the form of a higher expected return on small companies. However, it is uncertain whether such a risk factor exists.

The management of small-cap equities is more costly that managing the equities of larger companies. In its letter, the Strategy Council writes that this may explain why several other large funds have only included small-cap equities amongst their permitted investments, whilst refraining from including these in the benchmark portfolio. The costs associated with initial adaptation are estimated at about 0.06 pct. of the value of the equity portfolio if the adaptation is effected over ten months. A long time horizon is adopted when purchasing the equities, and the Ministry is of the view that these costs should not be perceived as an obstacle to broadening the benchmark portfolio.

However, annual management costs will also increase. This may be illustrated through the annual costs incurred in maintaining a portfolio equal to the benchmark portfolio, with and without the small-cap equity segment. Revised estimates from Norges Bank indicate that these maintenance costs will increase by 0.03-0.04 percentage point if small companies are included. This means, with an equity portion of 60 pct., that overall costs may increase by about 0.02 percentage point. In its assessment of this cost increase, the Ministry has attached weight to the argument that one would expect, even in the absence of any priced risk factor associated with the size of companies, the Fund's risk-adjusted return to be maintained despite these increased costs.

Furthermore, the Strategy Council has pointed out, in its letter of 20 February 2007, that a broadened benchmark portfolio will constitute a more appropriate comparative basis for the evaluation of active management performance in relation to the Fund. The Strategy Council writes that:

> "The Strategy Council believes that considerations to do with the evaluation of active management performance also favour the inclusion of small-cap equities in the benchmark portfolio. Since small companies form a large segment in the stock market, and since GPFG [Government Pension Fund – Global] already has access to such investments, a benchmark portfolio that includes small companies will constitute a more appropriate comparative basis than does the current benchmark portfolio."

As part of its assessment of consequences in terms of the effort relating to the Ethical Guidelines of the Fund, the Ministry has requested the Council on Ethics to explain the implications for its work of the benchmark portfolio for equities being broadened through the inclusion of approximately 4,500 small companies. In a letter of 21 March 2007 to the Ministry of Finance, the Council on Ethics has highlighted three observations:

- The Council on Ethics writes that it will be possible to hire consultancy firms to monitor the portfolio through daily news searches and filtering the portfolio for companies that manufacture certain types of weapons, also when the portfolio is expanded to include small companies.
- The Council estimates that its annual costs will increase by about NOK 3 million because:
  - The price of monitoring the portfolio is expected to increase in proportion to the number of companies in the benchmark portfolio.
  - Less readily available information increases the need for hiring consultants with a stronger regional affiliation.
- The number of cases requiring additional assessment is expected to increase. It will therefore be necessary to strengthen the assessment capacity of the secretariat through, *inter alia*, the expanded use of external examiners to assist in the investigation of specific cases.
- Furthermore, the Council writes that: "When the number of companies increases, there is also an increased risk that the portfolio will include companies that are involved in activities that are in violation of the guidelines. Nor can the possibility that the availability of information is more restricted for small companies than for larger ones be ruled out. Nevertheless, the Council is not in possession of any information to suggest that investments in small companies as such are either more or less risky from an ethical perspective than other investments."

Based on the Council on Ethics' assessment of the consequences for its efforts relating to the deliberation of company exclusions, and Norges Bank's assessment to the effect that the costs associated with corporate governance efforts in relation to a significantly larger number of companies will be limited relative to overall management costs, the Ministry is of the view that concern for the efforts relating to ethics should not be perceived as an obstacle to a broadening of the benchmark portfolio.

The Regulations relating to the management of the Government Pension Fund – Global currently operate with a 5 pct. upper limit on ownership stakes in individual companies. This limit has been fixed on the basis of, *inter alia*, an assessment of the consideration that a low ceiling on ownership stakes is a clear signal that the Pension Fund is a "financial", as opposed to a "strategic", investor. On the other hand, Norges Bank writes that an important strategy in seeking excess return is to identify businesses with a large profitability potential at an early stage in the development of such businesses, and these will typically be small and medium-sized enterprises. If small-cap equities are included in the benchmark portfolio, it is likely that the managers will wish to increase their holdings to maintain the size of the active positions. The 5 pct. limit on ownership stakes may make this more difficult.

It will, under any circumstance, be necessary to embark on a renewed assessment of the ceiling on ownership stakes in the not too distant future, due to the overall effect of the Fund's strong growth and the increase in its equity portion. The Ministry is of the view that concern for the ceiling on ownership stakes should not prevent the benchmark portfolio from being broadened to include the small-cap segment. The Ministry will revert later with a renewed assessment of the upper limit on ownership stakes.

A final potential counterargument against the inclusion of small-cap equities in the benchmark portfolio at present is the market's pricing of such equities. Traditional indicators relating to the pricing of companies, like the ratio between price and dividends, indicate that small companies have become more expensive in recent years, relative to large companies. In its analysis, Norges Bank points out the possibility that the price one has to pay for small companies may be unfavourably high. At the same, the Bank writes that these signals are too weak to make them relevant to the issue of whether small companies should be included in the benchmark portfolio. The Ministry agrees with this assessment. In addition, the risk of purchasing the equities at a point of time that turns out, in retrospect, to be unfavourable is reduced as a result of the benchmark portfolio changing over time, and as the result of the Fund's investments in both large and small companies being spread out over time as the Fund received new inflows.

Against this background, the Ministry plans to broaden the benchmark portfolio of the Government Pension Fund – Global to include the small-cap equity segment of the FTSE index. The adjustment to the new benchmark portfolio will be implemented over a fairly long period of time.

3.4 The regulation of recognised market places and currencies for the Government Pension Fund – Global

3.4.1 Introduction

Section 4 of the Regulations relating to the management of the Government Pension Fund – Global stipulates a list of 42 permitted market places for equities (where the equities are listed) and the currencies of 31 permitted countries for bonds (which currency the bond is issued in). Within the list of permitted investments, the benchmark portfolio comprises indices for 27 stock markets and bond indices for the currencies of 21 countries.

The list of recognised markets and currencies for the Government Pension Fund – Global has been deliberated at regular intervals in the Budget documents, and was last expanded in 2003 in connection with the National Budget for 2004. The deliberation was based on input from Norges Bank.

The National Budget for 2006 discussed several changes to the framework governing Norges Bank's management of the Fund. The new guidelines, which entered into effect on 1 January 2006, have less of an emphasis on the detailed regulation of which markets and instruments the Fund may invest in. In a letter of 11 March 2005, Norges Bank wrote, in the context of this rearrangement, that there was no need, from the perspective of the overall level of risk assumed by the Fund, for the Ministry to lay down detailed regulations as to which countries the Fund could be invested in either. At the same time, Norges Bank wrote that other considerations might nevertheless suggest that the Ministry should prepare a list of permitted market places and currencies. The National Budget for 2006 includes the following remarks in relation to Norges Bank's proposal:

> "The Ministry of Finance appreciates Norges Bank's argument that the detailed regulation of which countries and currencies are permitted for investment is not required for purposes of managing overall risk. At the same time, other considerations favour the continued use of such a list. (…) The Ministry is of the view, based on an overall assessment, that the list of countries pertaining to the Petroleum Fund shall remain part of the guidelines. One intends to subject the list of countries to renewed examination, with a view to its potential expansion. One will in this effort be drawing on, *inter alia*, advice from Norges Bank. The Ministry will revert to this matter."

In a letter of 13 July 2006, the Ministry requested input from Norges Bank for a renewed examination of the list of permitted market places and currencies. One also asked about Norges Bank's views on whether it would be more appropriate to define the investment universe for fixed income through a list of recognised issuing countries instead of a list of currencies.

In a letter of 4 September 2006 to the Ministry, Norges Bank primarily recommends transition to an arrangement without any explicit list of permitted markets and currencies being set out in the Regulations, whereby it would instead be up to Norges Bank to prepare internal guidelines as to which markets and currencies the Fund may invest in. Alternatively, Norges Bank recommends that a new list be set out in the Regulations, expanded by 38 market places for equities and 49 currencies for fixed income. Consequently, Norges Bank recommends that the list, if any, should continue to define permitted countries for the listing of equities and currencies of permitted countries in which the bond portfolio may be invested. The letter from Norges Bank is available on the Ministry's website (www.finansdepartementet.no).

3.4.2 The Ministry's assessment

The Ministry is of the view that an expansion of the list of permitted markets and currencies for the Government Pension Fund – Global may increase Norges Bank's opportunities for generating an excess return relative to the Fund's benchmark portfolio. Moreover, the experience gained by Norges Bank through investments in several less developed markets may provide useful input for a future evaluation of whether the benchmark portfolio should be expanded to include new markets. At the same time, an increase in the number of countries should be combined with a clearer division of responsibility between Norges Bank and the Ministry of Finance as far as concerns assessments relating to where the Fund should be permitted to invest.

In its letter of 4 September 2006, Norges Bank proposes that the Bank should itself approve which markets the Fund may invest in. This recommendation is based on the reasoning that the economic assessment of markets and currencies may be delegated to the operational manager, within the general requirements concerning valuation, return measurement, as well as the management and control of risk, set out in the guidelines laid down by the Ministry. A significant increase in the number of permitted markets and currencies raises a number of issues:

- Both the supervision of financial activities and relevant legislation may be inferior to that in developed markets. The settlement and clearing systems in many of the countries may be of a lower quality, and both political and macroeconomic risk are of a different nature than in developed markets.
- Measurement of the Fund's return requires the pricing of the securities in the portfolio. In new markets, the quality of pricing may be significantly lower than that in the markets where the Fund is already invested.
- Because risk measurements are in principle a matter of repeated pricing, one will be facing the same challenges when it comes to the measurement and management of market and credit risk as in the pricing or valuation of a portfolio. In addition, there has to exist information that enables the calculation of the price and risk associated with the security. For bonds this will, for example, be an overview of coupon payments, the loan repayment profile, as well as any options embedded in the bond. There will in many cases be no price history available for new markets. This will make it difficult both to measure risk and to price the instruments. For new markets it may, in addition, be more difficult to obtain supplementary information like repayment profile and options, etc.

The Ministry of Finance would therefore require Norges Bank to have completed, prior to the implementation of investments in new countries, a thorough process, which would in each individual case provide the bank with an overview of relevant issues relating to valuation, return measurement, as well as the management and control of risks associated with investments in each individual market and currency. Such effort would be required to include an assessment against the requirements implied by the Regulations and the supplementary guidelines, and to be documented. Provided that these requirements are met, the Ministry is of the view that there is no need for the detailed regulation of permitted markets on the part of the Ministry, as far as the management of the overall risk level of the Fund is concerned.

In the National Budget for 2006, the Ministry emphasised that other considerations favoured the continuation of the arrangement whereby a list of recognised markets and currencies was included in the guidelines of the Government Pension Fund – Global. In view of Norges Bank's letter of 1 September 2006, the Ministry has undertaken a renewed assessment as to whether other considerations, like possible signal effects, ethical considerations or issues of a more political nature, suggest that the Ministry should be responsible for permitting investments in new markets and currencies. This review favours, in the view of the Ministry, Norges Bank's primary recommendation, to the effect that Norges Bank should assume responsibility for preparing internal guidelines as to which markets and currencies the Fund may be invested in.

Ethical Guidelines for the Fund have been introduced since the last time the list was changed in 2003. The guidelines apply at company level, and cover activities in all countries where a company operates, independently of where the company is listed. The Graver Committee, which in the NOU 2003: 22 Green Paper laid the foundations for the current Ethical Guidelines, stated clearly that it would be difficult to justify, on the basis of ethical considerations, prohibitions on investments in the government bonds of certain countries, and that regular foreign policy channels represented a much more important tool for influencing the governments of other countries in the desired direction, than did exclusion from the Fund's investment universe.

The list of permitted market places for equities and permitted currencies for fixed income is not suitable for purposes of excluding participation in activities in individual countries. A company listed in a recognised market place in a given country may, for example, have large parts of its activities concentrated in a country that is not included in the Fund's investment universe. Furthermore, bonds issued by companies or states outside the list set out in the Regulations will be permitted as long as the bonds are issued in a currency that is included on the list of permitted currencies.

The Ministry proposes, on the basis of an overall assessment, that the current list of recognised markets and currencies be deleted from Section 4 of the Regulations relating to the management of the Government Pension Fund – Global. At the same time, Section 3.2 of the guidelines, on interest-bearing securities issued by the public sector in the currency of another country, will be amended, and Section 4 of the guidelines will include an explicit documentation requirement. This implies that Norges Bank will be required to document satisfactory routines for the assessment of permitted markets and currencies. The arrangement whereby the Council on Ethics evaluates the investments in equities and corporate bonds will be continued. Investments in equities and corporate bonds are subject to the Ethical Guidelines laid down by the Ministry, and the Council on Ethics will be responsible for rendering advice on the exclusion of companies in the new markets.

It is further intended to establish a procedure whereby the Ministry of Finance may prevent Norges Bank from investing in government bonds issued by specific countries. This will result in a clear division of responsibility between the Ministry and Norges Bank. Norges Bank will assess the financial aspects of the investments, whilst the list prepared by the Ministry establishes a procedure to ensure the exclusion of government bonds from individual countries if such exclusion enjoys broad political support. To avoid the creation of uncertainty as to the purpose of the Fund's investments, it is emphasised that such decisions have to reflect broad political agreement in line with the principle of "overlapping consensus" as defined by the Graver Committee. Decisions not to invest in the government bonds of individual countries should therefore primarily apply to countries in respect of which UN sanctions have been imposed, or countries that are subject to other special international measures supported by Norway. The Government intends, against the background of the measures adopted by the EU and other countries against Burma (Myanmar), to amend the guidelines in such a way as to explicitly bar Norges Bank from investing the Pension Fund's capital in bonds issued by the state of Burma. In formal terms, this will take place in connection with the amendment of the Regulations, cf. the discussion above.

3.5 Real estate and infrastructure in the Government Pension Fund – Global

3.5.1 Introduction

In the National Budget for 2007, it was pointed out that the largest asset class that currently falls outside the benchmark portfolio of the Government Pension Fund – Global is real estate, and that the Ministry will be embarking on an assessment of the scope for including this asset class in the benchmark portfolio. Most large institutional investors have invested parts of their portfolios in the property market. A report prepared for the Ministry by CEM Benchmarking shows that the world's largest pension funds hold average investments of 6 pct in real estate.[4] These investments generate a return that depends on the price developments of, and rent incomes from, office buildings, shopping centres, industrial buildings and, to a certain extent, other types of property as well. A low degree of covariation between the return on real estate and the return on equities and fixed income, a high direct return in the form of rent income, and a desire to protect the portfolio against inflation, are often highlighted as motivating other funds' investments in real estate.

Although the Pension Fund – Global currently has no separate allocation to real estate, the Fund has exposure to the property market through its investments in listed real estate equities, which are included in the Fund's benchmark portfolio. Just below 2 pct. of the market value of the Fund's benchmark portfolio for equities is comprised of real estate equities. In addition, many of the companies in the Fund's equity portfolio will own their

[4] The analysis company CEM Benchmarking Inc. compares, *inter alia*, the costs incurred by the Government Pension Fund – Global to those of other funds. It has selected a reference group comprised of large pension funds, which on average held a real estate portion of 6 pct., incl. REITS, as per yearend 2005.

own production and office premises. It is difficult to determine the impact of this on the risk profile of the equity portfolio.

The size of the market for listed real estate equities is on the increase, not least because an ever-increasing number of countries are facilitating the establishment of tax-transparent investment companies in the property market, so-called REITs[5], which are aimed at institutional and private investors. However, the unlisted market is much larger than the listed one, and is likely to remain so for a long time to come. A significant portion of the real estate portfolios of other large funds is therefore held in the form of unlisted investments.[6] Such investments are often illiquid. It is, for example, not uncommon for investments in unlisted real estate funds to in practise imply that one binds the invested capital for more than ten years. One may sell one's interests in the fund in the secondary market, but will then have to expect to sell such interests at a not insignificant discount from their real value. It is commonly assumed that investors are compensated, in the form of a higher expected return, when investing in less marketable assets. This excess return is often labelled an illiquidity premium. The Government Pension Fund adopts a long investment horizon, and the probability that it will have to sell its holdings on short notice is low. Generally speaking, the Fund is well placed to reap such illiquidity premiums.

Investments in infrastructure projects, like electricity and water supply, toll roads, airports and telecommunications, have traditionally represented a limited market. However, increasing participation and funding from the private sector in recent years have made such investments attractive for long-term financial investors. Although this market is expanding, and is expected to undergo considerable growth in coming years, it remains small compared to the property market. Nevertheless, it would be appropriate to examine such investments concurrently with an examination of investments in real estate, since the return and risk characteristics of infrastructure investments as similar to those of traditional real estate.

5 Real Estate Investment Trusts. These companies will pay a dividend to their shareholders that is tax-exempt on the part of the company, but must at the same time undertake to maintain a predominant portion of their overall investments in real estate, and to distribute a predominant share of their net rent income to their shareholders in the form of dividends.

6 The investments are made through different company structures, real estate funds, discretionary management mandates, joint ventures or other forms of strategic cooperation and co-ownership with local players in the various markets.

3.5.2 Norges Bank's recommendation

In its letter of 20 October 2006 to the Ministry of Finance, Norges Bank has, *inter alia*, recommended that the Government Pension Fund – Global be invested in real estate and infrastructure.

Norges Bank is of the view that there are two main arguments in favour of including real estate and infrastructure in the Fund's benchmark portfolio. Firstly, the Pension Fund is well placed to reap illiquidity premiums. Secondly, investments in real estate and infrastructure imply that the risks assumed by the Fund are spread across more asset classes. This implies that such investments may reduce the level of risk assumed by the Fund, without reducing its expected return.

It is commonly assumed that investments in real estate are characterised by average returns and risks that in the long run fall between the levels associated with equities and bonds. The reason why such investments may nevertheless reduce the overall risk level of the Fund, without reducing its expected return, is that the return on real estate is influenced by factors that are peculiar to that market, or that factors which influence the return on other asset classes have a different impact on the property market. This implies that the returns on investments in the property markets and in the other capital markets will not be fully correlated.

Another important reason why funds tend to hold investments in real estate is that such investments are expected to generate a stable real return over time, i.e. to offer good protection against surprising changes in inflation. For funds carrying explicit liabilities that will increase in line with inflation, the combination of inflation hedging and higher returns than on inflation-hedged bonds will be valuable. According to Norges Bank, this is of lesser importance to the Government Pension Fund. Besides, the degree of inflation hedging will vary between markets and projects, and particular demand and supply conditions in the property markets may also limit such effect. Norges Bank is therefore of the view that inflation hedging considerations should not be accorded much weight in assessing a separate allocation to real estate.

The management costs incurred in relation to investments in the property market will be significantly higher than those associated with management in listed markets. CEM's cost report for 2005 shows that the funds comprising the group of comparable funds incurred, on average, annual management costs of just below one percentage point in relation to unlisted, externally managed real estate.

Norges Bank writes that it will probably not be practicable, within the foreseeable future, to achieve a higher exposure to real estate and infrastructure than one corresponding to about 10 pct. of the overall portfolio. The model computations of the Bank confirm that such an allocation may result in a better diversification of the Fund's risk. If such investment is matched by correspondingly lower investments in fixed income, the overall risk level of the Government Pension Fund – Global would be more or less unchanged, whilst the expected return on the portfolio would increase. Norges Bank further writes that:

"Norges Bank recommends that, in the light of the probable liquidity premium and the probable diversification gains from investing in real estate and infrastructure, it be made a long-term strategic target for up to 10 per cent of the Government Pension Fund – Global to be invested in this asset class. This portfolio will have to be built up gradually over a period of several years."

Finally, the letter points out that it would be necessary to define an investment mandate that specifies the required rate of return, risk limits and reporting requirements before embarking on any investments in real estate and infrastructure.

3.5.3 The Ministry's assessment

The objective of the investments of the Government Pension Fund is to achieve the maximum possible return, at a moderate level of risk, cf. above. The scope for further diversifying the risk associated with the investments by including investments in real estate and infrastructure, and the scope for reaping a gain over time by investing in less marketable investments, should therefore be examined more closely.

The Ministry has requested the Strategy Council to evaluate whether the return and risk characteristics associated with investments in real estate suggest that such investments should form part of the benchmark portfolio of the Fund. The Strategy Council has commissioned external real estate management experts to prepare a report on investments in real estate. This report will, together with the analysis performed by Norges Bank, provide valuable inputs to the evaluation to be carried out by the Strategy Council.

Before it can be decided whether real estate and infrastructure should be covered by the Fund, it is also necessary, in addition to the technical investment considerations, to shed more light on the challenges in terms of administrative control. The manner in which the equity and bond portfolios of the Government Pension Fund – Global are managed at present, with a benchmark portfolio and an upper limit on tracking error, will not be directly applicable to a portfolio comprising real estate and infrastructure investments, irrespective of how such management is organised. The fixed-income and equity indices used by the Pension Fund are updated on a daily basis. Those indices that are available in the property market are updated monthly, quarterly or annually. Values will mainly be based on appraisals, and only to a lesser extent on completed transactions. The index values will therefore be uncertain, and difficult to use as a standard of comparison for the actual performance of this part of the portfolio. Nor will the indices be good management tools for actual investments because, *inter alia*, in many countries these only reflect developments in a limited part of the property market.

International investments in real estate will involve the manager being granted wider authority than is the case for Norges Bank's management of the current equity and bond investments. Such an assignment would imply less control over the contents of the real estate portfolio on the part of the Ministry, which would instead have to place more of an emphasis on reporting requirements in combination with management evaluations in cooperation with external experts.

Since a large share of the return is in the form of direct returns from rent income, the assessment of tax implications is an important aspect of real estate management on the part of other funds, and may impact on the composition of the portfolio. The Ministry will therefore have to examine the tax implications of real estate investments in the Government Pension Fund – Global in more detail.

In order to ensure that all aspects of this issue are illuminated, the Ministry will initiate several studies relating to expected return and risk, the organisation of the management effort, as well as the management model. Based on such work, the Ministry will revert with an assessment as to whether real estate and infrastructure should be included amongst the Fund's investments.

4 Ethics and exercise of ownership rights

4.1 Ethical considerations in the management of the Government Pension Fund

4.1.1 The integration of ethical considerations in the management of the Government Pension Fund

The Government Pension Fund is owned by the Norwegian people and coming generations of Norwegians. It is an ethical responsibility for an investor to ensure that the owners of the Fund achieve a favourable return over time. A favourable return on the Fund over time represents an important contribution to safeguarding the welfare state. In addition, investors should also share responsibility for how the companies in which they invest are conducting themselves, for what they are producing and for how they are treating the environment. The Government deems it important to integrate this type of responsibility into the management of the Government Pension Fund, because it promotes values that are important to the Norwegian people, and because it represents an important contribution to raising awareness amongst investors and companies domestically and abroad.

The Ministry of Finance laid down Ethical Guidelines for the Global part of the Government Pension Fund on 19 November 2004, based on the report and proposal of the Government-appointed Graver Committee (NOU 2003: 22 Green Paper). The same year, the Executive Board of Folketrygdfondet (also known as the National Insurance Scheme Fund) introduced Ethical Guidelines for the management of the Government Pension Fund – Norway. The guidelines for the two parts of the Government Pension Fund are largely built on a joint ethical platform. At the same time, the tools deployed in integrating ethical considerations are somewhat different in view of the different sizes, different investment strategies and different investment universes of the funds.

Responsibility for exercising ownership rights for the Fund lies with Norges Bank and Folketrygdfondet. The overall objective of the ownership effort is to safeguard the financial interests of the Pension Fund. This means that the capital shall be managed in such a way that it generates a favourable return over time and creates lasting value for current and future generations. The Ministry takes the view that there is a linkage between sustainable economic development and sustainable social and environmental development. This means that the Government Pension Fund in the long run will benefit from companies respecting fundamental ethical norms. This basic perspective is reflected in the UN Global Compact and in the OECD Guidelines of Corporate Governance and for Multinational Enterprises, cf. Box 4.1. The ownership principles of the Government Pension Fund – Global and the Government Pension Fund – Norway are primarily based on these international principles. Norges Bank and Folketrygdfondet will, in line with this, seek to, *inter alia*, influence companies in which they invest to respect fundamental ethical norms.

On 8 December 2006, the Ministry of Trade and Industry submitted Report No. 13 (2006–2007) to the Storting, “Active and Long-Term Ownership”. The Report examines companies that are partly or fully owned directly by the ministries, and discusses, *inter alia*, the responsibility of the owners for contributing to the long-term growth and development of the companies. There are important differences between the potential influence of the State in its capacity as large, long-term owner of Norwegian companies and that of the State in its capacity as financial investor through the Government Pension Fund, which is mainly invested abroad. At the same time, it is a shared characteristic that the State has to emphasise, both in its capacity as owner and in its capacity as investor, good corporate governance and corporate management, as well as environmental and social concerns. This is necessary in order for the companies to be well run and in order to create lasting value for the owners.

Box 4.1 Exercise of ownership rights

The principles governing the exercise of ownership rights of the Government Pension Fund are based on the UN Global Compact, the OECD Principles of Corporate Governance and the OECD Guidelines for Multinational Enterprises. Norges Bank and Folketrygdfondet have, on the basis of these principles, defined their own guidelines governing the exercise of ownership rights of the Government Pension Fund – Global and the Government Pension Fund – Norway, respectively. The Bank and Folketrygdfondet discuss these guidelines in their respective annual reports.

The UN Global Compact

The UN Global Compact defines ten universal principles derived from the Universal Declaration of Human Rights, the ILO's Declaration on Fundamental Principles and Rights at Work and the Rio Declaration on Environment and Development. The principles are general in nature and say, *inter alia*, that businesses should respect human rights and make sure that they are not complicit in human rights abuses, uphold the freedom of association and collective bargaining, as well as eliminate all forms of forced and compulsory labour, child labour and discrimination in respect of employment and occupation, support a precautionary approach to environmental challenges, as well as promote greater environmental responsibility and the development and diffusion of environmentally friendly technologies, work against all forms of corruption, including extortion and bribery.

2,900 companies and organisations in more than 100 countries have joined the Global Compact. The members are encouraged to report annually on their own compliance with the principles.

OECD Principles of Corporate Governance

These are very extensive principles that mainly address the basis for an effective corporate governance framework, the rights of shareholders and key ownership functions, the equitable treatment of shareholders, transparency and disclosure, and the responsibilities and liabilities of boards of directors.

OECD Guidelines for Multinational Enterprises

The guidelines are voluntary principles and standards for responsible business practises in many different areas in accordance with laws applicable to multinational companies. The guidelines represent the only multilaterally recognised and detailed regulatory framework that governments are obliged to promote. They contain recommendations on, *inter alia*, public disclosure of company information, working environment and employee rights, environmental protection, combating bribery, consumer interests, the use of science and technology, competition, as well as tax liability.

4.1.2 Tools used to integrate ethical considerations

The Government Pension Fund – Global is in its entirety invested in securities abroad. The investment strategy of the Fund is reflected in a benchmark portfolio comprising broad equity and bond indices. As per yearend 2006, the Fund held equity investments in about 3,400 companies. Norges Bank's average ownership stake in these companies is about 0.4 pct.

The tools used in the integration of ethical considerations are adapted to the Fund's investment strategy, hereunder the fact that its capital is broadly invested across many companies, with small ownership stakes in each company. The Ethical Guidelines of the Fund prescribe two policy instruments, exercise of ownership rights and exclusion of companies, as tools to promote the ethical commitments of the Fund, cf. the more detailed discussion in Sub-chapter 4.2.

The Government Pension Fund – Norway is primarily invested domestically. The benchmark index for the equity investments of the Government Pension Fund – Norway comprises the main index of the Oslo Stock Exchange and the Nordic equity index VINXB[1]. As per the end of

[1] In 2006, the FTSE NOREX 30 was used as the benchmark portfolio for the Nordic equity investments of the Government Pension Fund – Norway. With effect from January 2007, this has been changed to the more comprehensive equity index VINXB, which comprises about 150 companies.

last year, the Fund held ownership stakes in a total of 41 companies listed on the Oslo Stock Exchange and 32 companies in Denmark, Finland and Sweden. Folketrygdfondet's average ownership stake in Norwegian companies is about 5 pct. Last year, its average ownership stake in other Nordic companies was about 0.3 pct. As from 2007, its average ownership stake in the Nordic region is considerably less since its investments will from now on be spread across more companies.

In its management of the Government Pension Fund – Norway, Folketrygdfondet emphasises positive selection of the companies in which its capital is to be invested, and thereafter the exercise of ownership rights in the same companies. This has to do with the fact that the investment universe is well-defined and comprised of a relatively limited number of companies.

Exercise of ownership rights

The basic principles governing their ownership efforts are the same for the Government Pension Fund – Global and the Government Pension Fund – Norway, cf. Box 4.1. Norges Bank and Folketrygdfondet have formulated their own principles for the exercise of ownership rights, which are founded on these basic principles. The ownership efforts of Norges Bank and Folketrygdfondet are discussed in more detail in Subchapter 4.2.

Exclusion of companies

Companies shall be excluded from the investment universe of the Government Pension Fund – Global, pursuant to the Ethical Guidelines for the Fund, if they are involved in production or undertakings that imply an unacceptable risk that the Fund contributes to grossly unethical activities. The Ministry of Finance has excluded 21 companies from the Government Pension Fund – Global pursuant to the Ethical Guidelines, based on recommendations from the Council on Ethics for the Fund. See Box 4.4 for a more detailed description of the mechanism for exclusion of companies.

Folketrygdfondet may also exclude companies as part of its management of the Government Pension Fund – Norway, but has not done so thus far.

4.2 Application of the ethical guidelines

4.2.1 Introduction

Figure 4.1 shows the distribution of responsibility between the Ministry of Finance, Norges Bank and the Council on Ethics in their work relating to the Ethical Guidelines for the Government Pension Fund – Global. The Council on Ethics has no formal role as far as Folketrygdfondet is concerned. Nevertheless, the Ministry of Finance would require a Nordic company held by both the Government Pension Fund – Norway and the Government Pension Fund – Global to be removed from the investment universe of both funds if the Ministry renders a decision for the exclusion of such company.

4.2.2 Norges Bank's exercise of ownership rights

The Ethical Guidelines for the Government Pension Fund – Global stipulate that the exercise of ownership rights shall primarily be based on the UN Global Compact and the OECD Principles of Corporate Governance and for Multinational Enterprises, cf. Box 4.1. These represent the fundamental principles governing the exercise of the Fund's

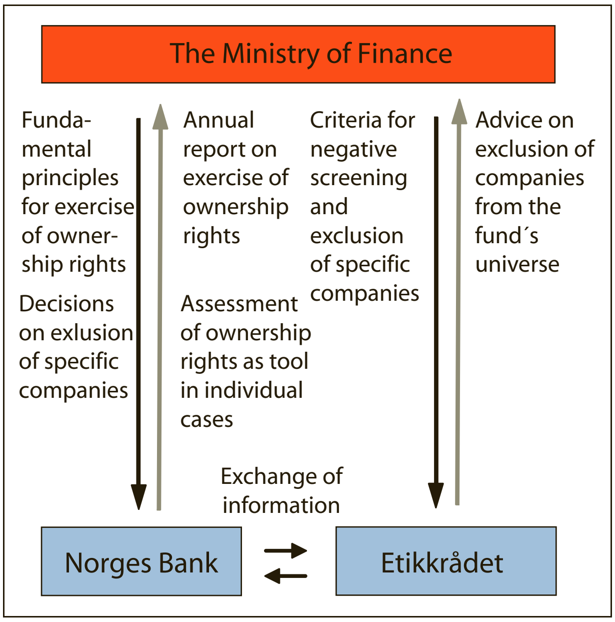

Figure 4.1 The distribution of responsibility between the Ministry of Finance, Norges Bank and the Council on Ethics in their work relating to the Ethical Guidelines for the Government Pension Fund – Global.

Source: Ministry of Finance

ownership rights. Norges Bank has adopted internal guidelines for its active ownership in line with these fundamental principles. The companies are subject to a number of requirements relating to their objectives, strategies and transparency. Furthermore, there are requirements as to the companies' form and structure of governance, as well as to their long-term sustainability, inasmuch as the companies need to take into account the effects of their own activities on the environment and on society in general. The principles also include a discussion of ownership tools, as well as on Norges Bank's own reporting on their ownership activities.

Norges Bank has devoted considerable resources to establishing robust and targeted ownership activities. During an initial phase, particular weight has been attached to accumulating expertise, leadership capacity and an international network. The objective for the coming four-year period is to become acknowledged as one of the world's most prominent and professional active owners. This is in line with the Government's objective that the Government Pension Fund shall be the best-managed fund in the world, also in terms of ethics and exercise of ownership rights. In order to succeed in this, Norges Bank has deemed it necessary to prioritise certain selected areas of commitment.

Norges Bank has sought to identify areas of commitment where ethics are aligned with long-term financial returns. Weight has been attached to ensuring that the themes will be of relevance to investors in general and to the Fund's portfolio in particular; that the themes will be suitable for dialogue with companies and/or regulatory bodies and offer prospects for real results; and that the themes will be financially justifiable.

Areas of commitment over the period 2007–2010

Norges Bank's key areas of commitment in its exercise of ownership rights are:

- good corporate management, with a main emphasis on owners' rights to nominate and appoint directors, to exercise their voting rights, to trade in their equities, and to receive transparent and timely information;
- children's rights and health, hereunder the battle against child labour, with a main emphasis on the value chain of multi-national companies;
- corporate lobbying in relation to long-term environmental problems, hereunder climate changes.

Good corporate management lies at the heart of all corporate governance activities. Norges Bank will, in the context of this effort, have a special focus on (1) The right to cast votes at the shareholders' meetings of the companies, and the safeguarding of predictable voting rules in all markets in order that the rights of minority shareholders will also be protected; (2) The right to nominate and appoint directors, and thus hold the boards of directors accountable; (3) The right to trade freely in the equities and to have a saying in relation to any poison pills; (4) The right to receive transparent and timely reporting from the companies. Norges Bank believes that it is important to ensure that the ownership rights may be exercised effectively. This will be a prerequisite for safeguarding the financial interests of the Fund, but also for being able to prevail in prioritised areas like the environment and human rights.

Norges Bank deems the battle to safeguard the rights and health of children to be of financial importance for an investor with a long-term horizon, because exploiting children and depriving them of opportunities for education and schooling are not sustainable in the long run. Moreover, such conduct on the part of a company may jeopardise the reputation of the company and the legitimacy of the market as a whole. Norges Bank's main objective within this area of commitment is to improve the situation of children employed in, or directly affected by, the value chain of companies in the Fund's portfolio. The Bank will seek to influence the companies to observe the requirements in the UN Global Compact, the ILO Convention on Child Labour and other relevant international standards. One shall also, where realistic, seek to influence the companies to go beyond such minimum standards in order to thereby safeguard the rights of children within the spheres of activity and influence of the companies.

Norges Bank will be focusing on environmental factors that may influence the long-term sustainability of the markets. The risk of climate changes is, for example, such an environmental factor. Political initiatives and market regulations will be of crucial importance to the battle against major climate changes. The Bank is of the view that investors are in a position to supplement this effort by exercising their influence. Norges Bank will in this context be working with individual companies and business sectors in order to create improved transparency as far as corporate environmental lobbying is concerned. Furthermore, the Bank wishes to promote responsible and transparent lobbying as an area where investors may contribute to responsible environmental protection measures. This same approach may also be of relevance to other environmental issues, hereunder the reduction in biodiversity of long-term importance to entire ecosystems, the unsafe handling of nuclear waste and the long-term destruction of potable water sources.

The Ministry is supportive of Norges Bank's ownership strategy and it believes that the rights of children and the protection of the environment are amongst the important, fundamental ethical norms that the ownership influence should contribute to safeguarding.

Tools for exercising ownership rights

Norges Bank deploys different tools in its ownership effort. Voting rights are of key importance in this context. The Bank exercises the voting rights associated with most of the companies in the equity portfolio of the Government Pension Fund – Global, for purposes of promoting key themes within the areas of corporate management, human rights and the environment. Norges Bank regularly contacts companies before and after their shareholders' meetings, to ensure that the companies are appraised of the Bank's views, and to influence the companies. Voting behaviour is an important platform for various parts of Norges Bank's active ownership, because company liaising outside the shareholders' meetings becomes more credible if based on well-planned voting behaviour.

In 2006, the Bank voted on 26,826 matters, in a total of 2,928 shareholders' meetings. In accordance with the ownership principles, Norges Bank has supported matters that promote:

– the company having a clearly defined business strategy, vested in its board of directors;
– the company disclosing sufficient information respecting its economic and financial position, and other relevant circumstances;
– the establishment of internal management and control systems that are tailored to the business, and the board of directors of the company attending to the interests of all shareholders;
– the board of directors comprising a sufficient number of directors holding relevant and sufficient qualifications, the majority of whom are independent;
– the board of directors being accountable for its decisions.

Box 4.2 Proposals submitted by shareholders and supported by Norges Bank

Norges Bank cast votes in respect of about 700 proposals submitted by shareholders in 2006, and supported such proposals in more than half of these cases. Proposals submitted by shareholders will in most cases not be supported by management. Such proposals are mainly concerned with the preservation of shareholder rights, the activities and structure of the board of directors, the remuneration of managers, and proposals of a social and environmental nature. The Bank has, *inter alia*, supported proposals promoting:

– equal voting rights for all shares;
– that options shall be expensed;
– that the allotment of options and other remuneration in the form of equity instruments shall be performance-related;
– that a majority of the directors shall be independent;
– that the remuneration of senior management shall be disclosed in the annual report;
– that the company shall prepare ethical guidelines relating to human rights and report on compliance therewith, in particular for activities in countries where human rights have traditionally not been respected;
– that the company guidelines on equal rights for employees, and the measures adopted by the company to ensure such equal treatment, be reported;
– that a company within the petroleum sector reports on the consequences of its activities as far as ecosystems in specific geographical areas are concerned;
– that a company within the petroleum sector reports on how it will prepare for, and adapt to, any amendments to regulations in connection with climate change, and what effect this may have on its competitive situation;
– that a company publishes or adopts guidelines based on internationally recognised standards for working conditions on the part of foreign subcontractors, and that controls of, and reporting on, such conditions be carried out.

Proposals submitted by shareholders accounted for almost 3 pct. of the matters on which Norges Bank voted in 2006. Box 4.2 discusses cases where Norges Bank has supported proposals submitted by shareholders.

Norges Bank also approaches companies directly outside their shareholders' meetings, in relation to the key areas of commitment. The Bank has approached, and will continue to approach, the boards of directors of individual companies, for example to discuss working conditions on the part of their subcontractors and the challenges involved in engaging in business in areas where there is a risk that human rights may not be respected.

Norges Bank participates in formal and informal networks with other investors for purposes of ensuring that its interests carry more weight, and to familiarise co-investors with the interests of Norges Bank. At the invitation of the then Secretary-General of the UN, Kofi Annan, Norges Bank in 2005 participated in a process where a group of institutional investors jointly prepared principles for responsible investment activities – "The Principles for Responsible Investment". This process has resulted in six principles based on the premise that environmental and social factors, as well as corporate management systems, may influence portfolio returns. The principles were launched on 27 April 2006, and have enjoyed broad support amongst investors worldwide. It is often necessary to cooperate with other shareholders to get the undivided attention of a company. Norges Bank therefore cooperates with other investors on a case-by-case basis. The need for investor cooperation will to some extent determine what cases the Bank is able to prioritise.

As part of its ownership efforts, Norges Bank also approaches regulatory bodies. The Bank has contributed comments to hearings before, *inter alia*, the US Securities and Exchange Commission (SEC), concerning disclosure of managerial salaries in the annual reports of US companies. In cooperation with three other investors, Norges Bank has through letter and meetings requested the SEC to facilitate real and effective shareholder influence over the appointment of directors of US companies.

Furthermore, the Bank participates in the public and academic debate on ownership influence, with a main emphasis on good corporate management and key social and environmental standards.

4.2.3 The efforts relating to the exercise of ownership rights on the part of Folketrygdfondet

The Executive Board of Folketrygdfondet has laid down guidelines for the exercise of ownership rights on the part of the Government Pension Fund – Norway. The guidelines are based on the Norwegian Code of Practice for Corporate Governance, as well as on the UN Global Compact and the OECD Principles of Corporate Governance and for Multinational Enterprises, cf. Box 4.1.[2]

The overall objective of the ownership effort is to safeguard the financial interests of the Fund. To ensure that the portfolio contributes, to the maximum possible extent, to promoting long-term growth, Folketrygdfondet has defined ethical principles for its investment activities as an integrated part of the guidelines for Folketrygdfondet's exercise of ownership rights.

Key areas for the exercise of ownership rights

Good corporate governance and corporate management shall promote the rights of owners and other stakeholders as against the companies, as well as ensure that the management mechanisms of the companies work appropriately. Important principles underpinning Folketrygdfondet's ownership effort are:

- Ensuring the establishment of clear ethical principles and ethical guidelines;
- Ensuring equal treatment of the shareholders;
- Safeguarding the rights of shareholders and their scope for ownership influence;
- Ensuring that the appointment of directors is well prepared, related to defined competency requirements and vested in the shareholders;
- Ensuring the establishment of remuneration models that are goal-oriented and prudent, and which do not impair shareholder value.

In following up the ethical principles it shall be specifically examined whether the company does itself, or through entities controlled by it, produce weapons that violate fundamental humanitarian principles through their normal use. Furthermore, it shall be examined whether the company bases its business on actions or omissions that

[2] The purpose of the Norwegian Code of Practice for Corporate Governance is for listed companies to pursue corporate governance policies that clarify the division of responsibilities between shareholders, boards of directors and daily management.

involve the violation of human rights, child labour, environmental damage, corruption or the violation of fundamental ethical norms. During such examinations one looks at, *inter alia*, which products are manufactured, which production methods are used, where the production takes place, the company's customer relations, the company's corporate culture/management culture, the company's ownership structure and the company's ownership interests.

The assessments made are based on information available in the public domain and on information disclosed by the company itself. Through its ownership activities, Folketrygdfondet aims to increase the companies' awareness of these themes.

In order to safeguard shareholder value, Folketrygdfondet deems it important to follow-up the managerial salary policies of the companies. This involves, *inter alia*, an evaluation as to whether managerial salary schemes are structured in such a manner as to actually contribute to more effective and result-oriented management. Incentive-based salary schemes shall be premised on results achieved beyond what could normally be expected, and shall not be based on developments in the equity price alone. The managerial salary principles pertaining to businesses in which Folketrygdfondet has invested through its management of the Government Pension Fund – Norway are discussed in Box 4.3.

Tools for exercising ownership rights

Folketrygdfondet may be represented on the boards of representatives, corporate assemblies and appointment committees of companies, but shall not be represented on their boards of directors. Folketrygdfondet seeks to exercise its voting rights in the shareholders' meetings of the companies. In those cases where Folketrygdfondet itself is unable to participate in shareholders' meetings, representatives of the company or others may be appointed as proxies.

If situations arise to suggest that the conduct of a company in which Folketrygdfondet is invested may be put into question, the issue shall be raised with the company. If appropriate, Folketrygdfondet will also cooperate with other investors to attend to its interests and ensure that its views prevail, with the company being influenced to rectify any unacceptable practises. Alternatively, Folketrygdfondet may dispose of its holdings in the business if necessary changes are not made.[3]

The companies in Folketrygdfondet's portfolio will be evaluated against the established principles at least once a year, and new companies will be subjected to a corresponding evaluation process before any investments are made. Folketrygdfondet will perform ongoing assessments of individual companies on the basis of any relevant issues that may catch its attention.

Folketrygdfondet will report annually on its exercise of ownership rights. The report will detail the activities carried out by Folketrygdfondet for purposes of attending to its ownership interests, and will, *inter alia*, address:

- special matters deliberated in shareholders' meetings;
- relevant matters raised by Folketrygdfondet with companies;
- the number and type of offices held by employees of Folketrygdfondet.

4.2.4 The Council on Ethics' work on recommendations for the exclusion of companies from the Government Pension Fund – Global

Companies may be excluded from the Fund pursuant to the Ethical Guidelines for the Government Pension Fund – Global through:

- negative screening to identify companies producing weapons that through their normal use violate fundamental humanitarian principles
- ad hoc exclusion of individual companies if an investment entails an unacceptable risk of contributing to actions or omissions that are deemed grossly unethical.

The Council on Ethics for the Government Pension Fund – Global renders recommendations on screening and exclusion, but the decision as to whether a company shall be excluded lies with the Ministry of Finance. The Ministry of Finance bases its decision on the Council's assessment, but will also attach weight to Norges Bank's views as to whether the Bank may, through ownership influence, reduce the risk of complicity in grossly unethical conduct.

The Council on Ethics deliberates matters of its own accord or at the behest of the Ministry of

[3] Folketrygdfondet has decided that the ethical principles shall apply to both the Fund's equity investments and to its fixed-income investments, although the latter do not carry ownership rights.

Box 4.3 Principles governing managerial salaries in businesses in which Folketrygdfondet has invested through its management of the Government Pension Fund – Norway

Folketrygdfondet's fundamental principles for the assessment of remuneration models for senior personnel:

1. Guidelines for the remuneration of senior personnel shall be set out in the annual report. The same shall apply to all elements of the remuneration of the Chief Executive Officer and individual senior personnel.
2. Incentive-based salary arrangements shall be based on actual performance beyond what could normally be expected, on not on developments in the equity price only.
3. A maximum limit shall be fixed for the annual remuneration of management, which shall not be deemed to be unreasonable in view of actual performance. The same shall apply to pensions, other supplementary benefits and severance pay.
4. Incentive-schemes shall be designed such as to motivate, to the maximum extent possible, management to promote the long-term creation of value and the development of robust organisations with a good working environment.
5. One should facilitate the investment of a portion of the paid-out performance bonus in the equities of the company, to ensure a long-term perspective and appropriate strategic choices.
6. Proposed option frameworks shall include allotment criteria, the real value of the option schemes, the accounting consequences for the company and potential dilution effects.
7. The strike price shall be adjusted annually when using option schemes. A significant share of the equities allotted under options schemes and other equity-based schemes shall be retained for a minimum of three years.
8. The directors shall not have access to incentive schemes.

Finance. When the Ministry of Finance requests the assessment of a matter, the Council will always render a recommendation for or against the exclusion of the relevant company. Matters assessed at the Council's own accord will as a main rule only be subjected to final deliberation if there are grounds for recommending that the company be excluded from the Fund.

The Council on Ethics maintains its own secretariat, which comprised five persons as per the end of last year. The secretariat researches and prepares matters for the Council.

Negative screening

The Revised National Budget for 2004 includes a list of which types of weapons the Fund shall not contribute to the production of. These include weapons that are prohibited pursuant to international law, as well as cluster munitions and nuclear arms. The Council on Ethics has commissioned the British consultancy firm Ethical Investment Research Services Ltd (EIRiS) to continuously monitor whether the companies in the portfolio produce such weapons. In addition, the Council carries out its own searches in open sources and in databases of Jane's Information Group, which is one of the world's largest information sources on defence materials. When the Council deems it likely that a company produces weapons that would merit screening, the company is approached and asked to comment on the Council's assessment. If the company confirms the information invoked by the Council, the Council will render a recommendation to the effect that the company be excluded. Companies that do not reply when approached are recommended for exclusion if the documentation in the possession of the Council shows that there is a high probability that the company produces weapons that violate the screening criterion.

This working method offers a reasonable assurance that companies producing weapons that violate the screening criteria will be excluded from the Fund. Nevertheless, one cannot guarantee that all companies will at all times be correctly screened through the Council's monitoring. The screening criterion and companies that are excluded pursuant to such criterion are discussed in more detail in Box 4.4.

Ad hoc exclusion

Whilst screening relates to the products of companies, exclusion relates to the production methods and conduct of companies. There exists no single overview of companies' complicity in human rights violations, environmental damage, corruption or other infringements of ethical norms, and companies will not normally disclose such information themselves. The Council therefore conducts its own investigations to identify companies that may be in violation of norms.

Following international competitive tendering in 2005, the Council has also commissioned EIRiS to monitor all the companies in the Fund's portfolio for purposes of uncovering possible violations of norms. EIRiS conducts daily searches on a number of Internet sources, and provides the Council with a monthly summary of cases that may be of relevance under the Fund's Ethical Guidelines. Matters are also brought to the attention of the Council through requests from national and international voluntary organisations, or through research reports, media coverage or its own Internet searches. Nevertheless, it is probably not possible to identify, at all times, all companies that are complicit in serious violations of norms worldwide.

In its selection of cases, the Council on Ethics will, *inter alia*, attach weight to how serious the violations of norms are, whether a company is accused of several counts of unethical conduct, whether it is likely that such conduct will continue, as well as the scope for documenting the conduct of which the company is accused. The intention is to identify companies where there is an unacceptable risk that violations of the Ethical Guidelines are taking place, and where these are likely to continue in future.

Many cases will be closed already after preliminary investigations. Information that does not suffice for a full evaluation of a company the first time round may nevertheless be used later if one subsequently becomes aware of additional circumstances. The Council on Ethics prioritises those cases that are the most likely to result in a recommendation of an exclusion of a company.

There is often a need for supplementary information to shed light on cases beyond what is available from public access sources. In this work, the Council makes use of consultancy firms, research institutions or voluntary organisations, often in the country where the company in question is alleged to violate ethical norms. This may involve fieldwork, assessments of the environmental reporting of companies and other documentation. The Council attaches considerable weight to ensuring quality and confidentiality in this work.

A company that the Council on Ethics considers for exclusion will, in accordance with the guidelines, be asked to comment on the grounds on which the recommendation for an exclusion is based. The companies may also be invited to reply to specific questions. The Council on Ethics emphasises detailed description of the grounds, and as thorough documentation thereof as possible. Any allegations made are supported by specific source references, normally to several different sources. When approached, the company will also be informed of the Ethical Guidelines, and of the fact that such company is considered for exclusion pursuant thereto. The companies are invited to reply within a specific deadline. The secretariat of the Council has on several occasions attended meetings with companies that have wished to provide additional information. The ad hoc exclusion criterion and companies that are excluded pursuant to such criterion are discussed in more detail in Box 4.4.

Process and time use

The process involved in recommending a company for exclusion consumes considerable time and resources. In 2006, the Council on Ethics estimates that it conducted a preliminary review of about 80 companies. Only a limited number of these will result in a recommendation to exclude a company. It will normally be many months from a case is first opened until the Council submits a final recommendation to the Ministry of Finance. The Ministry will carry out its own independent assessment as to whether the company should be excluded, cf. the discussion in Sub-chapter 4.2.5. If the Ministry decides to exclude a company, such a decision, and the attendant recommendation from the Council on Ethics, will only be made public after the Fund has sold its securities in the company. The assessment carried out by the Ministry implies, together with the disposal period, that it will usually be several months from a recommendation has been made until the exclusion of a company is made public. This is discussed in more detail in Sub-chapter 4.2.6.

The Council on Ethics will routinely examine whether the reasons for an exclusion still apply, and may on the basis of new information recommend that the Ministry of Finance revoke a decision to exclude a company.

Box 4.4 Exclusion of companies through screening and ad hoc exclusion

Screening

Companies shall be excluded from the investment universe of the Government Pension Fund – Global if they are deemed, pursuant to the Ethical Guidelines for the Fund – Global, to produce *“weapons that through their normal use may violate fundamental humanitarian principles”*.

The Revised National Budget for 2004 provides a list of weapons that are currently classified as belonging to this category of weapons: chemical weapons, biological weapons, anti-personnel mines, undetectable fragmentation weapons, incendiary weapons, blinding laser weapons, cluster munitions and nuclear arms. The Fund shall not invest in companies that develop and produce key components for this type of weapons. The Ministry of Finance has excluded 17 companies from the Fund under this criterion.

Tabell 4.1 Companies that are excluded on the basis of negative screening

Product	*Date*	*Company*
Anti-personnel land mines	26 April 2002	Singapore Technologies Engineering
Cluster munitions	31 August 2005	Alliant Techsystems Inc, General Dynamics corporation, L3 Communications Holdings Inc., Lockheed Martin Corp., Raytheon Co., Thales SA
	30 November 2006	Poongsan Corp.
Nuclear arms	31 December 2005	BAE Systems Plc, Boeing Co., EADS Co[1], EADS Finance BV, Finmeccanica Sp. A., Honeywell International Corp., Northrop Grumman Corp., Safran SA., United Technologies Corp

1 The company EADS was first excluded on 31 August 2005 because the company was involved in the production of cluster munitions. EADS no longer produces cluster munitions. However, the company is involved in the production of nuclear arms, and the Ministry of Finance upheld the exclusion on this basis on 10 May 2006.

Source: Ministry of Finance.

Ad hoc exclusion

Furthermore, a company shall be excluded from the Fund if its acts or omissions entail an unacceptable risk that the Fund may contibute to:

Serious or systematic human rights violations, such as murder, torture, deprivation of liberty, forced labour, the worst forms of child labour and other child exploitation, serious violations of individuals’ rights in situations of war or conflict, severe environmental damage, gross corruption, other particularly serious violations of fundamental ethical norms.

Tabell 4.2 Companies that have been excluded on the basis of ad hoc exclusion[1]

Activity that entails a risk of complicity in:	*Date*	*Company*
“serious or systematic human rights violations …”	31 May 2006	Wal-Mart Stores Inc. and Wal-Mart de Mexico SA de CV
“severe environmental damage”	31 May 2006	Freeport McMoRan Copper & Gold Inc.
	31 March 2007	DRDGOLD Ltd

1 The company KerrMcGee was excluded from the Fund in the summer of 2005 because the company’s exploration activities in the occupied territory of Western Sahara were deemed to constitute a particularly serious violation of fundamental ethical norms. The company terminated these activities in the spring of 2006, and on 30 June 2006 the Ministry of Finance decided, based on a renewed assessment from the Council on Ethics, to reintroduce KerrMcGee (now merged with Anadarko Petroleum) to the investment universe of the Fund.

Source: Ministry of Finance.

4.2.5 The Ministry's assessment

Coordinated use of policy instruments and the realisation of objectives

The Ministry of Finance believes that it is important for the policy instruments to be used in such a way as to complement each other in the best possible manner, and such as to serve the intent behind the Ethical Guidelines for the Government Pension Fund.

This intent is two-pronged. Firstly, the Fund shall achieve favourable returns over time. Secondly, the companies in which the Fund is invested shall respect fundamental ethical norms. These two partial objectives are linked, because it is assumed that favourable returns over time will depend on sustainable development in economic, ecologic and social terms. The main objective of the exercise of ownership rights is to safeguard the financial interests of the Fund. In order to realise such objective, it will be appropriate to use active ownership to seek to influence companies in which the Fund invests to respect fundamental ethical norms. Exclusion of companies is also a matter of respect for fundamental ethical norms, not for purposes of contributing to positive change, but to avoid contribution to grossly unethical activities. The underlying premise is that there are certain activities in which one is not prepared to contribute, irrespective of the consequences thereof.

The exercise of ownership rights is broad in scope and may in principle be applied to any company in the Fund's portfolio. In this sense, the ownership effort is the key policy measure available under the guidelines. Exclusion of companies shall only take place for purposes of preventing contribution to grossly unethical conduct. It follows from the report of the Graver Committee that the assessment as to whether the Fund runs an unacceptable risk of contribution to grossly unethical conduct will depend, *inter alia*, on whether one exercises one's ownership rights for purposes of bringing such conduct to an end. If the Fund excludes a company, its scope for ownership influence is lost. A possible consequence is that those harmed by the activities of the company continue to be harmed or, in the worst case, become even worse off. The exclusion of companies should, against this background, only take place on an exceptional basis.

It is challenging to render the ownership activities visible because, *inter alia*, it may be difficult to demonstrate a clear causality between influence from an owner and positive changes on the part of a company. It may also be appropriate to report on ownership efforts in retrospect, and not along the way when a process is being pursued against a company. Such processes will be time consuming and will often last for several years.

There may arise occasions on which the exercise of ownership rights is not, for some reason or another, a suitable approach, or where it has to be concluded that the company does not wish to engage in any form of dialogue with, or accept any influence from, the investor. In such cases it may be appropriate, under the guidelines, for the Fund to exclude the company if such company is involved in an activity covered by the exclusion criteria under the guidelines.

In its report, the Graver Committee pointed out that the policy measures may to some extent overlap. The assessments of the Council on Ethics may, for example, be of use to Norges Bank in its exercise of ownership rights. Correspondingly, it may be useful for the Council on Ethics to draw on Norges Bank's reporting from ownership activities as a source of information for its purposes. The system also encourages an interaction between the policy instruments in the sense that companies may themselves wish to change their behaviour if they know that there is a risk of being excluded from the Fund. The Ministry of Finance will emphasise the interrelationship between ownership influence and the evaluation of companies for possible exclusion. Ownership influence aimed at ensuring respect for fundamental ethical norms form part of a range of policy instruments, wherein which the exclusion of a company is the last resort.

The Ministry of Finance carries out an independent assessment of whether to exclude individual companies. In its assessment, the Ministry will look to the recommendation of the Council on Ethics, but will also have to take into account the scope for reducing the risk of contribution to grossly unethical activities through ownership influence in the relevant case. Usually, the Ministry will therefore request Norges Bank to outline its plans for influencing the company in respect of the relevant matter. If the prospects for prevailing through ownership influence are deemed to be sufficiently good to considerably reduce the risk of contribution, one may wish to postpone a final decision to exclude the relevant company until having observed what results may be achieved through the exercise of ownership rights.

Folketrygdfondet has made a positive selection of the Norwegian companies in the portfolio of the Government Pension Fund – Norway. This means that Folketrygdfondet has already before making the investment checked whether the company has introduced strategies and systems to ensure good corporate management, in addition to systems attending to environmental and social concerns. This makes it unlikely that one should need to exclude companies. However, the policy instruments may interact in this context as well, inasmuch as the risk of exclusion may influence companies to change their behaviour.

The quality of the basis for decision-making

The Ethical Guidelines and the administration thereof are noticed by other managers as well as by companies. This implies that their effect goes beyond the actual work carried out through the Government Pension Fund. This is one of the reasons why the Ministry is attaching considerable weight to ensuring the high quality of work relating to active ownership and the exclusion of companies. All decisions shall be based on thorough and robust preparatory work. The Ministry emphasises, in this context, that the recommendations from the Council on Ethics shall be thoroughly backed up by source references in line with the practise adopted by the Council. The Public Administration Act is not directly applicable to this effort, but the Ministry requires codes of conduct for good public administration to be complied with in the various work processes.

Evaluation of the Ethical Guidelines for the Government Pension Fund – Global

The Government Pension Fund – Global invests the capital of the community, and the Ethical Guidelines should enjoy broad support. In the report from the Graver Committee, which was submitted in June 2003, considerable weight was attached to ensuring that the ethical standard defined by the guidelines should enjoy the general support of the Norwegian people. All parties represented in the Storting have expressed their support for the current guidelines, which were introduced on 19 November 2004.

The Government has decided that the Ethical Guidelines for the Government Pension Fund – Global shall be evaluated in the current Storting period, to ensure that they function as intended. The Ministry aims to initiate the evaluation process at the end of 2007/beginning of 2008. A broad process is being planned, with as many institutions as possible contributing their comments. The evaluation will be presented to the Storting in the spring session 2009.

The Government deems it important to maintain the broad political support for the Ethical Guidelines in the context of the impending evaluation. However, this is an area undergoing constant development, and the Government wishes to harness any input that may contribute to the reinforcement of the ethical profile of the Government Pension Fund – Global.

The Government is supportive of the emphasis Folketrygdfondet places on active ownership in its management of the Government Pension Fund – Norway. It would be appropriate for the evaluation of the Ethical Guidelines for the Government Pension Fund – Global to also examine the need for additional harmonisation of the ethical principles governing the two parts of the Government Pension Fund.

4.2.6 Public disclosure in relation to the Ethical Guidelines

The Ministry of Finance is committed to transparency and public access to information relating to the Government Pension Fund. This reinforces the credibility of the Fund, as well as general support for the Fund. In drafting the Ethical Guidelines for the Government Pension Fund – Global, the Ministry has facilitated public access to information pertaining to the decisions of the Ministry of Finance. It has been decided, *inter alia*, that recommendations from the Council on Ethics shall be made public, and that Norges Bank shall account for its ownership activities in its annual report. The Ministry notes that Folketrygdfondet is also planning to report annually on its exercise of ownership rights in the Government Pension Fund – Norway.

Reporting of the work of the Council on Ethics

The Ministry shall, pursuant to the Ethical Guidelines for the Government Pension Fund – Global, make public all decisions to exclude companies from the Pension Fund, as well as the grounds therefore. The thorough disclosure of the grounds for excluding a company offers the general public good insight into how the exclusion tool is practised.

If, on occasion, the Ministry of Finance should decide not to adopt a recommendation from the Council on Ethics, the Ministry will also make public such decision, together with the relevant recommendation. Such a decision would normally be based on the premise that ownership influence is deemed suitable for reducing the risk that the Fund will be complicit in grossly unethical activities. In such cases, the Ministry will make public the fact that there is an ownership effort in process within a certain area, and that the Ministry has received a recommendation for the exclusion of a company within that area. However, it is necessary to make a specific assessment as to when the actual recommendation should be made public, in view of the need for ensuring that the process of influencing a company is carried out in a productive and orderly fashion.

The public announcement of a decision to exclude a company will, as a main rule, be postponed until Norges Bank has completed the sale of securities in the company. Disposal will normally take place over a period of two months. The Ministry introduced this procedure in line with the Ethical Guidelines to ensure, *inter alia*, a financially prudent disposal.

The Ministry may, pursuant to the Freedom of Information Act, exclude documents that have been prepared for purposes of internal preparation of cases from public disclosure. The process leading up to any exclusion of a company from the Government Pension Fund – Global will constitute internal preparation. The Council on Ethics examines and evaluates the activities of companies. Thereafter, the Ministry of Finance carries out an independent assessment, and makes a final decision in the matter.

There are several reasons why the Ministry should not inform the general public of the processes and assessments taking place prior to a decision being made as to whether a company shall be excluded. Generally speaking, the Ministry needs to ensure that all decisions are underpinned by robust assessments and grounds. In addition, it is important for the Government Pension Fund – Global to be perceived as a professional and structured player by other investors as well as by companies. If information respecting the assessments made internally on the part of the Council on Ethics is disclosed to the general public prior to a final decision, it may give rise to confusion as to the differing roles of the Ministry, as the final decision maker, and the Council on Ethics, as its advisor. Preliminary assessments from either the Council on Ethics or the Ministry prior to a final decision may also be misunderstood if disclosed. This may result in the general impairment of the market's confidence in the Fund, whilst at the same time potentially undermining the reputation of companies.

There may under some circumstances arise a statutory confidentiality obligation in respect of certain documents or details accessed or generated by the Council on Ethics or the Ministry. It may, for example, be that the Council receives information pertaining to a company that is classified as a trade secret that government authorities are obliged to keep confidential. Moreover, it is conceivable that the assessments and recommendations of the Council on Ethics may constitute insider information pursuant to foreign securities trading legislation, and have to be kept confidential for that reason.

The Council on Ethics will often be working on matters that do not result in a recommendation for the exclusion of a company. The Ministry is of the view that the abovementioned considerations suggest that documents and information relating to such matters should not be made public. The Ministry assumes that the Council on Ethics will refrain from disclosing preparatory assessments that do not result in a recommendation for an exclusion of a company. The Ministry may nevertheless request an assessment of specific companies, and in such cases the reply from the Council on Ethics to the Ministry will be made public, although said reply may not necessarily be in the form of a final recommendation for the exclusion of a company.

Reporting on Norges Bank's corporate governance effort

Norges Bank shall, pursuant to the Ethical Guidelines for the Government Pension Fund – Global, account for its exercise of ownership rights in connection with its regular annual reporting. The annual reporting requirement is reflected in the Bank's own principles for the exercise of ownership rights. The principles also state that, as a main rule, no information will be disclosed respecting informal contact with individual companies or other investors.

In its annual reporting, the Bank will, *inter alia*, disclose information about input to hearings, etc., and other communications intended to contribute to government bodies, exchanges and other regulatory bodies developing and monitoring regulatory frameworks that safeguard, to the best possible extent, the exercise of ownership rights in accordance with the principles of Norges Bank. Furthermore, the Bank will report on its voting behaviour. Thus far, the reporting of voting behaviour has been general in nature, specifying the type of cases prioritised by the Bank without any company-level details. Norges Bank is in the process of expanding its reporting of voting behaviour to encompass post-voting details pertaining to individual companies.

Norges Bank's direct contact and dialogue with companies aims to contribute to changes. In some cases, in particular in the context of informal contact with companies and other investors in individual matters, one can achieve the maximum impact when those involved are confident that no details from the dialogue will be made public. This is also the experience of other investors with whom Norges Bank compares itself. Where a process towards an individual company has been brought to an end, the Ministry assumes that Norges Bank will make both its effort and the outcome public in a suitable manner.

The Ministry is of the view that the importance of achieving positive outcomes from ownership activities will normally take precedence over the importance of public access to information during a process. Exceptions from this main rule are conceivable. In cases where the Ministry has requested Norges Bank to examine the scope for achieving results through active ownership towards a specific company, the Ministry will in each individual case consider the trade-off between the importance of increased public access to information and the importance of the prospects for completing a productive and well-organised process to influence a company.

Reporting on Folketrygdfondet's corporate governance effort

Folketrygdfondet will be reporting on its ownership activities as from 2007, in the context of the semi-annual reporting on its management performance. The reports will account for the activities carried out by Folketrygdfondet for purposes of attending to its ownership interests. As far as the reporting of contact and dialogue in individual cases is concerned, diligence and discretion will have to be exercised out of concern for the importance of achieving positive results. As is the case in respect of the Government Pension Fund – Global, the Ministry is of the view that the importance of achieving positive outcomes through active ownership will normally take precedence over the importance of public access to information during a process.

5 Further development of the framework and supervision

5.1 Introduction

The management of the Government Pension Fund – Global is governed by Act No. 123 of 21 December 2005, Regulations No. 1725 of 22 December 2005, guidelines with supplementary provisions, and a management agreement between the Ministry of Finance and Norges Bank. Norges Bank shall, pursuant to Section 7 of the Regulations, ensure the existence of satisfactory risk management systems and control procedures for the instruments used in the management of the Fund. The framework requires that the management, measurement and control of risk shall be in accordance with best practise and internationally recognised methods. In 2006/2007, the Ministry drew on external resources to survey "best market practise" and "recognised international standards" for, *inter alia*, the handling of different types of risk within asset management. This survey is a step towards the operationalisation of the changes to the framework that were discussed in the National Budget for 2006, cf. Sub-chapter 5.2.

The management of the Government Pension Fund – Norway is governed by the Regulations of 15 December 2006 No. 1419. The Regulations govern both administrative matters on the part of Folketrygdfondet (also known as the National Insurance Scheme Fund) and the guidelines for the investments of the Government Pension Fund – Norway. When the Regulations entered into effect on 1 January 2007, they replaced a set of rules laid down by the Storting. This resulted in a more uniform system for determining the guidelines for the two parts of the Government Pension Fund.

Upon the establishment of Folketrygdfondet in 1967, no clear distinction was made between Folketrygdfondet as the name of a fund (asset pool) and Folketrygdfondet as the name of the organisation that managed such an asset pool. Concurrently with the present Report, the Government is submitting a proposal for an Act relating to Folketrygdfondet, cf. Proposition No. 49 (2006-2007) to the Odelsting. The Proposition brings the formal framework for the management of the Government Pension Fund – Norway in line with the developed practise, with Folketrygdfondet acquiring, through a separate Act, the status of an independent legal entity, cf. more detailed discussion in Sub-chapter 5.3.

5.2 Risk based supervision of Norges Bank's management of the Government Pension Fund – Global

The capital of the Government Pension Fund is growing rapidly. At the same time, the investment strategy of the Fund is undergoing continuous development. This is taking place alongside major changes to the supervision of risk management in financial institutions as a result of new rules both in Europe (EU Directive) and globally (Basel II).[1] The Ministry deems it important to ensure that the framework for the management of the Government Pension Fund is adapted to these developments on an ongoing basis.

The risk/return-profile (ex ante) of the Pension Fund is largely determined by the Ministry's investment guidelines. The risk assumed in active management has only to a limited degree increased the actual market risk of the Fund beyond the level that is implied by the benchmark portfolio, cf. the more detailed discussion in Chapter 2. The Ministry's risk budget for active management has been stipulated in the form of an upper limit on tracking error at total fund level. No further limits on active risk have been stipulated at lower levels, like for example individual asset classes. The optimal allocation of the risk budget between the individual strategies and mandates is a key value driver in Norges Bank's active management.

The Ministry of Finance expanded the investment universe of the Government Pension Fund –

[1] This development is described, *inter alia*, in Chapter 12, "Risk-based supervision – development of new tools", in the anniversary publication "Experiences and Challenges – 20 Years as an Integrated Supervisory Authority" of Kredittilsynet (the Financial Supervisory Authority of Norway).

Global with effect from 1 January 2006, cf. the discussion in the National Budget for 2006. Based on advice from Norges Bank, as set out in its letter of 11 March 2005, the minimum rating criteria for bonds and the interval for the duration of the fixed-income portfolio were abolished. The provision to the effect that a maximum of 5 pct. of the equity portfolio shall be invested in emerging markets was also abolished. Furthermore, general authority was granted to make use of instruments that are inherently associated with permitted assets, hereunder fund units and commodity derivatives. In a letter of 11 January 2007 to Norges Bank, the Ministry of Finance has clarified that the authority to make use of fund units also encompasses funds whose underlying portfolios fall fully or partly outside the investment universe of the Government Pension Fund – Global, provided that the fund units are listed in a recognised market place inside such universe.

The expansion of the investment universe adds more degrees of freedom for active management. This was supplemented by additional requirements pertaining to risk management, valuation, performance measurement and reporting. In order to exploit the new degrees of freedom in its management, Norges Bank has to be able to document that these qualitative requirements of the guidelines have been met. It is stated in the supplementary guidelines to Section 7 of the Regulations that:

> “Valuation, performance measurement and the management, measurement and control of risk shall adhere to internationally recognised standards and methods. The Fund shall not invest in markets, asset classes or instruments unless these requirements can be complied with.”

Furthermore, it follows from the guidelines that Norges Bank shall adopt best market practise in its management, measurement and control of market and counterparty risk.

The Ministry announced, in connection with the expansion of the investment universe, that it would introduce risk based monitoring of Norges Bank’s investment management. In the National Budget for 2006 it is stated, *inter alia*, that:

> “Norges Bank operates a specialised asset management regime. By imposing reporting requirements, the ministry will be better placed to identify areas where, with the help of external expertise, it can evaluate Norges Bank’s compliance with instructions set out in the regulatory framework. The ministry plans regular due diligences of the fund, and particularly the bank’s risk management, in collaboration with consultants possessing suitable expertise.”

The first due diligence project on the basis of the new requirements in the framework was initiated in the autumn of 2006. Following prior competitive tendering, the Ministry of Finance chose an international team from Ernst &Young LLP (London/Zurich/New York) to review the risk management and control procedures of Norges Bank. The project comprises the following milestones:

1. Propose a reference framework for best market practice and internationally accepted standards within relevant areas such as, *inter alia*, operational risk and the modelling of market, credit and counterparty risk.
2. Design a questionnaire to be used by Norges Bank for self assessment of the risk management and control procedures within its asset management operation.
3. Perform a third-party evaluation of Norges Bank’s systems for handling risk in its asset management operation, based on Norges Bank’s self assessment and further follow-up work.
4. Prepare a final report, with recommendations and a list of areas that the Ministry should prioritise in its further follow-up of the asset management.

The Ministry aims to conclude the external review of risk management in relation to the asset management activities of Norges Bank in the spring of 2007. One aims to discuss the final report in the National Budget for 2008. One may, based on experience from this review, wish to re-examine certain aspects of the framework, e.g. the reporting requirements in relation to various types of risk.

5.3 The management framework of the Government Pension Fund – Norway

Folketrygdfondet was created as a government fund in 1967. Upon its establishment, no clear distinction was made between Folketrygdfondet as the name of the fund (asset pool) and Folketrygdfondet as the name of the organisation that managed such asset pool. At present, Folketrygdfondet is a government asset manager, and its activities are governed by, and pursuant to, the Act relating to the Government Pension Fund.

Concurrently with the present Report, the Ministry of Finance is submitting a proposition containing a proposal for a new Act relating to Folketrygdfondet, cf. Proposition No. 49 (2006–2007) to the Odelsting. The Proposition brings the formal framework for the management of the Government Pension Fund – Norway in line with the developed practise, with Folketrygdfondet acquiring, through a separate Act, the status of an independent legal entity. The main principles in the present organisation of Folketrygdfondet are continued in the proposed Act relating to Folketrygdfondet. No changes are intended in the activities of Folketrygdfondet or in the management of the Government Pension Fund – Norway. The new framework represents a tidying-up of the regulatory framework, which will also render visible the distinction between the asset pool designated as the Government Pension Fund – Norway and Folketrygdfondet as the entity managing this asset pool.

In its preparation of the Proposition, the Ministry has emphasised the distinction between organisational matters on the part of the manager and the guidelines for investing the capital of the Government Pension Fund – Norway. The Regulations relating to the management of the Government Pension Fund – Norway will therefore have to be amended to concentrate purely on the investment guidelines, after the administrative provisions relating to the management of Folketrygdfondet are set out in a separate act as outlined in the said Proposition. The Ministry will in this context be considering certain technical adaptations in the Regulations, e.g. whether the investment limits should be specified in percentage of market value instead of acquisition cost. The Ministry is also considering whether to specify the investment limits of the Government Pension Fund – Norway in more detail through a benchmark portfolio with a limit on permitted deviations fixed by the Ministry, as is currently the case with the Government Pension Fund – Global. At present, the Ministry specifies the investment strategy of the Government Pension Fund – Norway in the form of general investment limits, whilst the more detailed benchmark portfolio for the measurement of return and risk is determined by the Executive Board of Folketrygdfondet. A changeover would result in a clearer distinction between the outcome of the decisions that are the responsibility of the Ministry and the outcome generated by Folketrygdfondet through its management of the Government Pension Fund – Norway. Such a changeover may also be appropriate in view of the planned formation of a management agreement with Folketrygdfondet, which will govern, *inter alia*, the compensation principles pertaining to the management of the Government Pension Fund – Norway. The Ministry will revert with an assessment hereof in connection with the National Budget for 2008.

The Ministry of Finance

r e c o m m e n d s :

Recommendation of 13 April 2007 from the Ministry of Finance on the Management of the Government Pension Fund in 2006 is submitted to the Storting.

Appendix 1

Recommendations concerning the investment strategy for the Government Pension Fund – Global

Letter from Norges Bank to the Ministry of Finance of 20th of October 2006

1 Introduction

Norges Bank has reviewed the long-term investment strategy for the Government Pension Fund – Global. The analysis is documented in separate reports which will be made available to the Ministry. The point of departure for the review is that the Fund has become very large and will in all probability continue to grow rapidly. The Fund is intended as a permanent Fund where only the average real return is to be used. This makes for an unusually long investment horizon. For a fund of this kind, it is important that its investments as a whole are safe in the long term, while the liquidity of investments is less important. In reasonably efficient markets, low liquidity will be associated with higher expected returns than can be achieved with more liquid investments. The stated objective of the Fund suggests that we should endeavour to take advantage of this.

The Fund is currently invested exclusively in markets with relatively good liquidity. The asset mix should gradually be shifted in favour of greater emphasis on illiquid investments with a liquidity premium. The size of the markets imposes limits on how quickly it would be appropriate to proceed with this. However, it is reasonable to start moving away from investing exclusively in liquid markets.

The benchmark portfolio currently consists of listed equities in 27 countries and bonds with a high credit rating in 11 currencies. In the following, we look first at the question of whether the investment strategy should include more asset classes, which would mean a greater emphasis on illiquid investments:

- investments in real estate/infrastructure
- investments in private equity

We then look at possible changes in the two asset classes in which the Fund is already invested. The following topics are covered:

- the equity portion in the benchmark portfolio
- the regional weights in the equity and fixed income benchmarks
- investments in small cap equities
- investments in high-yield bonds

The issue of adding new countries to the equity benchmark or new currencies to the fixed income benchmark is not discussed in this letter.

2 New asset classes

The Fund's asset allocation differs considerably from that of large pension funds and other reserve funds, especially in two areas[1]:

- the Fund has a much higher proportion of bonds
- the Fund does not invest in unlisted markets such as real estate, infrastructure and private equity, or in other alternative asset classes

The split between equities and bonds is currently under review by the Ministry. Investments in unlisted markets were discussed most recently in the National Budget for 2004, where the Ministry concluded that the Fund's investment universe should be limited to listed equities and bonds for the time being.

The markets for unlisted investments have seen clear growth in recent years. As a long-term investor, the Fund is in a better position than many other institutional investors to accept higher levels of illiquidity in parts of its investments, where this results in higher expected returns or broader diversification of the overall portfolio.

[1] This ignores the ban on investments in the fund's homeland, as it is not relevant to draw comparisons with funds with very different objectives to the Fund.

Real estate and infrastructure

As a rule, real estate is included as a separate asset class in the portfolios of large pension funds and reserve funds. Each year, the company CEM Benchmarking Inc. performs an analysis of the Pension Fund's management costs. Its most recent analysis reveals that the average allocation to real estate, excluding listed real estate stocks, in 2005 was 4.5 per cent for the big pension funds in the USA, Canada and the Netherlands – the peer group with which the Fund's management costs can best be compared. Including listed property stocks, the average allocation was just under 7 per cent for the same group. Europe's largest pension fund, ABP in the Netherlands, had 11 per cent of its portfolio invested in real estate at the end of 2005, and the largest US pension fund, CalPERS, had 7 per cent.

In principle, real estate exposure can be achieved through both equity and debt instruments. However, when a separate allocation to real estate is being considered, this should be limited to equity instruments. It is in this way that the Fund can realise diversification gains in the portfolio, which are an important argument for a separate allocation.

Although the Fund does not currently have a separate allocation to real estate, the Fund is exposed to the real estate market through investments in listed property stocks included in the Fund's benchmark portfolio. Equities classed by the index supplier FTSE as property stocks account for just under 2 per cent of the market value of the Fund's benchmark portfolio for equities. Furthermore, many of the companies in the Fund's equity portfolio own their production and office facilities, but the significance of this for the equity portfolio's risk profile is difficult to gauge. The market for listed property stocks is growing, not least now that more and more countries are permitting tax-transparent real estate investment trusts (REITs)[2] aimed at both institutional and private investors. But the unlisted market is far larger than the listed market, and will probably remain so for a long time to come. It would be unrealistic for a fund as large as the Government Pension Fund – Global to build up a substantial real estate allocation over time without investing in the unlisted market. Such investments could be made through real estate funds, through discretionary management mandates, or through joint ventures or other forms of strategic alliance and co-ownership with local participants in the individual markets.

Real estate can be expected to generate an average return somewhere between that on ordinary equities and bonds in the long run. In the three markets with the longest return history for institutional investments in real estate (the USA, the UK and the Netherlands), the real estate market has generated an excess return relative to bonds of between 0.5 and 1.5 percentage points since the mid-1970s[3]. This has been a period of historically high real returns on bonds.

Indices which measure historical returns on unlisted real estate investments show that risk measured as annual volatility is only slightly higher than for bond investments. When these calculations are adjusted for known factors such as artificial stability in the underlying valuations, and for increased risk due to the funds' high average debt levels, it would be more reasonable to assume that volatility in real estate will also be roughly midway between equities and bonds.

The diversification gains for the Fund from investing in real estate derive from real estate returns being affected by market-specific factors, or from factors that affect returns in all of the capital markets having a different impact on the property market than on the other financial markets. This will result in a low correlation between investments in the real estate markets and those in the other capital markets. If return series based on unlisted real estate indices are used, the historical correlation between real estate and equities/bonds is very low. However, objections can be raised against a comparison of returns in time series based on different valuation principles. If shorter time series for listed property stocks are used, real estate has still offered clear diversification gains relative to ordinary equities and bonds, but not to the same degree as might be suggested by indices for unlisted real estate investments.

Another important reason why funds generally invest in real estate is that such investments are expected to generate a stable real return over time, i.e. provide good protection against unex-

[2] Real estate investment trusts pay dividends to their shareholders which are tax-free to the company, but must also undertake to invest the bulk of their capital in property and pay out the bulk of their net rental income to shareholders as dividends.

[3] Sources for property returns: NCREIF for the USA, IPD for the UK and Netherlands, Hordijk (2004) for the Netherlands 1977-94. The data for property returns denote the direct return in the property market, i.e. an assumed equity share of 100 per cent.

pected movements in inflation. For funds which have explicit obligations which rise in line with inflation, the combination of inflation protection and higher returns than on inflation-protected bonds will be valuable. This is not as important for the Fund. The degree of inflation protection will vary anyway between markets and projects, and supply/demand patterns peculiar to the property markets could also limit such an effect. No great importance should therefore be attached to inflation protection when considering a separate allocation to real estate.

Management costs will be substantially higher in the real estate market than in the listed markets. CEM's cost report for 2005 shows that, on average, the Funds in the peer group recorded management costs for unlisted, externally managed real estate investments of just under 100 basis points.

Investments in infrastructure projects, such as electricity and water supply, toll roads, airports and telecommunications, have traditionally been a limited market for institutional investors. However, in recent years, growing private-sector involvement and financing has made these investments interesting for long-term financial investors too. As with investments in traditional real estate, investors will expect a real return somewhere between that on equities and bonds, with much lower volatility than for equities, and with clear diversification gains relative to these asset classes. One clear difference to real estate investments is that the public sector will generally be involved in infrastructure projects as principal, contractual party and/or regulator.

For the foreseeable future, it will not be practicable to achieve exposure to real estate and infrastructure beyond the equivalent of about 10 per cent of the Fund's overall portfolio. Model analyses based on the assumptions discussed above – and in more detail in the full market analysis – confirm that such an allocation will result in clear diversification gains. If the allocation is matched by a reduced allocation to fixed income investments, the expected return on the overall portfolio will rise, even after taking account of the higher management costs. However, it will take time to build up this level of exposure. This is discussed in the full analysis report.

Norges Bank recommends that, in the light of the probable liquidity premium and the probable diversification gains from investing in real estate and infrastructure, it be made a long-term strategic target for up to 10 per cent of the Government Pension Fund – Global to be invested in this asset class. This portfolio will have to be built up gradually over a period of several years.

Before activities in this area can be started up, a detailed investment mandate specifying required rates of return, risk limits and reporting requirements needs to be formulated.

Private equity

Private equity is also a common asset class among large institutional investors. Private equity includes investments in both pure equity instruments and hybrid equity instruments such as subordinated, convertible debt. The Fund's peer group in the CEM report for 2005 had, on average, almost 6 per cent of their assets invested in private equity at the end of the year.

As a rule, investments in private equity are motivated by the goal of achieving higher returns in the longer term than offered by the listed equity market. By actively developing companies in the start-up phase (venture funds) or acquiring and restructuring existing companies (buyout funds), the managing partners in funds which invest in private equity aim to generate a return which is substantially higher than the listed market can be expected to offer in the longer term. This excess return is then divided between the partners and other investors in the funds which are raised for investment purposes. Typically, investors in such funds will demand or expect these investments to yield a return 3-5 percentage points higher than offered by the listed market (net to the investor, i.e. after fees paid to the managing partners in the funds).

However, it is uncertain whether the average investor in this market has actually achieved an excess return relative to listed equities at all. Studies of historical returns in both the USA and Europe have reached differing conclusions on this point. There does seem to be a consensus that the average investor has in any case not achieved a return after costs as high as the return on listed equities plus a margin of 3-5 percentage points. At the same time, the spread of returns has been extremely high. In the USA, return data from analysis firm Cambridge Associates show that, of all the funds that specialised in buyout[4]

[4] The two main groups of fund which invest in private equity are those which invest in companies in the start-up phase (venture funds) and those which invest in established companies which are bought out, refinanced and restructured (buyout funds).

strategies in the period 1986-2000, managers with returns in the top quartile generated returns 6-9 percentage points higher than that did the median manager. The differences are even larger when it comes to venture funds. There are also clear signs of persistence in these data, i.e. managers who have performed well have a tendency to achieve good returns in subsequent investments or funds.

As is the case with unlisted investments in general, short-term return data for private equity are heavily influenced by the valuations of the underlying investments. Such valuations are always uncertain, and they can be very different from a true market price estimate. This means that calculations of volatility and correlations with other asset classes are also very uncertain. It can in general be assumed that the listed and unlisted equity markets are highly correlated. Diversification gains cannot therefore be a strong argument in favour of investing in private equity.

The main instrument for investing in private equity is investments in funds which then invest directly in the individual companies, and which are actively involved in each individual company in the portfolio. Such a fund will, on average, have an expected life of around ten years, but many of the fund's investments will be realised long before the fund is closed. Primary investments are by far the most common, i.e. investments which are made with money that the individual fund raises in the market. There is also a smaller market for secondary investments, i.e. purchases of units from other investors in existing funds. Direct investments do happen, but then in the form of co-investments with a private equity fund or an institutional investor with specialist expertise in direct investments.

Management costs can be expected to be much higher for private equity than for listed equities. CEM's report on management costs in 2005 at the funds defined as the Fund's peer group shows an average cost of just over 120 basis points of committed capital and just under 240 basis points of invested capital.

In the National Budget for 2004, the Ministry noted that it was uncertain whether investments in private equity would generate an excess return relative to the listed segment. Return data from large investors and from broad return analyses show that investors who manage to identify good managers in advance can achieve an excess return which would be very difficult to realise to the same degree through active management in the listed market. At the same time, these analyses also suggest that the average investor has not achieved this excess return.

Norges Bank recommends that it be made a strategic target for up to 5 per cent of the Government Pension Fund – Global to be invested in private equity, including investments in funds which hold hybrid equity instruments. This portfolio should be built up gradually over a period of several years, and this strategic target should be reviewed after a few years on the basis of an evaluation of the management organisation by then built up.

The main argument in favour of this proposal is that investments in this asset class made by a competent investment organisation can generate a significant excess return. In the continued development of the Fund's management strategy, importance should be attached to finding new and independent opportunities for generating excess return. Investing in private equity is one such opportunity.

Before such investments can be started up on any scale, an investment mandate needs to be formulated which also addresses the issues of performance expectations, risk management and reporting. However, it may be a good idea to give permission for some instruments bordering on the listed markets relatively quickly, in order both to increase returns and to develop expertise in the management organisation. It is already permitted to retain positions in equities for a while after they have been delisted from an approved marketplace. One relevant extension of this would be to permit the acquisition of stakes in companies which can reasonably be expected to become listed in the foreseeable future.

As a short-term solution, Norges Bank recommends that the investment universe for the Government Pension Fund – Global be extended to permit the ownership of equities which are expected to be listed on an approved exchange in the next 12-24 months.

Way forward for investments in unlisted markets

Norges Bank would like to point out that investments in unlisted markets raise issues of both a technical and organisational nature. In the above, we have recommended on the basis of asset allocation considerations that investments be made in unlisted markets, and we have suggested the long-term allocation which it would be reasonable to aim for.

Investment in private equity will require some adjustment of the Fund's management structure.

It will not be possible or appropriate to define a mandate for investments in unlisted markets in the form of a benchmark portfolio and a limit for tracking error. Nor will it be possible to measure returns continuously based on the market prices of underlying assets, as is the case for bonds and listed equities. It will be possible to estimate returns regularly on the basis of valuations of underlying assets, but these returns will be associated with uncertainty. This uncertainty is something which all investors in this market have to accept, and for which practical adjustments can be made. As a rule, only after several years will there be a good enough basis, in the form of actual cash flows from a concrete investment in unlisted markets, to allow comparison of returns with alternative investments in the same period.

This does not prevent large pension funds, for example, from normally investing a proportion of their portfolio in unlisted markets. Nor should this be a barrier to the Fund investing in these markets. However, as in other funds, there will be a need to establish separate investment mandates specifying what form risk limits, reporting requirements and management follow-up are to take, given the limitations described above.

Norges Bank's Executive Board is in the process of assessing whether the bank could expand its management activities to include new asset classes. The idea is to be able to give the Ministry a detailed report on how Norges Bank could manage the Fund's investments in unlisted asset classes.

3 Existing asset classes

Equity portion

In its letter of 10 February 2006, Norges Bank recommended that the Ministry increase the equity portion in the benchmark portfolio for the Fund. The updated analysis we have now performed confirms the results underlying that recommendation: a higher equity portion will increase both expected return and return volatility. The trade-off between expected return and volatility appears attractive in the long term. The risk of a negative accumulated real return rises slightly, but it is highly likely that an increased equity portion will be profitable. If we look at a conditional probability distribution, we find that the expected loss, if an increased equity portion turns out not to be profitable, is relatively modest.

Regional weights in the equity and fixed income benchmarks

In its letter of 22 August 2005, Norges Bank recommended that the regional weight for Asia/Oceania be reduced in the fixed income benchmark and increased in the equity benchmark. These changes have now been made.

Based on these new regional weights, we have looked once again at the effects of changes in the regional weights in both the equity and fixed income benchmarks. Our view of the correlation patterns in the markets is not significantly different to before, and we can see no potential changes which would result in clear improvements in the portfolio's properties.

Small-cap equities

Shares in companies with a small market capitalisation (small-cap equities) are part of the Fund's investment universe, but are not included in the Fund's benchmark portfolio. In its letter of 1 April 2003, Norges Bank recommended including small-cap equities in the benchmark portfolio. The main justification was that this would result in broader representation of the investment universe, and that the Fund's size and growth warranted the Fund being broadly invested. In the National Budget for 2004, the Ministry decided to stick to a benchmark portfolio consisting of large and medium-sized companies (large/mid-cap equities). The Ministry noted that it was uncertain whether including small-cap equities in the benchmark portfolio would have a measurable positive impact on expected return and risk. The Ministry also deemed it best to wait until the issue of Ethical Guidelines had been considered before contemplating an increase in the number of stocks in the benchmark portfolio.

The market value of small-cap companies is equivalent to between 11 and 15 per cent of the market value of the large/mid-cap companies currently included in the benchmark portfolio in the three regions of the Americas, Europe and Asia/Oceania. This is the largest single segment of the listed markets not included in the current benchmark portfolio. Table 1 shows the number of companies and market value for the large/mid-cap and small-cap segments in the regional FTSE indices at the end of August 2006 for the countries included in the current benchmark portfolio for the Fund.

Table 1.1 Key figures for FTSE Global Equity Index Series, August 2006

Region/Index	Companies in index	Index market value (USD billion)	Average market value per company (USD billion)
Americas, large/mid	866	14,293	16.50
Americas, small	1,952	2,202	1.13
Europe, large/mid	484	8,247	17.04
Europe, small	971	1,032	1.06
Asia-Pacific, large/mid	1,006	4,658	4.63
Asia-Pacific, small	1,561	546	0.35

The average small-cap company in the Americas and Europe has a market value of USD 1-1.1 billion (approx. NOK 7 billion), while the average in the Asia-Pacific region is much lower at USD 300-400 million. By way of comparison, we can look at the smallest companies already included in the benchmark portfolio: the average value of large/mid-cap companies in New Zealand is USD 1.2 billion. We can also draw comparisons with the most liquid companies traded on the Oslo Stock Exchange (OBX), which had an average market value of around NOK 47 billion (USD 7.1 billion) at the end of August 2006, and with companies with average liquidity on the same exchange (OB Match), which had an average market value of around NOK 2.5 billion (USD 0.4 billion). Thus the companies included in the small-cap segment in the FTSE index are not necessarily small by Norwegian standards.

Time series from the US and UK stock markets show that investments in small-cap equities have generated a slightly higher return than those in large-cap equities[5], measured over the entire period for which data are available (since 1926 in the USA and since 1955 in the UK). However, the small-cap premium has varied widely and has also been negative for long periods, as can be seen in Table 2.

In the multi-factor models developed by Eugene Fama and Kenneth French[6], the size of companies is one of several risk factors used to explain the return on individual equities. According to this theory, shares in small companies are more risky than shares in larger companies, and this is reflected in a higher expected return. A common explanation of why shares in small companies should be more risky than other equities is that, on average, small companies are more likely to run into financial difficulties during periods of slow economic growth. Investors could therefore lose their capital in periods when they have the greatest need for a return (when the markets as a whole are weak). For investors to be willing to hold such equities, they need to be compensated with an extra risk premium. Investors with a lesser need for liquidity in such situations than the average investor, such as the Fund, should therefore be the natural holders of small-cap equities. This explanation is disputed in the academic literature. However, the large (but varying) long-term return differentials between small-cap equities and other equities support the view that the small-cap premium is an independent and priced risk factor in the market.

5 Dimson, March and Staunton (2002): "Triumph of the optimists", Princeton University.

6 Fama/French (1996): "Multifactor Explanations of Asset Pricing Anomalies", Journal of Finance.
Fama/French (1996): "Size and Book-to-Market Factors in Earnings and Returns", Journal of Finance.
Fama/French (1993): "Common Risk Factors in the Returns on Equities and Bonds", Journal of Financial Economics.

Table 1.2 Small-cap premium (annualised) during various periods in the USA, the UK and Japan.

Period	USA	UK	Japan
1974-79	10.4%		
1980-89	- 5.7%	(from 4Q85) 1.6%	2.1%
1990-99	-9.8%	-4.9%	-6.9%
2000-1H06	11.4%	3.5%	11.6%

Source: S&P (USA), FTSE (UK), Barra/Nikko (Japan)

The return on small-cap equities is positively correlated with the return on other segments of the equity market. The correlation between the small- and large-cap indices underlying the data in Table 2 is in the interval 0.75-0.85 when quarterly data are used, and is still high using non-overlapping annual data (in the interval 0.66-0.78). This suggests that the diversification gains from including small-cap equities in the benchmark index are limited, but still positive. The gains are probably greater with longer time horizons.

Norges Bank believes that the same considerations as were behind its recommendation in 2003 still favour the inclusion of small-cap equities in the benchmark portfolio. Small-cap equities make up a substantial segment of the market. It is difficult to see why the Fund, as a large and long-term investor, should have an exposure to this segment which is substantially lower than that of the market in general. There are also moderate diversification gains to be had from including these equities. If small-cap equities are added to the benchmark portfolio, higher returns can be expected without a significant increase in volatility in the portfolio.

However, a number of objections can be raised against the inclusion of small-cap equities in the benchmark portfolio:

Firstly, transaction costs will be higher in this segment than for other equities, both when establishing the portfolio and when maintaining it. If the entire small-cap portfolio is to be built up over a short period and funded through the sale of large-cap equities, the set-up costs are estimated at USD 153 million. These calculations have been performed using the StockFactsPRO cost model, with the same methodology as Norges Bank uses to calculate the cost of phasing in new capital into the Fund. Table 3 breaks down this estimate between buying and selling costs and between commissions/taxes and estimated market impact. If the phasing-in period is extended to ten months, the market impact will be significantly less, and the total transaction costs are then estimated at USD 62 million. Further cost reductions can be achieved by using the existing influx of capital allocated to equities by the rebalancing regime, or coordinating the phasing-in of a new benchmark portfolio with an increased equity portion. The costs associated with the sale of large-cap equities will then be reduced. However, the phasing-in period for a new benchmark portfolio will ask a great deal in terms of coordinating the more than 70 sub-portfolios which together make up the Fund's equity portfolio, and so there may be operational reasons for limiting the length of the phasing-in period.

The cost of indexing the small-cap portfolio will be higher than the indexing cost for the current equity benchmark. This is partly because the cost of each transaction is higher, but mainly because changes in the composition of the index are more frequent. There will be a transaction requirement as a result of new small-cap companies joining the FTSE index, companies leaving the small-cap indices without joining the mid/large-cap segment, and small-cap companies issuing shares and paying dividends.

FTSE's small-cap index has been produced for only three years, and the transaction requirement associated with changes in the composition of the index have varied considerably over time. The basis for estimating the future transaction requirement is therefore limited. The composition of the small-cap index is reviewed every quarter. During the last four quarters for which we have figures (June 2005 to March 2006), the total transaction requirement as a result of index changes in the small-cap segment of the FTSE index amounted to 23 per cent of market value. There is also the transaction requirement resulting from the issue of shares or payment of dividends outside the quarterly reviews. This transaction requirement can, on an uncertain basis, be estimated at up to 60% of the total transaction requirement.

Based on these assumptions, indexing costs for the equity portfolio will rise from around 3-4 basis points a year with the current equity benchmark to around 8-9 basis points if the small-cap segment is included. Investors normally require a higher gross return to compensate for high transaction costs. How realistic this is in the small-cap

Table 1.3 Estimated cost of short-term adjustment of portfolio to new benchmark index (USD million)

	Commissions & taxes	Market impact	Total
Sale of large-cap equities	7.1	17.3	24.4
Purchase of small/mid-cap equities	17.8	110.4	128.2
Total	24.9	127.7	152.6

market depends on how efficiently the market actually functions.

Another potential challenge is the Fund's ownership limit of 5 per cent of outstanding share capital. In Europe, the average stake in each company in the third quarter of 2006 is around 0.6 per cent. In the current management of the portfolio, virtually all shares in the benchmark portfolio are purchased in the internally managed index portfolios. When it comes to active management, the 5 per cent ownership limit is a particular problem for positions in small and medium-sized companies. One key strategy for excess return is to identify companies with considerable potential for profitability at an early stage in their development, which typically means small and medium-sized companies. If small companies are included in the benchmark portfolio, the managers will probably want to increase their holdings in order to maintain the size of their active positions. The 5 per cent ownership limit may make this more difficult.

A third challenge relates to the exercise of ownership rights. Norges Bank already has access to the necessary information on all companies in the FTSE index. But the number of companies in the portfolio will rise substantially, and, depending on the level of ambition for voting at small companies, there will be a need for increased resources internally at Norges Bank Investment Management (NBIM) to follow up this increased activity. The rise in the number of companies may also increase the Ministry's work on reviewing and potentially excluding companies from the portfolio on the basis of the Ethical Guidelines.

After weighing up the arguments for enlarging the benchmark portfolio against the increased operational challenges, Norges Bank recommends that the benchmark portfolio for equity investments be enlarged to include the small-cap segment in the FTSE index.

This will increase the number of companies in the benchmark portfolio from around 2,500 today to around 7,000. Many of these companies are small, especially in Asia and emerging markets. One alternative might therefore be to include small-cap equities only in the developed markets of Europe and North America. The total number of companies would then be around 5,400.

The main justification for this recommendation is that small-cap equities constitute a large market segment which is omitted from the current benchmark portfolio, and that the expansion of the benchmark will give exposure to this segment more in line with the average for the market. If this recommendation is adopted, coverage of the equity universe represented in the FTSE index will rise from around 85 to 96 per cent. The gap to 100 per cent is due to a number of large markets in Asia and Europe not being included in the benchmark portfolio.

High-yield bonds

The value of bonds with a high credit risk included in the Lehman Global High Yield Index (LGHY) at the end of August 2006 was equivalent to around 4 per cent of all bonds included in the Lehman Global Aggregate (LGA). More than 60 per cent of bonds in the LGHY were issued in USD. While the average size of each bond in the LGA was just over USD 2 billion, the average size of bonds in the LGHY was just over USD 200 million. This is also substantially lower than the average size of corporate bonds in Lehman's global index for this segment, which was around USD 600 million.

Return data for high-yield bonds in the USA are available from the mid-1980s onwards. To date, the return on this segment has been around 6.5 percentage points (annualised) above the return on government and corporate bonds. However, this is not a reasonable estimate of the expected return premium in the longer term. During the same period, the stock market as measured by growth in the S&P 500 has generated an excess return relative to government and corporate bonds of more than 10 percentage points, which is much higher than can reasonably be expected in the future. The risk premium for high-yield bonds, i.e. after expected bankruptcy costs are deducted, should be slightly lower than the risk premium for equities. A reasonable estimate might be in the region of 1-2 percentage points above the return on ordinary corporate bonds.

Over the last decade, the return on high-yield bonds has been positively correlated with the return on equities in the US market, and this correlation has been particularly high in the case of small-cap equities. The correlation with equity returns has been higher than with the return on ordinary corporate bonds with a low credit risk. Figure 1.1 shows these correlations calculated using monthly data in two-year windows.

It is usual for large funds to have a specific allocation to high-yield bonds. Both the expected

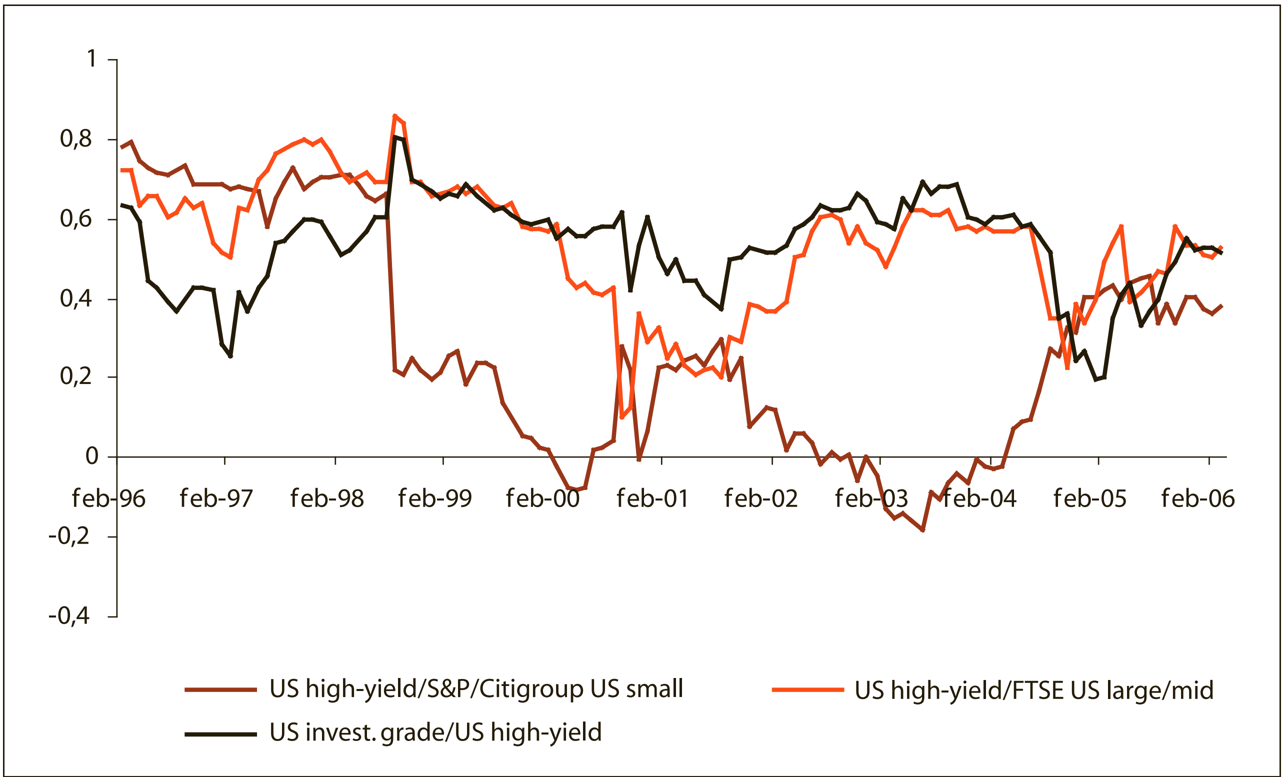

Figure 1.1 Correlations between returns in the US high-yield market on the one hand, and equities and ordinary corporate bonds on the other. Monthly data in two-year windows.

risk premium and the segment's diversification properties favour such an allocation.

On the other hand, it will be almost impossible to replicate a market-weighted benchmark index, as is done for both the equity portfolio and the fixed income portfolio in the Fund. The bond indices used to measure returns in the high-yield segment include many bonds which are not traded in the market, or in any case not at prices anywhere near those included in the bond indices. There is also reason to believe that pricing in this market may be inefficient, especially for bonds with the very highest levels of credit risk. Another problem with an indexing strategy is that risk measured as historical tracking error does not give an accurate picture of the real risk, which relates primarily to the probability of bankruptcy. A portfolio manager whose risk is measured as tracking error relative to an index may therefore be given the wrong incentives in terms of controlling bankruptcy risk in the management of the portfolio.

All things considered, Norges Bank does not therefore recommend including high-yield bonds in the benchmark portfolio for fixed income investments.

However, the analysis does show that it may be a good idea to have a separate allocation to this segment. This could take the form of a separate mandate in line with our recommendations for new asset classes. However, as high-yield bonds are a relatively small market segment, and the Fund is already allowed to invest in it, we will not be putting forward such a proposal on this occasion.

4 Summary

The Fund is intended as a permanent fund where only the real return is used. The Fund is well established as part of Norwegian economic policy, and Norges Bank believes that greater emphasis can now be given to the Fund's long-term objective when choosing an investment strategy. On this basis, Norges Bank recommends that a larger part of the Fund's investments be made in markets where it is possible to obtain a liquidity premium. The Fund is in a better position than most other investors to accept low liquidity in parts of its portfolio.

Norges Bank has made the following recommendations above:

– It should be made a strategic target for up to 10 per cent of the portfolio to be invested in real estate and infrastructure. Besides an expected liquidity premium for unlisted instruments, such investments will result in diversification gains that improve the trade-off between expected return and risk in the overall portfolio.

- It should be made a strategic target for up to 5 per cent of the portfolio to be invested in private equity. These are relatively non-transparent and illiquid markets, and it is possible to achieve relatively high returns with good management.
- As a short-term solution, the investment universe for equities should be extended to permit the ownership of unlisted equity which can be expected to be listed on an approved exchange in the next 12-24 months.
- The small-cap segment should be included in the benchmark portfolio for equities. This is the largest remaining segment of listed markets not yet included in the Fund's benchmark.

The risk profile of the overall portfolio will best be preserved if private equity is included as part of the equity portfolio, while real estate and infrastructure are included at the expense of the bond portion. However, as the management structure will be different, it may be more appropriate to define investments in private equity and property/infrastructure as separate mandates, and so allow the rest of the portfolio to retain its current mandate with a benchmark portfolio of equities and bonds.

Yours faithfully

Svein Gjedrem

Sigbjørn Atle Berg

Appendix 2

Expansion of the benchmark portfolio of the Government Pension Fund – Global to include small-cap equities

Letter of 20 February 2007 from the Ministry of Finance's Advisory Council on Investment Strategy

1 Background

Reference is made to the question from the Ministry of Finance as to whether the benchmark portfolio of the Government Pension Fund – Global (GPFG) should be expanded to include the small-cap equity segment of the FTSE index. By small-cap equities are meant shares of listed companies with low capitalisation. In practise, small-cap equities would be included in the benchmark portfolio of GPFG by changing the benchmark index for equities from the current benchmark index, FTSE All-World, which encompasses about 2,400 large and medium-sized companies, to FTSE All-Cap, which in addition also encompasses the 10 percent or so smallest companies within each region. This implies that the number of companies in the benchmark portfolio increases to about 7,000 companies. The average size of the new companies is NOK 7 billion in the Americas and Europe, and just under NOK 2.5 billion in Asia.

The question of whether to include small-cap equities in the benchmark portfolio has also been examined by Norges Bank. In the Bank's letter of 20 October 2006[1] to the Ministry of Finance it is recommended that the small-cap equity segment be included in the Fund's benchmark portfolio. The Bank writes:

> "Small-cap equities make up a substantial segment of the market. It is difficult to see why the Fund, as a large and long-term investor, should have an exposure to this segment which is substantially lower than that of the market in general. There are also moderate diversification gains to be had from including these equities. If small-cap equities are added to the benchmark portfolio, higher returns can be expected without a significant increase in volatility in the portfolio."

[1] This issue is discussed in more detail in Norges Bank's Strategy Report for the Government Pension Fund – Global and in Staff Memo No. 2006/7.

2 The role of the Strategy Council

The Ministry of Finance's Advisory Council on Investment Strategy (the Strategy Council) was established on 29 September 2005 to assist the Ministry in its work on the long-term investment strategy of the GPFG. The terms of reference of the Strategy Council refer to four general principles governing the Fund's investments:

- The objective of the management of the Fund is to achieve the maximum possible return, subject to moderate risk.
- The Fund shall be a financial investor, and not a tool for strategic ownership in individual companies.
- The Fund shall be well diversified.
- A long-term investment horizon shall be adopted.

Against this background, the role of the Strategy Council is to examine the inclusion of small-cap equities in terms of its effect on the expected return on, and risk of, the Fund. We have not examined the effect on the work relating to the implementation of the Ethical Guidelines or issues relating to the upper limit on ownership interests, since these are deemed to fall outside to scope of the terms of reference of the Strategy Council.

3 Assessment

Following an expansion to include small companies, the benchmark portfolio for equities will represent 96 percent of the stock markets included in the FTSE index, as compared to the current 85 percent. The Strategy Council has attached weight to such a change being a natural consequence of the purpose of the investments and of the Fund's overall investment strategy:

- The Fund is a financial investor, and not a tool for strategic ownership in individual companies. Consequently, the average ownership stakes held by the Fund are small.
- The change implies that the capital will be spread across close to 7,000 equities and 8,000 bonds in about 40 countries, with the benchmark portfolio mainly being composed in such manner that the return on such portfolio traces developments in global stock and bond markets.
- The active management limits do not change the profile of the portfolio as being broad in scope. Neither the risk limit of 1.5 percent tracking error, nor Norges Bank's implementation of the active management effort, are geared towards the return on the Fund being created through large individual positions based on short-term market perceptions.
- The Fund adopts a very long investment horizon. The equities purchased now are, generally speaking, not intended for sale at a later date.

The current benchmark portfolio of the GPFG deviates somewhat from the aggregate portfolio of the world's stock and bond markets. The equity portion of 40 percent is considerably lower than that of the market portfolio and that of large, comparable funds internationally. Furthermore, the regional weight of Europe is relatively high because imports from European countries form a large share of Norwegian imports. Nevertheless, the fundamental idea underpinning the investment strategy is to spread risk by purchasing a representative selection of the world's stock and bond market, in order to thereby achieve the maximum possible return at a moderate risk. The Strategy Council believes, against this background, that it is appropriate for the Ministry to also select the most representative available benchmark portfolio for equities.

The current limitation to large and medium-sized companies implies a systematic selection of the 85 percent largest companies, instead of purchasing the entire stock market. Such a strategy could be justified during an early phase of the Fund's history by invoking considerations relating to prudence and a desire to accumulate experience as far as new investment classes are concerned. The Fund has now been invested in global equities for nine years. The Strategy Council is of the view that it is not appropriate, at this stage of the Fund's development, to exclude small companies from the benchmark portfolio of the GPFG.

The Strategy Council believes that considerations to do with the evaluation of active management performance also favour the inclusion of small companies in the benchmark portfolio. Since small companies form a large segment in the stock market, and since GPFG already has access to such investments, a benchmark portfolio that includes small companies will constitute a more appropriate comparative basis than does the current benchmark portfolio.

Studies of historical returns (see the appended references) have documented interesting differences in market developments for small and large companies:

- The first studies to measure the difference in returns between small and large companies in the 1980s and early 1990s found a higher risk-adjusted return on small-cap equities than on large-cap equities.
- The excess return on small companies was documented for many countries, and it was generally the case that the companies performed better the smaller they were.
- After this effect had been well documented, there followed a period of 10-15 years when observed equity returns in many countries were lower for small-cap equities than for large-cap equities. After 2000 it would appear that it has again become most profitable to be invested in the smallest companies.
- For those markets in respect of which long time series are available (the United States and the United Kingdom), risk-adjusted returns on small companies have on average been somewhat higher than on large ones.
- The correlation between annual returns on large and small companies has been about 0.8. Although this covariation is high, it nevertheless allows for a certain diversification of risk. At the same time, the Council's own analyses of historical equity returns in the US show that the correlation between overlapping five- and ten-year average returns has been lower than the correlation between annual returns (about 0.5-0.6). The data set is very limited, but may indicate that the risk diversification effect from including small-cap equities increases with the investment horizon.

These studies document that returns on investments in small-cap equities have generally developed more favourably than those in large-cap equities. This is commonly labelled a "small-cap effect". The historical findings support theories that explain this effect by classifying company size as a separate risk factor, relating to, inter alia, the expectation that small companies may experience particularly low returns and low liquidity during recessions, as compared to large and medium-sized limited companies. Such a risk will be relevant to investors with a short time horizon, but of little relevance to the GPFG, which will, given its long investment horizon, be well placed to carry such a risk. However, the theoretical explanation for the positive historical excess return on small company equities remains an unresolved issue in financial literature. It is possible that this observed excess return only reflects an historical coincidence. In any case, the underlying reason for the "small cap effect" is of limited importance to the assessment of the Strategy Council. The Council attaches most weight to the fact that the proposed expansion of the benchmark portfolio will result in the Fund no longer excluding a significant segment of global stock markets.

As far as the additional costs associated with the inclusion of small companies in the benchmark portfolio are concerned, the Strategy Council has based its assessment on Norges Bank's estimate as to the cost of establishing and maintaining the new portfolio. Norges Bank has estimated the cost of the actual changeover of the benchmark portfolio at just under NOK 400 million if the change is effected over a period of ten months. Moreover, updated estimates from Norges Bank indicate that the maintenance costs associated with a portfolio equal to the benchmark portfolio will increase to 8-9 basis points when including the small company segment (from about 5 basis points under the current benchmark portfolio). The considerably higher management costs associated with small–cap equities may possibly explain why several large international pension funds have chosen to keep such equities outside their benchmark portfolios, and only include them in the opportunity set for active management.

The Strategy Council is of the belief that the increased costs estimated by Norges Bank do not represent a sufficiently weighty argument to refrain from including small-cap equities in the benchmark portfolio. There are several reasons for this:

– In an efficiently functioning market, investors will not purchase equities in the smallest companies unless they are compensated for increased costs in the form of a higher gross return. The extent to which this will apply to the market for small companies depends on how efficiently this market functions.
– Cost comparisons prepared by CEM Benchmarking have shown that the costs incurred in the management of the GPFG have been lower than those of other large pension funds. Given the experience that Norges Bank has accumulated in the management of large portfolios of equities and corporate bonds, there is reason to believe that the Fund will, at the very least, face no cost disadvantage relative to other large funds that have chosen to invest in small companies.
– Small companies are more risky than large companies, but their equity returns are less than perfectly correlated. A simple analysis of the risk associated with an expanded benchmark portfolio shows that it is actually marginally lower than the risk associated with the current benchmark portfolio. Even if we assume that the expected excess return on small equities is nil, the expected risk-adjusted return will still be higher in the expanded benchmark portfolio. The Strategy Council is of the view that this may justify the higher management costs.
– The observed excess return on small-cap equities may reflect investors assuming an additional risk when purchasing these, a risk that they are otherwise unable to assume, cf. the discussion above. As pointed out earlier, this risk is of less relevance to the GPFG. In such case, the risk- and cost-adjusted return will increase by including small-cap equities in the benchmark portfolio.

4 Conclusion

Based on considerations relating to the overall return and risk of the Government Pension Fund – Global, the Strategy Council recommends that the Fund's benchmark portfolio for equities be expanded by inclusion of the small-cap equity segment. Although costs, when taken in isolation, will increase somewhat after such a broadening, it is likely that this will be covered by way of a better risk-adjusted expected return for the portfolio. Such a broadening will make the Fund's benchmark portfolio more representative of developments in the international stock markets. Furthermore, an expanded benchmark portfolio will offer a more appropriate basis for assessing the active management of the Fund. The Council deems the proposed broadening to be a reasonable consequence of the Fund's general investment strategy, which is to purchase a representative portfolio of the world's stock market.

In its letter of 2 June 2006 to the Ministry of Finance, the Strategy Council recommended that the equity portion of the Fund be increased from 40 to 60 percent. The Council is of the view that an expansion of the benchmark portfolio to include small companies does not affect the assessment of the overall risk associated with the Fund or the recommendation to increase the equity portion.

Oslo, 20 February 2007

Erling Steigum (Chairman)
Bodil Nyboe Andersen
Monica Caneman
Ida Helliesen
Morten Jensen
Thore Johnsen
Eva Liljeblom

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Appendix 3

Consequences for the Council on Ethics of including new companies in the benchmark portfolio of the Government Pension Fund – Global

Letter of 21 March 2007 from the Council on Ethics to the Ministry of Finance

We refer to questions from the Ministry of Finance as to the consequences for the Council on Ethics of including small companies in the benchmark portfolio of the Pension Fund. In practise, such a changeover will imply that the current benchmark index for equities, FTSE All-World, which encompasses in excess of 2,400 large and medium-sized companies, is replaced by the FTSE All-Cap. The benchmark portfolio is thereby expanded to include small companies that account, in aggregate, for about 10 pct. of the stock exchange value of the companies encompassed by the FTSE All-Cap. The number of companies in the benchmark portfolio will then increase to about 7,000. The Council assumes that the Ethical Guidelines shall be practised in the same manner for these companies as for the current portfolio.

The Council on Ethics has been in contact with EIRiS, which has two different agreements with the Council for monitoring of the portfolio of the Pension Fund. Through the first agreement, EIRiS monitors the portfolio with a view to identifying companies that produce weapons that shall be screened from the Fund. Through the second agreement, EIRiS performs daily news searches for information on companies in the portfolio that may be engaged in activities in violation of the Ethical Guidelines. EIRiS is of the view that it would also be possible to perform such assignments if the benchmark portfolio of the Fund is expanded to include small companies.

A larger number of companies being covered by the Fund will increase the costs of the Council on Ethics. It would seem reasonable to assume that the cost of monitoring the portfolio will increase in proportion with the number of companies. In addition, there may be a need for hiring consultants with a stronger regional affiliation, because it may be more difficult to obtain information on smaller companies. Moreover, it must be expected that the number of cases requiring further assessment will increase. It will therefore be necessary to strengthen the examination capacity of the secretariat through, inter alia, the increased use of external examiners to assist in the investigation of specific cases. It would appear reasonable to assume that the cost budget of the Council on Ethics will increase by NOK 3 million a year.

The Council has been in contact with EIRiS to clarify the prospects for carrying out a preliminary review of the new companies with a view to identifying companies that are involved in the production of weapons that qualify for exclusion from the Fund. It would seem realistic to carry out such an initial review prior to the new equities being purchased for the portfolio.

When the number of companies increases, there is also an increase in the risk that the portfolio will include companies that are engaged in activities in violation of the guidelines. Nor can it be ruled out that access to information on small companies is inferior to that on large ones. Nevertheless, the Council is not in possession of any information to suggest that investments in small companies are, in themselves, either more or less risky from an ethical perspective than are other investments.

Yours faithfully,

Eli Lund
Head of the Secretariat
Council on Ethics

Appendix 4

Provisions on the Management of the Government Pension Fund

Chapter 1

Government pension fund Act (No. 123 of 20 December 2005)

Section 1 The Government Pension Fund shall support central government saving to finance the National Insurance Scheme's expenditure on pensions and long-term considerations in the application of petroleum revenues.

Section 2 The Government Pension Fund is managed by the Ministry of Finance. The Fund comprises the Government Pension Fund – Global and the Government Pension Fund – Norway.

The foreign portion is deposited in an account at Norges Bank. The countervalue is managed under further rules laid down by the ministry, see section 7.

The domestic portion is placed as a capital contribution to Folketrygdfondet. The countervalue is managed under further rules laid down by the ministry, see section 7.

Section 3 Income of the Government Pension Fund – Global consists of the cash flow from petroleum activities, which is transferred from the central government budget, the return on the Fund's capital, and the net results of financial transactions associated with petroleum activities.

The cash flow is the sum of

– total tax revenues and royalty deriving from petroleum activities collected pursuant to Petroleum Taxation Act (no. 35 of 13 June 1975) and the Petroleum Activities Act (no. 72 of 29 November 1996),
– revenues deriving from tax on CO_2 emissions due to petroleum activities on the continental shelf,
– revenues deriving from the State's Direct Financial Interest in petroleum activities, defined as operating income and other income less operating expenses and other direct expenses,
– central government revenues from net surplus agreements associated with certain production licences,
– dividends from Statoil ASA,
– transfers from the Petroleum Insurance Fund,
– central government revenues deriving from the removal or alternative use of installations on the continental shelf
– any government sale of stakes representing the State's Direct Financial Interest in petroleum activities,
– less
– central government direct investments in petroleum activities,
– central government expenses in connection with the Petroleum Insurance Fund,
– central government expenses in connection with the removal or alternative use of installations on the continental shelf
– any government purchase of stakes as part of the State's Direct Financial Interest in petroleum activities.

Net financial transactions associated with petroleum activities are the sum of:

– gross revenues from government sale of shares in Statoil ASA,

less

– government capital contributions to Statoil ASA and companies attending to government interests in petroleum activities.

Section 4 Income of the Government Pension Fund – Norway consists of the return on the capital under management.

Section 5 The capital of the Government Pension Fund may only be used for transfers to the central government budget pursuant to a resolution by the Storting (Norwegian parliament).

Section 6 The Government Pension Fund itself has no rights or obligations vis-à-vis private sector entities or public authorities, and may not institute legal proceedings or be subjected to legal proceedings.

Section 7 The ministry may issue supplementary provisions to implement this Act. The ministry may also lay down further provisions concerning the administration etc., Folketrygdfondet.

Section 8 The Act enters into force at such time as the King decides. The King may bring the individual provisions into force at different times. The ministry may make transitional rules.

Provisions on Folketrygdfondet laid down pursuant to the National Insurance Act section 23-11 fourth paragraph apply until otherwise prescribed pursuant to section 7.

Section 9 The following amendments to other Acts become effective as from the entry into force of this Act:

1. Repeal of the Government Petroleum Fund Act (no. 36 of 22 June 1990).
2. The National Insurance Act (no. 19 of 28 February 1997) section 23-11 shall read:

Section 23-11 The National Insurance Scheme's capital

The National Insurance Institution shall for accounting purposes keep the capital of the National Insurance Scheme separate from other capital in its keeping.

Chapter 2

Regulations on management of The Government Pension Fund – Global and The Government Pension Fund – Norway

Regulations on Management of the Government Pension Fund – Global

Laid down by the Ministry of Finance on 22 December 2005 pursuant to the Government Pension Fund Act (no. 123 of 20 December 2005).

Section 1 Management of the Government Pension Fund – Global

Norges Bank manages the Government Pension Fund – Global (hereafter termed "the Fund") on behalf of the Ministry of Finance. The Bank may use other managers.

Norges Bank shall prepare an annual report and quarterly reports for the Fund. The reports shall be public.

Section 2 Investment of the Fund

The Fund shall be placed on separate account in the form of krone deposits with Norges Bank. Norges Bank shall invest this capital in its own name in financial instruments and cash deposits denominated in foreign currency.

The actual portfolio shall be composed through extensive use of diversification.

Norges Bank shall seek to achieve the highest possible return on the investments in foreign currency within the investment limits set out in these regulations and guidelines issued under these regulations.

Section 3 Accounting return

The value of the Fund's krone account shall be equivalent to the value of the portfolio of financial instruments and cash deposits in foreign currency. Norges Bank's book return on the portfolio, less remuneration to Norges Bank, shall be added to the Fund's krone account on 31 December each year.

Section 4 Investment universe

The Fund shall be invested in accordance with the following asset allocation:

– Fixed income instruments 50 – 70%
– Equity instruments 30 – 50%

Financial instruments, including derivatives, which are naturally related to asset classes as mentioned in the first paragraph may be utilised. Commodity-based contracts and fund units are also eligible. Commodity-based instruments shall not be taken into account when calculating the asset allocation under the first paragraph.

The portfolio of fixed income instruments shall be invested in accordance with the following currency and regional distribution

– Europe 50 – 70%
– The Americas and Africa 25 – 45%
– Asia and Oceania 0 – 15%

The portfolio of fixed income instruments may be invested in any currency of the following countries:

- Europe: Austria, Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Spain, Sweden, Switzerland and the United Kingdom.
- The Americas: Canada, Mexico and the United States.
- Africa: South Africa.
- Asia and Oceania: Australia, Hong Kong, Japan, New Zealand, Singapore and South Korea.

The portfolio of equity instruments shall be invested in accordance with the following currency and regional distribution:
- Europe 40 – 60%
- The Americas and Africa 25 – 45%
- Asia and Oceania 5 – 25%

The portfolio may be invested in equity instruments quoted on a regulated and recognised market in the following countries:
- Europe: Austria, Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Spain, Sweden, Switzerland, Turkey and the United Kingdom.
- The Americas: Brazil, Canada, Chile, Mexico and the United States.
- Africa: South Africa.
- Asia and Oceania: Australia, China, Hong Kong, India, Indonesia, Israel, Japan, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan and Thailand.

Investments in securities issued by Norwegian enterprises are not permitted. “Norwegian enterprises” means any enterprise whose head office is in Norway.

Section 5 Benchmark portfolio and tracking error

The Ministry of Finance establishes a benchmark portfolio for the Fund.

The expected difference in return between the actual portfolio and the benchmark portfolio measured by tracking error on an annualised basis shall not exceed 1.5 percentage points.

Section 6 Equity holdings

The investments may not be placed such that the Fund attains a holding of more than five per cent of the shares of a single company that confer voting rights.

Norges Bank shall exercise voting rights for the Fund. The Ministry of Finance may issue supplementary guidelines for Norges Bank’s exercise of ownership. The overall goal of exercise of ownership is to safeguard the Fund’s financial interests.

Section 7 Risk systems and risk management

Norges Bank shall ensure that satisfactory risk systems and control routines are in place in regard to instruments used in the management of the Fund. The same applies in regard to the handling of counterparty risk and operational risk.

Section 8 Screening and exclusion

The Ministry of Finance establishes Ethical Guidelines for the Fund and decides whether specific issuers shall be excluded from the Fund’s investment universe. An ethics council shall be appointed to advise on whether investment opportunities in financial instruments issued by specified issuers are contrary to the Ethical Guidelines.

The Ministry of Finance may lay down further rules for the ethics council, its activities and organisation.

Section 9 Commencement

These regulations shall come into force on 1 January 2006. Regulations no. 1488 of 19 November 2004 on Management of the Government Petroleum Fund shall be revoked on the same date.

Regulations relating to the Management of the Government Pension Fund – Norway

Regulations No. 1419 of 15 December 2006 relating to the management of the Government Pension Fund – Norway. Laid down by the Ministry of Finance pursuant to Section 7 of Act No. 123 of 21 December 2005 on the Government Pension Fund.

Section 1 The management of the Government Pension Fund – Norway

Folketrygdfondet manages the Government Pension Fund – Norway (hereinafter referred to as the «Fund») on behalf of the Ministry of Finance.

Section 2 Investment of the Fund

The Fund is a capital contribution for Folketrygdfondet. Folketrygdfondet shall reinvest, in its own name, this contribution in financial instruments and cash deposits.

The Executive Board is responsible for ensuring that the capital of the Fund is invested with a view to achieving the best possible return over time in Norwegian kroner, with due regard to ensuring satisfactory security and the required liquidity. The Executive Board shall ensure that the management of the Fund is subject to satisfactory risk management.

The Executive Board shall appoint the internal auditors of Folketrygdfondet. The Executive Board shall approve the resources and plans of the internal auditors on an annual basis. The internal auditors shall report to the Executive Board.

Section 3 Return for accounting purposes

The value of the Fund shall be equal to the value of portfolio of financial instruments and cash deposits held by Folketrygdfondet. The income and gains generated through the management efforts of Folketrygdfondet shall be added to the capital as per 31 December each year.

Section 4 Investment limits

The capital of the Fund may be invested in equities, primary capital certificates, bonds, commercial paper, and as deposits with commercial and savings banks.

Within a limit of 50 percent of the capital of the Fund, as measured at acquisition cost, the capital may be invested in equities and primary capital certificates listed on a Norwegian exchange or an exchange in Denmark, Finland or Sweden, in listed convertible bonds, listed bonds with call options on equities of Norwegian companies and, with the approval of the Ministry of Finance, in other equities of Norwegian companies, provided that such equities are subject to regular and organised trading. Investments in equities listed on exchanges in Denmark, Finland or Sweden shall, in aggregate, not exceed 20 percent of the equity investment limit of the Fund. The capital of the Fund may, within the equity investment limit, be invested in non-listed equities of Norwegian companies that have applied for, or have specifically planned to apply for, an exchange listing. Investment in this type of equities shall not exceed 5 percent of the equity investment limit.

Up to 10 percent of the capital of the Fund as measured at acquisition cost may be invested in bonds and commercial paper from issuers domiciled in Denmark, Finland or Sweden.

Sub-section 2 shall not prevent Folketrygdfondet from retaining equities of Norwegian companies that change their status to become foreign companies in connection with acquisitions, mergers, etc.

Folketrygdfondet may hold shares representing up to 15 percent of the overall share capital or primary capital of any one single company in Norway. Folketrygdfondet may hold shares representing up to 5 percent of the overall share capital of any one single company in Denmark, Finland and Sweden.

Folketrygdfondet shall exercise the ownership rights of the Fund. The overall objective of the corporate governance effort is to safeguard the financial interests of the Fund.

Folketrygdfondet may, pursuant to more detailed guidelines laid down by the Ministry of Finance, form sale and repurchase agreements relating to equity instruments and interest-bearing instruments, whereby which the acquiror of the instruments have a duty under the agreement to return these to the seller.

Folketrygdfondet may utilise interest rate and currency derivatives in its management of the fixed-income securities portfolio.

Section 5 Composition of the Executive Board

The Executive Board shall comprise nine members, who shall be appointed, together with their personal alternates, by the King for four years at a time, until the accounts have been closed for the fourth year to elapse after their appointment was made.

If members or alternates are incapacitated or die during the term of their appointment, a new member or alternate shall be appointed for the remaining term.

The King appoints the chairperson of the Executive Board. The Executive Board appoints its deputy chairperson from amongst its members.

The Executive Board shall be based in Oslo.

Section 6 Board meetings

Board meetings shall be held when requested by the chairperson or by one of the other members of the Executive Board. The chairperson shall ensure that meetings are convened with no less than 8 days' notice.

The Executive Board has a quorum when at least one half of its members or their alternates are in attendance, hereunder the chairperson or deputy chairperson.

The Board members and alternates shall receive a remuneration determined by the Ministry of Finance. They shall receive travel and subsistence allowance at the rates applicable to civil servants during travels.

Section 7 The administrative staff of Folketrygdfondet

The administrative staff of Folketrygdfondet shall be responsible for preparing and presenting the matters to be deliberated by the Executive Board, and shall also be responsible for the administrative handling of the investment activities, unless otherwise determined by the Executive Board.

Expenses incurred in the management of the Government Pension Fund – Norway shall be paid out of the capital of the Fund.

The head of the administrative staff of Folketrygdfondet shall be appointed by the King in the Council of State. The Executive Board may render its comments prior to such appointment being made, cf. Royal Decree of 11 December 1983.

The other personnel shall be employed pursuant to the rules set of in the personnel regulations of the Fund, cf. Act No. 3 of 4 March 1983 on Central Government Employees, Etc. Their salaries and employment terms shall be determined by the Executive Board, and shall be notified to the Ministry of Finance.

The Executive Board is responsible for stipulating more detailed instructions for the head of the administrative staff.

Section 8 Annual accounts, annual report and semi-annual report

The Executive Board shall ensure the preparation, every calendar year, of annual accounts and an annual report in accordance with generally agreed accounting principles, and that Folketrygdfondet adheres to good accounting practise. The annual accounts and annual report shall be finalised no later than 15 March. The Executive Board shall also ensure the preparation, within 15 August, of a semi-annual report.

The annual accounts, annual report and semi-annual report are available to the general public.

Section 9 Auditing

The Office of the Auditor General shall be responsible for the auditing of the Government Pension Fund – Norway.

The Executive Board shall as soon as possible, and no later than 15 March, send the annual report and the annual accounts to the Ministry of Finance, which shall notify the Storting.

Section 10 Confidentiality obligation

Any person participating in the fund management activities pursuant to these rules shall be under a confidentiality obligation pursuant to Sections 13 to 13e of the Public Administration Act.

Section 11 Supplementary rules

The Ministry of Finance may render more detailed provisions to supplement and implement the rules. The Ministry of Finance may, in special cases, grant exemptions from the provisions of Section 4.

Section 12 Effective date

The Regulations shall enter into effect on 1 January 2007. Rules on the administration of Folketrygdfondet and on the management of its capital, auditing, etc., laid down by the Storting on 20 June 1997, as most recently amended on 15 December 2004, shall be repealed as from the effective date of the new rules.

Chapter 3

Guidelines for management of the Government Pension Fund – Global

These guidelines lay down supplementary provisions to the Government Pension Fund Act and the Regulations on Management of the Government Pension Fund – Global ("the regulations").

Contents:

1. Benchmark portfolio
2. Rebalancing of the benchmark portfolio
3. Tracking error and additional constraints

4. Requirements on valuation, measurement of return and management and control of risk
5. Ethics

1. Benchmark portfolio – section 5 of the regulations

1.1 The strategic benchmark portfolio

The composition of the strategic benchmark portfolio is 60 per cent fixed income and 40 per cent equities.

1.2 Benchmark portfolio for fixed income instruments

The strategic benchmark portfolio for fixed income instruments has the following composition:

– 60 per cent of the portfolio shall consist of Lehman Global Aggregate (LGA) and Lehman Global Real (LGR) in Europe except for Norwegian kroner (NOK) and with the addition of domestic government bonds that are included in Lehman Swiss Franc Aggregate.
– This section of the benchmark portfolio consists of the following currencies: Euro, British pound, Swiss franc, Swedish krona and Danish krone.
– 35 per cent of the portfolio shall consist of LGA and LGR in the United States and Canada with the share of mortgage-backed and asset-backed securities in US dollars downweighted to 25 per cent in relation to a pure market-value weighted index. Domestic government bonds (nominal and inflation indexed), other government related bonds ("LGA Government related") except for unsecured bonds issued by public institutions ("Agencies") and corporate bonds ("LGA Corporates") in US dollars are correspondingly upweighted in relation to their market value. This section of the benchmark portfolio consists of the following currencies: Canadian dollar and US dollar.
– 5 per cent of the portfolio shall consist of domestic government bonds from developed markets in LGA and LGR in Asia/Oceania (Australia, Japan, New Zealand and Singapore). Japan's share is calculated based on a factor of 25 per cent of the market capitalisation value of Japanese bonds.

This section of the benchmark portfolio consists of the following currencies: Australian dollar, Japanese yen, New Zealand dollar and Singapore dollar.

At each month-end the composition of the benchmark portfolio is revised in line with the changes in composition carried out by Lehman Brothers.

If new currencies that otherwise form part of the benchmark portfolio are included in LGR, such instruments shall be included in the benchmark portfolio as from the date decided by the Ministry of Finance.

1.3 Benchmark portfolio for equity instruments

The strategic benchmark portfolio for equity instruments is based on tax-adjusted FTSE All-World indices (large and medium-size companies) and shall have the following composition:

– 50 per cent FTSE All-World Europe in which the following countries are included: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Sweden, Spain, Switzerland and United Kingdom.
– 35 per cent FTSE All-World Americas/FTSE All-World Africa in which the following countries are included: Brazil, Canada, Mexico, South Africa and United States.
– 15 per cent FTSE All-World Asia Pacific in which the following countries are included: Australia, Hong Kong, Japan, New Zealand, Singapore, South Korea, and Taiwan.

The distributions within each region are determined on the basis of market capitalisation weights with daily rebalancing of country weights within each region.

2 Rebalancing of the benchmark portfolio – section 5 of the regulations

This item is exempt from the public domain.

3 Tracking error and additional restrictions – sections 4 to 6 of the regulations

3.1 Limit on tracking error

A general requirement is that expected (ex ante) tracking error shall be calculated using a system which models risk associated with the most important financial instruments in which the Fund invests. In cases where the system does not model financial instruments in which the Fund invests, the approach shall employ conservative estimates and methods making it more likely that expected tracking error will be overestimated than underestimated in relation to actual tracking error. The system shall aggregate risk across asset classes and financial instruments in a satisfactory manner.

An important objective for the risk system is that risk attending financial instruments should be calculated in such a way as to ensure that, over time, estimated risk in the Fund deviates as little as possible from actual risk. Moreover, some degree of stability in the choice of system for calculating risk is appropriate.

3.2 Fixed income securities issued by the public sector in another country's currency

Section 4, third paragraph, of the regulations prescribes which countries' currencies the Fund's portfolio of fixed income instruments can be invested in. In the case of bonds issued by the public sector [LGA Government related, Government index/linked and Treasury] in other countries, but in a currency belonging to one of the countries or areas specified in section 4, third paragraph, of the regulations, separate rules apply. The Fund's capital can be invested in such fixed income instruments provided the security's credit rating meets a minimum requirement corresponding to "investment grade" from a recognised credit rating agency. Up to 0.5 per cent of the fixed income portfolio's market value can derive from such securities having BB/Ba/BB as their highest long-term credit rating from a recognised credit rating agency. Norges Bank sets further rules for liquidation of holdings in cases where such securities are downgraded to below the approved minimum requirement. Should a fixed income security fail to meet these requirements yet is included in the Fund's benchmark portfolio, investment in that security is none the less permitted.

3.3 Calculation of holdings

If a stock exchange listed company does not employ the term "share capital" or the like, the holding shall be calculated based on the company's market capitalisation, i.e. the total number of issued shares multiplied by the share's market value.

4 Requirements on valuation, measurement of return and management and control of risk – section 7 of the regulations

Valuation, measurement of return and management and control of risk shall comply with internationally recognised standards and methods. The Fund cannot invest in markets, asset classes or instruments if these requirements cannot be met. See also 3.1.

4.1 Valuation and measurement of return

The method used to establish the value of financial instruments shall be verifiable and shall indicate with reasonable assurance the true value of the Fund's assets at the time of measurement. Valuation shall take place at least monthly and shall be based on market prices or, in cases where market prices cannot be observed, on recognised price models.

4.2 Management, measurement and control of risk

4.2.1 Market risk

Market risk shall be measured in such a way that compliance with the limit on relative risk in the Pension Fund can be documented. Best practice in the area shall be employed in regard to measuring methods, decomposition and measurement frequency.

4.2.2 Counterparty risk

Norges Bank shall have satisfactory routines and systems for selecting and evaluating counterparties. The monitoring system and measurement frequency employed for control of counterparty risk, including requirements on minimum credit rating and exposure limits, shall follow best practice in the area.

Counterparties for unsecured deposits and trading in unlisted derivatives shall have a long-term credit rating of at least A-/A3/A- from at least one of the following three agencies: Fitch, Moody's or Standard & Poor's. Norges Bank may make exemption from this minimum requirement in regard to a central counterparty. When such exemption is granted, the Ministry of Finance shall be informed thereafter.

Norges Bank must lay down such supplementary requirements on credit rating, provision of security and exposure limits as are appropriate in the operative management, and shall measure overall exposure to counterparties using internationally recognised methods that meet necessary requirements as to verifiability and accuracy.

Norwegian banks can be used as counterparties in currency trading and when making bank deposits, provided the currency involved is included in the investment universe.

4.2.3 Operational risk

Identification and measurement methods shall comply with internationally recognised standards for the various dimensions of operational risk. Operational risk shall be identified and shall be measurable and controllable before new activities (e.g. investments in new countries, instruments, asset classes, counterparties, external service providers, IT systems etc) are started.

4.3 Reporting

Annual reports prepared by Norges Bank under section 1 of the regulations shall contain:

- Norges Bank's strategic plan and the investment strategy for the Fund
- A list of all significant external service providers, including a complete list of external managers
- An account of the standards employed by Norges Bank for the purpose of valuation (accounts), measurement of return, along with management, measurement and control of identified risk factors (market risk, counterparty risk and operational risk)
- A report on the Fund's return, including absolute and relative return measured in Norwegian kroner and the Fund's currency basket, real return, decomposition of return on asset class and internal/external management
- A report on costs related to the phasing in of new capital, exclusion of companies and other changes resulting from any decision by the Ministry of Finance to change the Fund's benchmark portfolio
- A report on the Fund's absolute and relative market risk (volatility), monthly figures – in the aggregate and distributed on asset classes
- The composition of the fixed income portfolio by main categories of credit rating grade
- An overview of new countries, currencies and instruments in which the portfolio has been invested
- An overview of the Fund's investments in relation to the regulations' quantitative provisions
- An account of the exercise of ownership rights in accordance with the ministry's Ethical Guidelines, see 5.3.2
- A list of companies that are excluded from the investment universe
- A report on the accounts in accordance with Norges Bank's accounting principles
- A complete list of equities and bonds as of 31 December
- An account of the organisation and operating expenses of Norges Bank Investment Management

Quarterly reports prepared by Norges Bank shall contain:

- A report on the Fund's return, including absolute and relative return in Norwegian kroner and the Fund's currency basket, real return, and a description of important contributions to relative return
- A report on the Fund's absolute and relative market risk (volatility), monthly figures – in the aggregate and distributed on asset classes
- The composition of the fixed income portfolio by main categories of credit rating grade
- An overview of the Fund's investments in relation to the regulations' quantitative provisions
- A list of companies that are excluded from the investment universe
- A report on the accounts in accordance with Norges Bank's accounting principles

Any breach of the regulations' cap on maximum holdings that is reversed within 10 trading days does not constitute a formal breach of the regulations and shall not be reported to the ministry.

5 Ethical guidelines – section 8 of the regulations

5.1 Basis

The Fund's Ethical Guidelines are based on two premises:

- The Fund is an instrument for ensuring that a reasonable portion of the country's petroleum wealth benefits future generations. The financial wealth must be managed with a view to generating a sound return in the long term, which is contingent on sustainable development in the economic, environmental and social sense. The Fund's financial interests

should be consolidated by using the Fund's ownership positions to promote sustainable development.
- The Fund should not make investments that entail an unacceptable risk that Fund is contributing to unethical acts or emissions, serious violations of fundamental humanitarian principles, gross violations of human rights, gross corruption or severe environmental degradation.

5.2 Mechanisms

The ethical basis for the Fund shall be promoted using the following three mechanisms:
- Exercise of ownership rights to promote long-term financial returns based on the United Nations Global Compact and the OECD Guidelines for Corporate Governance and for Multinational Enterprises
- Negative screening from the investment universe of companies which, themselves or through companies they control, produce weapons whose normal violates fundamental humanitarian principles
- Exclusion of companies from the investment universe where there is deemed to exist a considerable risk of contributing to:
  - Gross or systematic violations of human rights, such as murder, torture, deprivation of liberty, forced labour, the worst forms of child labour and other child exploitation
  - Gross violations of individual rights in war or conflict situations
  - Severe environmental degradation
  - Gross corruption
  - Other particularly serious violations of fundamental ethical norms.

5.3 Exercise of ownership rights

5.3.1

The primary objective of Norges Bank's exercise of ownership rights for the Fund is to safeguard the Fund's financial interests. The exercise of ownership rights shall be based on a long horizon for the Fund's investments, and broad investment diversification in the markets that are included in the investment universe. The exercise of ownership rights shall primarily be based on the United Nations Global Compact and the OECD Guidelines for Corporate Governance and for Multinational Enterprises. Norges Bank's internal guidelines for the exercise of ownership rights shall stipulate how these priniciples are to be integrated in the exercise of ownership rights.

5.3.2

Norges Bank shall report on its exercise of ownership rights in connection with its ordinary annual reporting. An account shall be provided of how the Bank has acted as owner representative – including including a description of the work to promote special interests relating to the long-term horizon and diversification of investments in accordance with section 5.3.1.

5.3.3

Norges Bank may delegate the exercise of ownership rights to external managers in accordance with these guidelines.

5.4 Negative screening and exclusion

5.4.1

The Ministry of Finance shall make decisions on negative screening and exclusion of companies from the investment universe based on the recommendations of the Fund's Advisory Council on Ethics. The recommendations and decisions are to be made public. The ministry may in certain cases postpone the time of public disclosure if this is deemed necessary in order to ensure a financially sound implementation of the exclusion of the company concerned.

5.4.2

The Fund's Advisory Council on Ethics shall be composed of five members. The Council shall have its own secretariat. The Council shall submit an annual report on its activities to the Ministry of Finance.

5.4.3

The Council shall issue recommendations at the request of the Ministry of Finance on whether an investment may be in violation of Norway's obligations under international law.

5.4.4

The Council shall issue recommendations on negative screening of one or more companies on the basis of the production of weapons whose normal use is in violation of fundamental humanitarian principles. The Council shall issue recommendations on the exclusion of one or more companies from the investment universe where there is deemed to exist a considerable risk of contributing to actions or omissions that involve:

– Gross or systematic violation of human rights, such as murder, torture, deprivation of liberty, forced labour, the worst forms of child labour and other forms of child exploitation
– Gross violations of individual rights in war or conflict situations
– Severe environmental degradation
– Gross corruption
– Other particularly serious violations of fundamental ethical norms

The Council shall raise matters under this section on its own initiative or at the request of the Ministry of Finance.

5.4.5

The Council shall gather the necessary information on an independent basis and ensure that a matter is elucidated as fully as possible before a recommendation concerning screening or exclusion from the investment universe is issued. The Council can request Norges Bank to provide information as to how specific companies are dealt with in the exercise of ownership rights. All enquiries to such companies shall be channelled through Norges Bank. If the Council is considering an exclusion recommendation, the draft recommendation, and the grounds for it, shall be submitted to the company for comment.

5.4.6

The Council shall review on a regular basis whether the grounds for exclusion still apply and can on receipt of new information recommend that the Ministry of Finance reverse the exclusion decision.

5.4.7

Norges Bank shall receive immediate notification of the decisions made by the Ministry of Finance in connection with the Council's recommendations. The Ministry of Finance can request that Norges Bank inform the companies concerned of the decision taken by the Ministry of Finance and the reasons for the decision.

5.5 Exclusion of individual companies

Companies that are excluded from the investment universe of the Government Pension Fund – Global

Alliant Techsystems Inc.
EADS Co (European Aeronautic Defence and Space Company)
EADS Finance BV
General Dynamics Corporation
L3 Communications Holdings Inc.
Lockheed Martin Corp.
Raytheon Co.
Thales SA.
Singapore Tehnologies Engineering
BAE Systems Plc.
Boeing Co.
Finmeccanica Sp. A.
Honeywell International Inc.
Northrop Grumman Corp.
United Technologies Corp.
Safran SA
Wal-Mart Stores Inc.
Wal-Mart de Mexico SA de CV
Freeport McMoRan Copper&Gold Inc.
Poongsan Corp.
DRDGOLD Ltd.

Chapter 4 management agreement between the Ministry of Finance and Norges Bank

The Ministry of Finance and Norges Bank entered into the following Management Agreement for the Government Pension Fund – Global on 12 February 2001. It was most recently amended on 22 December 2005:

1. The contents of the agreement etc.

The State, represented by the Ministry of Finance, has delegated responsibility for the operational management of the Government Pension Fund – Global ("the Fund") to Norges Bank. The management of the Fund is subject to the Government Pension Fund Act (no. 36 of 20 December 2005), Regulations on the Government Pension Fund – Global and guidelines with supplementary provisions that have been or may be adopted by the Ministry of Finance. This Agreement, together with the Act and Regulations regulations mentioned, governs the relationship between the Ministry of Finance and Norges Bank in connection with the management of the Fund.

All communication referring to this agreement shall be in writing and shall be signed. Such communication shall be sent to Norges Bank Investment Management and to the Economic Policy Department of the Ministry of Finance.

2. Norges Bank's obligations

2.1 Norges Bank's responsibilities

Norges Bank shall manage the Fund in accordance with the law, the Regulations for Financial Management in the Government Administration, regulations and other decisions and guidelines that apply to the Fund (cf. Clauses 1 and 3.1). Matters of special importance shall be submitted to the Ministry of Finance.

Quarterly and annual reports on the management of the Fund which are issued by Norges Bank (see section 1 of the regulations), shall be certified by Central Bank Audit. Norges Bank shall without undue delay notify the Ministry of significant changes or expected significant changes in the value of the Fund. Norges Bank shall provide the Ministry of Finance with information as requested by the Ministry, including information in machine-readable form to companies that assist the Ministry in evaluating Norges Bank's management of the Government Pension Fund – Global.

Norges Bank is liable to pay damages to the State for losses arising as a result of negligence or intent on the part of the Bank, external managers or external service providers with whom the Bank has entered into an agreement (see Clause 2.2 first paragraph of the Agreement).

2.2 Management of the Fund

Norges Bank may use external managers and external service providers in the management of the Fund. Such managers must have satisfactory internal Ethical Guidelines for their activity. Norges Bank is party to agreements with such service providers, and shall oversee their activity on behalf of the Fund.

The Ministry of Finance shall be informed of the choice of external service providers that are of major importance to management and of the grounds for the choice. The Ministry shall receive copies of the annexes relating to remuneration in new management agreements entered into by Norges Bank with external managers in connection with the management of the Fund. Remuneration to external managers shall be such that the Fund retains the major part of the increase in excess return. The Ministry of Finance may require Norges Bank to submit to the Ministry all contracts entered into in connection with the management of the Fund.

2.3 Amendments to regulations, guidelines etc.

At the request of the Ministry of Finance, Norges Bank shall provide the Ministry with advice regarding amendments to the framework conditions for management, including regulations, decisions and guidelines laid down by the Ministry. Norges Bank may also submit its own proposals for changes in the framework conditions if the Bank considers it appropriate.

2.4 Exclusion and screening of financial instruments

At the request of the Ministry of Finance or the Fund's Advisory Council on Ethics, Norges Bank shall obtain information from specified issuers and give this information to the Council.

If the Ministry of Finance decides to exclude particular financial instruments from the investment universe of the Fund, Norges Bank shall normally be allowed a period of eight weeks in which to complete the sale of these instruments.

Norges Bank shall notify the Ministry of Finance when a sale has been completed. The Ministry of Finance shall consider whether to announce the assessments of the Council and the Ministry of Finance on a case-by-case basis (cf. the Royal Decree of 19 November 2004). If management considerations so indicate, the Ministry shall endeavour to postpone announcement until after it has been notified that a sale has been completed.

2.5 Information

Norges Bank shall, within the framework of the Freedom of Information Act and the Public Administration Act, and in accordance with further guidelines issued by the Ministry of Finance, provide information to the public concerning the performance of the management assignment.

3. The obligations of the Ministry of Finance

3.1 Regulations, guidelines, etc.

Norges Bank shall have the opportunity to express its view before any changes are made to regulations, decisions or guidelines on management, and shall be given reasonable notice to make changes in the portfolio.

3.2 Remuneration

Remuneration shall be in compliance with Annex 1 to this Agreement. Up to 1 December each year both parties may request changes in the method of calculating remuneration for the subsequent calendar year.

Remuneration shall be deducted from the Fund's gross return before the net return is transferred to the Fund's krone account on 31 December each year. Norges Bank shall submit its remuneration calculations to the Ministry of Finance as early as possible and no later than one week before finalising the accounts.

3.3 Crediting

The Ministry of Finance shall make any transfers of capital from the Treasury to the Fund's krone account in Norges Bank. The deadline for notifying Norges Bank and the final krone amount to be credited shall be in accordance with the prevailing "Guidelines for rebalancing the Fund".

3.4 Debiting

The Ministry of Finance shall notify Norges Bank in due time before making any deductions from the Fund to allow the Bank to make portfolio adjustments. The Ministry of Finance shall notify Norges Bank of the account to which the transfer is to be credited.

3.5 Tax issues

The Ministry of Finance shall contribute to providing the documentation necessary to clarify the tax position of the Fund's investments abroad.

4. Amendments and termination

4.1 Amendments

The Agreement shall be amended when changes in laws or regulations, decisions or guidelines so indicate. This Agreement and the annex thereto shall not otherwise be amended without written approval from both parties.

4.2 Termination etc.

If neither party has given written notification by 31 December in a given year that the agreement is to be terminated as from 31 December of the following year, the agreement will continue to apply for a further year at a time until such notification is given.

The Ministry of Finance will lay down further rules and instructions regarding termination of the management assignment, including severance pay and other remuneration to Norges Bank in connection with the termination. Clause 3.1 shall apply to a corresponding extent.

Oslo, 22 December 2005
For the Ministry of Finance
For Norges Bank

Annex 1:

Remuneration for management of the Government Pension Fund – Global

The remuneration shall cover Norges Bank's costs associated with management of the Fund. For 2007, however, costs over and above 10.0 basis points of the Fund's average market value will not be covered. Calculation of the average amount shall be based on the market value of the Fund's portfolio measured in Norwegian kroner at the start of each month in the calendar year. In addition to coverage of costs up to the upper limit, Norges Bank shall receive remuneration for performance-based fees to external managers.