

# Management of the Government Petroleum Fund

## Report for the second quarter of 2004

### Summary

The return on the Government Petroleum Fund in the second quarter of 2004 was -0.15 per cent measured in terms of the currency basket that corresponds to the composition of the Fund's benchmark portfolio. The overall return in the first half of 2004 was 2.77 per cent.

The second quarter return on the ordinary equity portfolio (excluding the Environmental Fund) was 1.87 per cent measured in terms of the benchmark portfolio's currency basket. Equity prices in all three main markets rose through the quarter. The return on the fixed income portfolio was -1.59 per cent measured in terms of the currency basket. Bond yields in all the main markets rose in the second quarter.

The return on the Petroleum Fund's ordinary portfolio in the second quarter of 2004 was 0.08 percentage point higher than the return on the benchmark portfolio defined by the Ministry of Finance. The overall excess return in the first half of 2004 was 0.32 percentage point.

The second quarter return on the Environmental Fund was 1.45 per cent measured in terms of the benchmark portfolio's currency basket. The overall return in the first half of 2004 was 5.65 per cent.

During the quarter, new capital equivalent to NOK 29.6 billion was transferred to the Petroleum Fund's international equity and fixed income portfolios. The Petroleum Fund's market value was NOK 942.4 billion at the end of the second quarter, which is an increase of NOK 27.0 billion during the quarter and an increase of NOK 97.1 billion since year-end.

The increase in market value in the second quarter is a result of the transfer of new capital. Negative returns in the markets and a stronger krone in relation to the currencies in which the Fund is invested contributed to reducing the Fund's market value by NOK 1.0 billion and NOK 0.8 billion respectively. However, the change in the krone exchange rate has no effect on the Fund's international purchasing power.

### 1. Key figures

The return on the Government Petroleum Fund in the second quarter of 2004 was negative, at -0.15 per cent, measured in terms of the currency basket that corresponds to the composition of the Fund's benchmark portfolio. Chart 1 shows that this was the ninth quarter with a negative return since the Petroleum Fund first invested in equities in 1998. During the same period, the Fund's returns have been positive in 16 quarters.

**Chart 1: Quarterly return on the Petroleum Fund measured in terms of the Fund's currency basket**

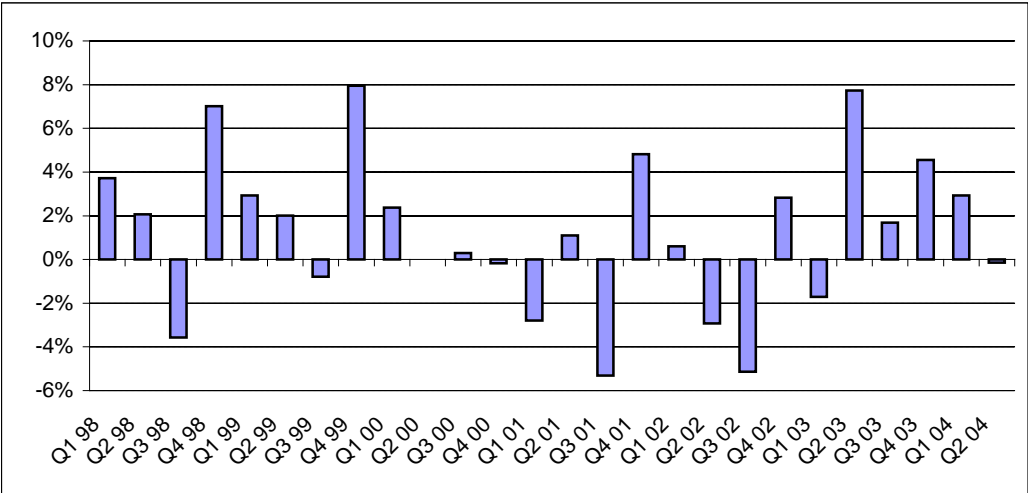
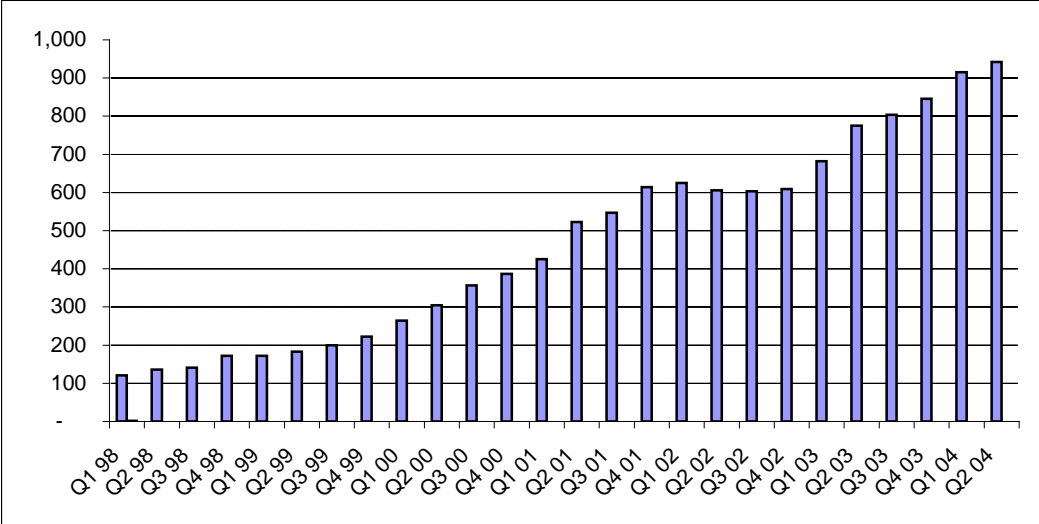


Chart 2 shows that the Petroleum Fund measured in NOK has grown from NOK 113 billion to NOK 942 billion since 1 January 1998. The time profile of changes in value is affected by fluctuations in the krone exchange rate. For the period as a whole, however, changes in value measured in NOK virtually correspond to developments in international purchasing power, i.e. the value measured in terms of the Fund's currency basket.

**Chart 2: The market value of the Petroleum Fund 1998-2004. In billions of NOK**



Since 1 January 1997, the annual net real return on the Petroleum Fund (after deductions for management costs and price inflation) has been 3.57 per cent. Table 1 shows the return up to the end of the second quarter of 2004, annualised from 1 January for each of the years 1997-

2003. Price inflation is a weighted average of price inflation in the countries in the benchmark portfolio which has been defined by the Ministry of Finance.

The right-hand column of the table shows that the average gross excess return has been 0.41 percentage point per year since 1 January 1997. This is the annualised arithmetic difference between the return on the actual portfolio and the annualised return on the benchmark portfolio.

**Table 1: Annual rates of return for the Petroleum Fund (including the Environmental Fund) up to the end of the second quarter of 2004, measured in terms of the Fund’s currency basket. Per cent per year**

	Gross annual return	Annual price inflation	Annual management costs	Annual net real return	Annual gross excess return
From 01.01.97	5.33	1.63	0.08	3.57	0.41
From 01.01.98	4.77	1.61	0.08	3.03	0.44
From 01.01.99	3.98	1.73	0.08	2.13	0.48
From 01.01.00	2.18	1.83	0.08	0.26	0.33
From 01.01.01	2.09	1.78	0.08	0.23	0.36
From 01.01.02	3.97	2.03	0.09	1.82	0.45
From 01.01.03	10.22	2.11	0.10	7.84	0.57

Chart 3 shows the cumulative return from 1 January 1998 for the fixed income and equity portfolios. During this period, the cumulative nominal return has been 20.25 per cent on equity investments and 43.46 per cent on fixed income investments.

**Chart 3: Index for cumulative return on the sub-portfolios in the Petroleum Fund in the period 1998-2004. (incl. Environmental Fund)**

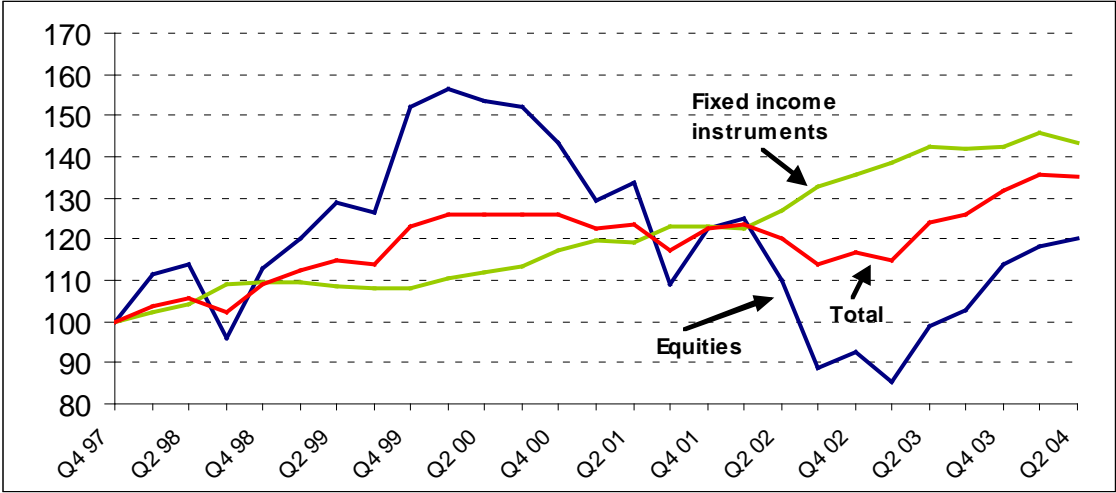


Chart 4 shows the cumulative return on the Petroleum Fund since 1 January 1998. The return up to the end of the second quarter of 2004 was 35.5 per cent. During the same period, the

return on the benchmark portfolio was 31.7 per cent. The difference between the actual return and the return on the benchmark portfolio is the excess return achieved by Norges Bank. Since 1998, the cumulative gross excess return measured in terms of the currency basket has been 3.7 percentage points, which corresponds to NOK 12.1 billion.

**Chart 4: Index for cumulative actual return and benchmark return measured in terms of the currency basket (left-hand axis) and quarterly gross excess return in percentage points (right-hand axis)**

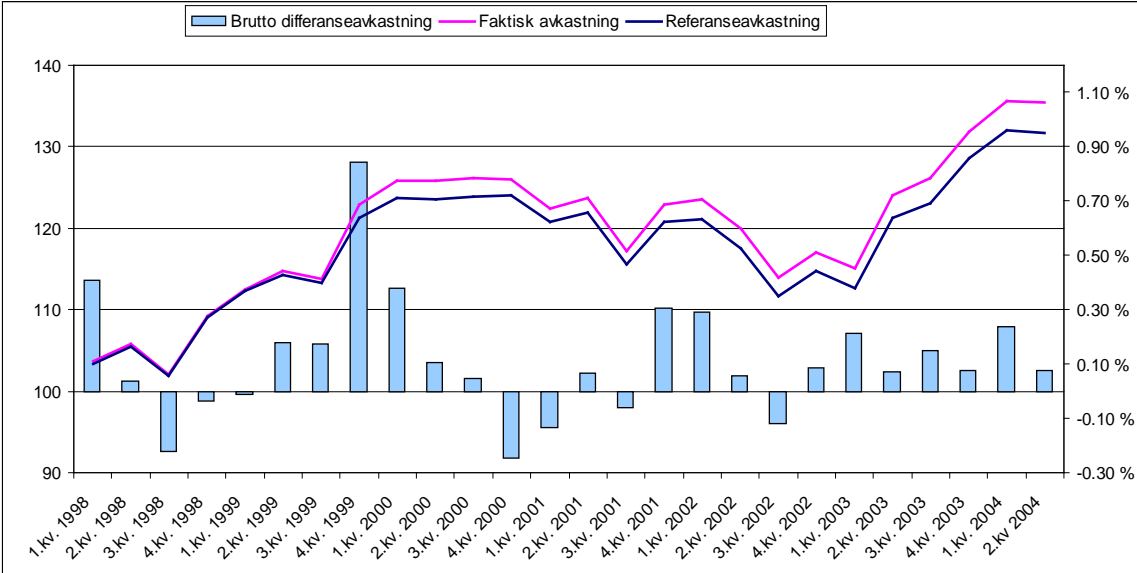
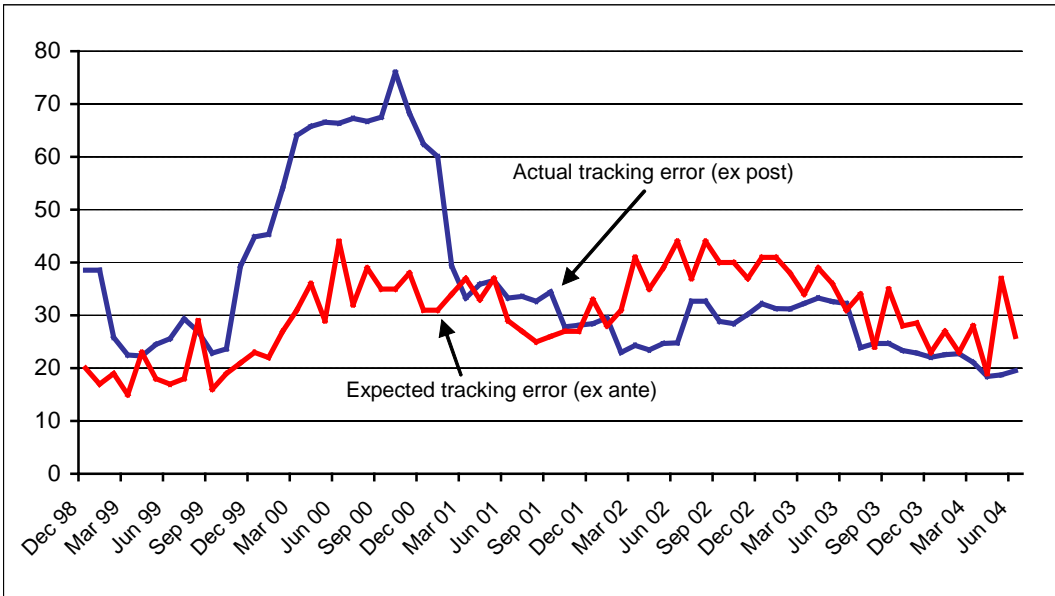


Chart 5 shows developments in relative market risk from December 1998, measured in two different ways. In the guidelines from the Ministry of Finance, expected tracking error (which is explained in Section 6 below) is used as a measure of market risk.

**Chart 5: Relative market risk at the end of each month in the period 1999-2004, measured by expected tracking error and actual tracking error. Figures in basis points**



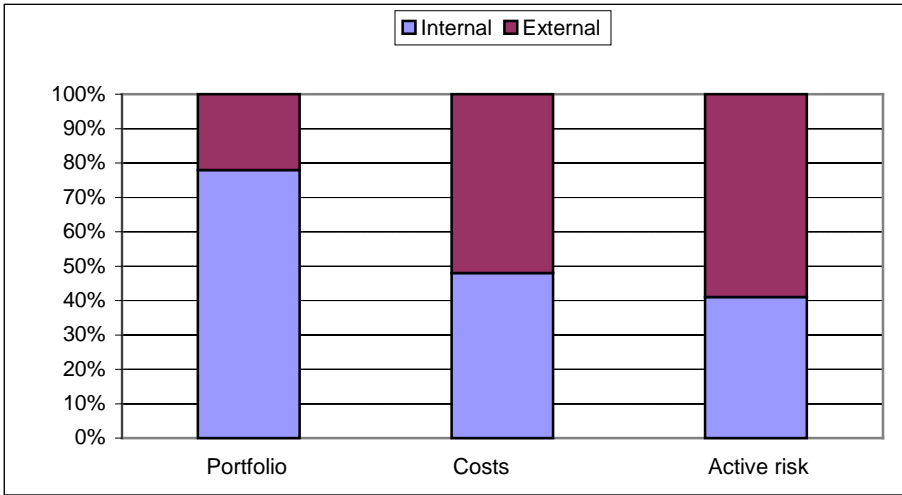
In retrospect, we can use the variation in the difference between the returns on the actual and benchmark portfolios (i.e. the variation in excess return) as a measure of actual market risk. In Chart 5, this tracking error is annualised using 12-month moving windows.

Both expected tracking error and actual tracking error may fluctuate considerably even when the degree of active management remains unchanged. This is because the measures are influenced by various market developments, such as changes in market volatility and changes in correlations between the various asset classes and securities. Tracking error has consistently remained well below the limit for relative market risk in the Petroleum Fund’s portfolio that has been stipulated by the Ministry of Finance.

The information ratio is a widely used measure of the skill of operational managers. The information ratio is the ratio between the gross excess return for the year and relative market risk (measured here as the actual standard deviation of the return differential). The average information ratio for the Fund from the first quarter of 1998 to the second quarter of 2004 has been 1.13, annualised. In comparable international investment management, an information ratio of 0.2 – 0.3 is often regarded as a solid result.

Chart 6 shows some key figures related to the distribution of external and internal management. It shows that at the end of the second quarter, 22 per cent of the Petroleum Fund was managed by external managers. At the same time, costs in connection with external management accounted for 52 per cent of total management costs. The market risk associated with external management accounted for approximately 59 per cent of the total risk associated with management of the Fund.

**Chart 6: Distribution of portfolios, management costs and active risk\* between internal and external management. Per cent**



\* There is no absolutely correct method of calculating the distribution of active risk. The distribution in the chart is based on summation of the value at risk (VaR) of each mandate, disregarding the correlation between mandates.

The market risk taken by external managers is mainly associated with active management, while the risk associated with internal management is largely connected with enhanced indexing. Active management is clearly more expensive than index management, and this is one of the reasons why unit costs are far higher for external management than for internal

management. However, comparable management (active or passive) is also less expensive when internal rather than external managers are used. The internal managers have limited capacity for active management, however, and external managers are used to achieve sufficient breadth and scope in risk-taking.

## **2. Mandate**

Norges Bank manages the Government Petroleum Fund pursuant to a regulation issued by the Ministry of Finance on 3 October 1997 and last amended on 18 December 2003 with effect from 1 January 2004. The Petroleum Fund's investment universe was expanded at this time to include a number of new countries. For further details, see the Report for the first quarter of 2004.

The Petroleum Fund's strategic benchmark, which has been defined by the Ministry of Finance, is composed of the FTSE equity indices for 27 countries and the Lehman Global Aggregate bond indices in the currencies of 21 countries. Equities shall account for 40 per cent of the strategic benchmark portfolio of the Petroleum Fund, excluding the Environmental Fund, and fixed income securities shall account for 60 per cent. In the equity portion of the benchmark, securities listed on European stock exchanges account for 50 per cent and other regions account for 50 per cent. The regional distribution in the fixed income benchmark is as follows: 55 per cent in Europe, 35 per cent in the US and 10 per cent in Asia/Oceania.

The asset classes and regional weights in the actual benchmark normally differ somewhat from the strategic weights described above. The actual weights change continuously as a result of changes in market prices for the securities in the benchmark. The monthly transfers of new capital to the Petroleum Fund are used to bring the asset class and regional weights back as close to the original weights as possible, providing this does not necessitate selling anything from the existing portfolio. Thus, even after the transfer of new capital, there may be a difference between the strategic benchmark and the actual benchmark. The actual benchmark provides the basis for managing risk and measuring the performance of the Petroleum Fund. The actual benchmark will be brought back in line with the strategic benchmark only if it deviates substantially from the strategic benchmark over time.

Table 2 shows the weights in the actual benchmark and the strategic benchmark at the end of the quarter. The weightings in the fixed income benchmark apply to the currency in which the securities are denominated, and shares of the euro weighting are therefore not listed for individual euro area countries.

The Ministry of Finance has set a limit for the market risk allowed in relation to the benchmark. In the ordinary portfolio, relative market risk, measured as expected tracking error in the RiskManager risk management system, shall always be less than 1.5 percentage points. Tracking error is explained in Section 6 below.

The Environmental Fund is a separate equity portfolio in the Petroleum Fund. It may be invested in the same countries as the ordinary equity portfolio, with the exception of emerging markets. In each country, the benchmark for the Environmental Fund is the same as the benchmark for the Petroleum Fund's ordinary equity portfolio, except that only companies that comply with specific requirements regarding environmental reporting or environmental management systems are included. The requirements regarding environmental reporting and

certification have been stipulated by the Ministry of Finance. In accordance with these requirements, all companies in the benchmark portfolio are reviewed quarterly by an external consulting company selected by the Ministry of Finance.

When the Environmental Fund's benchmark portfolio was established in 2001, its regional distribution for Europe, the Americas and Asia/Oceania was the same as the regional distribution of the ordinary benchmark portfolio at that time. Over time, the regional weights vary with developments in market values, and they are never restored to the original weights. The limit on tracking error for the Environmental Fund has been set at 1 percentage point.

**Table 2: Benchmark at 30 June 2004 for the Petroleum Fund's ordinary portfolio (excluding the Environmental Fund). Per cent**

	Equities		Fixed income instruments	
	Strategic benchmark portfolio	Actual benchmark portfolio	Strategic benchmark portfolio	Actual benchmark portfolio
Country for equity benchmark				
Currency for fixed income benchmark				
<b>Asset class weights</b>	<b>40.0</b>	<b>41.4</b>	<b>60.0</b>	<b>58.6</b>
Belgium		0.7		
Finland		0.8		
France		7.0		
Greece		0.3		
Ireland		0.4		
Italy		2.9		
Netherlands		3.4		
Portugal		0.3		
Spain		2.6		
Germany		5.1		
Austria		0.2		
<i>Euro area countries (EUR)</i>		23.9		46.4
UK (GBP)		17.3		6.7
Denmark (DKK)		0.5		0.7
Switzerland (CHF)		5.0		0.5
Sweden (SEK)		1.7		0.8
<b>Total Europe</b>	<b>50.0</b>	<b>48.4</b>	<b>55.0</b>	<b>55.1</b>
US (USD)		36.1		33.6
Brazil		0.3		
Canada (CAD)		1.6		1.4
Mexico		0.3		
South Africa		0.4		
<b>The Americas / Middle East / Africa</b>			<b>35.0</b>	<b>35.0</b>
Australia (AUD)		1.8		0.4
Hong Kong		0.9		
Japan (JPY)		8.1		9.1
New Zealand (NZD)		0.1		0.2
Singapore (SGD)		0.3		0.3
South Korea		0.8		
Taiwan		1.0		
<b>Total Asia and Oceania</b>			<b>10.0</b>	<b>10.0</b>
<b>The Americas / Middle East / Africa / Asia / Oceania</b>	<b>50.0</b>	<b>51.6</b>		

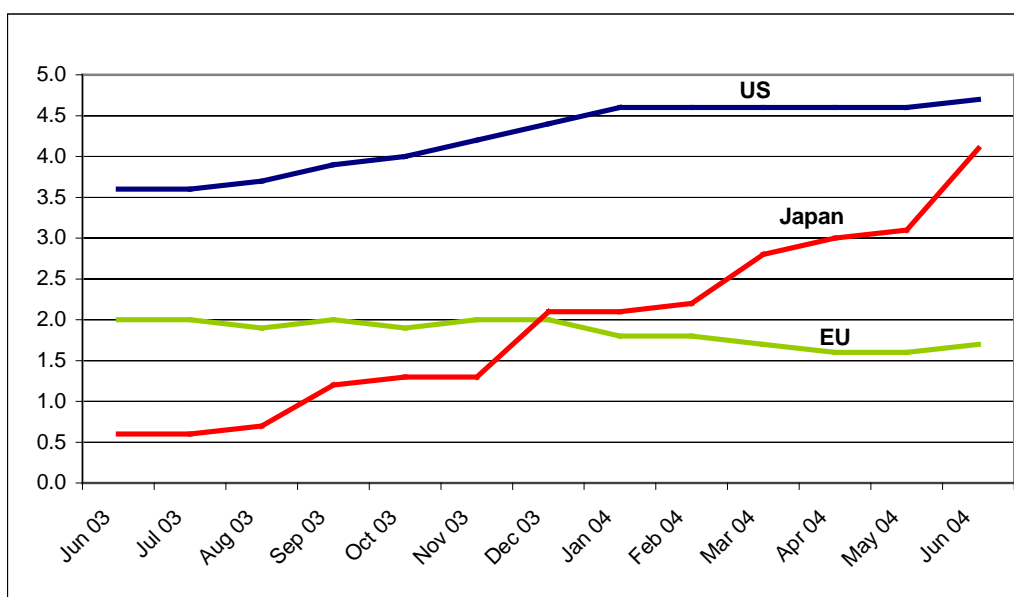
### 3. Market developments

### 3.1. Highlights

Although the rate of economic growth slowed somewhat in the second quarter, international developments were still marked by relatively high economic growth. Growth has been high in the US and Asia in particular, but economic developments in Eastern Europe and Latin America have also been solid. In the rest of Europe, the growth rate has been somewhat lower, particularly in large economies such as Germany and Italy. In the UK and France, however, economic developments have been stronger. There is still excess production capacity internationally, although unemployment declined somewhat in the US and Japan. Despite the recent rise in prices for oil and other commodities, core inflation has not risen appreciably.

Chart 7 shows how economists' expectations concerning growth in the main markets in 2004 have changed over the past twelve months. Expectations concerning growth in Japan have been revised upwards gradually since mid-2003 and are currently at approximately 4 per cent. Expectations concerning growth in the US have remained stable at about 4.75 per cent in the first half of 2004, whereas expectations concerning growth in the EU have fallen slightly. GDP growth in both the US and Japan is expected to be double that of Europe's GDP growth in 2004. Growth in the US and Asia is partly driven by a high level of investment and strong demand for consumer durables.

**Chart 7: Expected GDP growth in 2004 in the US, the EU and Japan, measured at various times in the past 12 months. Per cent**



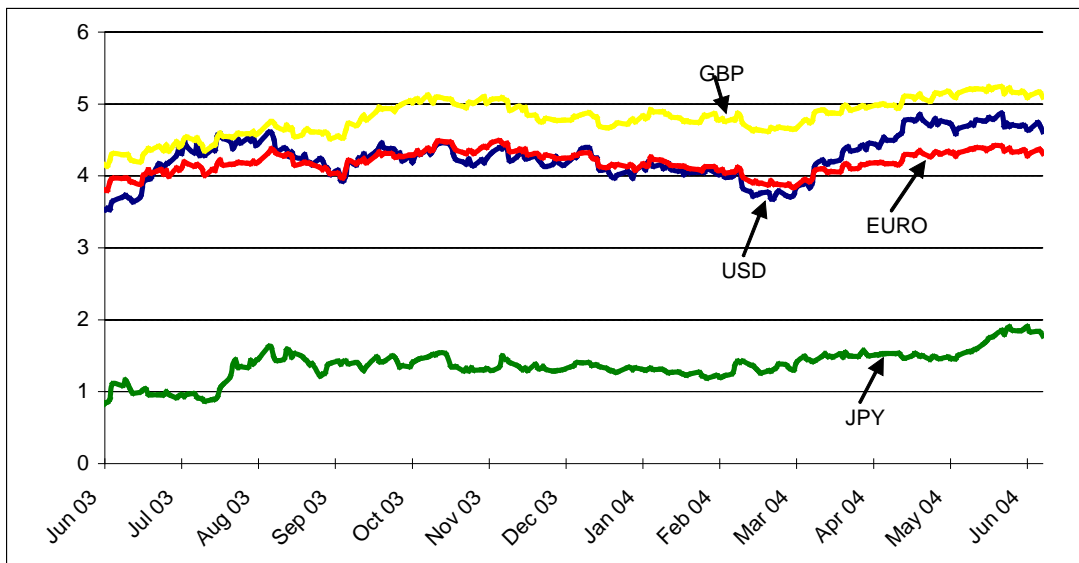
Source: Consensus Economics Inc.

### 3.2. Fixed income markets

Bond yields have risen in the main markets in the second quarter. Chart 8 shows that yields on 10-year government bonds have risen by about 0.8 percentage point in the US, whereas in Europe and Japan corresponding yields have risen by less than 0.4 percentage point.

**Chart 8: Developments in the most important bond markets in the last 12 months. Yields on government bonds with approximately 10 years to maturity. Per cent per year**





The rise in bond yields reflects continued strong growth in the global economy. High economic growth in countries such as China has contributed to higher commodity prices and increased freight rates in the shipping sector. Many investors have been uncertain about how strong the feed-through from commodity prices to prices for finished goods will be, and this uncertainty may have increased inflation expectations somewhat.

Japan is currently experiencing strong economic growth which is underpinned by strong demand for capital goods and consumer electronics. The strong demand, especially from the rest of Asia, has induced Japanese companies to start hiring and increase investment. Despite the improvement in the Japanese labour market, there are few signs of accelerating wage growth. Inflation in Japan is still expected to remain below zero. Therefore, real interest rates measured as long bond yields minus expected inflation are not appreciably different in Japan, the US and Europe.

The central banks in both the US and the UK increased their key rates during the second quarter.

Chart 9 shows changes in value in the Lehman Global Aggregates' government bond indices. Yields in the second quarter of 2004 were -3.2 per cent in the US, -1.0 per cent in Europe and -0.8 per cent in Asia.

**Chart 9: Movements in Lehman Global Aggregate government bond indices in the main markets in the last 12 months (31.12.03 = 100). In local currencies**

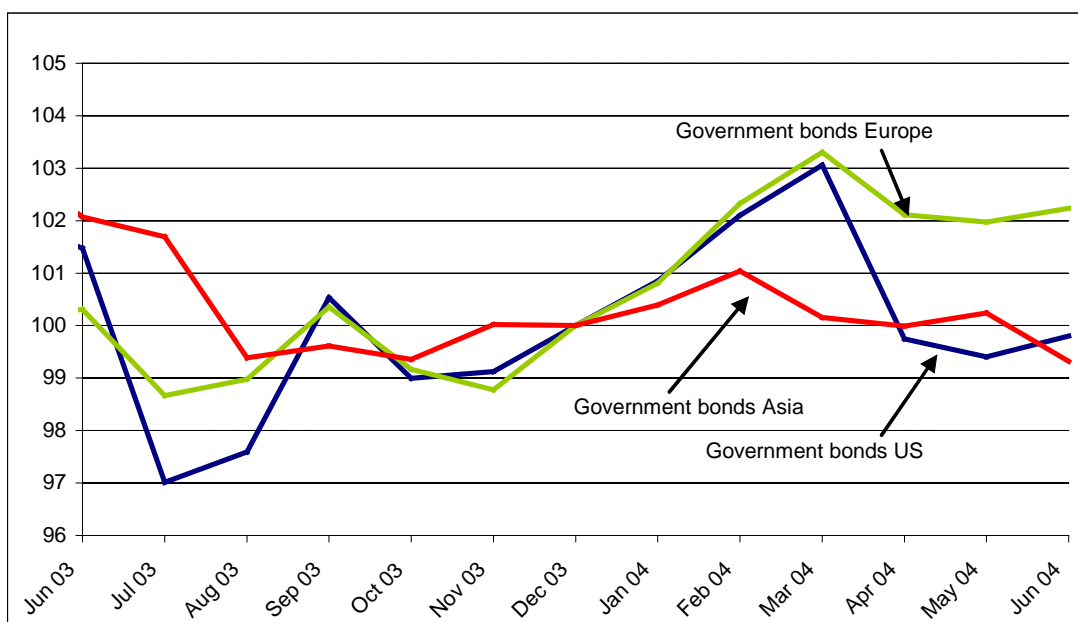


Chart 10 shows that the yield differential between bonds with credit risk and government bonds in the US widened somewhat at the beginning of the second quarter and subsequently narrowed slightly in May and June. The low yield differential reflects solid earnings in the business sector. In addition, companies are using a substantial portion of their earnings to repay debt, and this is improving their financial position.

**Chart 10: The difference between yields on corporate bonds<sup>1</sup> and government securities in the US**

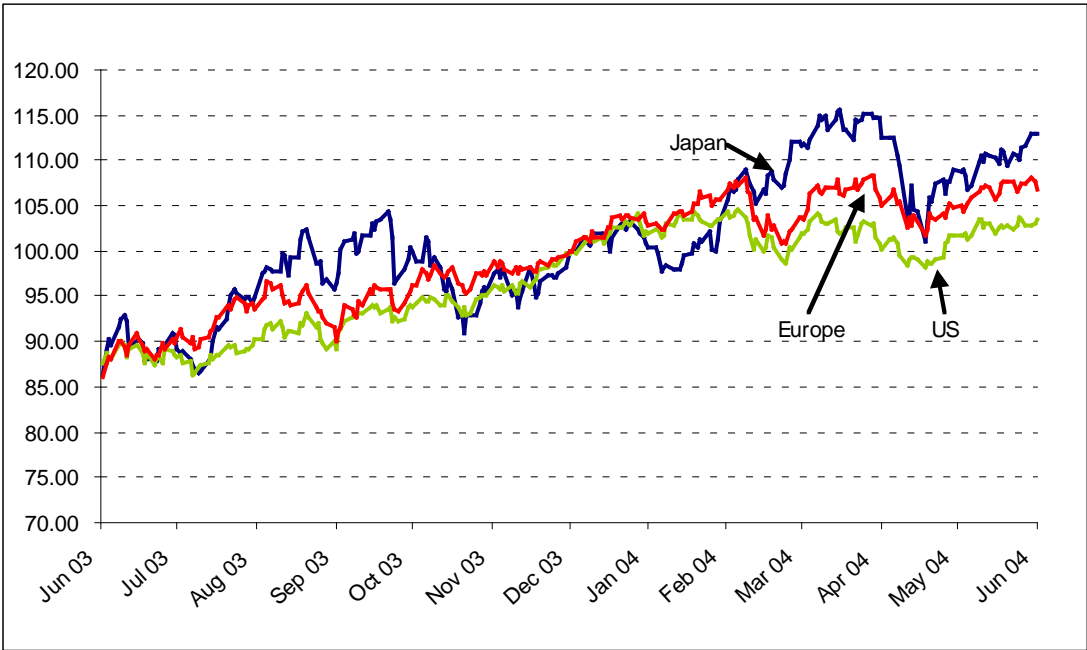


<sup>1</sup> Corporate securities with a AAA credit rating from Standard & Poor's

3.3. Equity markets

Chart 11 shows that equity prices rose in the three main markets in the second quarter as a whole. The falling price trend at the beginning of the quarter reversed in mid-May. Measured by the FTSE index, the equity markets rose by 3.3 per cent in Europe, 1.6 per cent in the US and 1.0 per cent in Japan.

**Chart 11: Changes in value in the FTSE equity indices for the main markets in the last 12 months. (31.12.03 = 100). In local currencies**



Global demand has been strongest for capital goods. Investment growth has been especially strong in Asia, including Japan, but has also been strong in the US. This has influenced sectoral developments in the second quarter.

Strong sectors have included manufactured goods and commodities as well as the oil sector. Developments in the financial industry and the semiconductor industry have been more sluggish. The negative trend in the financial sector reflects concern about weaker bank earnings as a result of higher interest rates.

Weaker developments in the technology sector in recent months may be explained in part by investors’ expectations of somewhat weaker growth in the global economy generally and in part by specific factors within the industry. Investment in new production equipment has been high after demand for electronics products picked up earlier this year. The market is concerned that manufacturers of semiconductors and mobile telephones are now building up excess capacity, which may affect margins and prices in the next few years. Many observers point out that semiconductors are an area of priority in China’s industrial development.

**Table 3: Return on the main sectors and the ten largest sub-sectors in the FTSE All-World Index in the second quarter of 2004, measured in terms of USD, NOK and the Fund’s currency basket. Per cent**

	USD	NOK	Currency basket

<b>Commodities</b>	<b>3.94</b>	<b>4.93</b>	<b>5.05</b>
- of which oil and gas	6.59	7.61	7.73
<b>Basic industries</b>	<b>1.06</b>	<b>2.03</b>	<b>2.14</b>
<b>General industrials</b>	<b>3.39</b>	<b>4.38</b>	<b>4.49</b>
<b>Cyclical consumer goods</b>	<b>3.88</b>	<b>4.88</b>	<b>4.99</b>
<b>Non-cyclical consumer goods</b>	<b>2.82</b>	<b>3.80</b>	<b>3.91</b>
- of which pharmaceuticals and biotechnology	2.02	3.00	3.11
<b>Cyclical services</b>	<b>-0.33</b>	<b>0.62</b>	<b>0.73</b>
- of which retail trade	-1.94	-1.00	-0.89
- of which media and photography	-1.17	-0.22	-0.11
<b>Non-cyclical services</b>	<b>-1.02</b>	<b>-0.07</b>	<b>0.04</b>
- of which telecommunications	-2.41	-1.47	-1.36
<b>Utilities</b>	<b>0.83</b>	<b>1.79</b>	<b>1.91</b>
<b>Financials</b>	<b>-2.03</b>	<b>-1.10</b>	<b>-0.99</b>
- of which banks	-1.83	-0.89	-0.78
- of which insurance companies	0.61	1.58	1.69
- of which other financial institutions	-5.88	-4.98	-4.87
<b>Information technology</b>	<b>-1.41</b>	<b>-0.46</b>	<b>-0.35</b>
- of which hardware	-5.00	-4.10	-3.99
- of which software and computer services	5.50	6.51	6.62

Table 3 shows that returns on the main and sub-sectors in the FTSE index were mixed, measured in terms of the Fund's basket of currencies. Developments in prices for commodities and cyclical goods were most positive, while developments were weakest for financial services.

#### 4. Management of the portfolio

The market value of the Petroleum Fund's international portfolio was NOK 942.4 billion at the end of the quarter. During the second quarter, the Fund's market value rose by NOK 27.0 billion. NOK 29.6 billion was transferred to the fixed income portfolio during the quarter. An equivalent amount in foreign exchange was transferred to the securities portfolio. Negative returns in the markets and a stronger krone in relation to the currencies in which the Fund is invested reduced the Fund's market value by NOK 1.0 billion and NOK 0.8 billion respectively. However, the change in the krone exchange rate has no effect on the Fund's international purchasing power. At the end of May, NOK 0.8 billion was transferred from the Petroleum Fund to Norges Bank as remuneration for the Fund's management in 2003. See the Government Petroleum Fund Annual Report for 2003.

**Table 4: Market value of the Petroleum Fund's sub-portfolios. In millions of NOK**

	Ordinary equity portfolio	Fixed income portfolio	Environmental Fund	Petroleum Fund total
30.06.03	318 915	455 273	1 335	775 523
30.09.03	329 446	472 465	1 389	803 299
31.12.03	359 648	484 141	1 517	845 306
31.03.04	383 474	530 251	1 622	915 347
<b>30.06.04</b>	<b>390 214</b>	<b>550 499</b>	<b>1 644</b>	<b>942 357</b>

##### 4.1. Management of the fixed income portfolio

The market value of the fixed income portfolio increased by NOK 20.2 billion to NOK 550.5 billion in the second quarter. A total of NOK 28.8 billion was transferred to the fixed income

portfolio during the quarter. However, negative returns in the fixed income market and an appreciation of the krone in relation to the currencies in which the Fund is invested reduced the value of the fixed income portfolio by NOK 8.2 billion and 0.4 billion respectively.

At the end of the quarter, approximately 90 per cent of the fixed income portfolio was managed internally by Norges Bank. The investment strategies being used are enhanced indexing and active management. Both external and internal mandates have been assigned.

In the fixed income portfolio, three sub-portfolios are indexed: government-guaranteed bonds, corporate bonds and collateralised bonds. Most of the portfolio, i.e. the first two sub-portfolios and European collateralised bonds, are indexed by internal managers. US mortgage-backed bonds are indexed by external managers.

About 10 per cent of the fixed income portfolio is managed externally. This portion includes the mandates for US mortgage-backed bonds and active mandates with a variety of strategies for outperforming the benchmark.

#### *4.2. Management of the equity portfolio*

At the end of the second quarter, the market value of the equity portfolio was NOK 390.2 billion, an increase of NOK 6.8 billion since the beginning of the quarter. There were no capital transfers to the equity portfolio in the second quarter. The increase is due to a return on investments of NOK 7.2 billion. An appreciation of the krone in relation to the investment currencies reduced the portfolio's value by NOK 0.4 billion.

At the end of the second quarter, approximately 59 per cent of the equity portfolio was managed internally in Norges Bank. Of this, 23 per cent, representing the financial, telecommunications, energy, media and trade sectors, is under active management, while an enhanced indexing strategy is employed to manage the remainder.

In the second quarter of 2004, capital was transferred to seven new mandates that have been assigned to external equity managers. A regional mandate for the UK has been assigned to Fidelity Pensions Management. One sector mandate each has been assigned to Alliance Capital Management LP, Columbus Circle Investors, Wellington Management Company LCP, T Rowe Price Associates Inc., Schroder Investment Management Limited and Fidelity Pensions Management.

## **5. The return on the Fund**

In the second quarter, the return on the Petroleum Fund, including the Environmental Fund, was -0.15 per cent, measured in terms of the benchmark currency basket. Measured in NOK, the return in the second quarter was -0.26 per cent. The difference is due to an appreciation of the krone by an average of about 0.1 per cent against the currencies in the benchmark portfolio during the quarter, with the result that the value of the Fund's currency basket was reduced in relation to the krone. However, this has no effect on the international purchasing power of the Fund.

**Table 5: Return on the Petroleum Fund's ordinary portfolio. Actual and benchmark portfolios, second quarter 2004. Per cent**

	Return measured in terms of the benchmark currency basket		Return measured in NOK		
	Actual portfolio	Benchmark portfolio	Actual portfolio	Benchmark portfolio	Differential
Q1	2.93	2.69	5.70	5.46	0.24
April	-0.86	-0.90	-2.99	-3.02	0.04
May	-0.30	-0.29	-1.31	-1.30	-0.01
June	1.01	0.96	4.17	4.12	0.05
<b>Q2</b>	<b>-0.15</b>	<b>-0.23</b>	<b>-0.26</b>	<b>-0.34</b>	<b>0.08</b>
Year to date	2.77	2.46	5.42	5.10	0.32

Table 5 shows that the return on the Petroleum Fund's ordinary portfolio (excluding the Environmental Fund) was also -0.15 per cent in the second quarter. The return was negative in April and May but positive in June. The table shows that in the second quarter the return on the ordinary portfolio was 0.08 percentage point higher than the return on the benchmark as it is calculated by the index supplier. As of 1 January 2004, the benchmark return has been adjusted for taxes paid by Norges Bank on share dividends.

The excess return amounted to approximately NOK 0.7 billion. NOK 137 million of this was income from securities lending. The internally managed fixed income portfolios made the largest contribution to excess return, although internally managed equity portfolios as well as externally managed fixed income portfolios also made a positive contribution to returns.

Table 6 shows the return on the equity portfolio and fixed income portfolio. In terms of the benchmark portfolio's currency basket, the return on the equity portfolio was 1.87 per cent in the quarter, while the return on the fixed income portfolio was -1.59 per cent. The table also shows the return on the total portfolio, measured against various currencies.

**Table 6: Return on the Petroleum Fund's sub-portfolios and total portfolio in the second quarter of 2004 measured against various benchmark currencies. Per cent**

	Equities	Fixed income	Environmental Fund	Total
The Fund's currency basket	1.87	-1.59	1.45	-0.15
Import-weighted currency basket	1.84	-1.62	1.42	-0.18
USD	0.79	-2.63	0.38	-1.21
EUR	1.81	-1.65	1.39	-0.21
NOK	1.76	-1.70	1.34	-0.26

### Methodology for calculating returns<sup>2</sup>

The calculation of returns is based on international standards. The return on the Petroleum Fund's portfolios is calculated according to the market value principle, i.e. the opening and

<sup>2</sup> An article available on Norges Bank's website provides more details about the calculation of returns. See "Performance measurement methodology" published in 2000.

closing values of the portfolios are valued at the relevant market prices at the beginning and end of the period. Interest expenses and revenues, dividends, withholding tax, changes in securities holdings and prices are accounted for on an accruals basis when calculating returns. Income and expenses relating to unsettled transactions are recognised on the trade date. The return is compared with the return on the benchmark portfolio. The return differential is defined here as an arithmetic difference between the returns on the actual portfolio and the benchmark portfolio.

Normally, transfers of capital to the Petroleum Fund and between the Fund's equity and fixed income portfolios are only made on the last business day of each month. The return for each month can then be calculated easily by looking at changes in market value. The geometrical return is used for longer periods, such as quarterly and annual return and return so far this year. This means that the return indices for each sub-period are multiplied. This return is thus a time-weighted return on the returns for the individual months.

The return is calculated in both NOK and local currency. The total return in NOK is calculated on the basis of the total market value of each individual currency, measured in NOK. WM/Reuters exchange rates<sup>3</sup> are used for converting local currencies to NOK.

The NOK return on the benchmark portfolio is calculated as the geometrical difference between the return in NOK and the return in local currency, measured in terms of the currency distribution in the benchmark portfolio. This indicates how much the Norwegian krone has appreciated or depreciated measured against the benchmark portfolio's currency distribution.

Returns are calculated in separate models and then reconciled with the accounting system. Differences between the returns calculated in the models and those in the accounts are a result of different assessment principles, for example in the treatment of money market investments and tax withholdings that have not been refunded. In the accounts, allocations are also made to cover remuneration to Norges Bank.

Table 7 shows that the second quarter return on the Environmental Fund was 1.45 per cent measured in terms of the currency basket and 1.34 per cent in NOK. The return was 0.02 percentage point lower than the return on the benchmark portfolio. The benchmark return in the second quarter was 0.36 percentage point higher than the return on a comparable benchmark from which no companies had been excluded on the basis of environmental criteria.

**Table 7: Return on the Environmental Fund in the first quarter of 2004. Per cent<sup>4</sup>**

	Measured in terms of the Fund's currency basket		Measured in NOK		
	Faktisk portfolio	Benchmark portfolio	Actual portfolio	Benchmark portfolio	Differential
Q1	4.14	4.13	6,94	6,93	0,01
April	-0.23	-0.23	-2,37	-2,37	0,00
May	-0.48	-0.47	-1,48	-1,47	-0,01
June	2.17	2.19	5,36	5,38	-0,02

<sup>3</sup> WM/Reuter Closing Spot Rates, fixed at 4 pm London time.

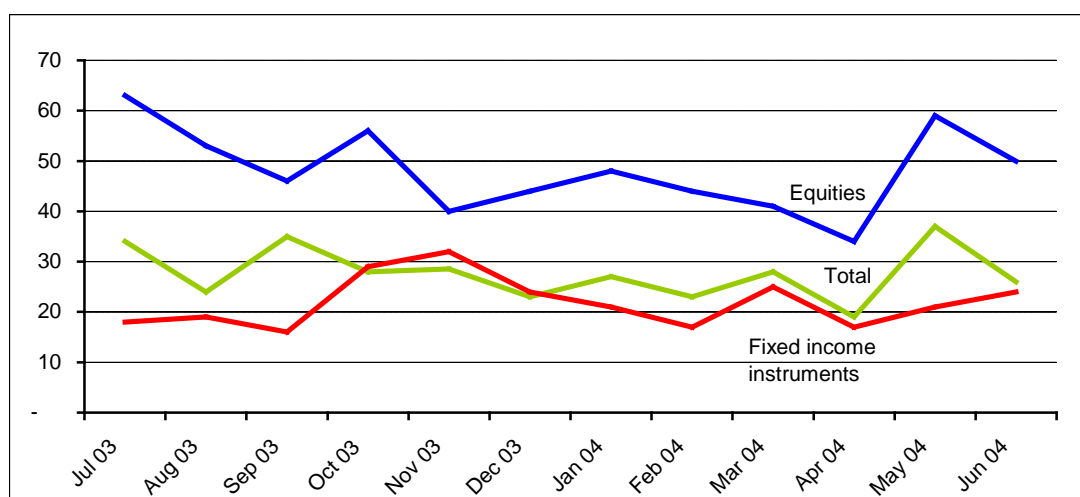
<sup>4</sup> The benchmark for the Environmental Fund is not corrected for tax paid by Norges Bank on share dividends.

<b>Q2</b>	1.45	1.47	1,34	1,36	-0,02
Year to date	5.65	5.66	8,37	8,39	-0,02
Note: Ordinary benchmark in Q 2 with country weights as in the Environmental Fund				<b>1.01</b>	<b>0.36</b>

## 6. Risk

The Ministry of Finance has set a limit on the market risk associated with the actual portfolio relative to the benchmark portfolio. This relative market risk shall always be less than an expected tracking error of 1.5 percentage points (150 basis points), as measured in the RiskManager risk model. Chart 12 shows that in the second quarter of 2004, relative market risk remained well below the upper limit. Expected tracking error has not been higher than approximately 35 basis points.

**Chart 12: Expected tracking error at each month-end for the last 12 months. In basis points (hundredths of a percentage point)**



Relative risk is higher in equity management than in fixed income management, in part because equity markets fluctuate more than fixed income markets. As a result, an equity position is more risky than a fixed income position of the same size. Another contributing factor is that a larger portion of the equity portfolio has been under active management. The difference has narrowed, however, in the last year. This may be partly because the active management of the equity portfolio has been spread over a larger number of mandates and partly because absolute volatility in the equity markets has declined.

The relative market risk figures for the Environmental Fund at the end of June was 10 basis points, measured as expected tracking error in relation to the benchmark for this portfolio. The Ministry of Finance has stipulated an upper limit of 100 basis points for the Environmental Fund.

### Expected tracking error

The Ministry of Finance uses *expected tracking error* to measure the market risk associated with management of the Petroleum Fund. This measure is defined as the expected value of the standard deviation of the difference between the annual returns on the Fund and the benchmark. When deviations from the benchmark are controlled by setting an upper limit for expected tracking error, it is highly probable that the actual return will lie within a band around the return on the benchmark. The lower the limit for tracking error, the narrower the



band will be. An expected tracking error of 1.5 percentage points or 150 basis points means that in two out of three years, the actual return on a portfolio that remains unchanged over time will not deviate from the benchmark return by more than plus/minus 1.5 percentage points.

Table 8 shows the composition of the bond portfolio (fixed income portfolio excluding cash) based on Moody's and Standard and Poor's (S&P) credit ratings. In the table, government securities and government-guaranteed bonds without credit ratings have been given the credit rating of the issuing country. According to the Ministry of Finance's guidelines for credit risk, the Petroleum Fund may not normally be invested in securities with a credit rating lower than Baa from Moody's, BBB from S&P or BBB from Fitch. Nevertheless, up to 0.5 per cent of the fixed income portfolio may be invested in securities with ratings of Ba, BB or BB from Moody's, S&P or Fitch, respectively. All fixed income instruments have a credit rating from at least one of the agencies. Besides bonds, the fixed income portfolio contains fixed income instruments with shorter maturities. These all have credit ratings of P-1 from Moody's and A-1 from S&P.

**Table 8: The fixed income portfolio at 30. June 2004 by credit rating. Percentages of market value**

Moody's		Standard & Poor's	
Rating	Per cent of total	Rating	Per cent of total
Aaa	48.67	AAA	44.44
Aa	17.87	AA	26.18
A	22.61	A	16.04
Baa	8.37	BBB	9.64
Ba	0.19	BB	0.19
Lower	0.00	Lower	0.01
No rating	2.29	No rating	3.50

Table 9 provides an overview of the risk exposure limits stipulated in the Ministry of Finance's Regulation on the Management of the Government Petroleum Fund and guidelines for the ordinary portfolio, and of actual exposure. Management has been in compliance with the risk exposure limits stipulated by the regulation and the guidelines throughout the quarter.

**Table 9: Risk exposure limits as defined in the regulation and guidelines**

§	Risk	Limits	Actual				
			30.06.03	30.09.03	31.12.03	31.03.04	30.06.04
§ 4	Market risk	Maximum 1.5 percentage point tracking error	0.3	0.4	0.2	0.3	0.3
§ 5	Asset mix	Fixed income instruments 50-70%	58.8	58.9	57.4	58.0	58.5
		Equities 30-50%	41.2	41.1	42.6	42.0	41.5
§ 6	Market distribution equities	Europe 40-60%	49.1	47.7	49.2	47.8	47.3
		The Americas, Middle East/Africa, Asia and	50.9	52.3	50.8	52.2	52.7

		Oceania 40-60%					
	Emerging markets	< 5% of equity portfolio	2.2	2.6	2.7	3.1	2.6
	Currency mix fixed income	Europe 45-65%	54.9	55.6	56.4	54.9	54.8
		The Americas and the Middle East/Africa 25-45%	35.7	34.6	34.0	35.0	35.4
		Asia/Oceania 0-20%	9.4	9.8	9.6	10.1	9.7
§ 7	Interest rate risk	Modified duration 3-7	5.5	5.3	5.4	5.3	5.5
§ 11	Ownership interest	Maximum 3% of a company	2.5	2.7	2.6	2.7	2.7

## 7. Management costs

Table 10 provides an overview of the costs of managing the Government Petroleum Fund in the second quarter of 2004. These costs comprise fees to external managers and custodian institutions and Norges Bank's internal operating expenses. In addition to the Petroleum Fund, Norges Bank Investment Management manages the Government Petroleum Insurance Fund and the bulk of Norges Bank's foreign exchange reserves. The total internal costs are spread over the three funds by means of a set of internal prices. The internal costs also include all support functions provided by other parts of Norges Bank.

Annualised, the costs in the first half year of 2004 amounted to 0.08 per cent of the average market value of the Fund, excluding performance-based fees to external managers.

Excluding fees for external managers, costs associated with equity management amounted to 0.11 per cent of the average equity portfolio during the quarter. Comparable figures for fixed income management were 0.04 for the second quarter of 2004. Performance-based fees to external managers amounted to NOK 82.9 million. The amounts are determined on the basis of the managers' total excess return over the last 12 months. Management costs for the entire portfolio totalled NOK 448 million in the first half year. Costs may be apportioned to internal and external management by using allocative keys for shared overheads and custodian costs. External management accounted for approximately 52 per cent of the costs, whereas about 22 per cent of the Fund's portfolio is managed externally.

**Table 10: Management costs in the first half of 2004. In thousands of NOK and as a percentage of the average portfolio**

	First half of 2004		First half of 2003	
	NOK 1000	Per cent	NOK 1000	Per cent
Internal costs, equity management	85 877		66 261	
Costs of equity custodians and settlement	38 890		33 233	
<b>Total costs, equity management</b>	<b>124 767</b>	<b>0.11</b>	<b>99 494</b>	<b>0.12</b>
Internal costs, fixed income management	71 035		68 740	
Costs of fixed income custodians	17 564		15 892	
<b>Total costs, fixed income management</b>	<b>88 599</b>	<b>0.04</b>	<b>84 632</b>	<b>0.05</b>
Minimum fees to external managers	151 840		111 451	

Performance-based fees to external fixed-income managers	82 916		34 970	
<b>Total costs, external management</b>	<b>234 756</b>	<b>0.24</b>	<b>146 421</b>	<b>0.19</b>
<b>Total management costs</b>	<b>448 123</b>	<b>0.10</b>	<b>330 537</b>	<b>0.10</b>
<b>Total management costs, excluding performance-based fees</b>	<b>365 207</b>	<b>0.08</b>	<b>295 577</b>	<b>0.09</b>

The Management Agreement between the Ministry of Finance and Norges Bank establishes the principles for Norges Bank's remuneration for managing the Petroleum Fund's portfolios. The remuneration for 2004 shall be equal to actual management costs and no more than 0.10 per cent of average total assets. Performance-based fees to external managers shall nevertheless be covered even if they exceed this upper limit. Norges Bank has entered into agreements concerning performance-based fees with the majority of external active managers, in accordance with the principles that have been approved by the Ministry of Finance.

## 8. Reporting of accounts

Table 11 shows the distribution of different instruments as presented in Norges Bank's accounts at the end of the last five quarters. Off-balance sheet items are shown in a separate table. Table 12 shows the book return, which in the second quarter was NOK -1 651 million prior to the deduction of Norges Bank's management fee.

The accounts figures are based on holdings including traded but unsettled transactions (except cash). All securities are valued at current market values supplied by independent third party sources. Investments in foreign currency are converted to NOK at market rates as at 30 June quoted on WM/Reuters London. The recorded value of the Petroleum Fund's portfolio deviates from the market value in Table 4 above because management remuneration has not been deducted in this table, and because different calculation principles have been used for some items (see the box in section 5 on methodology for calculating returns). Similarly, there are small deviations in the accounting return figures.

In Table 12, income and expenses in foreign currency have been converted to NOK according to the exchange rate on the transaction date, and have been recognised as they are earned or accrued, according to the accruals principle.

**Table 11: The Petroleum Fund's international portfolio distributed by instrument, at 30.06.04. In thousands of NOK**

	30.06.2003	31.09.2003	31.12.2003	31.03.2004	30.06.2004
Short-term assets, incl. deposits in foreign banks	4 032 013	8 373 828	20 159 575	13 450 907	-3 178 275
Money market investments in foreign financial institutions against collateral in the form of securities	231 690 203	247 242 425	287 041 828	279 864 129	461 264 065
Borrowing from foreign financial institutions against collateral in the form of securities	-302 943 078	-261 330 966	-298 603 119	-311 010 300	-410 186 755
Foreign interest-bearing securities	533 085 800	484 665 659	482 341 421	554 996 405	510 284 611
Foreign equities	312 247 142	325 244 242	354 346 887	378 561 266	385 239 797

Adjustment of forward contracts and derivatives	-2 541 871	-821 946	72 774	-555 003	-959 721
<b>Total portfolio before remuneration for management</b>	<b>775 570 209</b>	<b>803 373 243</b>	<b>845 359 367</b>	<b>915 307 404</b>	<b>942 463 721</b>
Management remuneration due*	-342 232	-528 286	-772 595	-962 868	-448 123
<b>Total portfolio</b>	<b>775 227 977</b>	<b>802 844 957</b>	<b>844 586 771</b>	<b>914 344 536</b>	<b>942 015 598</b>

\*Management remuneration due at the end of the first quarter of 2004 includes remuneration for 2003 and an adjustment of NOK 772 595 for a previous period.

<b>Off-balance sheet items (in NOK 1000)</b>	<b>30.06.2003</b>	<b>31.09.2003</b>	<b>31.12.2003</b>	<b>31.03.2004</b>	<b>30.06.2004</b>
Forward exchange contracts sold	-17 900 785	-19 508 884	-25 395 459	-26 235 470	-33 074 909
Futures sold	-12 993 264	-43 398 154	-35 942 356	-135 240 732	-125 873 033
Equity swaps sold	0	0	-13 340	-543 176	-2 646 383
Interest rate swaps sold	-131 535 564	-129 336 721	-175 568 502	-194 724 825	-363 569 782
<b>Liabilities sold</b>	<b>-162 429 614</b>	<b>-192 243 758</b>	<b>-236 919 657</b>	<b>-356 744 203</b>	<b>-525 164 107</b>
Forward exchange contracts purchased	17 900 785	19 508 884	25 395 459	26 235 470	33 074 909
Futures purchased	30 086 662	50 900 741	47 628 021	117 672 014	113 943 091
Equity swaps purchased	0	0	13 526	535 574	2 078 643
Interest rate swaps purchased	128 976 219	128 409 960	175 545 354	194 169 293	362 614 141
<b>Liabilities purchased</b>	<b>176 963 666</b>	<b>198 819 585</b>	<b>248 582 360</b>	<b>338 612 351</b>	<b>511 710 784</b>
Futures options sold	0	-8 485	-4 323 667	-16 564 927	-35 643 955
Equity options sold	0	0	0	0	0
<b>Rights sold</b>	<b>0</b>	<b>-8 485</b>	<b>-4 323 667</b>	<b>-16 564 927</b>	<b>-35 643 955</b>
Futures options purchased	54 602	8 894	4 331 315	24 464 671	36 878 601
Equity options purchased	0	0	0	0	0
<b>Rights purchased</b>	<b>54 602</b>	<b>8 894</b>	<b>4 331 315</b>	<b>24 464 671</b>	<b>36 878 601</b>

*Table 12: Book return on the Petroleum Fund's international portfolio at 30 June 2004. In thousands of NOK*

	<b>30.06.2003</b>	<b>31.09.2003</b>	<b>31.12.2003</b>	<b>31.03.2004</b>	<b>30.06.2004</b>
Book return					
Interest income	9 552 586	14 891 853	19 560 414	6 094 222	13 382 773
Dividends	4 308 049	5 917 817	6 996 199	2 011 768	5 152 824

Exchange rate adjustment	63 075 338	55 310 312	45 985 725	21 582 056	21 357 284
Unrealised securities losses/gains	27 211 534	30 903 736	55 786 976	11 235 128	-3 567 631
Realised securities losses/gains	-3 806 719	-2 963 386	633 103	7 442 408	10 549 393
Brokers' commissions	-11 413	-18 009	-16 458	5 810	7 093
Forward exchange trading	-766	-1 004	-976	1 332	29 666
Gains/losses futures	992 812	1 460 431	2 039 765	29 670	-37 857
Gains options	39 566	136 155	135 947	-6 609	11 674
Gains/losses equity swaps	0	0	257	-16 808	37 004
Gains/losses interest rate swaps	-1 255 634	370 281	1 292 862	-511 121	-705 034
<b>Book return on investments</b>	<b>100 105 353</b>	<b>106 008 187</b>	<b>132 413 815</b>	<b>47 867 858</b>	<b>46 217 190</b>
Accrued management remuneration	-342 232	-528 286	-772 595	-190 273	-448 123
<b>Net return</b>	<b>99 763 121</b>	<b>105 479 901</b>	<b>131 641 219</b>	<b>47 677 585</b>	<b>45 769 067</b>