I. Macroeconomic developments, prospects and policy challenges

Strong growth through the five years to 1998 was induced by a strong expansion in the private sector due to the improvement in competitiveness in the early 1990s, a significant fall in interest rates in 1993 and higher oil investments. It necessitated a fiscal and monetary policy tightening, which, together with a drop in oil investment, has damped activity since then. Despite moderate output growth in recent years, the labour market has remained tight (Figure 1), causing a sharp deterioration in competitiveness. Furthermore, as Norway is the world's third largest oil exporter behind Saudi Arabia and Russia, the high oil price since 2000 has led to very large current account and government surpluses.

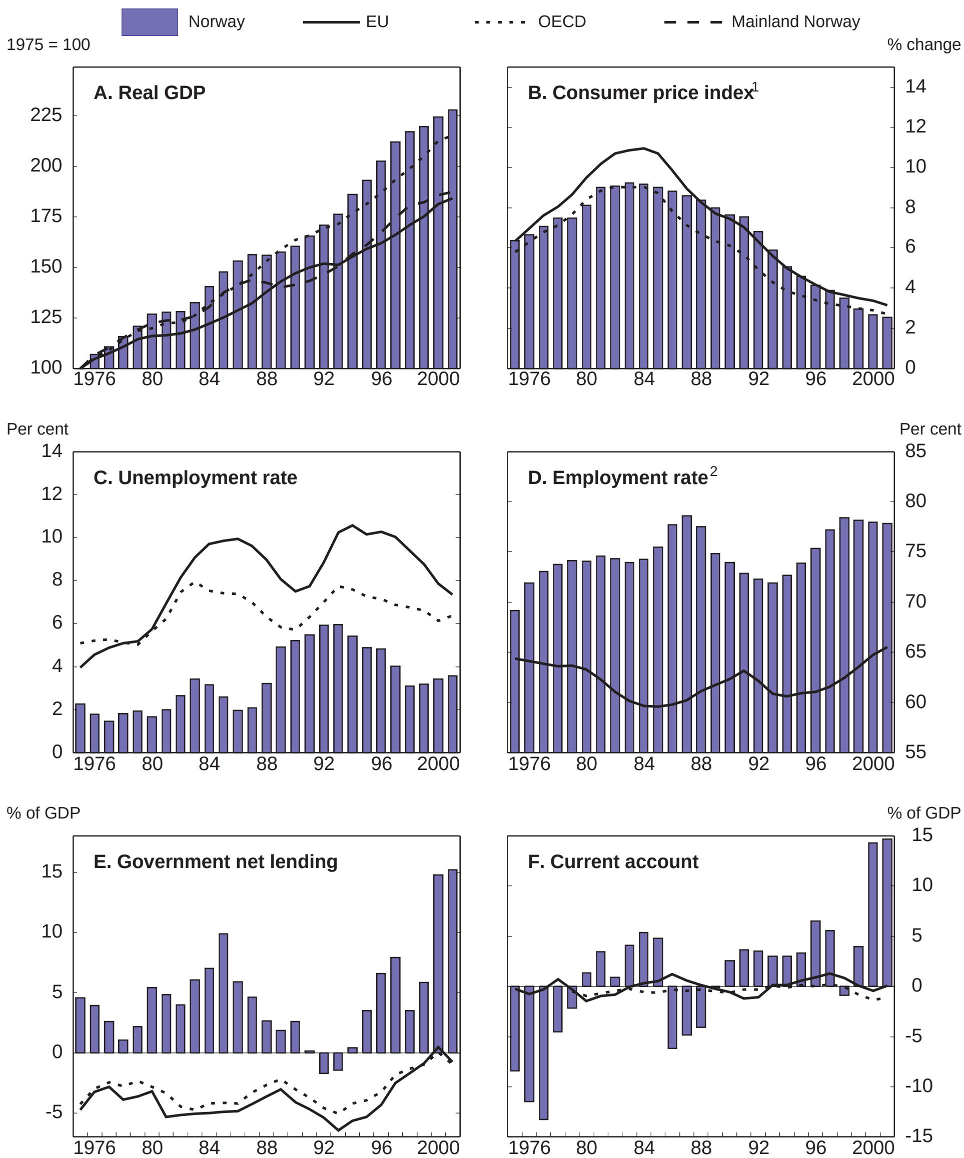
In March 2001, the large government surplus and the rapidly rising assets of the Government Petroleum Fund prompted a reform of the macroeconomic policy framework. The new fiscal policy rule sets the central-government non-oil structural deficit equal to the expected real return on the Petroleum Fund. As a result, this deficit is projected to rise from 1½ per cent of mainland GDP in 2001 to 4½ per cent in 2010, with the total government surplus declining to 10 per cent of GDP and Government Petroleum Fund assets rising to 116 per cent of mainland GDP in 2010 (Ministry of Finance, 2002). With the presumption that monetary policy tightening might well be necessary to offset this steady fiscal expansion, the government also introduced an inflation target for the central bank. This brings the monetary policy framework in line with the current practice of many other central banks. The robustness of this new framework will undoubtedly be tested in the coming years.

Against this background, this chapter provides an overview of recent macroeconomic developments, analyses the new macroeconomic policy framework and reviews the monetary and fiscal policy stance. It concludes with the prospects for 2002 and 2003, together with an assessment of both the risks surrounding these projections and the main macroeconomic policy challenges in the years ahead.

Economic developments in 2001 and early 2002

As in the previous year, mainland GDP excluding electricity production increased by around 1½ per cent in 2001 (Table 1). However, as hydro-electric

Figure 1. **Key indicators in long-term and international perspective**



1. OECD excludes high inflation countries.
2. Total employment as a percentage of working age population (aged 16-64).

Source: OECD, *Main Economic Indicators* and *OECD Economic Outlook,* No. 71, June 2002, finalised in April 2002.

Table 1. **Demand and output**

Percentage changes from previous period, volume

	1998 current prices NOK billion	1999	2000	2001	Annual rates[1]		
					2001 S1	2001 S2	2002 Q1
Private consumption	554.5	3.3	3.5	2.5	3.2	4.6	4.8
Government consumption	247.4	3.2	1.2	2.0	3.4	3.3	8.3
Gross fixed capital formation	284.9	–5.6	–1.5	–4.6	4.6	–6.3	–12.1
Public sector	41.6	0.5	–8.1	–4.3	–5.6	–14.4	–1.8
Petroleum activities	80.3	–15.4	–20.1	–7.4	7.2	16.4	11.1
Residential	40.7	3.0	11.0	5.1	6.7	5.2	–9.1
Other private[2]	122.4	–4.2	7.1	–7.1	6.3	–15.2	–24.0
Stockbuilding[3, 4]	23.8	–0.5	0.7	–0.8	–1.4	–0.9	1.7
Total domestic demand	1 110.7	0.4	2.5	–0.2	1.9	0.8	3.7
Exports of goods and services	427.1	2.8	2.9	4.2	1.8	0.8	–21.2
Traditional goods	177.4	4.0	1.7	4.0	7.4	–0.1	–8.0
Crude oil and natural gas	118.3	–0.8	6.6	5.2	1.1	3.8	–27.4
Ships and platforms	11.0	32.9	–38.9	59.4	–22.0	61.8	–83.5
Services	120.5	1.8	4.9	–0.6	–2.7	–5.8	–15.7
Imports of goods and services	405.6	–1.8	3.2	0.0	3.5	0.3	–15.5
Foreign balance[3]	21.5	1.7	0.1	1.7	–0.4	0.2	–4.4
GDP	1 132.1	2.1	2.4	1.4	1.4	0.9	–1.1
of which:							
Mainland	981.3	2.7	1.9	1.2	1.5	0.2	4.6
Mainland excl. electricity production	956.7	2.8	1.6	1.7			

1. Seasonally adjusted data, change from previous period, at annual rates.
2. Including shipping.
3. Contribution to GDP growth.
4. Includes statistical discrepancy.

Source: Statistics Norway.

production had been temporarily boosted in 2000 by strong precipitation, total mainland GDP decelerated from 1.9 to 1.2 per cent.[1] As a result, the positive output gap has vanished; however, uncertainties about such gap estimates are substantial and labour shortages have remained in many sectors. Output growth was fully due to an increase in net exports as total domestic demand dropped. This decline was prompted by a sharp fall in investment and stockbuilding, which was only partly offset by a rise in private and public consumption.

Exports have accelerated despite a further loss in competitiveness

In contrast to all other OECD economies except Iceland, export volume growth accelerated in 2001 (Table 1). Exports of petroleum products – representing

Table 2. **Exports by commodity**
On a national accounts basis, percentage volume changes

	2001 % of total exports[1]	1995	1996	1997	1998	1999	2000	2001
Total exports	100.0	4.9	10.2	7.7	0.6	2.8	2.9	4.2
Goods	76.4	6.3	10.9	6.7	–1.0	3.2	2.2	5.9
Crude oil and natural gas	43.2	9.2	13.7	2.9	–4.4	–0.8	6.6	5.2
Ships and oil platforms	2.4	0.2	–12.6	39.0	–18.7	31.6	–38.9	59.4
Traditional products	30.9	4.4	10.5	8.6	3.5	4.0	1.7	4.0
of which: Manufacturing	28.9	3.5	11.0	8.8	3.5	3.6	0.9	5.0
Services	23.6	0.9	8.2	11.1	5.5	1.8	4.9	–0.6
Gross receipts, shipping	11.6	2.8	1.1	6.3	3.7	–1.1	1.0	–2.5

1. Current prices.
Source: Statistics Norway.

almost half of total exports in 2001 – increased by 5¼ per cent (Table 2). The global slowdown and the sharp drop in oil prices in the wake of the 11 September attacks in the United States had no influence on production as oil companies normally produce at the technical maximum level. However, in December 2001, the Norwegian government decided to cut oil production by 5 per cent (150 000 barrels per day) in the first half of 2002 to support the oil price. At the same time, the Organization of the Petroleum Exporting Countries (OPEC), Mexico and Russia announced similar decisions. As the Norwegian cut was against a rising baseline, it did not affect the surge in gas production and was not prolonged into the second half of 2002, petroleum sector exports are expected to rise in 2002.

Norway's information and communication technology (ICT) sector is very small, especially compared with neighbouring Finland and Sweden, and exports were therefore not strongly affected by the international ICT collapse, while ships and oil platforms no longer acted as a drag on growth. On the other hand, in the capital-intensive ferroalloys industry, weaker world demand has led to temporary or permanent shutdowns of plants. Surprisingly, given the deteriorating price competitiveness (Box 1), exports of traditional (non-petroleum) goods and services also accelerated (Table 2).[2] Although the manufacturing sector as a whole did not lose export market share in 2001, it has shrunk substantially over the period 1995-2001, with manufacturing exports lagging market growth by almost 2 percentage points per year (Figure 2).[3] As competitiveness has deteriorated, with a further substantial deterioration in early 2002, renewed market losses are expected in 2002.

In 2001, export prices dropped somewhat (2 per cent) after the sharp oil-induced rise (37 per cent) in the previous year. All goods categories showed price declines but service prices rose, reflecting the continuing increases in labour

Box 1. How much has competitiveness deteriorated since 1995?

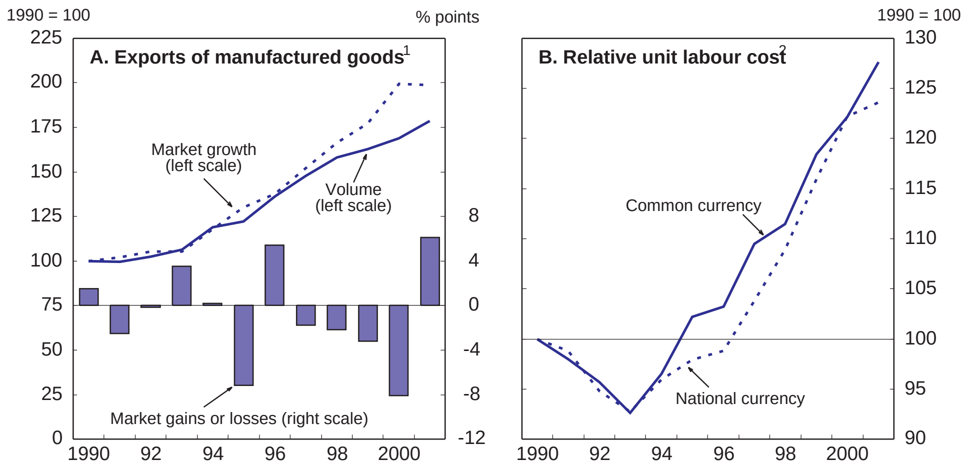
The cost competitiveness indicator used by the national authorities and the social partners is based on wages per hour in the manufacturing sector. This is in contrast to the OECD indicator that is based on unit labour costs in the manufacturing sector and therefore also takes into account relative productivity developments. The European Commission follows the same approach. Empirically, the difference is substantial. According to the national indicator, competitiveness deteriorated by a cumulative 7 per cent between 1995 and 2001, compared with 24 per cent according to the OECD indicator.*

As productivity differences are relevant for competitiveness, an indicator based on unit labour costs is superior to one based on wages alone. In practice, however, a unit labour cost indicator can be biased due to measurement errors in productivity. According to the *Technical Reporting Committee for Income Settlements*, which calculates the competitiveness indicator in Norway and in which the social partners, the ministries and Statistics Norway are represented, differences between countries in calculating national accounts statistics, especially in deflating methods, are significant. As a consequence, productivity data are not fully comparable across countries. Furthermore, productivity differences between countries are partly due to differences in industrial structure, with these sectoral productivity differences often offset by relative output price developments. For instance, the very strong productivity rise in the ICT sector up to 2000 was accompanied by a sharp decline in prices. For these reasons, the committee decided in 1996 to focus on a broader set of indicators including hourly wages, capital costs, market shares, employment, profitability and productivity. As part of the OECD *Growth Study*, the OECD has analysed the international comparability of productivity data (Schreyer and Pilat, 2001). It concluded that substantial progress has been made in recent years to improve the comparability of productivity statistics.

* The OECD indicator is based on data available in April 2002 and does therefore not take into account the recent upward revision in Norwegian productivity growth. The difference between the two indicators is only marginally due to a different set of trading partners and differences in weights. According to the European Commission, competition deteriorated by 15 per cent *vis-à-vis* other industrial countries (European Commission, 2002). The OECD competitiveness indicator based on manufactured export prices deteriorated only by 2 per cent, indicating that the stronger rise in unit labour costs was almost completely offset by a drop in profit margins.

costs. For petroleum exports, the price drop of 7 per cent was minor compared with the surge of 145 per cent over the two previous years and the oil price has risen again in early 2002 reflecting the global recovery, production cuts by the main oil producing countries and tensions in the Middle East.

Figure 2. **Export performance and cost competitiveness**



1. Excluding ships and oil platforms.
2. In manufacturing.

Source: OECD, *OECD Economic Outlook,* No. 71, June 2002, finalised in April 2002.

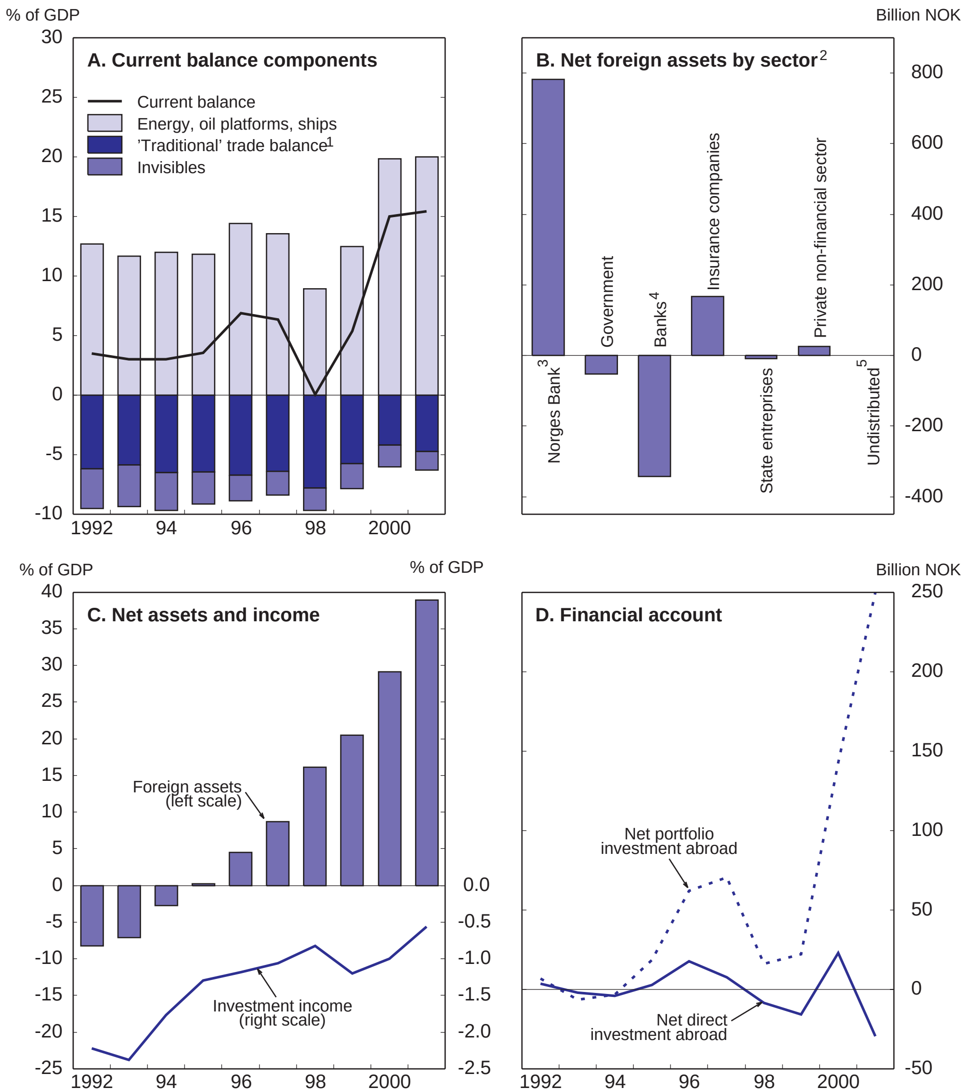
Import volume and prices were broadly flat

Despite the deteriorating competitive position of domestic producers, imports of traditional goods were flat, reflecting weak domestic demand and a sharp drop in the imports of ships and oil platforms (Table 1). The halving of value added tax (VAT) on food and the lowering of the alcohol tax had no noticeable effect on the sizeable cross-border shopping in Sweden. The negative impact of the global downturn on world prices, the effective appreciation of the krone and the continuing shift towards imports of consumer goods from low-cost countries have damped import price rises. The shift towards low-cost countries is most pronounced for clothing and footwear for which import prices have dropped by around 10 per cent since 1996. With a substantial negative carry-over and an accelerating appreciation in early 2002, import prices are projected to fall in 2002.

The current account surplus is very large

As export volume growth exceeded that of imports by a wide margin, the current account surplus has increased further despite a terms-of-trade loss (Figure 3). With a surplus of 15 per cent of GDP in 2001, Norway is clearly in a

Figure 3. **External position**



1. Excluding petroleum, oil rigs and ships.
2. December 2001.
3. Including the Government Petroleum Fund.
4. Commercial and savings banks, mortgage and financial companies.
5. Including errors and omissions.

Source: Norges Bank.

category of its own in the OECD.[4] As a result of this large surplus and notwithstanding the negative impact of the sharp share price decline and the appreciation of the krone, net foreign assets have risen to 39 per cent of GDP. Net investment income, however, has remained negative due to the higher interest rate in Norway and the registration only of dividends as investment income on equities (share price changes being accounted as revaluations of assets).

Private consumption has remained subdued

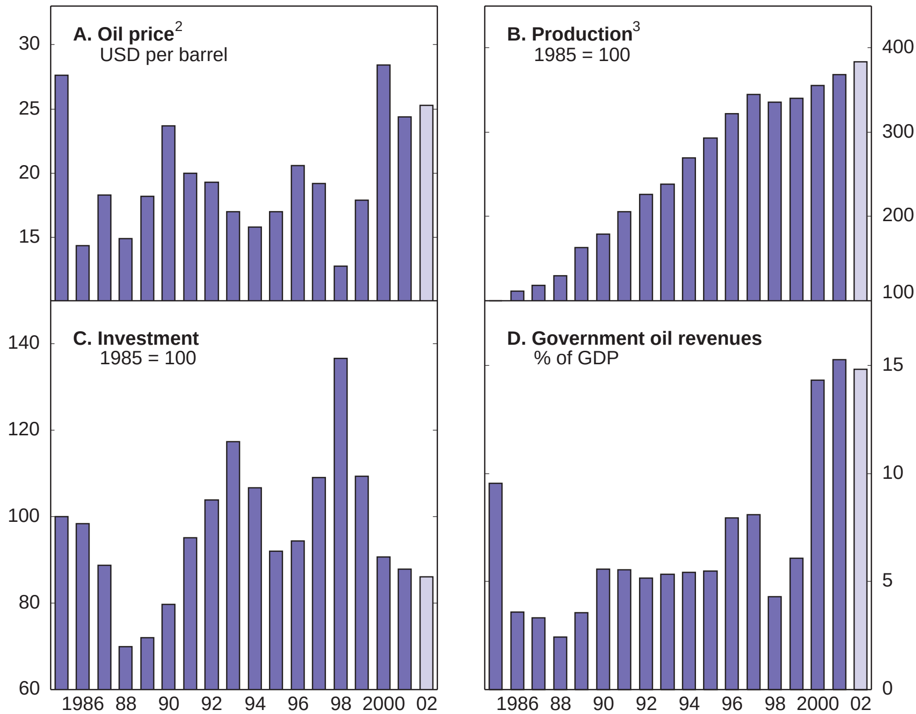
Private consumption increased by 2½ per cent in 2001, somewhat lower than in the two previous years and clearly less than the 4 per cent per year gain registered in 1994-98. The moderate pace in recent years reflects smaller real disposable income and employment gains, and higher debt servicing caused by tighter monetary policy and increased debt. Furthermore, in 2001, weaker consumer confidence may have damped private consumption. In early 2002, however, consumer confidence has risen steeply, especially the view of households on their own financial situation that was the most positive since the survey was introduced in 1992. This rise in confidence and the tax cuts since mid-2001 have underpinned private consumption in early 2002.

Investment has continued to fall

Except for residential investment, all investment categories fell in 2001, including the highly erratic shipping investment (Table 1).[5] Stockbuilding was also substantially lower, but this incorporates the national-accounts statistical discrepancies. Oil investment – one-fifth of the total – recovered during the year but was a third below its 1998 peak and 15 per cent below the 1990s average (Figure 4). The strong swings in oil investment are mainly determined by the development of new fields with the oil price having a substantial negative effect only if the price falls to a very low level. In early 2002, the Norwegian Petroleum Directorate revised its short-term projection upwards substantially. As new fields will be developed, an increase from the current level of investment is expected for the coming years.

Despite heavy investment by the aluminium industry and the rest of the manufacturing sector, mainland business investment dropped substantially in 2001 reflecting weak demand and a drop in profitability (Table 1 and Figure 5). The sharp deterioration in competitiveness has reduced profitability and made Norway a less enticing investment location. This holds especially for the manufacturing sector where the rate of return fell from the peak of 10 per cent in 1995 to 7 per cent in 2000 and is estimated to have declined further thereafter. The negative impact of lower profitability on investment is only partly offset by an increase in capital intensity in reaction to rising labour costs. The drop in investment has reduced domestic credit growth to non-financial enterprises from 15 per cent in 2000 to 7 per cent in 2001. However, with profitability deteriorating, this was insufficient to prevent a rise in debt and debt service ratios to levels not seen

Figure 4. **The oil sector**[1]



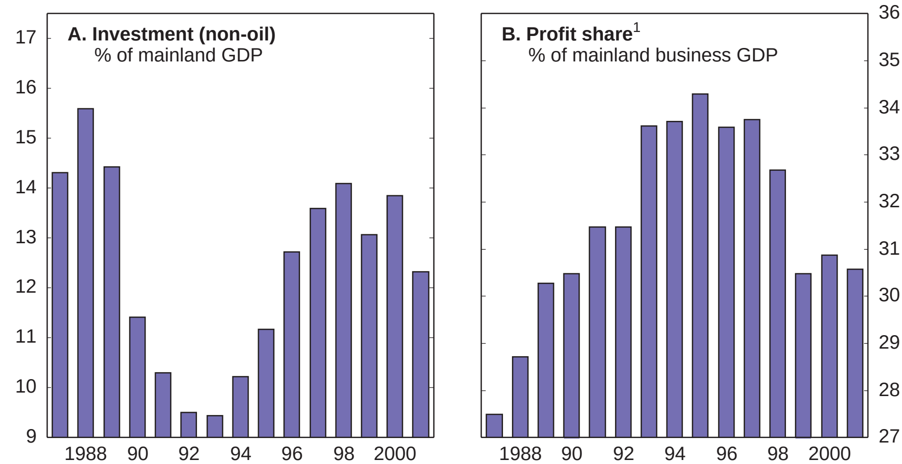
1. Data for 2002 are OECD projections.
2. Brent Blend. The estimate for 2002 shows the price of the latest available month.
3. Petroleum activities and ocean transport.

Source: Statistics Norway and OECD, *OECD Economic Outlook,* No. 71, June 2002, finalised in April 2002.

since the end of the 1980s.[6] As a result, the bankruptcy probability for large unlisted companies has increased (Norges Bank, 2001a).

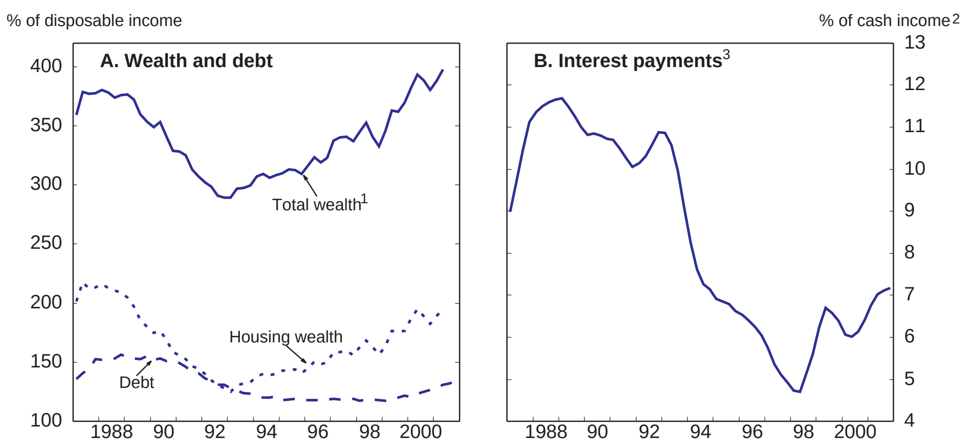
Residential construction continued its brisk increase in 2001 despite high interest rates, weaker consumer confidence and the on-going shortage of construction workers. Although there was some softening in the second half of the year and in early 2002, housing starts in 2001 were the highest since 1989.[7] The increasing housing stock did not dampen house prices. Since the trough in 1993, prices have risen steadily but house prices relative to construction costs do not indicate that a price bubble has developed. The rise in house prices has led to a substantial increase in gross housing wealth and at the same time to higher mortgages (Figure 6). Since 2000, credit to households has risen by more than 10 per cent per

Figure 5. **The business sector**



1. Mainland business sector GDP less compensation and net indirect taxes.
Source: OECD, *OECD Economic Outlook,* No. 71, June 2002, finalised in April 2002.

Figure 6. **The financial position of households**



1. Sum of gross financial wealth and housing wealth.
2. Cash income is the disposable income before deducting gross interest expenses.
3. After tax, as a percentage of cash income.
Source: Norges Bank.

year and, already in 1999, debt and interest payments started to head higher as a percentage of disposable income. Nevertheless, as these ratios are clearly lower than during the house price bubble at the end of the 1980s and as households own substantial net financial wealth, the financial position of households as a group remains sound and households have a sufficient buffer in the event of an economic downturn.[8] The recent strong credit growth is therefore not likely to endanger the stability of the financial sector, nor to force households to reduce consumption and investment in the near future.

The labour market is tight despite some easing in 2001

Due to moderate output growth, labour market tensions diminished somewhat in 2001 (Table 3). As in the previous year, the unemployment rate rose by 0.2 percentage points, to 3.6 per cent, on par with the OECD's current estimate of the structural unemployment rate (NAIRU) and less than half the euro area

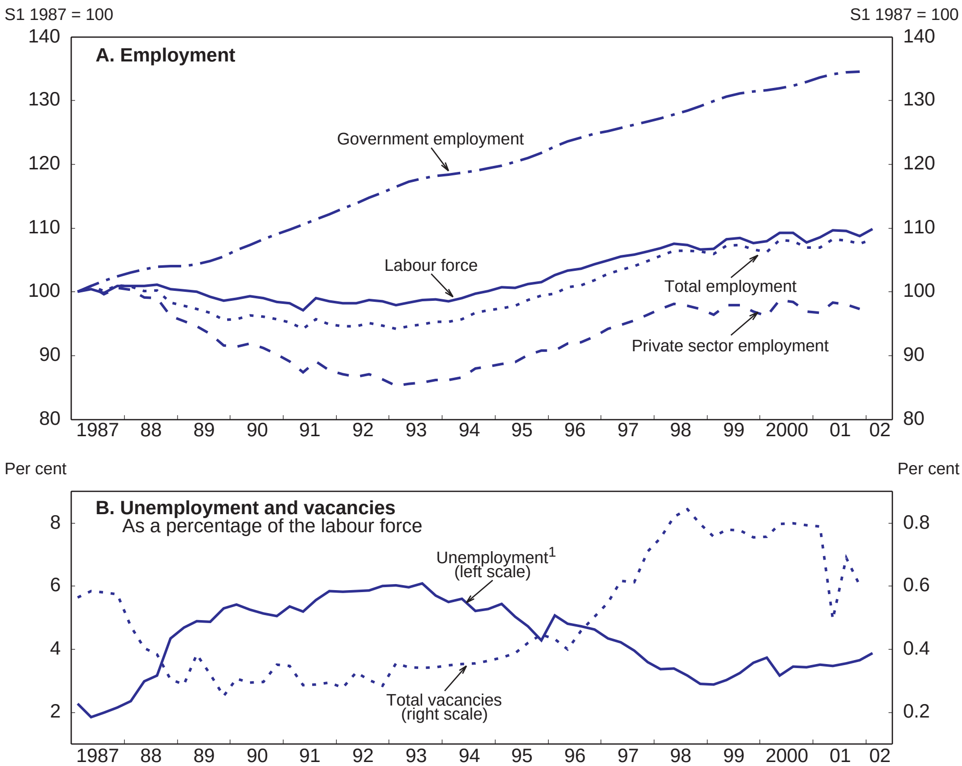
Table 3. **Employment developments**[1]
Percentage changes[2]

	1995 thousand persons	1996	1997	1998	1999	2000	2001
Labour force	2 187	2.4	2.1	1.3	0.6	0.7	0.5
Employment total	2 080	2.5	3.0	2.3	0.5	0.5	0.4
Private sector	1 457	2.0	3.5	2.8	0.3	0.3	0.0
Manufacturing	300	1.6	4.3	1.2	–4.0	–2.4	–1.6
of which: Construction of oil platforms and ships	34	–2.7	10.7	9.1	–1.8	–10.3	–0.6
Services	906	2.2	3.2	3.5	2.2	1.5	0.7
Government	656	2.1	1.7	2.1	1.9	0.7	1.6
Central (civilian)	112	1.3	2.9	0.5	1.0	0.7	1.3
Local	499	2.5	1.9	2.8	2.4	1.0	2.3
Hours worked (total)	2 987[3]	1.6	2.6	2.4	0.7	–1.1	–1.0
Labour productivity[4]		1.2	0.9	1.8	0.9	1.5	0.8
Participation rate[5]		79.2	80.4	80.9	80.7	80.6	80.3
Employment rate[6]		75.4	77.2	78.4	78.2	77.8	77.5
Unemployment rate	107	4.8	4.0	3.1	3.2	3.4	3.6

1. Data for the labour force, total employment as well as for the participation, employment and unemployment rates are based on the Labour Force Survey while the employment data per sector and the total hours worked are on a national accounts basis.
2. Unless otherwise indicated.
3. Million hours.
4. Per person, in the business sector.
5. Labour force as a percentage of the population aged 16 to 64.
6. Employed persons as a percentage of the population aged 16 to 64.

Source: Statistics Norway and OECD.

Figure 7. **Labour market developments**



1. Break in series in January 1996 due to a broadening of the unemployment definition in the Labour Force Survey which is estimated to have raised the unemployment rate by 0.5 percentage point.

Source: OECD, *Main Economic Indicators* and *OECD Economic Outlook,* No. 71, June 2002, finalised in April 2002.

average. Concomitantly, new vacancies dropped slightly, to the lowest level since 1997 (Figure 7). In the first quarter of 2002, unemployment was broadly unchanged, while new vacancies picked up somewhat.

As in the two previous years, employment increased by ½ per cent in 2001, almost completely due to a rise in the government sector. The direct effect of the 11 September attacks was limited to some job cuts in the aviation and travel industries. Total hours worked fell by ¾ per cent reflecting additional holidays, a further increase in sick leave and the trend shift towards part-time employment. The labour force growth was again limited as the working-age population rose only moderately and the number of disability and early-retirement pensioners expanded further, reducing the labour force by approximately ¼-½ per cent. Measured in persons, the labour force participation rate was constant at slightly above 80 per cent, thus very high by international and historical standards.[9]

Since 1970, manufacturing employment has fallen by a fifth. As elsewhere, this drop was partly due to technical progress and to increased specialisation, causing a shift in employment from the manufacturing to the service sector. In Norway, this scaling back has not happened gradually but in waves.[10] Employment dropped especially sharply in 1978-84 (by 14 per cent) and 1988-92 (by 18 per cent). Prior to these periods, competitiveness deteriorated substantially. Initially, the impact of this erosion on output and employment was limited as enterprises adjusted profit margins downwards. However, weak profitability had a lagged negative impact on output and investment decisions and thus on employment. In the light of these trends, the deterioration in competitiveness since 1995 may indeed be a precursor to a renewed scaling back of manufacturing employment, especially because labour markets are likely to remain tight.

Strong wage rises in 2002

As labour market tensions have slightly diminished, wage rises have slowed from the 1998 peak rate but have continued to outpace the average of main trading partners. Mainland wages increased by 4.8 per cent in 2001, somewhat stronger than in 2000 but still below the 1998 peak (Table 4 and Figure 8).[11] Hourly wages increased even more, by 5.8 per cent, due to the two extra days of vacation. As productivity rose by 1.7 per cent, unit labour cost rose by 4.1 per cent,

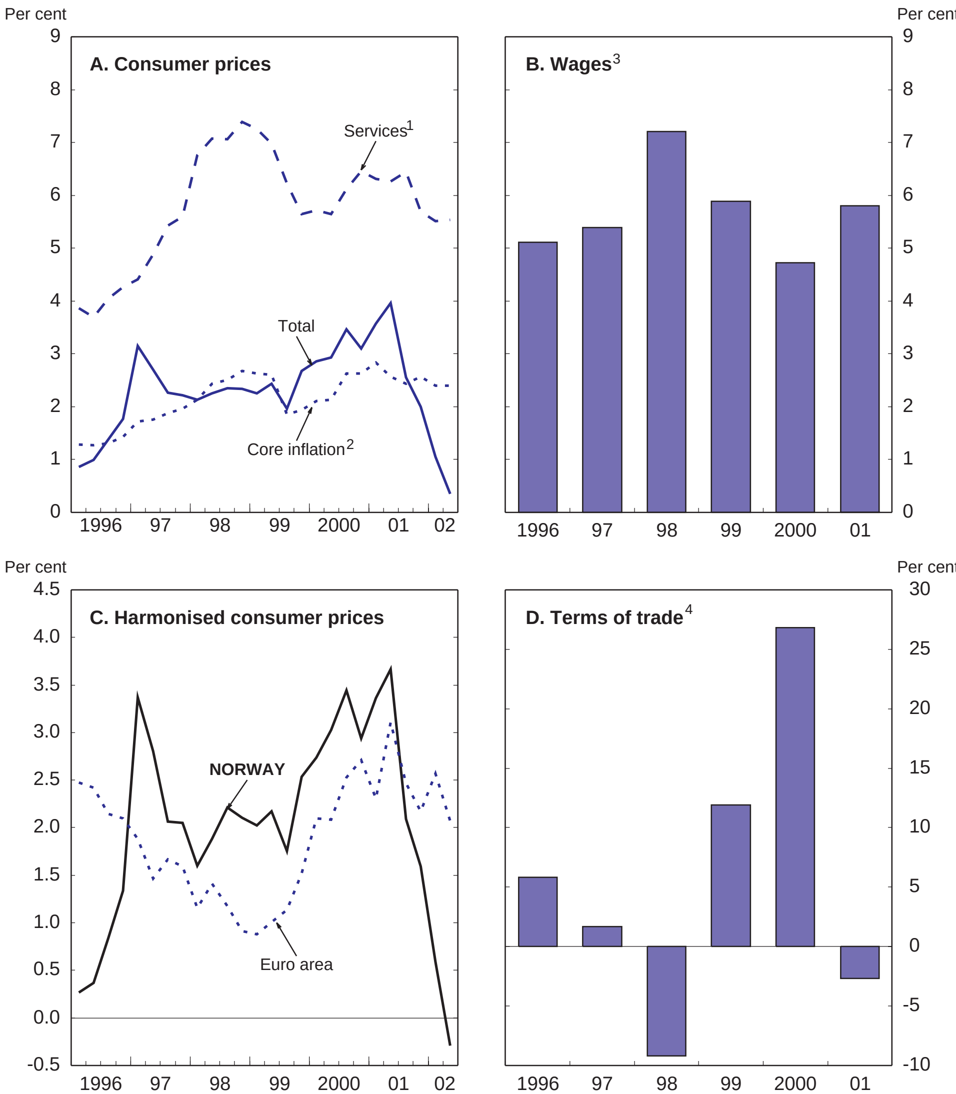
Table 4. **Prices, wages and costs**
Percentage changes

	1994	1995	1996	1997	1998	1999	2000	2001
Consumer price index	1.4	2.4	1.2	2.6	2.3	2.3	3.1	3.0
Harmonised	. .	. .	0.7	2.6	1.9	2.1	3.0	2.7
Core inflation (CPI-ATE)[1]	1.4	1.4	1.3	1.8	2.4	2.3	2.4	2.6
Private consumption deflator	1.2	2.4	1.4	2.3	2.5	2.0	3.3	1.8
Wage rate[2]	3.1	3.3	4.4	4.8	6.6	5.3	4.3	5.0
of which:								
Mainland	3.1	3.4	4.5	4.7	6.5	5.3	4.4	4.9
Manufacturing	3.1	3.8	4.1	4.3	6.1	5.8	3.8	4.9
Private services	3.2	3.5	4.6	4.8	6.7	5.3	4.5	5.0
Public sector	3.0	3.1	4.5	4.5	6.3	5.3	4.6	4.9

1. Consumer price index (CPI) adjusted for tax changes and excluding energy products. Data estimated by Norges Bank prior to August 1999.
2. Wages and salaries per full-time equivalent person on a national accounts basis.
Source: Statistics Norway, Norges Bank and OECD.

Figure 8. **Wage and price developments**

Year-on-year percentage changes



1. Services with wages as the dominating price factor.
2. Consumer price index adjusted for tax changes and excluding energy products.
3. Compensation rate in the private sector on a national accounts basis.
4. Change in the ratio of export and import prices for goods and services.

Source: Statistics Norway and OECD, *Main Economic Indicators*.

thus providing a cost impulse to inflation, which was considerably above the inflation target rate of 2½ per cent. In the 2000-01 wage round, the manufacturing sector remained the trend-setter and wage rises were relatively uniform across industries and professions. The main exception concerns teachers who got extraordinary pay rises to make the profession more attractive. Teachers' pay increased by 6 and 8 per cent in 2000 and 2001, respectively, and the increase in 2002 will again be above average.[12] Furthermore, as in the past, the 2000-01 settlements have led to somewhat stronger rises for low-paid workers, thereby weakening incentives for individual investment in human capital.[13]

In April and May 2002, wage agreements were reached in the private sector that will lead to a wage rise of above 5 per cent in 2002. This implies a steep rise in unit labour costs and higher wage rises than in the main trading partners for the sixth consecutive year. The wage agreements reached in the public sector will lead to higher wage rises than in the private sector. In the local government and hospital sectors, it was also agreed to give more room for local negotiations.

Tax cuts have temporarily pushed down inflation

In 2001, indirect taxes and energy prices induced sizeable swings in headline inflation (Figure 8). After the increase in the overall VAT rate in January 2001 by 1 percentage point to 24 per cent and the mostly weather-related hike in the electricity price, inflation – measured by the 12-months change in the consumer price index – peaked at 4.3 per cent in May.[14] However, mainly due to the halving of VAT on food in July 2001, it receded rapidly thereafter to 2.1 per cent in December. In early 2002, as the impact of the VAT rise a year earlier dropped out and indirect taxes were cut again, inflation fell further, to 0.4 per cent in May, the lowest rate in OECD Europe. As a result of the indirect tax cuts, inflation is below the euro area average since July 2001, after exceeding it for more than four years. Adjusted for tax changes and excluding energy products, inflation has hovered around 2.5 per cent since early 2001.[15] Prices of services with wages as the dominant factor have increased by 6¼ per cent in 2001, broadly unchanged from the two previous years. Air fares rose a lot, by 20 per cent in the twelve months up to February 2002, reflecting not only much higher insurance costs after the 11 September events, but also the lack of competition in the Norwegian domestic market; in April, the abolition of the airline passenger tax mitigated this price rise.

The macroeconomic policy framework has been reformed in 2001

In reaction to recent large budget surpluses and the ensuing pressures to raise government outlays, the previous government presented new guidelines for fiscal and monetary policy in March 2001 that were approved by Parliament shortly thereafter (Box 2). The new fiscal policy guideline sets the structural non-oil central-government budget deficit equal to the expected real return on the

Box 2. The economic policy guidelines of March 2001

Fiscal policy guideline

The current fiscal policy guideline, as set out in Report No. 29 to the Parliament (Ministry of Finance, 2001a) and approved by Parliament, is:

– The structural non-oil central-government budget deficit shall generally correspond to the expected real return of the Government Petroleum Fund that is estimated at 4 per cent.
– Fiscal policy must still place emphasis on stabilising fluctuations in the economy. In a situation with high activity in the economy, the fiscal stance – as measured by the structural deficit – should be tightened accordingly, while a downturn may necessitate a bigger structural deficit.

The guideline foresees that in the event of extraordinary substantial changes in the Petroleum Fund's capital or in the structural deficit,[1] corrective action will be spread over several years.

Monetary policy regulation

The Royal Decree of 29 March 2001 on the regulation of monetary policy has the following main paragraphs:[2]

– Monetary policy shall be aimed at stability in the Norwegian krone's national and international value, contributing to stable expectations concerning exchange rate developments. At the same time, monetary policy shall underpin fiscal policy by contributing to stable developments in output and employment.
– Norges Bank is responsible for the implementation of monetary policy.
– Norges Bank's implementation of monetary policy shall, in accordance with the first paragraph, be oriented towards low and stable inflation. The operational target of monetary policy shall be annual consumer price inflation of approximately 2½ per cent over time.
– In general, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances shall not be taken into account.
– Norges Bank shall regularly publish the assessments that form the basis for the implementation of monetary policy.

1. The structural deficit estimate for the past may change due to historical data revisions and due to changes in the underlying calculation method.
2. The new decree replaced the one of 6 May 1994 stipulating that "the monetary policy to be conducted by the Norges Bank shall be *aimed* at maintaining a stable krone exchange rate against European currencies, based on the range of the exchange rate maintained since the krone was floated on 10 December 1992. In the event of *significant* changes in the exchange rate, monetary policy instruments will be *oriented with a view* to returning the exchange rate *over time* to its initial range. No fluctuation margins are established, nor is there an appurtenant obligation on the Norges Bank to intervene in the foreign exchange market" (italics added).

Petroleum Fund.[16] However, as expressed in the government report on the new guidelines, fiscal policy still has a counter-cyclical role to play and deviations from this deficit target are thus allowed in the case of excess demand and supply. Moreover, the guideline foresees that in the event of extraordinary changes in the Petroleum Fund's capital or in the structural deficit, corrective action will be spread over several years. There has been a smooth implementation as the structural deficit in 2001 was broadly in line with the new guideline. With the presumption that tight monetary policy might well be necessary to offset this steady fiscal expansion, the government also set an inflation target of 2½ per cent over time for the central bank. This inflation target implies a demand management role for the monetary authorities. As was the case in the previous macroeconomic framework, the government will place emphasis on incomes policy co-operation, where, in the view of the authorities, the social partners ought to contribute to maintaining a strong internationally-exposed sector and low unemployment through moderate wage settlements.[17]

The new rate of return rule

The previous fiscal policy guideline – that the budget should have an approximately neutral impact on the economy in a neutral cyclical situation – focused on the short term but implied for the longer term a constant structural non-oil deficit of undetermined size. The new guideline will lead to a gradual rise in the structural deficit. But, by setting it equal to the real rather than the nominal return on the Petroleum Fund, adhering to the rule will mean that existing assets of the Fund are safeguarded in real terms if the expected return is realised. Moreover, with continuing high – although falling – government petroleum revenues, the Fund is projected to increase in real terms and even as a percentage of GDP up to 2050. The rule implies somewhat less saving of petroleum revenues than in 2001 but a greater saving than on average in the past. In 1971-2000, central government only saved about NOK 300 billion of the NOK 1 100 billion total petroleum revenues. With a rule for the structural deficit, Norway has adopted a sophisticated approach. Measuring the structural deficit is not without technical problems, though, but a structural deficit rule is nevertheless preferable as it leads to a focus on discretionary fiscal policy measures.

One way to assess the long-term consequences of the new guideline is to look at generational accounts. The most recent estimates, taking into account the impact of the new fiscal rule in 2002, indicate a need to tighten the current budget by NOK 0-20 billion (0-1¾ per cent of mainland GDP) to avoid a stronger burden on future generations (Annex I). Another tool to assess the long-term consequences is provided by the long-term macroeconomic scenario based on the new fiscal rule (Box 3). This scenario is policy-rich, as substantial public sector and pension reforms will be needed to avoid an unsustainable budgetary situation

Box 3. A policy-rich long-term economic scenario

Although it published some key variables for 2001-10, the current government has not yet put forward a comprehensive long-term economic scenario consistent with its intended fiscal and structural policies. However, as it adheres to the new fiscal policy guidelines introduced by the previous government in March 2001, the 2000-50 scenarios presented in the *Long-Term Programme* 2002-2005 (Ministry of Finance, 2001b) are still relevant, although most recent developments are not taken into account. The "return" scenario – the scenario based on the new fiscal guideline of a structural non-oil deficit equal to the return on the Government Petroleum Fund – shows a gradual increase in the structural non-oil deficit from 0.8 per cent of mainland GDP in 2000 to 5.3 per cent in 2010 (4.4 per cent according to most recent estimates) and 6.7 per cent in 2020, with a broad stabilisation thereafter up to 2050 (Table 5). Government outlays will rise by almost 10 percentage points of mainland GDP in the period 2000-50 while government non-oil tax revenues will rise by 2 percentage points, although they will fall initially by 1½ percentage points up to 2010. This will be accompanied by a fall in government oil revenues by 16 per cent of GDP due to a drop in petroleum production and in oil prices, partly offset by higher investment income.

In this "return" scenario, government outlays will increase by more than required by demographics up to 2020 but less thereafter. This and the assumed tax cuts make the scenario policy-rich and challenging. Substantial public sector reform is needed to prevent government outlays rising even more than assumed in the "return" scenario or to prevent reduced coverage of welfare services. Moreover, a comprehensive pension reform, not yet built into the scenario, is required. Without reforms, total age-related government spending will rise by around 13 percentage points of GDP between 2000 and 2050. This rise – among the strongest in the OECD area – is due to the maturing of the pension system, the strong increase in female participation in past decades and the absence of pension reforms in recent years in contrast to many OECD countries. Moreover, pension outlays are boosted by the continuing full wage indexation of pension rights and pensions.*

* Based on existing rules, much more modest indexation is assumed for most other OECD countries (OECD, 2001a). However, it remains to be seen whether this restraint is politically feasible in the long term (Moum and Wold, 2001; Van Ewijk, 2001).

and significant reforms are built into the scenario. On the one hand, this could be seen as an insufficiently conservative budgetary approach as there are immediate outlay increases and tax cuts while the required reforms are not yet implemented. If agreement can be reached – which is not certain given past experience – the pension reform is unlikely to be implemented before 2007 and may fall short of what is needed. Concerning public sector reforms, the government is not much

Table 5. **The long-term budget scenario 2000-2050**[1]

As a percentage of mainland GDP

	2000	2010	2020	2030	2040	2050
Government revenues						
Non-oil tax revenues	49.2	47.9	47.7	49.9	51.7	51.2
Oil revenues[2]	18.1	9.0	5.3	3.7	2.6	2.1
Net investment income	4.5	9.8	12.4	12.8	13.1	13.4
Total government revenues	71.8	66.7	65.4	66.4	67.4	66.7
Government outlays	51.7	54.5	56.0	58.8	60.7	60.5
of which: Pensions (old-age and disability)	9.3	10.8	13.8	16.7	18.5	18.4
Financial balance						
General government financial balance	20.1	12.2	9.4	7.6	6.6	6.2
of which: Non-oil central government balance	–0.8	–5.3 (–4.4)[3]	–6.7	–7.0	–7.1	–7.2
Assets of the Government Petroleum Fund	37	145 (116)[3]	177	179	179	181
Petroleum wealth	224	117	78	52	37	25
Total public sector wealth[4]	261	262	255	231	216	226
Pension liabilities[5]	233	263	299	320	326	323
% of total GDP						
Government revenues[6]	53.1	57.5	59.7	62.6	64.5	64.4
Government outlays[7]	38.3	47.1	51.1	55.4	58.2	58.5
Government financial balance	14.9	10.4	8.5	7.2	6.4	5.9
Coverage of public sector welfare services[8]	–2	5	6	–3	–9	–7
Government employment[9]	26.9	29.4	29.7	30.5	31.1	32.1
Mainland GDP volume growth[10]	1.8	2.0	1.7	1.3	1.2	1.3
Total GDP volume growth[2, 10]	2.3	1.6	1.2	1.1	1.1	1.3

1. Based on the current fiscal guideline of a structural non-oil central-government deficit equal to the expected 4 per cent real return on the Government Petroleum Fund. The table is consistent with the Long-Term Programme 2002-05 of March 2001 and therefore does not take into account the most recent developments (see also footnote 3 and differs therefore from Table 6).
2. Oil and natural gas extraction is assumed to rise from 243 million Sm^3 o.e. (standard cubic metres oil equivalents) to a peak level of 281 million Sm^3 o.e. in 2004 and to fall thereafter gradually to 106 million Sm^3 o.e. in 2050. In 2001 prices, the oil price is assumed to fall from USD 25 per barrel in 2001 to USD 15 per barrel in 2010 and to remain constant thereafter.
3. Within brackets the updated number as given in the revised 2002 national budget (Ministry of Finance, 2002). The corresponding forecast for the balance in 2005 is –3.3 per cent of mainland GDP.
4. Sum of assets of the Government Petroleum Fund and the petroleum wealth. As stakes in state-owned companies and the National Insurance Fund (NIS) are not taken into account, public sector wealth is underestimated.
5. The pension burden is the net present value of the increase in expected future NIS pension outlays over and above the growth in the tax base, and measured as a percentage of mainland GDP.
6. Includes net interest income.
7. Excludes gross interest payments.
8. Percentage difference between the projected local government employment (including hospitals) based on the new fiscal guideline and the local government employment assuming unchanged coverage from 1998 onwards and taking into account the projected demographic development. The latter is based on calculations with the MAKKO model. A positive number in the table means an increase of coverage while a negative number means a lower coverage; a negative number also indicates the required increase in public sector productivity if coverage is maintained.
9. As a percentage of total employment.
10. Based on the assumptions of a labour productivity growth between 1.5 and 1.2 per cent per year in mainland Norway and roughly unchanged labour force participation rates and unemployment rates.

Source: Ministry of Finance.

beyond the phase of defining the main principles and the first major reform still has to be implemented. On the other hand, higher future mainland deficits due to the new fiscal rule may break the existing structural reform inertia and may make it easier to implement the urgently needed public sector (Chapter II) and pension reforms (Chapter III).

One also can assess the long-term properties of the guidelines on the basis of economic theory. Theory implies that spending the real expected return (permanent income) of the *total* wealth of the non-renewable resource – in the Norwegian case, the sum of petroleum wealth and the financial wealth in the Petroleum Fund – is the optimal strategy. It is optimal under the stringent assumption that the aim is to have a perpetual intergenerational transfer of the total wealth of the non-renewable resource. Such a strategy would mean a much higher current non-oil budget deficit – in 2002, several times larger than the current deficit target – and would therefore create high transition costs in the short term.[18] The new fiscal rule is thus substantially more conservative than this alternative rule. However, the alternative rule ignores the severe budgetary consequences of the ageing of the Norwegian population.

In assessing rules, it is crucial to take communication into account. The new rule of using the return on the Fund is relatively easy to communicate to the public. As the rule has intuitive appeal, support for its implementation by the general public is facilitated, which may contribute to containing spending pressures. However, this communication advantage would be undermined in case of a frequent use of the smoothing clause of the guidelines. It could also be undermined by discretionary fiscal policy that would lead to a divergence of the structural deficit from the target rate.

Another virtue of the new rule is that it is in level terms. This should avoid slippage but at the same time makes the rule tougher to apply and could imply a pro-cyclical impact. On the other hand, the new fiscal policy guideline only contains a deficit rule and gives insufficient communication to the public on future taxes and spending. Even though the present government has stated that it intends to have an increase in expenditure that is less than that in mainland GDP, having an explicit spending rule in addition would lead to a better-informed policy debate. It would reduce the risk that spending pressure that is even stronger than the programmed fiscal easing will crowd out the tax cuts currently envisaged or, as is the case in the revised 2002 national budget, that a tax windfall is immediately used for additional outlays (see also Chapter II).

The use of the expected return on the Fund rather than the actual return is commendable as it leads to a more gradual development of the non-oil deficit and avoids pro-cyclicality to the extent that the Norwegian economy and the international financial markets are correlated.[19] The authorities could have gone further by setting a medium-term time path for the deficit based on the expected medium-term development of the Petroleum Fund instead of calculating it annually on the estimated size of the Fund.[20] This could have been the core of a medium-term budget framework of the type nowadays applied in most OECD countries (see also Chapter II). This advantage may, however, come at the cost of making the rule less easy to understand for the general public. Concerning the expectation of a 4 per cent real return, this is in line with the historical average of the Petroleum Fund's portfolio and equal to the discount rate used in the budget documents. Past returns may, however, not be a good guide for setting future rates, even for periods of ten years and longer. The high returns in the 1990s may have been partly due to the reduction in the risk premium on equities and the drop in inflation; both are unlikely to be repeated this decade and the reduction in the risk premium may even be reversed. Moreover, it cannot be excluded that the Norwegian krone will appreciate this decade, causing the rate of return in krone to be less than in foreign currencies. One short-term advantage of the chosen rate, however, is that it made a smooth implementation possible as, at an expected real return of 4 per cent, the estimated structural deficit in 2001 was broadly in line with the new guideline.

The guideline does not change the policy to invest all assets of the Government Petroleum Fund abroad. This commendable policy substantially relieves the upward pressure on the Norwegian krone caused by the large petroleum revenues and diminishes rent-seeking behaviour to some extent. In contrast to opinions sometimes expressed in the Norwegian economic policy debate, the relatively thin domestic capital market does not provide a reason for using oil revenues for domestic commercial investments or for R&D projects. The strong integration of the Norwegian and international financial markets means that there is ample capital for profitable private sector investment. Furthermore, concerning short-term developments, the guideline does not change the valuable buffer role of the Petroleum Fund. It continues to prevent short-term fluctuations in the oil price from substantially influencing spending in the budget and therefore the domestic economy.

The new monetary policy guideline

The new monetary policy regulation with its explicit inflation target has effectively formalised operational procedures that have been in place in recent years and therefore by itself does not entail a significant change in the conduct of monetary policy.[21] Up to the end of 1998, the exchange rate was the operational monetary policy target. But the central bank could not fine-tune the development of the exchange rate during the various episodes of international financial turbulence, and extensive and prolonged currency market interventions yielded poor results. Moreover, the exchange rate objective led occasionally to a pro-cyclical monetary stance. In early 1999, however, the central bank started to emphasise the need to bring price and cost inflation down towards the European Central Bank's (ECB) price stability objective as a fundamental precondition for exchange rate stability *vis-à-vis* the euro. In the view of the authorities, this operational procedure was in line with the 1994 Royal Decree on monetary policy.

The new monetary policy guideline of March 2001 also mentions stability of the Norwegian krone's international value as an aim of monetary policy (Box 2). However, this should be seen as a policy objective and not as an operational target.[22] Norges Bank has underscored that the Petroleum Fund contributes to stabilising the krone exchange rate as it acts as a buffer against fluctuations in the oil price. The central bank has stated that nevertheless one must be prepared for fluctuations in the exchange rate that are more in line with those observed for other commodity-exporting countries such as Australia (Gjedrem, 2002a). In the view of the central bank, low and stable inflation is a fundamental precondition for the medium-term stability of the Norwegian krone and the best contribution monetary policy can make to stabilising exchange rate expectations is to aim at its objective of low and stable inflation (Norges Bank, 2001b). However, in an open economy like Norway where imported goods and services have a direct weight of around a quarter in the consumer price index, exchange rate developments have a substantial influence on inflation and therefore remain crucial in setting interest rates.

The government has set the inflation target at approximately 2½ per cent over time, slightly higher than the ECB's upper bound of the price stability range. It is also somewhat higher than the Swedish and Canadian inflation targets but broadly in line with the targets in the United Kingdom and Australia. The somewhat higher target compared with the average of the trading partners must be seen in the light of the need of a real effective appreciation and the aim to prevent a strong nominal trend appreciation. Furthermore, the target rate is in line with average inflation during the 1990s. The inflation target is defined as consumer price inflation adjusted for changes in interest rates, taxes, excise duties and extraordinary temporary disturbances. Statistics Norway reacted in a timely way by introducing a consumer price index adjusted for tax changes and excluding energy products (Lilleås, 2002). In its inflation analysis, Norges Bank will concentrate on this new price index.[23]

In line with international practice, Norges Bank takes a forward-looking perspective in its interest-rate setting. As its analysis indicates that a substantial share of the effects of interest rate changes occur within two years, the time horizon for achieving the inflation target is set at two years.[24] In most cases, interest rates will be changed gradually to avoid unnecessary output fluctuations, given the uncertainty associated with the analysis and to allow the bank to evaluate new information and the effects of interest changes already made.[25] The inflation target is a point target and Norges Bank will increase interest rates if the expected inflation in two years time is higher than 2½ per cent and lower it if the expected inflation is below 2½ per cent. The bank has indicated that in the assessment of monetary policy, to be published in its annual report, it will place particular emphasis on deviations of more than 1 percentage point between actual inflation and the target (Norges Bank, 2001b).[26]

Long before March 2001, Norges Bank had the necessary tools for inflation targeting in place and developed a proper communication strategy. It has been publishing its Inflation Reports since 1994, currently three times a year, in which its inflation forecast is presented, using its macroeconomic models, and the distribution of risks to the inflation forecast based on the methodology developed by the Swedish Riksbank and the Bank of England.[27] Further assessments are presented every six weeks in connection with the Executive Board's monetary policy meeting. As developments in financial markets can be a source of a more unstable inflation environment, the analysis of the Inflation Reports is supplemented twice a year by the Financial Stability Report.[28]

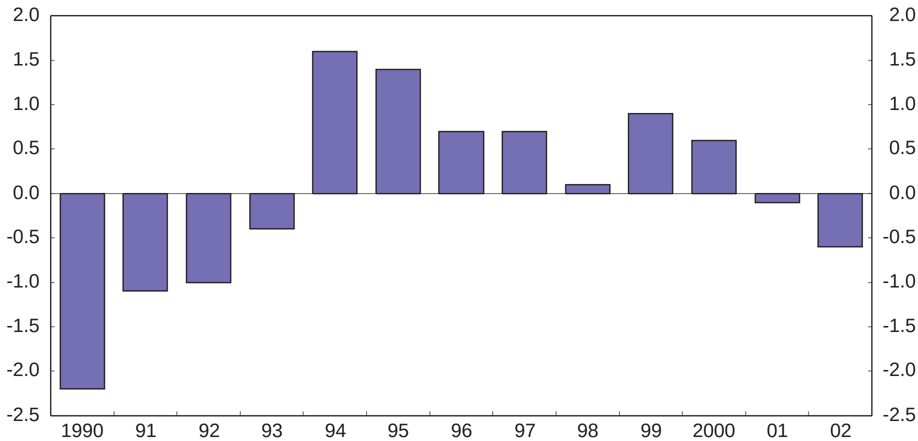
The explicit inflation target now in place is in line with international practice, has increased transparency and has made policy easier to communicate. The challenge for the central bank is to further strengthen its credibility, not only in the eyes of financial market participants but also among those involved in the wage negotiations.[29] Due to the intended fiscal expansion, monetary conditions will be tighter than otherwise. With the economy close to full capacity, more public spending or higher private outlays induced by tax cuts will need to be offset either by the negative impact of higher interest rates on interest-rate sensitive expenditure or the negative effect of a stronger exchange rate on exports.

The demand-management role of monetary and fiscal policy has evolved further

In the past, when an operational exchange rate target was pursued by the monetary authorities, fiscal policy was the main tool for demand management (Figure 9).[30] After introducing the new guidelines, the authorities' attitude towards fiscal activism has recently evolved in the direction of giving the principal demand-management role to monetary policy. In recent policy documents, the authorities have stated that the central government budget will not normally have to be used actively to stabilise the economy. This change is welcome for several reasons:

- Discretionary fiscal policy measures are implemented with a substantial lag and can therefore even be pro-cyclical.
- Expansionary fiscal measures are often difficult to reverse and may lead to an upward trend in spending.
- Short-term fiscal activism could distract attention from medium-term issues, most importantly from measures aimed at enhancing productivity in the public and private sector.

Figure 9. **The fiscal stance**[1]
As a percentage of trend mainland GDP



1. Change from previous year in the structural non-oil central government budget balance.
Source: Ministry of Finance, revised 2002 national budget, May 2002.

– The large size of the public sector is no justification for an active fiscal policy. On the contrary, as the government sector's output is little affected by the cycle, a large public sector already dampens the cycle and therefore reduces the need for cyclical measures. Furthermore, the high tax burden due to the large public sector means sizeable automatic stabilisers that also reduce the need for cyclical measures. A weak and uncertain monetary policy transmission mechanism would be a more appropriate reason for fiscal discretionary measures but there is no evidence that it is weaker or more uncertain than elsewhere.

Incomes policy co-operation and the new economic guidelines

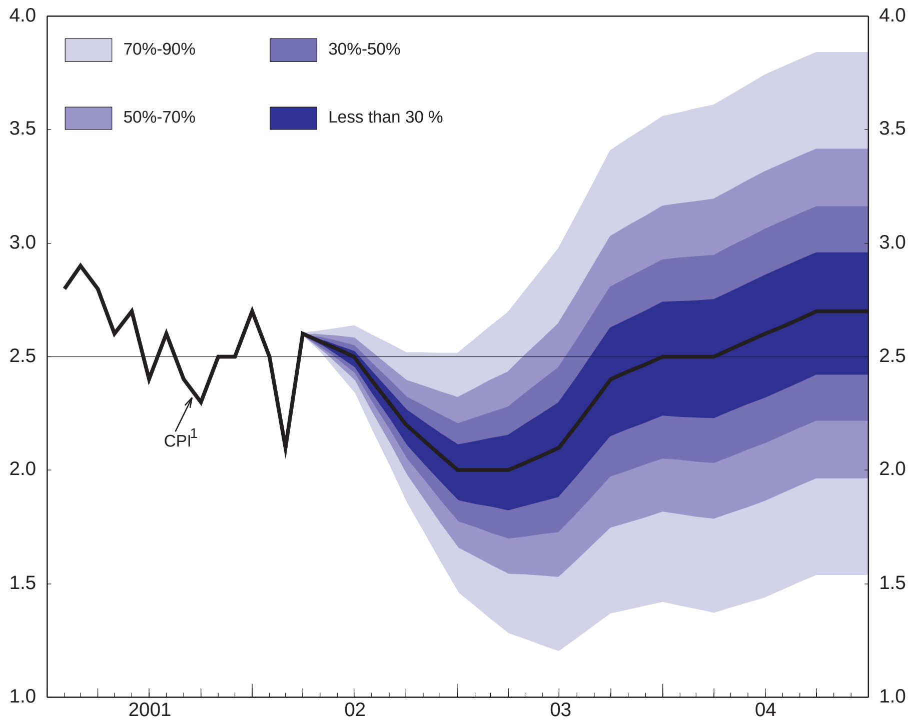
Incomes policy co-operation has been the traditional third pillar of the Norwegian macroeconomic policy framework. In the first half of the 1990s when unemployment was high, wage moderation underpinned by incomes policy co-operation contributed to the recovery and to the return to full employment. Since the mid-1990s, however, this co-operation has failed to keep wages in line with developments abroad and the competitive position has substantially deteriorated. Moreover, the highly-centralised wage negotiations have reduced flexibility at the local level, and have induced policy concessions such as the early retirement scheme with clearly negative supply consequences. Given the importance attached to maintaining a strong internationally-exposed sector, national wage negotiations have traditionally focused on the manufacturing sector. Wage negotiations in this sector are held first during the biennial wage rounds and set the trend for the other sectors. This strong representation of manufacturing sector interests in the central wage negotiations has led to settlements and reforms that are less suited for other sectors (NOU, 2000).[31] With the role of the manufacturing sector shrinking – in 2001 only 13 per cent of employed persons were working in this sector – it is doubtful whether the manufacturing sector will remain the trend setter. This trend setting role will likely also be undermined by the new fiscal rule with its persistent fiscal expansion during this decade, as labour demand in the public and private service sectors will rise, requiring a shift of employees from the manufacturing to the service sectors. This effect is not clearly communicated in the official reports on the new macroeconomic framework, even though measures increasing the labour supply or increasing productivity in the public service sector may mitigate the reduction in manufacturing employment.

Furthermore, the inflation target will require a new approach in wage negotiations. The social partners should shift the focus from wage developments relative to the trading partners towards wage increases in the business sector relative to productivity developments. If, as is the case since 1998, nominal wages in the business sector rise by more than the sum of productivity gains and the inflation target of 2½ per cent, labour costs will tend to push inflation above the target rate – and therefore lead to a monetary tightening – unless import prices rise only little or profit margins drop. An additional advantage of switching the emphasis to productivity and unit labour costs in the wage negotiations would be that more attention will be paid to measures that would raise productivity and therefore real wages.

The monetary policy stance is tight

After increasing its key deposit rate in 2000 from 5.5 to 7 per cent in reaction to increasing inflationary pressures, Norges Bank kept its rates unchanged up to December 2001. The new monetary policy regulation of March 2001 did not influence the monetary policy stance as it was a formalisation of operational procedures already in place. In December 2001, however, based on the downward revision of the projected inflation two years ahead due to the weaker global economy, the key deposit rate was cut by 50 basis points to 6.5 per cent.[32] On average since mid-1999, interest rate decisions have surprised market participants in Norway slightly more than in comparable European countries, which may indicate that it takes time for market participants to gain insight into the Bank's response pattern.[33] The central bank kept its easing bias up to February 2002 when it switched to a neutral stance in light of the international recovery and a revision of projected inflation two years ahead up to the target rate (Figure 10). In May 2002, in the light of higher-than-projected wage increases,

Figure 10. **The inflation projection of Norges Bank**
Year-on-year percentage changes



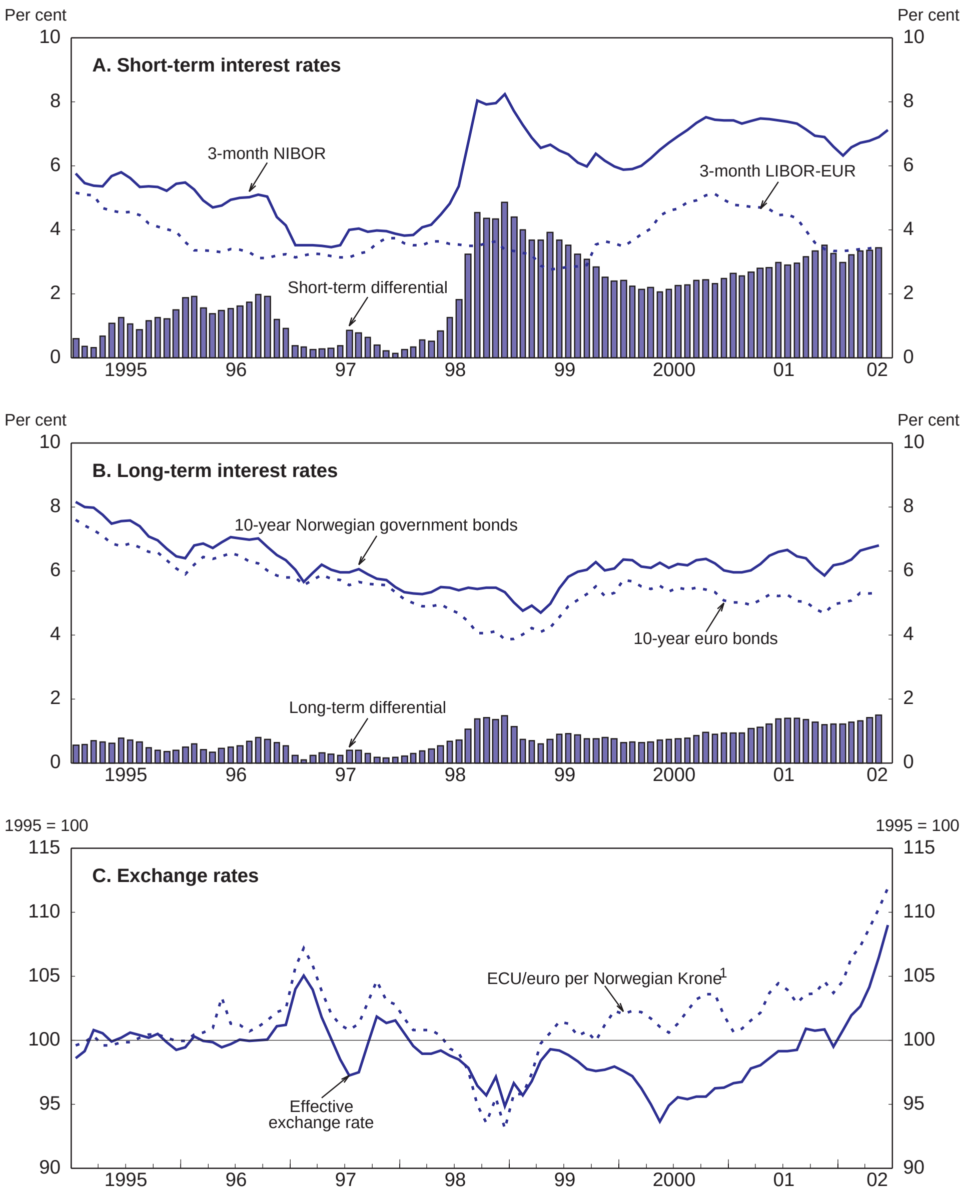
1. Consumer price inflation, adjusted for tax changes and excluding energy products. The bands indicate different probabilities for inflation.

Source: Norges Bank, *Inflation Report 2/2002*, July 2002.

strong consumption growth and a pick-up in global economic growth, Norges Bank introduced a tightening bias. And in July 2002, Norges Bank raised its deposit rate by 50 basis points to 7 per cent while keeping its tightening bias.

Short-term interest differentials have become even bigger, while long-term interest rates were broadly stable and somewhat above the euro area average because of differences in market liquidity and the monetary policy stance. At the end of the first half of 2002, the Norwegian three-month interest rate was more than 3 percentage points higher than in the euro area and around 5 percentage points higher than in the United States, mainly reflecting the cyclical divergence (Figure 11, Panels A and B). Monetary policy is likely to remain tight in Norway due to the persistent fiscal expansion in the coming years.

Figure 11. **Interest rate and exchange rate developments**



1. Theoretical ECU up to end 1998, euro as from January 1999.
Source: Norges Bank and OECD, *Main Economic Indicators*.

The Norwegian krone has appreciated substantially, especially in the first half of 2002 (Figure 11, Panel C). At the end of the first half of 2002, the effective nominal exchange rate – the trade weighted index as measured by Norges Bank – was up by 13½ per cent since May 2000 and by 8 per cent since December 2001. The appreciation was especially strong *vis-à-vis* the Swedish krone but also marked *vis-à-vis* the currencies of other main trading partners (*vis-à-vis* the euro, the krone has appreciated 9½ per cent since May 2000). The major cause of the appreciation is probably the high and rising interest rate differential. The oil price development has not had a clear impact on the krone. The appreciation in early 2002 may have been underpinned by the oil price rise but, on the other hand, the sharp fall in September 2001 did not have a noticeable impact.

Fiscal policy is expansionary in 2002

In 2001, the fiscal stance, as measured by the structural non-oil central-government budget balance, was broadly neutral (Figure 9), while the general government budget surplus rose to a record 14.4 per cent of GDP due to booming oil revenues (Table 6). Oil revenues were almost a third of total central-government revenues and were almost completely transferred to the Government Petroleum Fund (Box 4). No major new expenditure initiatives were taken, but government expenditure nevertheless rose somewhat as a percentage of mainland GDP due to the underlying upward spending trend, for instance on sickness and disability benefits. The impact on the non-oil deficit was partly offset by a higher tax burden, mainly due to tax measures. The main revenue-boosting

Table 6. **Public finances**[1]
As a percentage of GDP

	1995	1996	1997	1998	1999	2000	2001	2002[2]
Expenditure	47.7	45.5	43.9	46.4	45.8	41.2	41.9	43.6
As a percentage of mainland GDP	56.1	55.5	53.9	53.7	54.9	55.7	55.7	56.5
Revenue	51.2	52.1	51.8	49.9	51.5	56.3	56.3	55.6
Oil revenues	5.5	7.9	8.0	4.3	6.1	14.4	13.3	11.7
Non-oil revenues	45.7	44.1	43.8	45.6	45.5	42.0	43.1	43.8
As a percentage of mainland GDP	53.7	53.8	53.7	52.8	54.5	56.7	57.3	56.9
Net lending	3.5	6.6	7.9	3.5	5.8	15.1	14.4	12.0
Excluding oil revenues	–2.0	–1.4	–0.1	–0.8	–0.3	0.7	1.1	0.3
Gross debt	34.7	31.0	27.9	26.6	27.6	30.9	31.9	30.2
Net financial assets	32.9	36.9	43.5	47.6	54.3	62.0	74.4	84.9

1. On a national accounts basis.
2. Official forecasts of May 2002.
Source: Ministry of Finance, revised 2002 national budget, May 2002.

Box 4. **The Petroleum Fund's assets have risen sharply**

In 2001, the government allocated more than NOK 250 billion (17 per cent of GDP) to the Government Petroleum Fund, increasing the size of the Fund by two-thirds. Nevertheless, it is still only half the size of the largest European pension fund (the Dutch ABP) and the largest American pension fund (CALPERS). Due to the stock market meltdown, the rate of return on the Fund's currency basket was negative (–2.4 per cent) for the first time, while the appreciation of the krone made the return even more negative (–5.3 per cent) in local currency. Since 1998,* the real return has been 3.6 per cent per year, slightly below the real return of 4 per cent expected in the fiscal policy guidelines. In the view of the managers of the Fund, there are hardly grounds for expecting that the high returns recorded in the 1990s will be repeated this decade (Norges Bank, 2002a). The return on the Fund mainly depends on the benchmark portfolio set by the Ministry of Finance and the maximum divergence it allows from it. Additional returns from the active management of the Fund by Norges Bank – done internally as well as externally – are however non-negligible at 39 basis points on average in 1998-2001, although they were only 13 basis points in 2001. Management costs were below that of comparable funds. Objectives other than maximum return have become more important since 2001 as an Environmental Fund of NOK 1 billion was created – it had a more negative return in 2001 – and as a council was established to evaluate whether the Fund's investments comply with international law.

At the end of 2001, the value of the assets held by the Fund was NOK 614 billion, around USD 150 000 per capita and 42 per cent of GDP. Based on cautious assumptions, the Ministry of Finance has projected the Fund to reach 52 per cent of GDP at the end of 2002 and 102 per cent by 2010 (Ministry of Finance, 2002).

* In 1998, the Fund started to invest in equities and currently 60 per cent of the portfolio is allocated to fixed-income assets and 40 per cent to equities. In 1996-97, the Fund only invested in fixed-income assets while it was empty in 1990-95. From 2002 onwards, the Fund is allowed to invest in non-government-guaranteed bonds with its share in bonds gradually rising to 30-40 per cent.

measures were the rise in the general VAT rate of 1 percentage point to 24 per cent, the broadening of the VAT to some services, the introduction of a temporary 11 per cent dividend tax and a rise in the electricity tax. This was mitigated by the halving of VAT on food, the cut in the petrol tax and the lowering of the personal income tax for low-wage earners.

The 2002 budget is the first one of the new government and the first one based on the new fiscal rule. As a result, the structural non-oil central-government deficit is budgeted to rise by NOK 7 billion (½ per cent of trend mainland GDP) to NOK 25 billion (2.2 per cent of trend mainland GDP).[34] This fiscal expansion is the largest since 1992, but in contrast with the 1992 stimulus, which occurred when the economy was recovering from a recession, it now occurs in the context of a tight labour market situation. The fiscal stance may even be more expansionary than indicated by the structural non-oil central-government budget deficit due to the increase in subsidised loans to municipalities for the maintenance of school buildings, the increase in the State Housing Bank's lending limits and the improvement in the financial position of the local government sector due to the take-over of hospitals by the state.[35] In the revised national budget presented to Parliament in May 2002, with estimated tax revenues revised upwards, the government has proposed to increase government outlays by NOK 8 billion in 2002 compared to the budget approved in November 2001 (Table 7).[36] According to the revised

Table 7. **Budgetary plans and outcomes**[1]
Billion NOK

	2001		2002	
	Budget[2]	Outcome[3]	Budget[4]	Revised Budget[5]
Central government				
Excluding petroleum activities and Petroleum Fund				
Revenues	473.4	489.5	516.4	522.1
Expenditure	485.4	491.2	552.5	560.8
Balance	–12.0	–1.6	–36.1	–38.6
Petroleum activities and Petroleum Fund (balance)	204.2	260.5	229.5	203.3
Including petroleum activities and Petroleum Fund				
Balance on a government accounts basis	192.2	258.8	193.4	164.6
Statistical discrepancy[6]	–13.0	–41.4	8.1	5.1
Balance on a national accounts basis	179.2	217.4	201.5	169.7
As a percentage of GDP	12.7	14.8	13.4	11.3
Local government[7]				
Revenues	213.4	222.4	198.7	205.3
Expenditure	222.8	229.3	185.7	190.8
Balance cash basis	–9.5	–6.9	13.0	14.4
Balance accrual basis	–5.5	–5.4	9.3	10.3
As a percentage of GDP	–0.4	–0.4	0.6	0.7
General government[8]				
Net lending	173.7	212.0	210.8	180.0
As a percentage of GDP	12.3	14.4	14.0	12.0

1. Based on the central government account definitions unless indicated otherwise.
2. Approved budget, December 2001.
3. Preliminary outcome, May 2002.
4. Draft budget, September 2001.
5. Revised national budget, May 2002.
6. Definitional differences between central government account and national accounts; surplus in other central government and social security accounts; direct investment in state enterprises.
7. On a national accounts and a cash basis.
8. On a national accounts basis.

Source: Ministry of Finance.

budget, real underlying central-government expenditure will increase by 2½ per cent, twice as much as in the approved budget.

As the new government puts more emphasis on reducing the tax burden, the NOK 7 billion room for manoeuvre due to the rule-based rise in the structural deficit is mostly used to cut taxes.[37] Three taxes are being abolished – the temporary dividend tax introduced in 2001 by the previous government, the investment tax and the domestic air passenger tax – while the personal income tax is lowered, the property tax rate is cut, corporate tax depreciation rates are increased and taxes on electricity and alcohol are lowered. Since the abolishment of the investment tax is implemented late in the year, there are strong carry-over effects, reducing the room for taking measures in the 2003 budget. Moreover, the 2002 level of the structural non-oil central-government deficit is likely to be influenced by the recent revision of the national-accounts data.

Short-term outlook

The projections

The strong rise in oil investment, the international recovery and continuing fiscal expansion are projected to lead to an acceleration of mainland GDP growth to 1¾ per cent in 2002 and 2½ per cent in 2003 (Table 8).[38] This acceleration will be curtailed by export market losses caused by worsening competitiveness, while it will be boosted by strong consumer confidence (Figure 12). In early 2002, consumers had the most positive view on their own financial position since the survey was introduced in 1992 and private consumption will be the driving force, especially in 2002. Indirect tax cuts will reduce inflation by around 1 percentage point in 2002, while disposable income and therefore private consumption will also be underpinned by continuing substantial wage increases. The household saving ratio is projected to rise as the substantial tax cuts are unlikely to be fully spent immediately and as dividend payments, of which a higher proportion is usually saved than of other income sources, will firm due to the abolishment of the temporary dividend tax. Given the emphasis of the new government on reducing the tax burden and the new fiscal rules, government consumption should increase only moderately.

As indicated by housing starts, residential investment growth may edge down in 2002, before nudging up in 2003 driven by a favourable development of disposable income. Despite heavy investment by the aluminium industry and the power supply sector, business investment is not expected to recover before 2003, partly because some investment projects are likely to be postponed due to the abolishment of the 7 per cent investment tax in October 2002 and partly because of the negative impact of deteriorating competitiveness. After falling since 1999, oil investment is projected to increase by more than 10 per cent in 2003 as new

Table 8. **Short-term projections**

Percentage changes from previous period, at constant prices

	1998 current prices NOK billion	1999	2000	2001	2002	2003
Private consumption	552.8	2.2	2.4	2.2	3.1	3.3
Government consumption	238.3	3.3	1.4	1.5	1.9	2.0
Gross fixed investment	289.5	–8.2	–1.1	–5.9	–0.6	4.2
Oil sector[1]	82.0	–19.9	–17.1	–3.0	–2.0	12.5
Mainland business sector	123.0	–3.5	1.8	–4.8	–2.8	1.4
Residential construction	31.0	–2.5	12.2	7.8	3.5	4.5
Public sector	40.8	–0.1	–7.9	–5.6	4.5	1.0
Stockbuilding[2]	24.4	–0.3	0.8	–0.7	0.0	0.0
Total domestic demand	1 104.9	–0.7	2.2	–0.6	1.9	3.1
Exports of goods and services	411.6	2.8	2.7	5.3	3.2	2.9
Non-manufacturing goods (including energy)	165.8	2.4	4.5	4.5	3.5	3.0
Imports of goods and services	401.7	–1.6	2.5	0.3	2.9	4.7
Foreign balance[2]	9.9	1.7	0.2	2.0	0.4	–0.4
Gross domestic product	1 114.8	1.1	2.3	1.4	2.1	2.5
Mainland GDP	962.5	1.0	1.8	1.0	1.7	2.4
GDP price deflator		6.2	16.3	1.9	1.9	3.4
Private consumption deflator		2.0	3.1	2.5	1.2	2.5
Short-term interest rate (level)		6.5	6.7	7.2	6.6	6.6
Employment		0.5	0.5	0.4	0.5	0.6
Unemployment rate (level)		3.2	3.4	3.6	3.6	3.5
Private sector compensation per employee		5.7	4.2	4.8	5.0	5.0
Output gap (%)[3]		1.4	0.8	–0.2	–0.2	0.4
Current balance (% of GDP)		3.9	14.3	14.7	15.3	15.5
Net government lending (% of GDP)		5.9	14.8	15.2	14.0	13.9

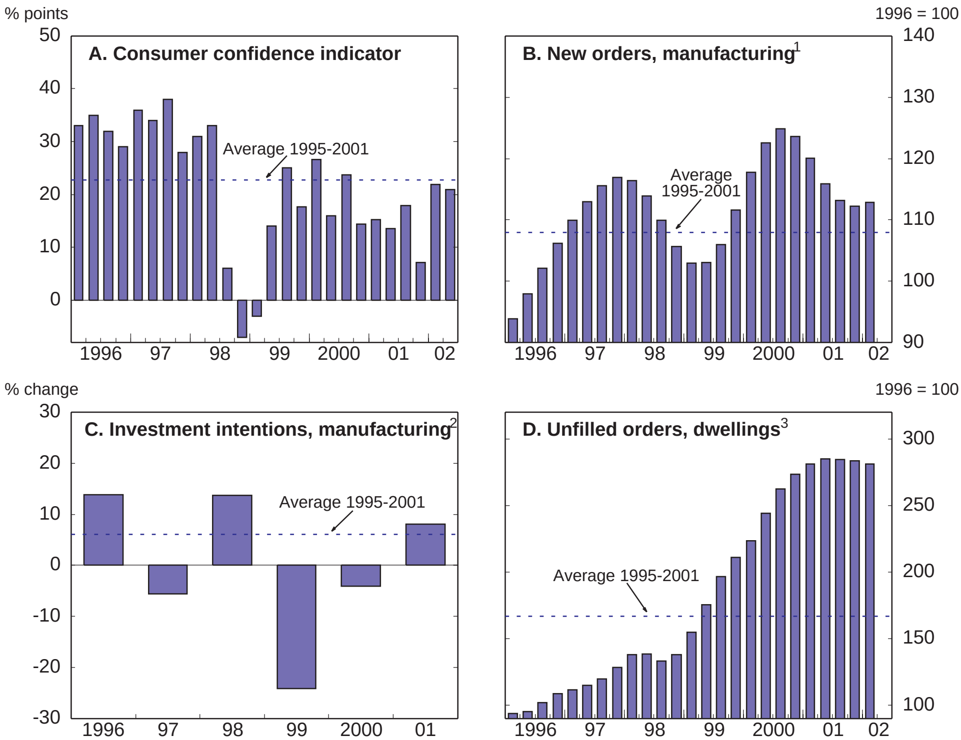
1. Includes platforms under construction, crude oil production, oil drilling and pipeline transport.
2. Contribution to GDP growth.
3. Mainland Norway.

Source: OECD, OECD *Economic Outlook*, No. 71, June 2002, finalised in April 2002.

fields are developed. Despite the cut in oil production in the first half of 2002, petroleum exports are projected to increase in 2002 and are likely to increase further in 2003. Although export markets are projected to rebound, manufactured exports will only increase moderately, as poor competitiveness will lead to market share losses.

Faster economic growth will only have a limited impact on employment growth in the business sector. Nevertheless, the pick-up in private employment and the continuing growth in government employment is projected to lead to a

Figure 12. **Leading indicators**



1. New orders received, trend series.
2. According to the February survey; investment intentions for the current year.
3. Value.

Source: Statistics Norway and Norsk Gallup Institutt.

marginal drop in the unemployment rate. This drop is also due to the continuing negative impact of the rising number of disability pensioners and early-retirees on the labour force. At the same time, restructuring in the manufacturing sector due to poor competitiveness may increase the flow of discouraged workers into social security schemes.

The tight labour market is projected to keep wage gains high during the projection period. As a consequence, the rise in unit labour costs will not be consistent with the inflation target of 2½ per cent over time, although inflation is projected to be low in 2002 due to indirect tax cuts, lower electricity prices and falling import prices due to the appreciation of the krone.[39] Given sector-specific bottlenecks, wage increases in the public sector are projected to exceed those in the private sector. The strong rise in labour costs in the private sector is likely to prevent any monetary easing. With growth picking up, some monetary tightening may be needed to comply with the inflation target unless the recent appreciation of the krone continues. With an assumed oil price of USD 25 per barrel from the second quarter of 2002 onwards, the current account and the government budget are projected to keep showing very large surpluses.

The projection presented in Table 8 was finalised in April. Thereafter, Statistics Norway substantially revised its national accounts up to 2001 and published preliminary GDP data for the first quarter of 2002. The revision led to an upward revision of output growth in the 1990s. Moreover, the Norwegian krone has appreciated substantially further, Norges Bank has hiked its deposit rate, short-term interest rates have risen and wage settlements indicate that wage increases in 2002 are likely to be higher than projected in April.[40] The stronger currency may lead to weaker export growth than projected while the higher interest rate may dampen interest-rate sensitive expenditure. On the other hand, the higher wage rises may stimulate private consumption in the short run. The stronger krone is likely to lead to lower import prices than projected in April while the stronger wage rises are boosting domestic costs. Overall, the new information does not give reason to change the projections for output growth, unemployment and inflation significantly.

Risks

The major uncertainties surrounding these projections concern the exchange rate, the strength of oil investment and saving behaviour of households:

– The sharp appreciation of the Norwegian krone cannot be easily explained and therefore neither a reversal nor a further appreciation can be excluded. Some reversal may happen if the short-term interest rates in the euro area and the United States rise, as projected in the OECD *Economic Outlook*, No. 71 (OECD, 2002a). A continuing appreciation would hurt price competitiveness further and would reduce export growth in 2002 and 2003 compared to the central projection. On the other hand, the lower import price increases due to such a continuing appreciation may delay or avoid an interest rate hike, with positive effects on domestic demand.

– Oil investments are projected to rise sharply in 2003 due to the development of new fields. However, forecast errors are often substantial for this expenditure category and some investment projects may be delayed. Furthermore, the import content of these investments is uncertain and may diverge from the assumption made in the central projection.

– Finally, the saving ratio of households is projected to rise as part of the tax cuts may not be spent immediately. However, it cannot be excluded that the saving ratio will be stable or even fall given the very positive view of households on their own financial situation and given the expected further tax cuts. This would boost domestic demand, increase inflationary pressures and might force the central bank to tighten the monetary stance further.

The policy challenges

The work of policy makers is never fully accomplished. For the fiscal authorities, the main challenge will be to apply the new fiscal rule while pressure to raise public spending is high. Slippage on the deficit rule in 2002 or 2003 would seriously undermine the credibility of the new fiscal guidelines. Moreover, there is a danger that the combination of the deficit rule and spending pressure will lead to smaller tax cuts than currently envisaged. Substantial tax cuts are needed to improve the current potential output performance. With labour markets tight – and likely to remain so in the near future – and the persistent fiscal expansion in the coming years, the monetary authorities face a tough challenge as they are likely to carry the burden of policy adjustment alone. As wages are rising more strongly than in the main trading partners and as the krone has appreciated substantially recently, the pressure from the exposed sector to ease monetary policy will be strong. This pressure could rise significantly if a new wave of downsizing of the manufacturing sector were to start due to poor price competitiveness. In future wage rounds, the social partners should pay more attention to wage developments relative to productivity, as unit labour costs are crucial for monetary policy decisions.

Notes

1. Manufacturing production fell for the third successive year but, while the sector also plunged into recession in the United States and the euro area, the drop was less than in previous years in Norway as the sharp fall in demand for investment goods by the oil sector ended.
2. Traditional goods and services exclude petroleum and ocean transport.
3. The market loss for services exports was 1 percentage point per year.
4. Only Switzerland also had a double-digit surplus.
5. Within the business sector, the strong rise in the manufacturing sector was more than offset by the fall in the service sector.
6. The debt burden (interest-bearing debt of non-financial onshore enterprises as a percentage of cash surplus excluding interest expenses) has fallen from 570 per cent in 1990 to a trough of 350 per cent in 1995. It rose thereafter to 630 per cent in 2001. The debt service burden (interest expenses as a percentage of cash surplus) has fallen from 64 per cent in 1990 to a trough of 28 per cent in 1998. It rose thereafter to 40 per cent in 2001 (Norges Bank, 2002b).
7. The rise was partly due to temporary earmarked grants for elderly care housing.
8. However, neither assets nor liabilities are distributed evenly across households (Norges Bank, 2001a). The highest income decile owns almost half of the gross financial wealth and has a positive net financial wealth together with the three lowest income deciles. Other income groups have negative net financial wealth.
9. The labour force participation rate is defined as the total labour force as a percentage of the population aged 16 to 64 years.
10. See also Norges Bank (2002c).
11. As in previous years, the remuneration of managers has risen by more (7.2 per cent). In 1995-2001, mostly due to increased incentive schemes, the total rise was 40 and 111 per cent for managers in small and major enterprises, respectively (Ministry of Labour and Government Administration, 2002).
12. In the three-year “intention agreement”, the parties also agreed to keep the number of vacation days unchanged, in contrast to the other employees in 2001-02, to increase flexibility and to increase teaching hours by one hour per week from August 2002 onwards.
13. In the trend-setting manufacturing sector, wage rises measured in percentage terms were higher for low-paid workers due to the equal nominal wage increase of NOK 2.50 per hour in the two-year period and due to the supplementary hourly increases for low-paid workers. The degressivity of the 2001-02 round may be less due

to above average wage drift for higher-paid workers and, in the case of the public sector, by the sector-specific wage rises that were biased towards employees with higher education.

14. In July 2001, the halving of VAT on food was accompanied by a broadening of the VAT base for services and a reduction in the petrol tax. In January 2002, alcohol and electricity taxes were reduced. Finally, in April 2002, the domestic airline passenger tax was abolished.

15. In reaction to the introduction of the operational inflation target for monetary policy, Statistics Norway has introduced this price index. It is assumed that tax changes have a full and immediate effect on retail prices although in practice this may not be the case. Strong competition may cause less than a full feed-through of tax rises while low competition pressures may even lead to overcompensation (Lilleås, 2002).

16. A fiscal rule linking the deficit with the return on the Petroleum Fund was first reviewed in the 1983 report of the Petroleum Depletion Committee.

17. The role of incomes policy co-operation was stressed by the previous government in the report on the new economic guidelines (Ministry of Finance, 2001a) and by the current government in its amended 2002 budget paper (Ministry of Finance, 2001c).

18. It will be several times bigger despite that, as in the past, the real return on petroleum reserves is likely to be lower than that on the Petroleum Fund (Bergo, 2002).

19. In the 1990s however, the Norwegian cycle measured by the output gap was not strongly correlated with the economic cycle in the rest of the OECD.

20. To apply the rate of return rule in the budget paper presented in October, an estimate has to be made of the size of the Petroleum Fund at the end of the year. With the size of the Fund at the end of the second quarter known, this requires estimates of the oil price, rate of return and krone exchange rate in the second half of the year.

21. The 1985 Act on Norges Bank and the Monetary System, which lays down the institutional framework, was kept unchanged. Under this law, the government has the right of instruction. Using this right is likely to cause the governor to resign. The Executive Board takes the monetary policy decisions and its members (the governor, deputy governor and five ordinary members who are employed outside the bank) are appointed by the government. The ordinary members have a political background. According to Andreassen *et al.* (2001), they are all but in name the appointees of political parties. This is in contrast with Sweden and the United Kingdom where only experts are members of the Executive Board. Moreover, Parliament appoints the 15 members of the Supervisory Council that has to ensure that the rules governing the Bank's activities are observed.

22. The same holds for the requirement stated in the Royal Decree to contribute to stable developments in output and employment. In the view of Norges Bank, it cannot achieve higher employment in the long run by accepting higher inflation (Gjedrem, 2001). However, in the short run, in the case of a demand shock, inflation is likely to deviate from its target in the same direction as unemployment and the output gap, and measures to bring inflation back to target will thus stabilise output and demand.

23. However, the central bank will not fully ignore the temporary factors influencing consumer price inflation as higher indirect taxes and higher electricity prices can be a source of accelerating inflation via spill-over effects on other prices and wages (Gjedrem, 2001).

24. To avoid unnecessary real economic costs, the bank could however apply a longer time horizon than two years (Gjedrem, 2001). If it decides to do so, it will provide a clarification.
25. It will however not always take a gradualist approach: "a rapid and pronounced change in the interest rate is appropriate if, for example, heightening turbulence in financial markets or a cost-push shock resulting from negotiations indicates that confidence in monetary policy is in jeopardy" (Gjedrem, 2001).
26. This is not a very stringent demand and is in contrast with other countries applying inflation targeting. For instance in the United Kingdom, the governor of the central bank has to send an "open letter" to explain the reasons for a big deviation from target and the actions that will be taken to bring inflation back to target. In practice, however, the Norges Bank is likely to explain deviations already in its Inflation Report and possibly at the press conference after the meetings of its Executive Board.
27. See Norges Bank (2001c) for the risk assessment methodology applied.
28. Norges Bank's responsibility to foster robust and efficient payments systems and financial markets is however the main reason for these reports.
29. Credibility of the target seems substantial in the eyes of financial market participants. This is for instance indicated by the difference in the 10-year forward interest rate differential *vis-à-vis* Germany.
30. During the first half of the 1990s with its excess supply and high unemployment, fiscal policy was eased. And during the second half of the 1990s with its tight product and labour market conditions and high cost inflation, fiscal policy was tightened, although insufficiently.
31. Already in 1999, to reduce the bias towards the manufacturing sector, social partners other than the LO (Norwegian Confederation of Trade Unions) and the NHO (Confederation of Norwegian Business and Industry) started to participate in the *Technical Reporting Committee on Income Settlements*, the committee preparing the central wage negotiations.
32. Already in October 2001, the central bank moved to an easing bias.
33. See the box "Have Norges Bank's interest rate decisions been anticipated?" in Norges Bank (2002c).
34. The rise is NOK 6 billion in constant prices.
35. The debt of counties will be reduced by NOK 13 billion as a result of the state takeover of hospitals. Moreover, NOK 2½ billion in debt will be cancelled to take into account that some counties may have little hospital debt due to a high equity portion in investments and/or short debt repayment schedules.
36. The upward revision of tax revenues in 2002 is mainly due to higher tax revenues in 2001 than estimated in November 2001.
37. In the amended budget of November 2001, the new government increased the room for tax cuts somewhat by increasing dividends paid by state-owned companies compared with the budget proposal of the previous government.
38. These OECD projections are the same as those published in the OECD *Economic Outlook* No. 71 (OECD, 2002a). Currencies are assumed to remain at their rates of 4 April 2002, implying an exchange rate of NOK 7.58 per euro. The oil price is assumed at USD 25 per barrel from the second quarter of 2002 onwards. GDP growth in the OECD area is projected to rebound from 1.1 per cent in 2001 to 1.8 per cent in 2002 and 3.0 per cent in 2003. The cut-off date for information in those projections was 11 April 2002.

39. The appreciation will however not be fully reflected in import prices in the short run (see also Bache, 2002).
40. In the projection, currencies are assumed to remain at their rates of 4 April 2002. However, between this date and the end of June 2002 the nominal effective appreciation of the Norwegian krone was 4½ per cent.
41. In Finland where regional policy is less ambitious, regional aid amounted to 4¼ per cent of GDP in 2000 (OECD 2002g). In Norway, a technical committee is expected to deliver an estimate of regional aid by the end of 2002.
42. In the long-term scenario, public sector net wealth (*i.e.* the sum of assets in the Petroleum Fund and the value of estimated petroleum reserves) is stable at 261 per cent of mainland GDP during the current decade before falling to 226 per cent in 2050.
43. This budget process runs from January to October when the budget proposal is sent to Parliament. In January, the spending departments provide expenditure estimates for the coming year based on unchanged policy and propose new policy initiatives. During their March three-day budget conference, the cabinet agrees on preliminary expenditure ceilings for the departments and endorses a separate frame for new policy initiatives. In the budget conferences of May, the cabinet agrees on final expenditure ceilings, while in the budget conference of August, a decision is taken on the new policy initiatives and on tax changes.
44. See also Persson and Tabellini (2002).
45. In 2001, a committee of Parliamentarians and a representative of the Ministry of Finance evaluated the switch to the top-down approach and came to a positive assessment.
46. Many Parliamentarians have a background in local councils and are lobbied by local government representatives at all stages of the budget process.
47. If a local government does not restore a balanced budget within two years, it will come under central government supervision. Supervision is frequent. In 2001, 80 local governments were under supervision while the local government sector has consistently shown a deficit since 1995.
48. Since 2000, there is a consultation process at the political level between key departments of the central government and local government representatives. Four meetings per year are held, which have the primary goal of establishing a mutual understanding of the current situation. However, the central-government representatives do not provide confidential information on the central government budget.
49. The gains of the Norwegian National Lottery that are transferred to sporting, cultural and research bodies is the main off-budget item, but with its allocation controlled by the Cultural Affairs Committee of the Storting. In 2001, the transfer amounted to NOK 2.6 billion (equivalent to ¼ per cent of mainland GDP).
50. Some countries (including Australia, Austria, Denmark, Finland, Germany, New Zealand, and Switzerland) do not impose restrictions on the ability of public entities to carry forward unused appropriations for operating costs (OECD, 2002b). Others impose some restrictions but often less severe than in Norway (*e.g.* up to 50 per cent of unused appropriations can be carried over in the United States).
51. An example of a user charter ("service declaration") is that of the tax administration, which is available on Internet at the following address: *www.skatteetaten.no/skatteetaten/serviceerklaering/service/declarations/*

52. The law on patients' rights introduced the guarantee of not waiting more than three months for patients whose health conditions are regarded as severe but not acute. The number of patients with unfulfilled waiting-time guarantees fell from 25 000 in 1997 to 5 000 in 1999. This law has been changed in 2001 providing patients with the right of having their health situation assessed within 30 days and a "right to receive necessary health care within individual medical limits".
53. Wage data published by Statistics Norway indicate for instance that clerks employed full-time by the central government receive a wage about 20 per cent lower than their private sector counterparts.
54. In September 2001, the government and the main trade unions agreed on a set of principles that central government sector entities will apply for employees made redundant, forced to change jobs or to move, as a result of a reorganisation of the public sector.
55. From January 2002, the responsibility for hospital care was transferred from the counties to the central government, entailing a shift of employment from local to central government.
56. A recent study by Statistics Norway revealed that a 50 per cent reduction in the number of municipalities by merging the smallest ones would result in a permanent saving amounting to about 0.2 per cent of GDP.
57. The amount of money delivered through earmarked grants has risen recently. In 2001, earmarked grants accounted for 19.9 per cent of local governments' resources, up from 15.4 per cent in 1999.
58. Several empirical studies have revealed the low price elasticity of inpatient care services. See for instance Manning *et al.* (1987).
59. Pharmaceuticals are divided into three categories. Non-prescription medicines are fully paid by the individual; prescriptions are either covered by the National Insurance system ("blue prescriptions") or paid in full by the patient ("white prescriptions"). There is a co-payment on blue prescriptions, which is limited to 36 per cent of the prescription fee. There is also a ceiling on all co-payments, including those for out-patient care, which was set at NOK 1 350 per year in 2002. Additional fees and charges are fully reimbursed for the year in which the ceiling has been reached. From October 2002, those aged 67 and over as well as disability pensioners will no longer pay for most pharmaceuticals, resulting in an estimated increase in expenditure of NOK 400 million.
60. At the national level, about 25 per cent of the total annual budget for road construction accrues from toll fees on road projects.
61. The local and central government sectors finance the early retirement scheme directly out of their budgets. In the private sector, 20 per cent of pension benefits are paid directly by the employer concerned; the government pays 40 per cent for those aged 64 to 66 (but nothing for those at age 62 or 63). The employers participating in the early retirement "fund" finance the remaining 40 per cent (80 per cent for those at age 62 or 63).
62. These private hospitals specialise in open heart surgery, hip surgery and minor surgical procedures in response to long waiting lists for such care in public hospitals (European Observatory of Health Care Systems, 2000).
63. The government is considering raising its participation in private schools up to 90 per cent of the current expenses by students received by public schools.

64. Currently, there are no centrally defined limits for the level of parental fees. They range from 28 to 45 per cent of actual costs.
65. The normal schooling age has recently been brought down from age 7 to age 6 in Norway. However, it is still higher than in most other OECD countries. Some Nordic countries have also lowered the minimum schooling age. In particular, Sweden will introduce pre-school classes for 4 and 5 year-olds in 2003.
66. The central government has already increased the activity-based grant to kindergartens in July 2001. This has resulted in a 1.9 per cent decline in parental fees from August 2001 to January 2002.
67. For children attending less than full time, the parents receive part of the amount.
68. Though the female employment rate in Norway is the highest in the OECD, adjusted for hours worked, Norway's female employment rate moves below Portugal and Finland. The incidence of female part-time work, at 42.5 per cent of total female employment, is also very high by international standards.
69. Hellevik and Koren (2000) reveal that the parents most likely to take the benefit and remain at home with their children are lone mothers, mothers with several young children, mothers with lower levels of education, and/or low-income, and one salary families.
70. Norway, like other EFTA countries in the EEA, is subject to the same surveillance and enforcement procedures as regards common rules for public procurement as the EU countries. However, Norway has been granted an exemption by the EFTA Surveillance Authority for entities operating in the oil and gas sectors.
71. According to the previous Act on Public Procurement, only suppliers affected by carrying out procurement could submit complaints. Experience showed that few suppliers were interested in bringing charges against potential customers. A complete national database for public procurement in excess of the threshold values is also available on the net (*http://norsk.lysingsblad.no*).
72. Hagen *et al.* (1999) show that competitive tendering is much higher in municipalities which have experienced low growth in revenues.
73. A public body is exempted from VAT if less than 20 per cent of its turnover is sold to the private sector.
74. Early in 2002, 250 000 patients were waiting for hospital treatment, and the average period was about 80 days. The central government has appropriated NOK 1 billion to pay for treatment abroad.
75. Empirical studies on the quality and cost saving effects resulting from a shift from in-house production to outsourcing and competitive tendering cover a broad range of countries but typically a limited range of services (in particular waste collection and cleaning). The estimated cost savings vary strongly across studies, with the majority showing positive savings and some concentration in the range of 10 to 30 per cent.
76. Indeed, evidence even seems to show that in some countries, possessing natural resources has proved to be more a curse than a blessing. Interest in the existence of negative effects on growth from resource endowments was rejuvenated by Jeffrey Sachs and Andrew Warner. See Lederman and Maloney (2002) for a recent review.
77. See also Gjedrem (2002b).
78. These figures are taken from OECD data on average total hours worked per employee. Note that due to different methods of calculation, cross-country data are not strictly comparable. Statistics Norway (2002b) shows that among those aged 16 to 74, the average number of hours worked per day is 3 hours and 47 minutes, only about twice

the average amount of time spent watching television. The survey also illustrates the differences in working time between men and women and across age groups. In broad terms these results show that average working time has remained roughly constant to-date as declines, particularly among youth and older cohorts of men, have been offset by rising female participation.

79. For a description of the National Insurance Scheme see Ministry of Social Affairs (2002). In Sweden the period where sick leave is covered by employers was reduced from 28 to 16 days and the replacement rate was raised to 80 per cent in 1998. Subsequent analysis shows these changes to have measurably increased the propensity to take sick leave (OECD, 2002h).
80. The private-sector AFP schemes are funded by the social partners with a significant subsidy from the government, the largest scheme is for the LO/NHO area. Both central and local government employees are covered by separate AFP schemes. The unemployment benefit also, in principle, contributes to early retirement. Those over 64 years are guaranteed benefit until retirement age at 67 years. However, the number of individuals on unemployment benefits in this age group is very low (see Table 16 of OECD, 2001d). A recent analysis of how the disability and AFP pensions affect early retirement can be found in Tysse (2001).
81. As discussed in the OECD (2001d), pensioners make a lower contribution to the NIS than other taxpayers and they also benefit from an extra deduction from the ordinary income tax base that is doubled for disabled pensioners (including those who formerly received disability pensions). In addition, there is a rule (*skattebegrensningsregelen*) that limits the tax burden for low-income pension households. According to the Ministry of Finance, the tax treatment of pensioners results in about 10 per cent of pensioners paying no tax, 40 per cent paying tax according to the limitation rule and the remainder paying tax according to the favourable rules on ordinary tax.
82. However there are comparability issues. The Norwegian disability pension is typically the only transfer disabled persons receive, whilst in other countries other transfer schemes are often also important sources of income.
83. OECD (2002c) reports rejection rates of about 50 per cent in disability benefit schemes for Austria, Canada, Portugal and for contributory disability benefits in the United States.
84. Work permits are required for non-EEA citizens only.
85. Usually applicants for work permits are assessed as to whether there is someone else of similar competence (in principle in Norway or within the area of the European Economic Area Agreement) available to perform the job.
86. Seasonal workers can now apply for permits after they have entered the country and restraints on the number of seasonal work permits have been lifted.
87. The committee on immigration is due to report at the end of 2003. It will also focus on reform of asylum regulations.
88. Regulations on hiring workers from a temporary-work agency are in Section 58A of the Working Environment Act according to which use of a temporary-work agency is allowed: *i)* when warranted by the nature of the work and the work differs from that ordinarily performed by the enterprise, including seasonal work; *ii)* for work as a trainee or temporary substitute; *iii)* when a person participates in a labour market scheme under the direction of, or in co-ordination with the Public Employment Service; *iv)* when agreement is made with the chief executive or when considered necessary as the result of an agreement with a foreign state or international organisation; and *v)* for athletes, trainers, judges and other leaders within organised sports.

89. The *Colbjørnsen Committee* reported in 1999 and recommended more flexible rules on working time and labour contracts. It should be stressed that in Norway, agreements between social partners are often of more relevance than labour law in assessing working conditions and pay. For example, the 2002 wage negotiations in the construction sector included increases in the minimum wage and an agreement for compulsory local negotiations when a company wishes to use hired labour or subcontractors.

90. For a recent review of the evidence linking human capital with growth see Ahn and Hemmings (2000). A recent investigation of the link for OECD countries is contained in Bassanini and Scarpetta (2001).

91. See OECD (2001j), Table C1.1. Only a few countries are reported as having longer expected education than Norway including Finland (18.3 years) and Sweden (20.3 years).

92. Efforts to increase awareness of vocational careers include the development of internet-based vocational guidance tools and advice for schools on how to integrate vocational guidance into the teaching of subjects. Flexibility and incentives have been improved through providing more possibilities for transferring between vocational training and general education. Entrepreneurship has been made a priority and employers have been given financial incentives to create apprenticeship places and support for in-house instructors has been increased. Efforts to improve the response of the system to local labour market conditions have been carried out through the establishment of resource centres that provide training to public and private institutions on a commercial basis. In addition, partnerships between education, business and industry have been encouraged. In addition, a new Act concerning intermediate-level vocational education is to be proposed in 2002.

93. Norway also emerged as a middle-ranking country in the Second International Science Study that examined proficiency in chemistry, biology and physics. Spending on education is affected by the "inclusive" approach Norway takes to those with special needs in society; for example, almost all disabled children attend ordinary schools with additional resources being made available to accommodate their needs. However this is not the only factor generating high education costs in Norway. For example, the commitment to highly localised primary schools results in small class sizes.

94. The Norwegian students had an average test score of about 500 in all three subjects, around 40 points below the top-scoring countries. In the PISA scoring scale, 75 points approximate the difference between each of 5 distinct "levels' of ability. Thus, for the top-scoring countries, average test scores are about ½ a level of educational achievement above those in Norway.

95. Only a relatively small proportion of Norwegian students saw mathematics as worth pursuing because of its relevance for their future. In terms of learning strategy, students had a low score in an indicator assessing their "degree of control of the learning process", that measures use of strategies to focus and reinforce their learning effort. This indicator of learning strategy, more than others, was found to be correlated with performance in the PISA study.

96. From August 2002, 2nd, 3rd and 4th grade primary school pupils will receive an additional study period per week aimed at improving Norwegian language skills. Use of Internet-based education in English and mathematics will be developed further. Use of ICT as a pedagogic tool by teachers will also be increased. The appointment of the *Committee of Quality* has a general mandate to propose improvements in compulsory education. One of the issues under discussion is the reduction in the total length of compulsory education from 13 to 12 years.

97. The Competence Reform began in 1996 and is a major tri-partite effort towards increasing and improving adult education. See OECD (2002e) for more detail.
98. Various funding systems for post-secondary adult education were considered by the *Johnsen Committee* such as a central fund administered at the company level compared with alternatives such as individual savings arrangements with tax incentives.
99. The issue of occupational pensions was raised in the wage round by the Norwegian Confederation of Trade Unions (LO). The LO's pension policy was outlined recently in a report by an internal committee that included recommendations to use the Government Petroleum Fund to support the NIS PAYG scheme and greater coverage of occupational schemes and maintenance of the AFP.
100. Complications in the relationship between competition and growth arise in the process of innovation. For example, innovation by firms can be generated by an expectation of post-innovation market power. Such mechanisms can be seen as one of the reasons for supporting research and development through patent systems.
101. For example, in the widely-used International Institute for Management Development (IMD) competitiveness scoreboard Norway ranks lower than most other developed countries (IMD, 2002).
102. Under the previous regulations companies could merge before investigation, thereby weakening the NCA's powers.
103. In the current Competition Act, the NCA may only "call attention to the restraining effects on competition of public measures…" (Section 2.2d of the Act).
104. See Guellec and van Pottelsberghe (2001) for further discussion and recent evidence about the link between R&D and productivity growth.
105. The tax relief scheme, replacing the grant system in January 2002, is limited to companies with less than NOK 80 million sales, NOK 40 million balance sheet and less than 100 employees.
106. In addition the evaluation stresses the RCN should take a stronger advisory stance, be given greater executive powers, should develop more substantial bilateral international agreements and should simplify its administrative processes (Technopolis, 2001). Interestingly, work-in-progress at the OECD on the governance of the science system suggests that the relative roles played by institutional funding (block grants) and funds allocated by the RCN represents good practice in international comparison.
107. Government shareholdings in SAS are 14.3 per cent for Denmark and Norway and 21.4 per cent for Sweden. The shareholding structure was simplified in 2001 (SAS, 2002).
108. The public stake in the oil sector has been reduced by the sale of 21.5 per cent of SDFI assets, a move that also entailed passing the management of the SDFI to a new state-owned company, Petero. However, government influence in the oil sector as a result of this sale is unlikely to be greatly diminished as 15 per cent of the SDFI portfolio was sold by prior arrangement to Statoil. In addition, Norsk Hydro in which government currently has a 44 per cent stake, picked up about one third of the remaining 6.5 per cent of the SDFI.
109. The adoption of mobile number portability at the end of 2001 could also have helped competition.
110. See the Norwegian Post and Telecommunications Authority's report for 2001 (NPT, 2002). The Authority has decided that delays by two licence holders (Telenor and Netcom) are due to technical reasons outside the power of the operators, whilst for a third operator (Tele2) it has decided to recommend fining the company for a delay in the network rollout.

111. In August 2001 the NCA sent a preliminary notice of possible intervention against SAS's acquisition of 69 per cent of Braathens ASA's shares on the grounds that already restricted competition would be further diminished. However, in a subsequent evaluation of Braathen's financial position, notably taking into account the changed market conditions due to the terrorist attacks of 11 September, the NCA concluded that the merger could go ahead under the three conditions of its "failing firm" argument: insolvency, lack of alternative purchasers and, *ex post*, no difference in the competitive position whether the merger goes ahead or not.

112. A speech made by the Director General of the NCA in March 2002 outlines a number of initiatives being explored to improve competition in airline travel, including: measures against predatory pricing and price co-ordination, increased competition between airports, market-orientated slot allocation, the promotion of independent ground-service companies, non-discriminatory reservation systems and travel agency restrictions, stricter merger control and the abolition of state aid to airlines (Eggum Johansen, 2002).

113. For example Aftenposten reported on 19 March 2002 that the low cost airline Sterling was considering domestic flights.

114. The high cost of food in Norway has resulted in significant cross-border shopping that looks set to continue despite recent policy changes. Preliminary reports indicate the reduction in VAT in 2001 on food from 24 to 12 per cent has not had a significant impact.

115. Norway is giving special priority in its work on EEA matters to ensure Norwegian salmon exporters have stable, long-term and predictable access to the EU market and to find a satisfactory solution for trade in fish and fish products when the existing free-trade agreements with the candidate countries cease to apply as a consequence of EU enlargement (Ministry of Foreign Affairs, 2002). In a separate development, the inclusion of a local ownership criterion in the rules governing the allocation of aquaculture licences has been opposed by the EFTA Surveillance Authority on the grounds that it restricts foreign investment.

116. The government's share in DnB is managed by S*tatens* B*ankinvesteringfond* (the Norwegian Government Bank Investment Fund).

117. This mechanism is known as the 10 per cent rule and is derived from laws, which imply that holdings in Norwegian financial institutions can either be less than 10 per cent or more than 90 per cent. Thus implying a successful take-over has to entail at least a 90 per cent holding. In the run-up to Sampo's bid, state-controlled DnB acquired a 9.9 per cent stake in Storebrand, which along with a small residual shareholding effectively blocked the merger. Interestingly, the National Insurance Fund, owning almost 10 per cent of the Storebrand shares, accepted the Sampo offer despite strong political pressure. The reason for the 90 per cent requirement is that the private/public limited companies act requires more than 90 per cent ownership to redeem minority owners by force.

118. Storebrand's board of directors accepted the originally proposed exchange ratio of 1.33 DnB shares per Storebrand share.

119. The Selvig Committee proposes that notification and authorisation should be required for acquisitions of 10 or more per cent and for acquisitions that lead to control of more than 20, 33 or 50 per cent of the shares. In order to reduce the risk of blocking tactics, the Committee proposes that a take-over bid must be put forward if the owner intends to acquire a total holding of more than 25 per cent of shares in the company. The

committee proposes that authorisation is made through legal guidelines on several issues, including: *i*) the implications of cross-ownership for competition; *ii*) the possibility of undue influence from other industries on the financial sector as a result of the holding; *iii*) whether the acquisition can lead to an undesirable development in the financial sector of a specific region; and *iv*) whether the acquisition leads to an undesirable development of the credit and equity system in general.

120. The Ministry of Finance proposed regulations to allow banks to convert to limited companies in March 2002. Union Bank Norway (UBN) and Gjensidige NOR Spareforsikring propose to use the regulations to convert to limited companies under a common ownership of Gjensidige ASA. In June 2002, the Banking, Insurance and Securities Commission recommended the Ministry of Finance to allow UBN to convert.
121. There was a sharp increase in the number of infractions of reporting requirements to the Kredittilsynet in 2001, about two thirds of which relate to insider trading. This appears to be due to increased surveillance efforts.
122. Almost all of the equity component of the National Insurance Fund is held in Norwegian companies. For example the Folketrygdfondet is the second largest shareholder in the troubled Kvaerner engineering group.
123. One largely unresolved debate in the growth literature concerns the nature of the relationship between growth and the "size" of government; some argue the evidence supports a dominance of negative effects, such as crowding out, whilst others claim the evidence is inadequate to make any strong claim. The debate about the role of the size of government in growth is exemplified in papers by Fölster and Henrekson (1998) who argue the relationship between the size of the fiscal regime and growth is robust and Agell *et al.* (1997, 1998) who claim the evidence is inconclusive. Other research has explored the extent to which different types of taxation (or revenue) affect growth differently. For example evidence presented by Kneller *et al.* (1998) supports the view that more neutral taxes are better for growth compared with highly distorting taxes.
124. See the special chapter on taxation in OECD (2000a) for further detail.
125. The abolition of the 7 per cent investment tax will take effect in October 2002. The tax includes exemptions for certain industries thus compromising the neutrality of investment decisions.
126. OECD (2002i) estimates that for a single person earning the average production-worker wage (APW) the marginal rate of income tax plus employers contributions rate is about 36 per cent and this rises to nearly 50 per cent if the person is earning more than the APW and to 55.3 per cent if the person is earning more than 2.6 times the APW. This contrasts sharply with the flat corporation tax of 28 per cent.
127. The tax rules allow investment in production equipment and pipelines to be depreciated for tax purposes over a period of 3 years when the gas is used for LNG production in a new large-scale LNG facility. The usual depreciation period in the Petroleum Taxation Act is 6 years.

Glossary of acronyms

ABP	*Algemeen Burgerlijk Pensioenfonds* (pension fund for government and education authorities in the Netherlands)
AFP	*Avtalefestet pensjonsordning* (contractual early retirement scheme)
APW	Average production-worker wage
CALPERS	California Public Employees Retirement System
DRG	Diagnosis related group
ECB	European Central Bank
EEA	European Economic Area
EFTA	European Free Trade Association
EU	European Union
EUR	Euro
FUNN	Research and Development in a Creative Trade and Industry
GDP	Gross domestic product
GPGS	General purpose grant scheme
GSM	Global System for Mobile communication
IALS	International adult literacy survey
ICT	Information and communication technology
IMD	International Institute for Management Development
LNG	Liquified natural gas
LO	Norwegian Confederation of Trade Unions
NAIRU	Non-accelerating inflation rate of unemployment
NAS	Norwegian Air Shuttle
NCA	National Competition Authority
NHO	Confederation of Norwegian Business and Industry
NIS	National Insurance Scheme
NOREX	The strategic alliance between the Nordic stock exchanges, currently consisting of the Copenhagen Stock Exchange, Iceland Stock Exchange, Oslo Börs and Stockholmsbörsen
OPEC	Organization of the Petroleum Exporting Countries
PAYG	Pay as you go
PES	Public employment service
PISA	Programme for International Student Assessment
PSE	Producer Support Estimate
RCN	Research Council of Norway
R&D	Research and Development
SAS	Scandinavian Airlines System
SDFI	State Direct Financial Interest (the direct state participation of the state in oil gas fields)
SELF	State Educational Loan Fund
Sm^3 o.e.	Standard cubic metres oil equivalents

SME	Small and medium-sized enterprises
SND	Norwegian Industrial and Regional Development Fund
SOE	State-owned enterprise
UBN	Union Bank Norway
USD	United States dollar
VAT	Value added tax

Bibliography

Adema, W. (2000),
"Revisiting real social spending across countries: A brief note", OECD *Economic Studies*, No. 30, 2000/I, Paris.

Adema, W. (2001),
"Net social expenditure, second edition", *Labour Market and Social Policy – Occasional Papers*, No. 52, OECD, Paris, *www.olis.oecd.org*/OLIS/2001DOC.NSF/LINKTO/DEELSA-ELSA-D(2001)5

Agell, J., T. Lindh and H. Ohlsson (1997),
"Growth and the public sector: A critical review essay", *European Journal of Political Economy*, 13.

Agell, J., T. Lindh and H. Ohlsson (1998),
"Growth and the public sector: A reply", mimeo.

Ahn, S. and P. Hemmings (2000),
"Policy influences on economic growth in OECD Countries: An evaluation of the evidence", OECD *Economics Department Working Papers*, No. 246, *www.oecd.org/pdf*/M00002000/M00002009*.pdf*

Andreassen, H.M., P. De Grauwe, H. Solheim and Ø. Thøgersen (2001),
"Norges Bank Watch 2001. A review of inflation targeting, the Norwegian monetary regime and its institutional arrangements and Norges Bank's actual monetary policy and communication", *Centre for Monetary Economics working paper*, No. 5/01, *www.bi.no/cme/Norges_Bank_Watch_*2001

Auerbach, A.J., J. Gokhale, L.J. Kotlikoff and E. Steigum Jr. (1993),
"Generational accounting in Norway: Is Norway overconsuming its petroleum wealth?", Report 75/93, SNF (Institute for Research in Economics and Business Administration).

Auerbach, A.J., L.J. Kotlikoff and W. Leibfritz (1999),
Generational accounting around the World, The University of Chicago Press.

Bache, I.W. (2002),
"Empirical modelling of Norwegian import prices", *Research Department Working Papers*, No. 2002/1, Norges Bank, *www.norges-bank.no/publikasjoner/arbeidsnotater/pdf/arb-*2002-01*.pdf*

Backer-Røed, N. and L. Mannsåker (2000),
"The activation and qualification of social assistance recipient in Oslo", in *Labour market policies and the public employment service*, OECD Proceedings, Prague Conference, July 2000.

Bassanini, A. and S. Scarpetta (2001),
"Does human capital matter for growth in OECD countries? Evidence from pooled mean-group estimates", OECD *Economics Department Working Papers*, No. 282, *www.oecd.org/pdf*/M00002000/M00002523*.pdf*

Bergo, J. (2002),
"Oil – natural resource and financial asset", speech at the Norwegian Petroleum Society, Oslo, 25 April, *www.norges-bank.no/english/speeches/2002-04-25/speech-2002-04-25.html*

Blöndal, S., S. Field and N. Girouard (2002),
"Investment in human capital through post-compulsory education and training: selected efficiency and equity aspects", OECD *Economics Department Working Papers*, No. 333, *http://appli1.oecd.org/olis/2002doc.nsf/linkto/eco-wkp(2002)19*

Boug, P. and B.E. Naug (2001),
"Beaten by the Swedes? A comparison of productivity growth in Norwegian and Swedish manufacturing", *Economic Survey*, No. 2/2001, Statistics Norway, *www.ssb.no/english/subjects/08/05/10/es/200102/boug.pdf*

Eggum Johansen, K. (2002),
"Consumers and industry better served by increased competition in air transport services sector", speech by the director-general of the Norwegian Competition Authority at the Federation of Norwegian Transport Users Aviation Political Conference, Gardemoen, March, *www.konkurransetilsynet.no/kunder/konkurransetilsynet/index.nsf/d0b85697890d0e6ac12565970076aaf2/67f53c89fe3427e2c1256b0d004ac7b8?OpenDocument*

European Commission (1999),
"Generational accounting in Europa", *European Economy Reports and Studies*, No. 6, *http://europa.eu.int/comm/economy_finance/publications/european_economy/reportsandstudies0699_en.htm*

European Commission (2002),
"Price and Cost Competitiveness, first quarter of 2002", *http://europa.eu.int/comm/economy_finance/publications/priceandcostcompetiteveness_en.htm*

European Observatory of Health Care Systems (2000),
"Healthcare systems in transition: Norway," *http://odin.dep.no/archive/shdvedlegg/01/01/0HiTf031.pdf*

Fölster, S. and M. Henrekson (1998),
"Growth and the public sector: A critique of the critics", *European Journal of Political Economy*.

Gjedrem, S. (2001),
"Inflation target – how interest rates are set", *Aftenposten*, 29 May, *www.norges-bank.no/english/publications/articles/art-2001-05-29-en.html*

Gjedrem, S. (2002a),
"The inflation target and the floating krone: The interplay between fiscal policy, the interest rate and competitiveness", Address to the Executive Board of the Federation of Norwegian Manufacturing Industries, 20 March, *www.norges-bank.no/english/speeches/2002-03-20/speech-2002-03-20.html*

Gjedrem, S. (2002b),
"Economic perspectives", Annual address at the meeting of the Supervisory Council of Norges Bank, 14 February, *www.norges-bank.no/english/speeches/annual-2002/annual-2002.pdf*

Gjersem, C. (2002a),
"Generational accounting in the Nordic countries", *Nordic Journal of Political Economy*, Vol. 28 (1), forthcoming.

Gjersem, C. (2002b),
"A presentation of generational accounting in Norway", *Nordic Journal of Political Economy*, Vol. 28 (1), forthcoming.

Guellec, D. and B. van Pottelsberghe de la Potterie (2001),
"R&D and productivity growth: panel data analysis of 16 OECD countries", OECD *Economic Studies*, No. 33.

Hagen, T.P., J. Rattsø and R.J. Sørensen (1999),
"Monopoly and competition in government service production: Economic and political determinants of reform", *www.svt.ntnu.no/iso/Jorn.Rattso/Papers/solstrand.pdf*

Hellevik, T. and C. Koren (2000),
"Parents between work and care: effects of the new cash benefit scheme", Skriftserie 7/00, NOVA (Norwegian Social Research).

IMD (2002),
The world competitiveness scoreboard 2002, *www01.imd.ch/documents/wcy/content/ranking.pdf*

Jacobzone, S. (1999),
"Ageing and care for frail elderly persons: an overview of international perspectives", OECD *Labour market and social policy*, Occasional paper No.°38, *www.olis.oecd.org/*OLIS/1999DOC.NSF/LINKTO/DEELSA-ELSA-WD(99)1

Johnsen, R.N. (2001),
"Undersøking om foreldrebetaling I barnehagar" (Survey on parents' payments to kindergartens), *Notater*, Statistics Norway, August, *www.ssb.no/emner/*04/02/10/*notat_*200162/*notat_*200162.*pdf*

Kjerstad, E. (2001),
"Prospective funding of general hospitals in Norway – Incentives for higher production?", SNF Report 58 – Essays on public policy and private incentives.

Kneller, R., M. Bleaney and N. Gemmell (1998),
"Growth, public policy and the government budget constraint: evidence from OECD countries", University of Nottingham, School of Economics, Discussion Paper, No. 98/4.

Knudsen, C. (2001),
"Hvem lot seg påvirke?: kontantstøtten og mødres yrkesaktivitet" (Who changed behaviour? The child-care cash benefit scheme and mothers' labour activity), *Rapport*, NOVA (Norwegian Social Research), *www.nova.no/publis/rapport/*2001/11*sam.htm*

Lederman, D. and W. Maloney (2002),
"Open questions about the link between natural resources and economic growth: Sachs and Warner revisited", *Central Bank of Chile Working Papers*, No. 141, February, *www.bcentral.cl/Estudios/*DTBC/141/*dtbc*141.*pdf*

Leibfritz, W., D. Roseveare, D. Fore and E. Wurzel (1995),
"Ageing populations, pension systems and government budgets: how do they affect savings?", OECD *Economics Department Working Papers*, No. 156, OECD, Paris, *www.oecd.org/pdf/*M00001000/M00001141.*pdf*

Lilleås, P.E. (2002),
"CPI adjusted for tax changes and excluding energy products", *Economic Survey*, No. 1/2000, Statistics Norway, *www.ssb.no/english/subjects/*08/05/10/*es/*200201/*lilleas.pdf*

Lundsgaard, J. (2002),
"Competition and efficiency in publicly funded services", OECD *Economics Department Working Papers*, No. 331, *http://appli*1.*oecd.org/olis/*2002*doc.nsf/linkto/eco-wkp*(2002)17

Manning, W.G., J.P. Newhouse, N. Duan, E.B. Keeler, A. Leibowitz, and M.S. Marquis (1987),
"Health Insurance and the Demand for Medical Care", *The American Economic Review*, Vol. 77, No. 3, June.

Ministry of Finance (2001a),
"Guidelines for economic policy", *Report to the Storting*, Summary in English, No. 29 (2000-2001), Oslo, *http://odin.dep.no/archive/finbilder/01/04/repor063.pdf*

Ministry of Finance (2001b),
"The Long-Term Programme 2002-2005", *Report to the Storting*, Summary in English, No. 30 (2000-2001), Oslo, *http://odin.dep.no/fin/engelsk/publ/white_papers/006071-040002/index-dok000-b-n-a.html*

Ministry of Finance (2001c),
"Samarbeidsregjeringens budsjettforslag" (Amended national budget 2002 of the co-operation government), St.prp. nr. 1 (2001-2002) Tillegg nr. 4, *www.statsbudsjettet.dep.no/pdf/stprp1_tillegg4.pdf*

Ministry of Finance (2002),
"Revidert nasjonalbudsjett 2002" (Revised national budget 2002), *Stortingsmelding*, No. 2, *www.statsbudsjettet.dep.no/pdf/2.pdf*

Ministry of Fisheries (2001),
Aquaculture policy statement, *http://odin.dep.no/fid/engelsk/p10001872/p10001873/008031-990016/index-dok000-b-f-a.html*

Ministry of Foreign Affairs (2002),
The Norwegian Government's European Policy Platform; Challenges, Goals and Measures, *http://odin.dep.no/ud/engelsk/publ/handlingsplaner/032141-130005/index-dok000-b-f-a.html*

Ministry of Labour and Government Administration (2002),
"Lønnsutviklingen i 2001 for toppledere i privat næringsvirksomhet" (Wages in 2001 for top management in the private sector), update of NOU 2002:5, *http://odin.dep.no/aad/norsk/publ/rapporter/002071-220002/index-dok000-b-f-a.html*

Ministry of Social Affairs (2002),
The Norwegian Social Insurance Scheme 2002, *http://odin.dep.no/sos/engelsk/publ/handbooks/044051-120003/index-dok000-b-f-a.html*

Moum, K. and I.S. Wold (2001),
"Can Norway afford the National Insurance Scheme? The challenge to Norway's social security policy in a European context", *Economic Survey*, No. 3/2001, Statistics Norway, pp. 21-34, *www.ssb.no/english/subjects/08/05/10/es/200103/moum.pdf*

Nordic Competition Authorities (2002),
Competitive Airlines, Towards a more vigorous competition policy in relation to the air travel market, June, *www.konkurransetilsynet.no/kunder/konkurransetilsynet/index.nsf/d0b85697890d0e6ac12565970076aaf2/87999d131698ce16c1256bdc002df7a9?OpenDocument*

Norges Bank (2001a),
Financial Stability Report, No. 2/2001, November, *www.norges-bank.no/front/rapport/en/fs/2001-02/fs-2001-02-en.pdf*

Norges Bank (2001b),
"Guidelines for monetary policy ", letter submitted to the Ministry of Finance on 27 March, *www.norges-bank.no/english/publications/submissions/submission-2001-03-27.html*

Norges Bank (2001c),
Inflation Report, No. 2/2001, June, *www.norges-bank.no/front/rapport/en/ir/2001-02/ir-2001-02-en.pdf*

Norges Bank (2002a),
The Government Petroleum Fund: Annual Report 2001, *www.norges-bank.no/english/petroleum_fund/reports/2001/engelsk.pdf*

Norges Bank (2002b),
Financial Stability Report, No. 1/2002, May, *www.norges-bank.no/front/rapport/en/fs/2002-01/fs-2002-01-en.pdf*

Norges Bank (2002c),
Inflation Report, No. 1/2002, February, *www.norges-bank.no/front/rapport/en/ir/2002-01/ir-2002-01-en.pdf*

NOU (2000),
En strategi for sysselsetting og verdiskapning (A strategy for employment and value added), report of the Holden Committee, Norways Official Reports, NOU 2000:21, *http://odin.dep.no/fin/norsk/publ/utredninger/NOU/006001-020007/index-dok000-b-n-a.html*

NPT (2002),
Annual Report 2001, Norwegian Post and Telecommunications Authority, *www.npt.no/no/publikasjoner/aarsrapporter/arsrapport2001/index_eng.htm*

OECD (1997a),
Managing across levels of government, *www.oecd.org/pdf/M00004000/M00004166.pdf*

OECD (1997b),
OECD *Economic Surveys*: *Norway*, Paris.

OECD (1999),
OECD *Economic Surveys*: *Norway*, Paris.

OECD (2000a),
OECD *Economic Surveys*: *Norway*, Paris.

OECD (2000b),
Literacy in the Information Age: *Final report of the international adult literacy survey*, Paris, *www.oecd.org/EN/documents/0,,EN-documents-4-nodirectorate-no-15-no-4-no-no-2,00.html*

OECD (2001a),
"Fiscal implications of ageing: projections of age-related spending", OECD *Economic Outlook*, No. 69, *www.oecd.org/pdf/M00029000/M00029158.pdf*

OECD (2001b),
"Competitive Public Employer", *www.oecd.org/EN/document/0,,EN-document-308-9-no-28-29888-308,00.html*

OECD (2001c),
Knowledge and Skills for Life: *first results from* PISA 2000, Paris, *www.oecd.org/EN/documents/0,,EN-documents-4-nodirectorate-no-15-no-4,00.html*

OECD (2001d),
OECD *Economic Survey*: *Norway*, Paris.

OECD (2001e),
Starting strong: *Early childhood education and care*, Paris.

OECD (2001f),
"Investment in human capital through post-compulsory education and training", OECD *Economic Outlook*, No. 70, December, *www.oecd.org/pdf/M00023000/M00023497.pdf*

OECD (2001g),
The New Economy: *Beyond the Hype*: *final report on the* OECD *Growth Project*, Paris, *www.oecd.org/pdf/M00018000/M00018622.pdf*

OECD (2001h),
OECD *Science*, *Techonology and Industry Scoreboard*, *towards a knowledge-based economy*, Paris.

OECD (2001i),
Multifunctionality, towards an analytical framework, Paris, *www.oecd.org/pdf/M00002000/M00002898.pdf*

OECD (2001j),
Education at a Glance, Paris, *www.oecd.org/EN/documents/0,,EN-documents-4-nodirectorate-no-15-no-4,00.html*

OECD (2002a),
OECD *Economic Outlook*, No. 71, June.

OECD (2002b),
"Overview of results focused management and budgeting in OECD Member countries", *www.oecd.org/EN/document/0,,EN-document-notheme-9-no-20-26305-0,FF.html*

OECD (2002c),
"Participative disability policies for the working-age population: towards a coherent policy mix", forthcoming.

OECD (2002d),
OECD *Economic Surveys: Switzerland*, Paris.

OECD (2002e),
Education Policy Review: Lifelong learning in Norway, Paris, *www.oecd.org/EN/documents/0,,EN-documents-4-nodirectorate-no-15-no-4,00.html*

OECD (2002f),
Agricultural policies in OECD countries: monitoring and evaluation, *www.oecd.org/EN/home/0,,EN-home-1-nodirectorate-no-no–1,00.html*

OECD (2002g),
OECD *Economic Survey: Finland*, Paris.

OECD (2002h),
OECD *Economic Survey: Sweden*, Paris.

OECD (2002i),
Taxing Wages 2000-2001, Paris, *www.oecd.org/EN/document/0,,EN-document-22-nodirectorate-no-1-28721-22,00.html*

Persson, T. and G. Tabellini (2002),
"Do constitutions cause large governments? Quasi-experimental evidence", *European Economic Review*, Vol. 46.

SAS (2002),
Annual Report, 2001, *www.scandinavian.net/company/investor/reports/annualreports/SAS01ENG.pdf*

Schreyer, P. and D. Pilat (2001),
"Measuring Productivity", OECD *Economic Studies*, No. 33.

Statistics Norway (2002a),
"Use of ICT in Nordic enterprises 2000/2001", *Reports*, 2002/10, Statistics Norway *www.ssb.no/english/subjects/10/03/rapp_ict_en/rapp_200101_en/index.html*

Statistics Norway (2002b),
"Time use survey", 2000, *www.ssb.no/tidsbruk_en/*

Steigum, E. and C. Gjersem (1999),
"Generational accounting and depletable natural resources: The case of Norway", in Auerbach, A.J., L.J. Kotlikoff and W. Leibfritz (eds.), *Generational accounting around the world*, University of Chicago Press.

Szehebely, M. (1999),
"The impact of moving borders between traditional institutions and home care in Scandinavia", mimeo, September.

Technopolis (2001),
A *Singular Council, Evaluation of the Research Council of Norway*, December, *www.technopolis-group.com/reports/RCN/RCN_BR14.pdf*

Tysse, T.J. (2001),
"Effects of Enterprise Characteristics on Early Retirement", *Reports*, 2001/26, Statistics Norway, *www.ssb.no/english/subjects/03/04/rapp_200126_en/rapp_200126_en.pdf*

Van Ewijk, C. (2001),
"Beyond Maastricht", *De Economist*.

Annex I

The use of generational accounts in Norway*

During the 1990s, a number of countries began to present standardised calculations of generational accounts to measure the long-term sustainability of public finances. For Norway, generational accounts were first calculated and presented in 1993 (Auerbach *et al.*, 1993) and have since been presented regularly in budget and other public documents.

A generational account is the present value of expected current and future taxes paid net of individual age-specific government outlays received over the rest of life by a representative individual of a given age and sex. To calculate these generational accounts, information on current and future government outlays by age cohort is needed. Thus, the data requirements are substantial and important assumptions have to be made. In particular, generational accounts usually aim at showing the consequences of maintaining current fiscal policy. Therefore, tax rates and spending levels by age group are assumed unchanged. If the sum of generational accounts for all current and future individuals equals the present value of non-age specific government outlays and government net financial assets, then the government's intertemporal budget constraint is met and current tax rates and government programmes can be kept unchanged in the future. If the balance is negative, however, the implication is that current fiscal policy is unsustainable and current and future generations will have to pay higher taxes or receive lower individual benefits. In the Norwegian case, it is the change in current and future government consumption required to attain this balance that is presented as an indicator of the current budget's intergenerational stance.

An important item in the Norwegian accounts is public petroleum revenue, which differs from other revenue, as it is the result of extraction of non-renewable natural resources. The temporary nature of the government's petroleum revenues can be handled by including an estimate of the net present value of future expected revenues in government assets in the government's budget constraint. Non-renewable resources are thus viewed as equal to financial wealth (Steigum and Gjersem, 1999). Large re-evaluations in the last decade underscore the degree of uncertainty in the stream of future petroleum revenues that add to the uncertainty surrounding such calculations.

The calculations presented in the 1995 budget paper showed a large generational deficit, requiring a reduction of government consumption of between 2-4 per cent of GDP for intergenerational balance. The required reduction was smaller in the following budgets and in the 1997 national budget the interval spanned zero. As elsewhere, the early Norwegian

* Generational accounting for a number of countries, including Norway, was presented in Leibfritz *et al.* (1995). An introduction to and a comprehensive presentation of both the methodology and a wide range of applications can be found in Auerbach *et al.* (1999) while a co-ordinated presentation for the EU members countries is presented in European Commission (1999). A summing up of recent generational accounting results for the Nordic countries can be found in Gjersem (2002a).

experience with generational accounts found the current business cycle situation to have undue influence on generational accounts and a cyclical adjustment has been made since 1998, although the methodology for this correction is still under discussion. In 1998, the interval continued to span zero. However, in the 2000 budget, the accounts again signalled a need for cuts, due to both an extension of the business cycle adjustment to include local government and lower petroleum prices reducing petroleum revenues. The most recent calculation is presented in the 2002 budget papers and indicate a need to tighten the current budget by NOK 0-20 billion (0-1¾ per cent of mainland GDP). As it is based on the proposed 2002 budget, it takes into account the impact of the new fiscal rule in 2002. However, it does not take into account the higher government expenditure and lower tax burden in the coming years due to the fiscal rule (Gjersem, 2002b). As a consequence, the reduction in government consumption required to restore the intertemporal budget balance is underestimated.

Generational accounting requires a heavy data input and results are very sensitive to key assumptions about real wage developments, the discount rate and in the Norwegian case the oil price. Moreover, there are methodological issues, especially concerning the cyclical correction that are still debated. Furthermore for Norway, the current calculations do not take the new fiscal rule into account for the coming years and is therefore underestimating the required reduction in government consumption. The Norwegian authorities provide an interval as the calculation is done for two different real wage trajectories (of ¾ and 1¼ per cent per year) but given uncertainties on other key assumptions, the confidence interval around the calculation is larger than this interval. Even so, the Norwegian authorities consider it as a valuable pedagogic tool with intuitive appeal also to the general public.

Annex II

Key aspects of market structure and state involvement by sector

	The role of the state in each sector	Contribution to GDP, %[1]	Employment %[1]
Oil and gas extraction	State-controlled Statoil has an important share. Other state interests in the sector are held in the SDFI and via shareholding in Norsk Hydro (44 per cent).	**23.3**	**1.0**
Agriculture, forestry, fishing, mining	Substantial state subsidy to the agricultural sector, mostly reflecting regional policy motives.	**1.8**	**4.3**
Agriculture and hunting	Substantial state subsidy via a guaranteed producer price system. Distribution is state-owned via Statkorn (grain) and Tine (milk).	0.8	3.1
Forestry and logging	State-owned Statskog plays a role.	0.2	0.2
Fishing and fish farming	The state-controlled enterprise Cermaq is one of the major fish farming companies.	0.7	0.7
Mining and quarrying	The state-owned enterprises in this sector are Store Norske Spitsbergen Kulkompani AS and A/S Olivin (51 per cent).	0.2	0.2
Manufacturing, construction and energy supply		**14.4**	**19.5**
Construction	Maintenance and construction of government buildings is carried out solely by the directorate of public construction and property, Statsbygg. Road maintenance is only partially contracted out to private sector.	3.5	5.5
Machinery, ships and other transport equipment	Some subsidy provided to shipyards via "reseach and development" programmes.	2.3	3.3
Electricity, gas and steam supply	State-controlled company (Statkraft) gaining market share, notably in market in southern Norway.	1.7	0.7
Food products, beverages, tobacco	Large interest in liquor company Arcus (34 per cent).	1.3	2.3
Metal products	Government interest in aluminium products and extraction via Norsk Hydro. Also with manufacturing interests in Kongsberg Gruppen ASA, Nammo AS and Raufoss ASA.	1.1	0.7

	The role of the state in each sector	Contribution to GDP, %[1]	Employment %[1]
Building of ships, oil platforms and modules	Subsidy provided to shipyards via "regional" and "research and development" aid programmes.	1.1	1.5
Publishing, printing, reproduction		1.0	1.8
Refined petroleum, chemical and mineral products	Government interest via Statoil and Norsk Hydro.	0.7	1.0
Pulp, paper and paper products		0.5	0.4
Basic chemicals		0.4	0.4
Wood and wood products		0.4	0.7
Furniture and other manufacturing n.e.c.		0.3	0.7
Textiles, wearing apparel, leather		0.2	0.4
Activities in general government		**14.5**	**31.0**
Local government	Includes public health and education sectors.	10.4	24.4
Central government		4.1	6.6
Service industries excluding general government		**36.7**	**44.2**
Wholesale and retail trade, hotels and restaurants	Government retains interest in pharmaceutical distributor Norsk Medisinaldepot. Public-sector catering provided by partially privatised Statens Kantiner. Government largely controls alcohol import and distribution via interests in Arcus ASA and state-owned Vinmonopolet.	9.2	16.9
Transport	Effective monopoly of domestic air travel following the merger of SAS with Braathens. The rail traffic company NSB is fully state-owned. Subsidy of regional land transport via the Regional Transportstøtte-scheme and subsidy of coastal shipping transport via the Hurtigruten Agreement.	8.4	8.8
Renting and business activities		6.3	7.5
Dwelling services (mainly rental income)		5.2	0.1
Private services		4.8	8.8
Financial intermediation, insurance	State retains control over the largest bank (DnB).	2.9	2.1
Post and telecommunications	Dominance of State-controlled Telenor in telecommunications and state-owned Norway Post in postal services.	1.5	2.3

1. Output and employment data are for 2000. The sum of the contributions to GDP is less than 100 per cent due to value added tax and other items.

Source: OECD and Statistics Norway.

Annex III

Calendar of events

2001

January

The general VAT rate increases by 1 percentage point to 24 per cent, accompanied by a rise in the electricity tax and a cut in petrol taxes.

"Defined-contribution" pension schemes become corporate tax deductible.

New health acts enter into force expanding the possibility of unrestricted choice of hospitals for patients.

New EEA regulation enters into force that forbids operating support to the shipbuilding sector on new contracts.

March

The government presents new guidelines for fiscal and monetary policy that are approved by Parliament shortly thereafter.

The government installs a pension committee headed by former minister of finance Mr. Sigbjørn Johnsen. The committee with representatives of the main political parties should present its recommendations on pension reform by October 2003.

New Act on Pharmacies enters into force aimed at increasing competition.

May

The Ministry of Petroleum and Energy establishes Petoro AS to handle its oil and gas assets on the Norwegian continental shelf.

Ms. Gerd-Liv Valla succeeds Mr. Yngve Hågensen as president of Norway's Federation of Trade Unions (LO). She is the first woman and the first president with a public sector background to hold the post.

June

In an initial public offering (IPO), the fully state-owned oil company Statoil sells shares corresponding to 17.5 per cent of its capital to private investors.

July

The VAT rate on food is halved to 12 per cent, petrol taxes are reduced further and the VAT base for services is broadened.

Norway tops the United Nations' standard of living ranking.

A new act on government procurements enters into force that aims at simplifying the legislation and improving efficiency.

August

Royal wedding of Crown Prince Haakon and Mette-Marit Tjessem Hoiby.

September

In the general elections, the governing Labour Party looses heavily. The main winners are the Conservative Party and the Socialist Left Party.

Terrorist attacks in the United States.

In reaction to the sharp fall in share prices after the terrorist attacks, capital adequacy requirements for insurance companies are softened to avoid extensive share sales that could reduce the long-run return of customers and could intensify the decline in the stock market.

October

The outgoing government and the social partners conclude an "agreement of intent" to reduce sickness absence by 20 per cent over the period 2001-05. The agreement includes a commitment by government to propose changes to the present sickness benefit scheme.

The outgoing government presents the draft 2002 budget to Parliament. The draft budget adheres to the new fiscal rule.

After negative financial market developments and strong political opposition, the Finnish financial conglomerate Sampo withdraws its friendly merger bid for the Norwegian insurance company Storebrand made in May 2001.

The King appoints a minority centre-right government with Mr. Kjell Magne Bondevik as Prime Minister. The Christian Democratic Party, the Conservative Party and the Liberal Party – with 62 of the 165 members of Parliament – are represented in this "co-operation" government.

Norges Bank moves to an easing bias.

November

The engineering and construction company Kvaerner reaches agreement with its largest shareholder Aker Maritime on a comprehensive restructuring.

After the government threatened to make the Parliamentary budget decision a vote of confidence, the Storting approves the 2002 budget. In November, the proposals of the new government did not gain majority backing in the Parliamentary Finance Committee.

Number portability is introduced for mobile telephony.

December

Norges Bank cuts its sight deposit rate by 0.5 percentage point to 6.5 per cent and the first change in its key rates since September 2000.

The fully state-owned electricity company Statkraft agrees to buy regional utility Trondheim Energiverk (TEV) for NOK 4.25 billion. However in 2002, this merger is blocked by the Norwegian Competition Authority.

To prevent the oil price from falling to very low levels, the Norwegian Government decides to reduce crude oil production by 4.7 per cent (150 000 barrels per day) from 1 January until 30 June 2002 compared to the official estimate. The cut will be suspended if other countries do not implement announced cuts.

2002

January

The central government takes over responsibility for hospitals from local government. The hospitals become subsidiaries of one of five regional public enterprises.

The temporary 11 per cent dividend tax introduced in January 2001 is abolished. The consumption tax on electricity is reduced.

The ownership stake of the Norwegian insurance company Storebrand in the Nordic non-life insurance company If is reduced to 22.5 per cent due to the merger of the non-life insurance operations of the Finnish financial conglomerate Sampo with If. Sampo's ownership stake in If is 48.1 per cent and that of the Swedish company Skandia 29.4 per cent.

Norske Hydro agrees with the German utility E.ON to buy its aluminium unit VAW for USD 2.8 billion, the biggest take-over by a Norwegian company ever. The take-over will make Norske Hydro the world's third-largest aluminium producer.

February

Norges Bank removes its easing bias.

April

The airline passenger tax on domestic flights is abolished.

In its White Paper on state ownership, the government proposes to cut the state stake in some companies and to keep a blocking minority stake in several companies.

May

The social partners agree on wage settlements for 2002 that will lead to a wage rise of somewhat more than 5 per cent.

In its revised national budget, the government proposes a bigger rise in government outlays in 2002 but continues to adhere to the new fiscal rule.

Norges Bank introduces a tightening bias.

Partially state-owned Den norske Bank (DnB) makes a friendly bid for the Norwegian insurance company Storebrand. The intended merger collapses in June.

July

Norges Bank raises its sight deposit rate by 0.5 percentage point to 7 per cent while keeping its tightening bias.

Table of contents

Boxes

Tables

Figures

BASIC STATISTICS OF NORWAY (2001)

THE LAND

Area (1 000 km²):		Major cities (thousand inhabitants, 1.1.2002):	
Total (1999)	385.2	Oslo	512.6
Mainland (1999)	323.8	Bergen	233.3
Agricultural (1999)	10.4	Trondheim	151.4
Productive forests (1999)	70.5		

THE PEOPLE

Population (thousands, 1.1.2002)	4 524.1	Total labour force (thousands)	2 353
Number of inhabitants per km² (1.1.2002)	11.7	Civilian employment (thousands)	2 259
Net natural increase (thousands, 1.1.2002)	12.5	Civilian employment (% of total):	
Net migration (thousands, 1.1.2002)	7.9	Agriculture, forestry and fishing	3.8
		Industry and construction	21.5
		Services	74.5

PRODUCTION

Gross domestic product:		Gross fixed capital investment:	
NOK billion	1 472.0	% of GDP	19.0
Per head (USD)	36 202	Per head (USD)	6 876

THE GOVERNMENT

Public consumption (% of GDP)	20.0	Composition of Parliament (number of seats):	
General government (% of GDP):		Labour	43
Current and capital expenditure	41.3	Progressive	26
Current revenue	57.6	Christian Democrats	22
		Conservative	38
		Centre	10
		Socialist Left	23
Last general elections: 10.9.2001		Other	3
Next general elections: September 2005		Total	165

FOREIGN TRADE

Exports of goods and services (% of GDP)	47.5	Imports of goods and services (% of GDP)	30.0
of which: Oil and gas	20.8		
Main commodity exports (% of total):		Main commodity imports (% of total):	
Fish and fish products	5.6	Ships	3.4
Base metals and products	7.9	Raw materials (including fuel and chemicals)	11.5
Machinery and transport equipment (excluding ships)	7.3	Base metals and products	7.8
Mineral fuels	61.7	Machinery and transport equipment (excluding ships)	33.6
Non-oil commodity exports by area (% of total):		Non-oil commodity imports by area (% of total):	
EU	69.0	EU	67.4
of which: Denmark and Sweden	19.5	*of which*: Denmark and Sweden	23.0
United States	7.6	United States	7.3
Rest of the world	23.4	Rest of the world	25.2

THE CURRENCY

Monetary unit: Krone		June 2002, average of daily rates:	
		NOK per USD	7.75
		NOK per EUR	7.40

Note: An international comparison of certain basic statistics is given in an annex table.

This Survey is published on the responsibility of the Economic *and* Development Review Committee *of the* OECD, *which is charged with the examination of the economic situation of* Member *countries.*

•

The economic situation and policies of Norway *were reviewed by the* Committee *on* 25 June 2002. *The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole* Committee *on* 4 July 2002.

•

The Secretariat's draft report was prepared for the Committee *by* Wim Suyker, Philip Hemmings *and* Isabelle Joumard *under the supervision of* Peter Hoeller.

•

The previous Survey of Norway *was issued in* February 2001.

From:
OECD Economic Surveys: Norway 2002

Access the complete publication at:
https://doi.org/10.1787/eco_surveys-nor-2002-en

Please cite this chapter as:

OECD (2002), “Macroeconomic Developments, Prospects and Policy Challenges”, in *OECD Economic Surveys: Norway 2002*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/eco_surveys-nor-2002-3-en

OECD