

# General government sector and economic policy in 2000

## Fiscal policy

The management of central government expenditure and revenues has a considerable influence on aggregate domestic demand and activity in the mainland economy. In the formulation of fiscal policy, emphasis is placed on its contribution to stabilizing current economic developments without undermining the scope for manoeuvre in the medium and long term. Over the past 20 years, fiscal policy has primarily been oriented towards reducing cyclical fluctuations in the Norwegian economy. In effect, real underlying growth in central government spending was lower than mainland GDP growth through both upturns 1984-1986 and 1993-1998, while the opposite was the case during the downturn in 1988-1992. The Ministry of Finance's non-oil, cyclically adjusted budget indicator net of interest payments shows virtually the same picture. However, according to this indicator the discretionary part of fiscal policy contributed to amplifying the cyclical effects in 1985 and 1998, and to a moderate extent also in 1984 and 1993. Furthermore, both this indicator and central government underlying spending growth indicate that there was some fiscal slippage later in the cyclical upturn in the 1990s, and the budget for 1998 can be characterized as almost cyclically neutral. Measured by the Ministry of Finance's non-oil, cyclically adjusted budget indicator net of interest payments, the fiscal stance was tightened again in 1999 by a good 3/4 per cent of mainland GDP. For 2000 and 2001, the fiscal stance can again be characterized as approximately neutral, as measured by this indicator.

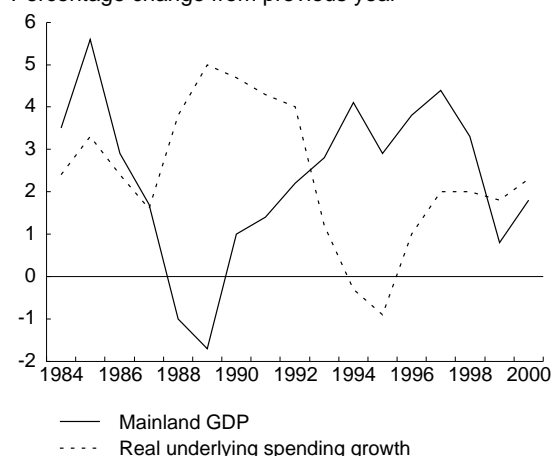
In view of the guidelines for transfers between the central government budget and the Government Petroleum Fund, the most appropriate approach would be

to view the balance on the central government budget and the Government Petroleum Fund as a whole when comparing central government budget key figures over time. A comparison with the figures for the total surplus on the central government budget and the Government Petroleum Fund shows that a deficit of about NOK 44 billion in 1993 was reversed to a surplus of about NOK 70 billion in 1997. The improvement in the budget balance primarily reflects the sharp upswing in the economy, combined with a substantial increase in central government revenues from petroleum activities. The total surplus on the central government budget and The Government Petroleum Fund was subsequently more than halved between 1997 and 1998. The decline must be seen in connection with the fall in the average oil price from NOK 135 in 1997 to NOK 96 in 1998. Partly because a share of central government revenues from petroleum activities are paid with a lag, the total surplus on the central government budget and The Government Petroleum Fund only increased by about NOK 6 billion between 1998 and 1999, in spite of moderately higher oil prices in 1999 compared with 1997. The lag in the payment of high petroleum taxes for 1999 and a further rise in oil prices in 2000 contributed to a further increase of close to NOK 123 billion in the surplus for 2000.

## Government budget for 2000

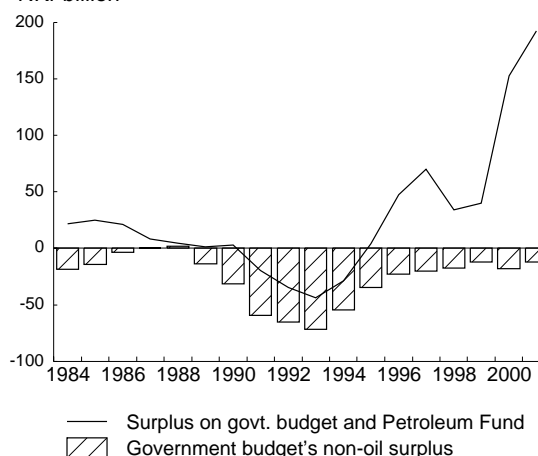
Proposition no. 32 to the Storting, the Final Budget Bill (including social security) for 2000, shows estimates for the accounts for 2000. The total surplus on the central government budget and the Government Petroleum Fund, including the return on the Fund, is estimated at NOK 162.6 billion. This is more than four times the amount for 1999, and twice the amount

**Government budget's real underlying spending growth and growth in mainland GDP. 1984 - 2000**  
Percentage change from previous year



Sources: Statistics Norway and Ministry of Finance.

**Surplus on government budget and Government Petroleum Fund. 1984 - 2000 and forecast for 2001**  
Nkr billion



Source: Ministry of Finance.

### Key figures for central government budget and the Government Petroleum Fund. 1999-2001

In billions of NOK

	1999 <sup>1</sup>	2000 <sup>2</sup>	2001 <sup>3</sup>
<b>Total revenues</b>	<b>499.6</b>	<b>641.1</b>	<b>679.4</b>
Revenues from petroleum activities	75.6	184.4	206.0
Revenues excl. petroleum revenues	424.0	456.8	473.4
Taxes from Mainland Norway		379.7	407.5
Other revenues	44.3	49.2	56.9
<b>- Total expenditure</b>	<b>467.0</b>	<b>489.6</b>	<b>502.4</b>
Expenditure on petroleum activities	31.0	23.3	17.0
Expenditure excl. petroleum activities	436.0	466.2	485.4
<b>= Surplus before transfer to the Government Petroleum Fund</b>	<b>32.6</b>	<b>151.6</b>	<b>177.0</b>
- Net cash flow from petroleum activities	44.6	161.1	189.0
<b>= Non-oil surplus</b>	<b>-12.1</b>	<b>-9.5</b>	<b>-12.0</b>
+ Reversed from the Government Petroleum Fund	18.5	9.5	12.0
<b>= Surplus on the central government budget</b>	<b>6.4</b>	<b>0.0</b>	<b>0.0</b>
+ Net allocation to the Government Petroleum Fund	26.1	151.6	177.0
+ Interest and dividends, Government Petroleum Fund	7.3	11.0	15.2
<b>= Total surplus on the central government budget and the Government Petroleum Fund</b>	<b>39.9</b>	<b>162.6</b>	<b>192.2</b>

<sup>1</sup> Accounts 1999.

<sup>2</sup> Estimated accounts 2000.

<sup>3</sup> Approved budget 2001.

Source: Ministry of Finance.

that was expected in the approved central government budget for 2000. The increase in the surplus compared with the approved budget is ascribable to a revenue increase of NOK 100 billion, including interest income and dividends in the Government Petroleum Fund, while expenditure increased by an estimated NOK 16.6 billion. The main explanation for the upward revision of the revenue estimate is an increase in the net cash flow from petroleum activities.

The net cash flow from petroleum activities is estimated at NOK 161.1 billion in 2000. Like the total budget surplus, this represents almost a fourfold increase from 1999 and a twofold increase in the estimate in the National Budget for 2000 (NB2000), while this is in line with the estimate in the National Budget for 2001 (NB2001). The main reason behind the sharp increase is the rise in oil prices through 1999 and 2000. In NB2000 it was assumed that the average oil price would be NOK 125 per barrel both in 1999 and 2000, whereas the figures in NB2001 were revised upwards to NOK 141 for 1999 and NOK 235 for 2000. The final result for 2000 was NOK 252 per barrel. In addition to the price rise, oil and gas production increased from NOK 227 million Sm<sup>3</sup> oil equivalents in 1999 to an estimated NOK 252 million Sm<sup>3</sup> in 2000

### Some key concepts

*General government net lending* indicates the transaction-based change in the sector's net claims on and indebtedness to households, enterprises and the foreign sector. Net lending emerges as the difference between general government total revenues and expenditure. The definition in the national accounts is:

Net lending = Gross saving – Gross fixed investment – Net expenditure on land – Net capital transfers

Net lending for general government is the sum of net lending in the central and local government sector. General government net lending is stated in accrued values. If net lending for general government is stated in book values, adjustments must be made for the difference between book and accrued taxes. Book taxes are taxes that are paid in a period, while accrued taxes are taxes that have been assessed, but not necessarily paid in the same period.

*The Ministry of Finance's non-oil, cyclically adjusted budget* indicator net of interest payments shows changes in the surplus on the government budget adjusted for petroleum revenues and expenditure, cyclical conditions and factors that are assumed to have no effect on the level of activity in the economy. The following is done to arrive at an estimate for how much of the change in the budget balance is due to cyclical conditions: For direct and indirect taxes, the isolated effect on the budget balance of a deviation in output growth from trend growth is calculated. Separate calculations are also made of how the budget is influenced by the deviation from trend in new car registrations. Furthermore, payments of unemployment benefits are adjusted by starting with the deviation from a trend-estimated unemployment level. When unemployment is higher than this, the balance is adjusted for estimated additional expenditure on unemployment insurance, and the same approach is applied in the case of lower unemployment.

*The indicator for real underlying spending growth in the government budget* is based on central government budget expenditure minus expenditure on petroleum activities, unemployment benefits and interest expenditure. In addition, adjustments are made for accounting factors that influence the comparability of budget figures for subsequent years.

(NB2001), which was still close to NOK 20 million Sm<sup>3</sup> less than expected one year earlier.

The total surplus on the central government budget and The Government Petroleum Fund, excluding the net cash flow from petroleum activities and the return on the Petroleum Fund, shows the budget balance in terms of the non-oil deficit. For 2000, the deficit is now estimated at NOK 9.5 billion, which is NOK 3.8 billion less than in the approved budget for 2000. The improvement primarily reflects a substantial upward adjustment of the estimates for direct and indirect tax revenues. The debt restructuring at NSB Gardemoen AS, the postponement of the sale of bank shares and increased expenditure as a result of compensation to the local government sector for an increased number

### Cyclical fluctuations and fiscal policy

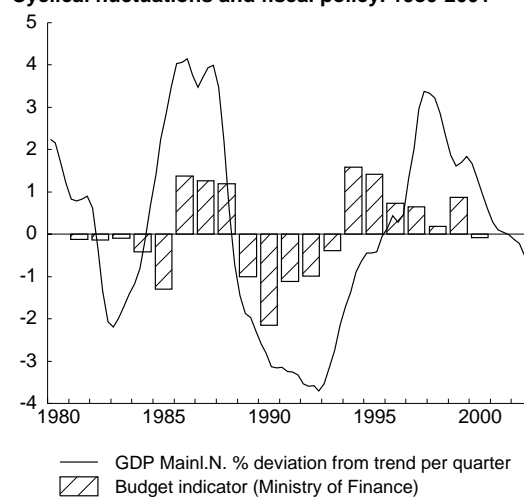
Over the past 20 years, annual growth in mainland GDP has averaged about 2.2 per cent. Growth in activity levels in the economy has, however, not been stable over time, but has varied around a more long-term average trend (trend growth). During an upturn, actual growth in the level of activity is normally higher than trend growth, while the opposite applies during a downturn. The economy can be said to be in a boom when the activity level is higher than the estimated trend path, while a recession features an activity level that is below trend growth. As the underlying trend in the activity level cannot be observed directly, the delimitation of cyclical phases will to some extent be of a tentative nature.

The figure shows the percentage deviation from an estimated trend in seasonally adjusted, smoothed quarterly figures for mainland GDP. Rising series indicate an upturn and falling series a downturn. The series lies above the zero line during a boom, and below during a recession. The figure illustrates the wide cyclical fluctuations in the mainland economy over the past 20 years, with two pronounced recessions and two pronounced booms. Furthermore, the periods 1984-1986 and 1993-1998 can be characterized as upturns, while 1980-1983, 1988-1992 and 1999-2000 can be characterized as downturns.

The figure also shows developments in the Ministry of Finance's budget indicator. Changes in the fiscal stance are partly the result of explicit government measures (discretionary policy) and partly the result of built-in stabilizers. Built-in stabilizers ensure that fiscal policy to some extent dampens fluctuations without explicit government measures. The most important are unemployment benefits and tax revenues. During a downturn, unemployment benefits are higher and tax revenues lower than in an upturn, which has an automatic expansionary effect. The Ministry of Finance's budget indicator provides an estimate for the discretionary part of policy by showing the change in the non-oil, cyclically adjusted central government budget surplus net of interest payments as a percentage of mainland GDP. When the

budget indicator is above the zero line, the fiscal stance is described as contractionary, and expansionary when it is below the zero line. However, the indicator does not capture all the economic effects of government measures in an appropriate way. One example of this is the primary school reform in 1997, where the central government covers the local government sector's extra investment costs. In principle, these investments are debt-financed so that the central government only makes annual transfers to the local government sector to cover interest and principal payments on these loans. According to the indicator, the expansionary impact of the primary school reform is limited, but long-term, while the actual impact was substantial and short-term. Another case in point is the investments in the Gardmoen rail service in the latter half of the 1990s. Against this background, the fiscal stance was more expansionary during this period than implied by the indicator.

Cyclical fluctuations and fiscal policy. 1980-2001



Source: Statistics Norway and Ministry of Finance.

of vacation days and expenditure for the wage settlement for teachers have the opposite effect. According to the estimates for the accounts, real underlying spending growth in the central government budget was about 2 1/4 per cent from 1999 to 2000, 1/4 per cent lower than expected in NB2000.

### Central government budget for 2001

The approved budget for 2001 shows a total surplus on the central government budget and the Government Petroleum Fund, including the return on the Petroleum Fund, of NOK 192.2 billion, 29.6 billion more than last year. The non-oil surplus is estimated at NOK 12.0 billion, i.e. an increase of NOK 2.5 billion on last year. The central government's net cash flow from petroleum activities is estimated at NOK 189.0 billion based on an average oil price of NOK 180 per barrel in 2001. Payment in arrears of some taxes accruing in 2000 and an assumed increase in production explain the expected increase in the cash flow between 2000 and 2001 in spite of expectations of lower oil prices. Petroleum revenues are estimated to

increase by almost NOK 22 billion, while expenditure on petroleum activities is estimated to decline by close to NOK 6 billion as a result of lower investment.

Real underlying spending growth in the approved central government budget for 2001 is estimated at close to 2 1/2 per cent, or marginally higher than the previous year. Measured by the Ministry of Finance's non-oil, cyclically adjusted budget indicator net of interest payments the fiscal stance is neutral. The budget agreement between the Government and the centrist parties involved substantial changes to the revenue side of the budget, but no change in the tightness of the budget, as measured by the budget indicator. An elimination of the approved tax on new commercial buildings will only influence accrued, not book taxes and will thus have no effect on the indicator. About half of the real growth in central government spending in 2001 is linked to social security expenditure and other rule-based benefit schemes. Increases in spending on sick pay and disability pensions alone account for about 40 per cent. Among the policy prio-

rities, increased transfers to the local government sector, increased allocations to the health sector and development aid represented substantial budget items. On the revenue side, the general VAT rate was raised from 1 January, while VAT on services and halved VAT on food will be introduced as from 1 July. In addition, the tax on electricity was increased from 1 January, while petrol taxes are reduced in two steps, from 1 January and 1 July. A continuation of all the rules and rates from 2001 and 2002 will thus in isolation result in a more expansionary budget next year.

### The Government Petroleum Fund

One of the purposes of the Government Petroleum Fund is to ensure transparency in the use of petroleum revenues over the central government budget. This is reflected in the accounting guidelines, which stipulate that the central government's net cash flow from petroleum activities shall be transferred to the Government Petroleum Fund after it is recorded as income in the central government budget. Interest and dividends on the Fund's capital are recorded as income directly in the Fund, and are thus not included in the central government budget. The Fund's expenditure consists of a transfer from the Fund to the central government budget, which is to cover the non-oil deficit. In addition, up to half of the increase in central government lending to the state banks can be covered by drawing on the Fund, but thus far the authorities have not exercised this right. The Fund's capital may also vary as a result of exchange and capital gains/losses, but this is recorded as income or expenses in the Fund. Norges Bank is responsible for the management of the Government Petroleum Fund. The Fund is managed using a benchmark portfolio where equities account for 40 per cent and bonds for 60 per cent of the portfolio. The entire Fund is invested in foreign securities, with Europe accounting for about 50 per cent, North America for 30 per cent and Asia/Oceania for 20 per cent.

Figures from Norges Bank show that the market value of the capital in the Government Petroleum Fund came to NOK 356.9 billion at the end of September. Of this amount, NOK 142.7 billion was invested in equities and NOK 208.0 billion was invested in bonds and other interest-bearing securities. In the third quarter of 2000, the Bank started tactical asset allocation, which amounted to NOK 6.2 billion at the end of the quarter. In NB2001, the capital in the Fund is estimated to reach about NOK 385.1 billion at the end of 2000, which implies an increase of more than 70 per cent compared with one year earlier.

The approved budget for 2001 implies a net transfer to the Government Petroleum Fund of NOK 177.0 billion, based on an average oil price of NOK 180 per barrel. When this sum, combined with the estimated interest income and exchange and capital gains, is

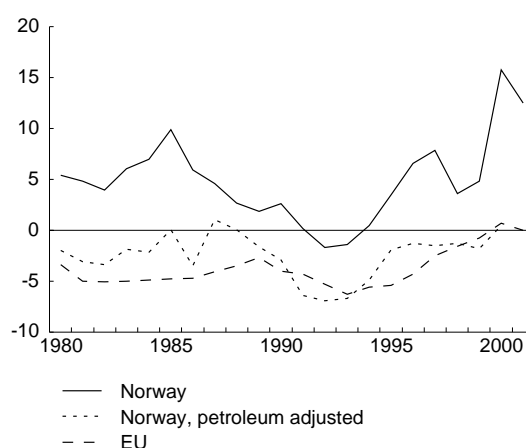
### General government net lending in Norway and the EU

General government net lending is one of several indicators of the general government sector's financial position. Net lending reflects the transaction-based share of growth in general government net claims (including the value of capital deposits, see separate box on key concepts). If net lending is on average equal to zero over time and we disregard valuation changes, general government claims are stable. Positive net lending implies an increase in claims over time, while negative net lending implies a decrease in claims.

The figure shows developments in net lending for Norway and the EU over the past 22 years. It illustrates that while EU countries have consistently conducted a fiscal policy through the period that has increased general government net debt, Norway has pursued a policy that has increased general government net claims.

The high level of general government net lending in Norway must be seen in connection with the central government's net cash flow from petroleum activities. Excluding this cash flow, the central government's net capital deposits in petroleum activities, financial income in the Government Petroleum Fund and the difference between accrued and paid-in petroleum taxes from the estimate, we arrive at an indicator of the change in general government non-oil net claims (or net debt). This measure of non-oil net lending indicates the extent of the general government sector's current oil dependence, i.e. the share of general government net expenditure that is financed by petroleum revenues on a current basis. We see that non-oil net lending has been consistently negative through the past 22 years, but less so than the average for the EU.

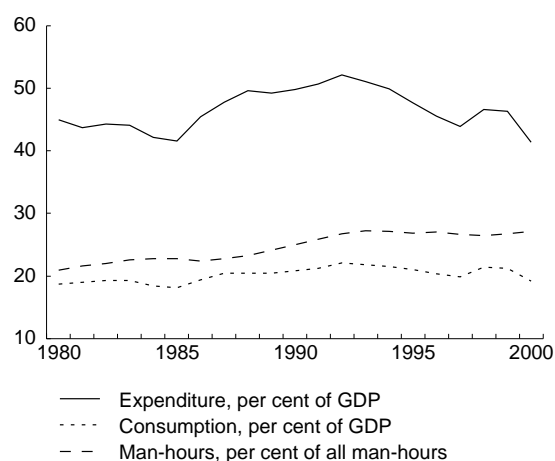
General government net lending 1980 - 2001  
Per cent of GDP. Forecasts for 2001



Sources: MoF, OECD and European Commission.

added to the Fund, the market value of the total capital in the Government Petroleum Fund is estimated at around NOK 589.1 billion at the end of 2001. This is the equivalent of more than 40 per cent of expected GDP in 2001.

### Expenditure, consumption and man-hours worked in general government sector. 1980-2000



Source: Statistics Norway.

### General government

According to preliminary estimates, the general government sector recorded a surplus of about NOK 221 billion in 2000, measured as accrued net lending, while the surplus came to NOK 57.5 billion in 1999. Higher petroleum revenues made a substantial contribution to the general government surplus in 2000. Book net lending for the central government sector is estimated at NOK 164.4 billion in 2000, i.e. an improvement of NOK 109 billion on the previous year. The preliminary estimate for the local government sector's book net lending is -9.7 billion.

According to preliminary estimates, general government consumption rose by 1.4 per cent between 1999 and 2000, measured at constant prices. This is slightly higher than growth in the mainland economy last year, but below average GDP growth over the last 25 years. General government gross fixed investment was about the same as in the previous year, measured at constant prices. Central government investment declined by 2 per cent, while local government investment increased by about 1 per cent. Central government investment in the education sector and health

and care sector fell sharply, while investment in other services (public administration, etc.) and defence pushed up the average for the sector. General government total spending, including capital spending, increased in nominal terms by 5.2 per cent in 2000. General government spending thus came to 41.4 per cent of GDP in 2000.

General government employment increased by 9 000 last year. In the period 1980-2000 as a whole, the number of employed increased by 252 000, representing 193 600 new man-years. Employment in the local government sector rose by about 232 800, while employment in the central government sector increased by 19 300. This has increased the share of general government employment from almost 24 per cent in 1980 to about 31 per cent in 2000. The bulk of the increase occurred in the 1980s. The general government sector's share of the number of man-hours worked has increased from 21 per cent in 1980 to 27 per cent in 2000. Part-time employment is also more widespread in the public sector than in other sectors, but the difference is small.

### Central government

According to preliminary estimates, central government consumption rose by 1.0 per cent between 1999 and 2000, measured at constant prices. Military consumption fell by about 1.0 per cent, while civilian consumption rose by 1.6 per cent. Consumption of civilian, public services and health, social and care services showed the strongest increase with a volume growth of close to 2.0 per cent, while consumption of education services increase by about 1 per cent.

Product inputs (intermediate inputs) in the central government sector grew by slightly more than consumption between 1999 and 2000. Measured at constant prices, the increase was 1.4 per cent. In the civilian central government sector, product inputs increased by about 2.5 per cent, while product inputs in the military sector fell by about 2 per cent.

### Key figures for general government. 1996-2000

	1996	1997	1998	1999*	2000*
<b>Net lending</b>					
General government, accrued values, NOK bn.	66.7	85.8	39.6	57.5	220.9
General government, book values, NOK bn.	51.5	83.1	53.9	55.6	164.4
Local government, book values, NOK bn.	-1.0	-1.8	-6.2	-9.8	-9.7
General government, accrued values, per cent of GDP	6.6	7.9	3.6	4.8	15.7
<b>The size of general government</b>					
General government expenditure, per cent of GDP	45.5	43.9	46.6	46.3	41.4
General government consumption, per cent of GDP	20.3	19.9	21.4	21.2	19.2
Man-hours worked, per cent of total employment	27.0	26.6	26.4	26.7	27.1
Taxes, recorded, per cent of GDP	41.5	42.3	43.4	41.8	40.8

\* Preliminary figures.

Sources: Statistics Norway and Ministry of Finance.

## Local government revenues and expenditure by type. Preliminary figures. NOK bn.

	1998*	1999*	2000*	Percentage change 98/99	Percentage change 99/2000
<b>A. Current revenues</b>	<b>178 163</b>	<b>188 748</b>	<b>201 035</b>	<b>5.9</b>	<b>6.5</b>
1. Property income, interest	4 291	6 124	6 300	4.7	2.9
2. Tax revenues	88 640	89 968	93 259	1.5	3.7
3. Other current transfers	81 746	88 818	97 106	8.7	9.3
Transfers within general government	79 103	86 141	94 350	8.9	9.5
Other transfers	2 643	2 677	2 756	1.3	3.0
4. Operating surplus <sup>1</sup>	3 486	3 838	4 370	10.1	13.9
<b>B. Current expenditure</b>	<b>170 608</b>	<b>183 140</b>	<b>194 556</b>	<b>7.3</b>	<b>6.2</b>
1. Property expenditure, interest	4 829	6 053	6 250	25.3	3.3
2. Transfers to private sector	19 958	20 620	21 900	3.3	6.2
3. Other current transfers	1 261	1 863	1 456	47.7	-21.8
Transfers within general government	1 515	1 607	1 656	6.1	3.0
Transfers to municipal enterprises	-254	256	-200	.	-178.1
4. Local government consumption	144 560	154 604	164 950	6.9	6.7
Compensation of employees	116 331	125 060	133 200	7.5	6.5
Product inputs	40 459	43 345	45 009	7.1	3.8
Depreciation	8 907	9 660	10 600	8.5	9.7
Product purchases for households	3 448	3 624	3 780	5.1	4.3
Operating surplus <sup>1</sup>	3 486	3 838	4 370	10.1	13.9
-Fees	28 071	30 923	32 009	10.2	3.5
<b>C. Saving (A-B)</b>	<b>7 555</b>	<b>5 608</b>	<b>6 479</b>	<b>-25.8</b>	<b>15.5</b>
<b>D. Capital expenditure</b>	<b>13 752</b>	<b>15 373</b>	<b>16 200</b>	<b>11.8</b>	<b>5.4</b>
1. Net fixed investment	14 635	15 694	16 989	7.2	8.3
Gross fixed investment	23 542	25 354	27 589	7.7	8.8
-Depreciation	8 907	9 660	10 600	8.5	9.7
2. Net purchases of land	-966	-279	-739	.	.
3. Capital transfers to business activities	83	-42	-50	-150.6	.
<b>E. Total expenditure (C+D)</b>	<b>184 360</b>	<b>198 513</b>	<b>210 756</b>	<b>7.7</b>	<b>6.2</b>
<b>F. Net lending (A-E)</b>	<b>-6 197</b>	<b>-9 765</b>	<b>-9 721</b>	<b>.</b>	<b>.</b>

<sup>1</sup> Operating surplus in local government water supply, sewer system and refuse disposal services.

Source: Statistics Norway.

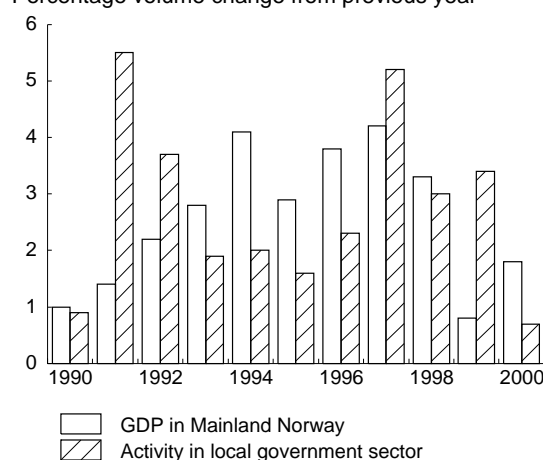
Gross fixed investment was reduced by about 2 per cent in volume terms between 1999 and 2000. Civilian investment declined by 3 per cent, while military investment increased by about 2 per cent. The decline in investment in the education sector and the health and care sector was the main factor that contributed to pushing down the figures for the civilian central government sector.

### Local government

Preliminary estimates for the local government sector point to weak growth in economic activity in the local government sector last year. We use an indicator where changes in employment measured in man-hours, product inputs measured at constant prices and gross fixed investment at constant prices are weighted together. By this measure, local government activity increased by about 1.0 per cent between 1999 and 2000. This is considerably lower than the 1.8 per cent estimate for volume growth in mainland GDP. Product inputs, the number of man-hours worked and investment showed weak growth.

### Activity in local government sector and GDP in Mainland-Norway. 1990-2000

Percentage volume change from previous year



Source: Statistics Norway.

The figure shows growth in local government activity over the past ten years compared with general cyclical developments in Norway, as indicated by mainland GDP growth. In 1991, 1992, 1997 and 1999, activity growth in the local government sector was higher than mainland GDP growth, while the opposite was the case in 1993-1996, 1998 and 2000. The particularly strong activity growth in the local government sector in 1997 primarily reflected strong volume growth in investment and product inputs, which must be seen in connection with the primary school reform.

At current prices, labour costs in the local government sector increased by close to 7 per cent between 1999 and 2000, primarily reflecting an increase in hourly wage costs of about 6 per cent. In addition, the number of man-hours worked rose by 0.7 per cent, corresponding to about 7 000 man-hours.

The number of employed in the local government sector increased by 1.4 per cent in 2000. The strongest growth in employment was in other local government services where the number of employed increased by 1.8 per cent. In the education sector and the health and care sector, the number of employed rose by 1.1 per cent and 1.4 per cent respectively. The number of man-hours worked showed a somewhat smaller increase than the number of employed, rising by 0.7 per cent. This must be seen in connection with the number of vacation days, which was two days lower in 2000 than in 1999 owing to the days on which official public holidays fell.

According to preliminary estimates for the local government sector, gross fixed investment rose by 1.3 per cent in 2000, measured at constant prices. Investment in the health and care sector showed a sharp increase, reflecting the implementation of the action plan for the elderly. Investment in the education sector declined.

Local government book net lending came to -9.7 billion in 2000. The deficit was thus the same as the level recorded in 1999. Local government expenditure increased by 6.2 per cent in nominal terms, while revenues rose by 6.5 per cent.

## Monetary policy and financial developments

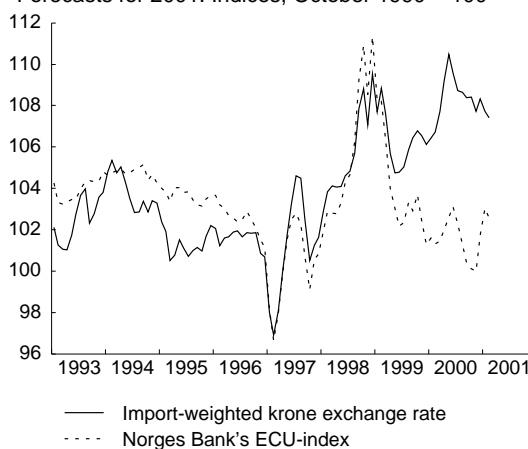
### Monetary and exchange rate policy

The objective of Norway's monetary and exchange rate policy is set out in the Government's regulation on the exchange rate system for the Norwegian krone of 6 May 1994. This states that Norges Bank's "conduct of monetary policy shall be oriented towards 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 shall

### The import-weighted krone exchange rate

According to the Exchange Rate Regulation, Norges Bank shall stabilize the krone against "European currencies", operationalized as the euro. In 1998, countries that are now EMU countries accounted for 38 per cent of Norway's foreign trade in traditional goods (i.e. imports and exports, excluding oil and gas, shipping and platforms). By comparison, Norwegian imports from countries whose currencies were included in the basis of calculation for the ECU (EU12) accounted for 50 per cent of total imports of traditional goods, while the export share for the same countries was 54 per cent. The euro is thus even less representative than the ECU as regards the geographical composition of Norway's foreign trade. In order to illustrate the significance of exchange rate movements for the Norwegian economy, an ECU/euro exchange rate must be supplemented using an alternative exchange rate indicator that reflects the trade pattern to a further extent. Examples of such indices are an import-weighted krone exchange rate, export-weighted krone exchange rate, trade-weighted exchange rate and manufacturing industry's effective krone exchange rate. The figure shows developments in the ECU/euro exchange rate and the import-weighted krone exchange rate, where the latter's weights are calculated based on the composition of traditional goods imports.

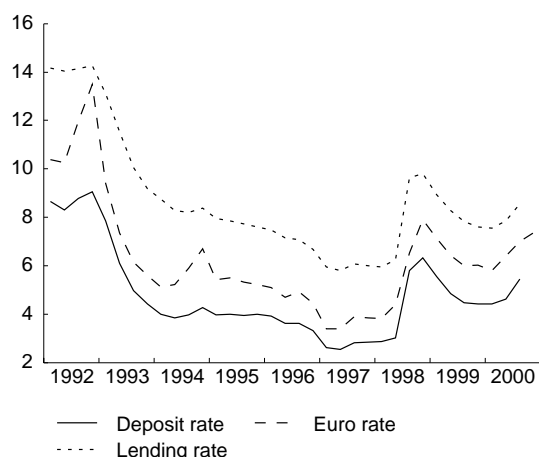
**Development in import-weighted krone exchange rate and Norges Bank's ECU-index. 1992 - 2001**  
Forecasts for 2001. Indices, October 1990 = 100



Sources: Norges Bank and Statistics Norway.

be oriented with a view to returning the exchange rate over time to its initial range". The regulation does not specify an exact central rate or fluctuation margins for monetary management; nor does it specify the currencies against which the krone shall remain stable. Between October 1990 and December 1992 the Norwegian krone was pegged to the EU's currency unit, the ECU, and up to 31 December 1998 Norges Bank continued to use the exchange rate between the Norwegian krone and the ECU as an indicator of the krone's value against European currencies. Between 10 December 1992 and up to the beginning of May 1994, which can be considered the regulation's reference period, one ECU was generally worth between NOK 8.25 and 8.40, with an average of NOK 8.33 per

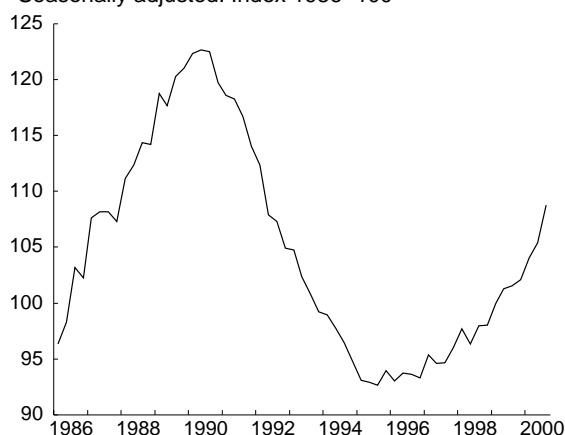
### Average deposit and lending rate in private financial institutions and 3 month NOK euro rate. 1992 - 2000



Source: Norges Bank.

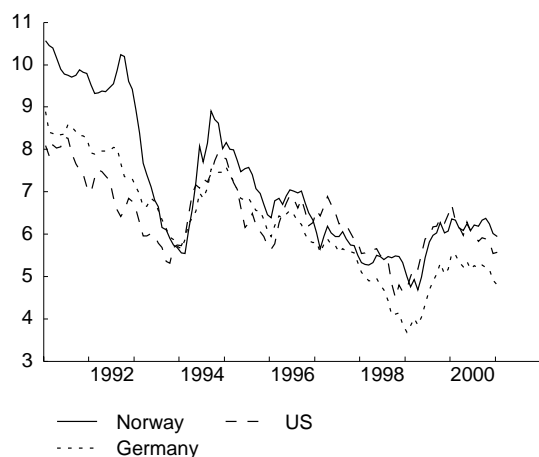
### Private debt. 1986-2000

Per cent of mainland GDP  
Seasonally adjusted. Index 1986=100



Sources: Statistics Norway and Norges Bank.

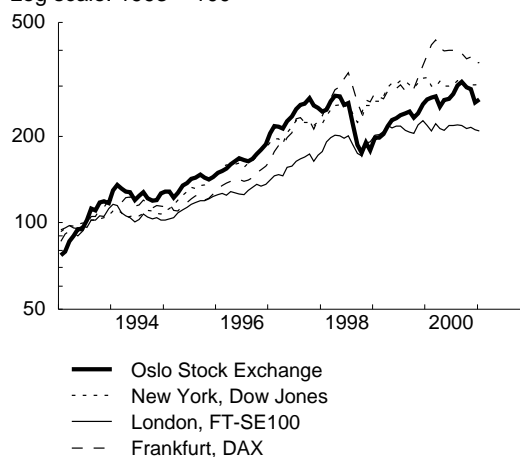
### Yield on government bonds with a 10-year residual maturity



Source: Norges Bank.

### Oslo Stock Exchange's all-share index and foreign stock exchange indices. 1993 - 2001

Log scale. 1993 = 100



Source: Norges Bank.

ECU. On 31 December 1998 the ECU was replaced by the euro with a conversion rate of 1:1 on the change-over date, and Norges Bank has now allowed the euro to replace the ECU as the reference currency for the conduct of monetary policy.

In 1999, the focus of the formulation of monetary policy shifted from current exchange rate movements to developments in variables of importance to exchange rate stability in the slightly longer run. In this context, Norges Bank emphasizes that there are two fundamental preconditions for exchange rate stability. First, price and cost inflation must be reduced to the level aimed at by the euro area. Second, interest rates must not be set at such a high level that this contributes to a downturn that undermines confidence in the krone.

Through most of 1999, the year-on-year rise in the consumer price index ranged between 2 and 2.5 per cent. Throughout the year, Norges Bank's projection

for price inflation in 1999 was 2 1/4 per cent, with an expected decline in 2000 and 2001. Norges Bank also projected a growth pause in the Norwegian economy, with mainland GDP growth for 2000 estimated between -1/4 per cent and +3/4 per cent. Against this background, in conjunction with the high interest rate level at the beginning of the year, Norges Bank reduced its key rates on five occasions in 1999 by a total of 2.5 percentage points.

In November 1999, the year-on-year rise in the consumer price index rose to 2.8 per cent, and thereafter remained in the range 2.5-3.5 per cent through 2000. Norges Bank's inflation and growth forecasts for 2000 and 2001 were revised upwards early in 2000. With a view to easing pressures in the economy and thereby curbing inflation, Norges Bank increased its key rates in four steps in 2000 by a total of 1.5 percentage points. Since the increase in key rates in September, Norges Bank has kept the deposit rate and the over-

night lending rate constant at 7 and 9 per cent respectively. At its most recent monetary policy meetings, Norges Bank has announced that the probability that the next change in interest rates will be a reduction is the same as the probability of an increase.

The Norwegian money market rate has been about 0.5 percentage point higher than Norges Bank's deposit rate through 2000, and at the end of the year the rate was about 7.3 per cent. The interest rate differential between Norwegian rates and EU rates narrowed from 2.3 per cent in January to 2.1 per cent in May 2000 as EU money market rates rose by a greater margin than Norwegian rates. The interest rate differential widened as from June 2000, primarily as a result of the increase in Norwegian rates. In December, the Norwegian money market rate was 2.4 per cent higher than the EU rate.

Up to 1998, there were only marginal variations between the ECU and the import-weighted krone exchange rate. From December 1998 to December 1999, the krone appreciated by almost 6 percentage points more measured against the euro than against the import-weighted krone exchange rate. The difference between these two exchange rate measures continued to increase through 2000, as the krone depreciated by a further 2 per cent measured against the import-weighted exchange rate. Measured against the euro, the krone has been stronger than during the reference period of the Exchange Rate Regulation. At the same time, the krone as measured against the import-weighted exchange rate has never been weaker, reflecting the sharp appreciation of the US dollar, pound sterling and – for a period – Swedish krona against the euro over the past two years. Measured against the euro, the US dollar appreciated by as much as 23.5 per cent in the two years to December 2000, while pound sterling and the Swedish krona appreciated by 12.7 and 8.3 per cent, respectively, in the same period.

### Financial developments

Norwegian government bond yields have by and large shadowed comparable German and US bonds. The yield on Norwegian government bonds with an average residual maturity of 10 years was about 6.2 per cent over 2000, which was 0.2 percentage point higher than the yield on comparable US bonds and 1.0 percentage point higher than the yield on German bonds. The yield differential widened through the year, reflecting the fall in US and German bond yields in 2000.

The yield in Norwegian government bonds with a residual maturity of 3 and 5 years edged up over 2000. At the same time, the yield on comparable US bonds fell, while the yield on German government bonds with a short maturity has remained more or less unchanged. The interest rate differential for bonds with

a residual maturity of 5 years was 0.8 percentage point in December measured against US bonds, and 1.5 percentage point measured against German bonds, while the corresponding interest rate differentials for bonds with a residual maturity of 3 years were 1.2 and 1.8 percentage points respectively.

Financial institutions' average lending and deposit rates have generally followed developments in money market rates in recent years. In 1998, average deposit and lending rates fell by 1.9 and 2.2 percentage point respectively, while in the first three quarters of 2000, they rose by 1.0 and 0.9 percentage point respectively. At the end of the third quarter of 2000, the average lending rate was 8.6 per cent, while the deposit rate stood at 5.5 per cent. The interest margin is thus 3.1 percentage points, i.e. a reduction from 3.2 percentage points at the end of 1999 and from 3.5 percentage points at the end of 1998.

Twelve-month growth in domestic credit (C2) increased from 7.0 per cent in August 1999 to 12.7 per cent in November 2000. The expansion in credit in November was the highest rate recorded since the end of the 1980s. Measured as a share of mainland GDP, the private and municipal sector's gross debt is now about 10 per cent below the level prevailing at the beginning of the 1990s.

The all-share index on the Oslo Stock Exchange declined by 1.7 per cent through 2000, which is fairly marginal compared with 1998 when share prices declined by 26.7 per cent and 1999 when they advanced by 45.5 per cent. However, prices varied to some extent through 2000, reaching a new peak on 14 September when the all-share index hit 1608.67. On average, share investments in small and medium-sized enterprises generated a return of 21.3 per cent in 2000, and the financial index advanced by 27.3 per cent. On the other hand, investments in IT shares resulted in an average loss of 31.5 per cent in 2000, as a result of the sharp declines recorded in the last two months of the year.

Foreign stock markets also recorded declines in 2000. On the London Stock Exchange, share prices fell by about 10 per cent and in Frankfurt by 7.5 per cent. In the US, the Dow Jones Index was at about the same level at the end of the year as at the beginning of the year, while the NASDAQ index declined by almost 40 per cent.