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**Norway**

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## BASIC STATISTICS OF NORWAY (2001)

### THE LAND

Area (1 000 km <sup>2</sup> ):		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 km <sup>2</sup> (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	<u>3</u>
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
<i>of which:</i> 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
<i>of which:</i> Denmark and Sweden	19.5	<i>of which:</i> 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.*

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*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.*

## Assessment and recommendations

*Despite subdued growth for several years, the labour market has remained tight*

Strong growth through the five years to 1998 necessitated fiscal and monetary policy tightening which, together with a drop in oil investment, damped activity since then. However, the labour market has remained tight with tensions persisting in many sectors, even though the unemployment rate has risen slightly to 3.7 per cent in early 2002. Rapid wage gains have caused a sharp deterioration in competitiveness since the mid-1990s. On the other hand, inflation has remained under control, reflecting a squeeze in profit margins, cuts in indirect taxes and more recently the appreciation of the krone. As Norway is the world's third largest oil exporter behind Saudi Arabia and Russia, high oil prices since 2000 have led to an extremely large current account surplus which reached 15 per cent of GDP in 2001.

*Output growth is projected to rebound*

With large oil revenues the general government surplus has become huge (14 per cent of GDP in 2001), creating strong pressure to ease fiscal policy. This prompted a reform of the macroeconomic policy framework that will lead to a persistent fiscal expansion from 2002 onwards. In 2002-03, this fiscal expansion will coincide with a healthy recovery abroad and a projected robust rise in oil investment, while consumer confidence is currently brimming and will probably be sustained by further hefty real wage gains. Export market losses caused by worsening competitiveness will dent output gains, but even so mainland GDP growth is projected to accelerate from 1¼ per cent in 2001 to 1¾ per cent in 2002 and 2½ per cent in 2003. Hence, unemployment is projected to remain low and a positive output gap to reappear. Nevertheless, because of cuts to indirect taxes and falling import prices due to the appreciation of the krone, headline inflation should be low (1¼ per cent) in 2002. The

tight labour market is likely to keep wage gains strong so that interest rates will need to stay high – indeed some tightening may be needed – to comply with the inflation target of 2½ per cent, unless the krone appreciates further. With the oil price assumed to remain at USD 25 per barrel from the second quarter of 2002 onwards, the current account and the government budget are projected to continue to show very large surpluses.

***The macroeconomic policy framework has been reformed...***

The previous government presented new guidelines for fiscal and monetary policy in March 2001 that were approved by Parliament shortly thereafter. The new fiscal policy rule sets the structural non-oil central-government deficit equal to the expected 4 per cent real rate of return on the Government Petroleum Fund. However, as expressed in the government report on the new guidelines, fiscal policy has a counter-cyclical role to play and deviations from this deficit target are thus allowed in the case of excess demand or 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. With the presumption that tight monetary policy might well be necessary to offset this steady fiscal expansion, the government set an inflation target of 2½ per cent over time for the central bank. Based on the new fiscal rule, the structural non-oil central-government deficit is currently projected to rise gradually from 1½ per cent of mainland GDP in 2001 to 4½ per cent in 2010, with the strongest rises in the initial years. The total government surplus would fall to 10 per cent of GDP in 2010, while the Government Petroleum Fund assets would increase to 116 per cent of GDP.

***... and is to lead to tight monetary conditions and an employment shift from the exposed to the sheltered sector***

With the economy close to full capacity, the intended fiscal expansion will lead to tight monetary conditions. More public spending or higher private outlays induced by tax cuts will need to be offset either by the negative impact of high interest rates on interest-rate sensitive expenditure or the negative effect of a strong exchange rate on exports. In any case, labour demand in the public and private service sectors will increase, requiring a shift of employees from exposed to sheltered activities.

***The introduction of an explicit inflation target has improved the macroeconomic policy framework***

Although the introduction of the inflation target largely represents a formalisation of operational procedures which had been in place since 1999, it is welcome as it has increased transparency. As the monetary policy framework is now in line with current practice of many other central banks, it is now easier to communicate policy decisions. With the manufacturing sector squeezed by strongly rising labour costs and the appreciation of the krone, pressure on the monetary authorities to soften the policy stance is likely to increase, but should be strongly resisted.

***Fiscal policy should not go beyond letting the automatic stabilisers work***

According to the guidelines, fiscal policy should still play an important role in stabilising output fluctuations while inflation targeting by the monetary authorities will have the same impact. In a welcome development, the authorities' attitude towards fiscal activism has recently evolved in the direction of giving the principal demand-management role to monetary policy. Monetary policy is a much more flexible instrument and fiscal activism could divert the authorities' attention from medium-term issues. Moreover, an active fiscal policy risks to be asymmetric over the cycle pushing up outlays. Fiscal policy should therefore not go beyond letting the automatic stabilisers work fully around the expansionary path set by the fiscal rule and active stabilisation policy should be left to the central bank. It is important that the authorities continue to communicate that monetary policy is the primary instrument of stabilisation policy.

***The wage negotiation framework should be re-focused to make it compatible with the inflation target***

The introduction of an operational inflation target requires a new approach to the wage negotiations and incomes policy co-operation, the traditional third pillar of the Norwegian macroeconomic policy framework, the so-called *Solidarity Alternative*. Excessive labour cost increases will lead to monetary tightening and the social partners should shift focus from wage developments relative to the trading partners towards wage increases relative to productivity developments. To reduce labour market imbalances, greater room for negotiations at the local level is also required while policy concessions, such as the introduction in the past of financial support for early-retirement schemes, should no longer be made.

***In case of insufficient public sector and pension reform, a tighter fiscal rule will be needed***

In principle, the new fiscal rule, while looser than the earlier framework, will still just about ensure broad generational fairness, as the on-going reduction in petroleum reserves is matched by a corresponding increase in the assets of the Petroleum Fund. However, the official long-term scenario implicitly assumes a substantial improvement in public sector efficiency and a far-reaching pension reform. If these are not forthcoming the new fiscal rule will lead to an unsustainable budgetary situation in the long term. Given this, the authorities should under no circumstance ease beyond the current deficit rule. Moreover, if the current public sector reform programme does not rein in spending soon or if a pension reform is agreed in 2004 that is not ambitious enough, the current framework will be too loose and policy will have to be reversed to ensure long-term fiscal sustainability.

***The budget process could be improved by supplementing the deficit rule by an explicit expenditure rule***

Concerning the budget process, the authorities should introduce multi-annual budgeting as this would underscore that the room for additional spending is limited in the medium term. Furthermore, the deficit rule should be supplemented by an explicit expenditure rule. This would reduce the risk that spending pressure will crowd out the tax cuts currently envisaged or, as in the case of the revised 2002 national budget, that a tax windfall is immediately used for additional outlays. It would also be helpful to supplement the current Long-Term Programmes, presented by the government before elections, with a detailed fiscal strategy statement of the new government soon after the elections. To improve transparency, a move from cash to accrual accounting is also desirable. It would give better information on costs and may therefore improve cost effectiveness. Moreover, the budget papers should present comprehensive estimates of the cost of regional policy to enhance transparency in an area where there is currently little information despite its importance.

***To improve cost-efficiency, funding of public services should become more activity-based and public sector wages more performance-related***

Public sector reform should focus on moving further towards a budget and management approach geared towards outcomes, in order to improve cost-efficiency. Activity-based funding schemes, similar to that for hospitals, should be extended to other public services, but at the same time price signals, should be used more frequently to avoid excessive demand and hence public spending. In the aftermath of the hospital reform, the problems of cost control may be a particular source of concern. To enhance public sector efficiency, more flexible personnel management practices are also required. Public bodies should be given more freedom to set employment and employees' wages, with the possibility to use efficiency gains to reward good performance. At the moment, the public-sector wage system is too rigid and the remuneration schemes are not sufficiently performance-based.

***The financing of local government outlays should be changed so that there is a closer link between taxation and spending***

To encourage efficiency gains, mergers of and co-operation between municipalities should be stimulated, so as to reap scale economies. Furthermore, citizens should be allowed to use the services of other municipalities to increase user choice and raise competition within the public sector. Better cost-accounting and a consistent application of the "money follows the user" principle are prerequisites for better co-operation and increased user choice. Local-government funding arrangements fail to provide sufficient incentives to contain local spending and should therefore be reformed. Currently, all municipalities apply the maximum local income tax rate partly because they fear that lowering the rate will be met by a cut in discretionary central government grants. These discretionary grants should therefore be sharply reduced. Moreover, property taxes should be given more prominence in local government revenues. These are less volatile than income taxes and, as revenues are not shared with central government, they are more transparent for citizens and thus are likely to help to contain local spending. A sharing arrangement between local governments and the state for the corporate income tax, which is currently discussed by the government, should not be reintroduced as the tax base is very volatile. It can also lead to excessive spending to attract businesses, as local governments do not have the power to set the rate.

***A larger role for the private sector in the provision of public services should lower costs and enlarge user choice***

To provide public services in a more cost-efficient way, more competition between public and private sector providers is also required. In this context, equal funding of public and private providers is crucial. The recent government objective to equalise funding for early childhood educational and care facilities is thus commendable and should be extended to other public services. However, the application of the “money follows the user” principle to other childcare arrangements (parental care and private child-minders) through the existing childcare cash benefit should be reconsidered. This does not bring the same economic and social benefits, in particular concerning labour supply as well as the cognitive development and social integration of children. Furthermore, the current tight regulations on the establishment of private providers should be liberalised, especially in the hospital and education sectors. In this context the recent government proposal to facilitate the founding of private schools is welcome. More user choice is likely to promote better outcomes in the education system, which have recently been shown as being only average in the OECD PISA study despite the high government outlays. Finally, increased recourse to outsourcing and competitive tendering would contribute to a better delivery of services, requiring a reform of the special VAT treatment for public bodies because the current system favours in-house production.

***User charges should be raised***

Increases in user charges should be considered as a means to reduce excessive demand for public services. Several OECD countries have better targeted support for higher education through fees, loans and grants schemes which include provisions of the less well-off, and the Norwegian authorities should envisage similar measures. The introduction of such schemes would strengthen incentives for students to complete studies in a reasonable time. In the elderly care sector, there is also scope to raise user charges, as recommended in the previous *Survey*. However, in increasing the role of user fees, equity considerations should be taken into account and mechanisms need to be introduced to avoid “cream skimming”. Therefore, the commendable government proposal to increase user choice in primary education should be supplemented by measures to avoid social segregation.

***The oil wealth masks the need for structural reforms***

In addition to public sector reform, other measures are needed to boost potential output growth. Spurred by petroleum revenues, national income per capita is among the highest in the OECD but the oil wealth masks the need for structural reforms and makes implementation more difficult. Besides the attention required to growth issues explored in the recent OECD *Growth Study* – such as the need to encourage an appropriate mix of private and public research and the need to enhance the capacity for adopting new technologies – there are specific labour market and product market problems that have to be solved.

***The recent voluntary tripartite agreement is unlikely to lead to the targeted 20 per cent reduction in sick leave***

Norway's commendable tradition of work-oriented social inclusion has led to one of the highest employment rates in the OECD area but, at 26½ hours per week, average working hours are relatively low, partly due to high part-time employment. This reflects individual preferences but also the impact of the tax and social security systems and of labour market regulation. In this context, the October 2001 agreement on sick leave between the government and social partners is disappointing. It is highly unlikely that the goal of reducing sickness absence by 20 per cent in four years will be reached by the voluntary company-level approach. With sick leave continuing to rise, the re-evaluation agreed for mid-2003 should be advanced and the recommendations of the recent *Sandman Committee* to lengthen the duration of the employer's contribution and to reduce benefits should be implemented.

***Measures are needed to reverse the fall in the effective retirement age***

Another major labour market issue is the worrying drop in the effective retirement age, although it is still high in international comparison. Withdrawal from the labour force before the standard pensionable age of 67 years via the disability pension and early retirement schemes has become increasingly common. Spending on disability pensions is around 2½ per cent of GDP, one of the highest levels in the OECD. The introduction in 2001 of the assessment of each disability pensioner's potential to return to work is a positive step but as participation in rehabilitation programmes is voluntary, the measure has to be strengthened and additional measures to stop the use of the scheme for early retirement are needed. As recommended in the previous *Survey*, the current early retirement schemes

should be replaced by a system of flexible retirement with actuarially-adjusted benefits. It remains to be seen whether the latest pension committee – the third one in six years – will come up with such a recommendation. This committee will provide a comprehensive review of the Norwegian system, including the possible use of the Government Petroleum Fund for funding pensions. Such earmarking may help to reduce the pressure to raise other government outlays in the future but may have consequences for the formulation of the fiscal framework. However, to avoid an unsustainable budgetary development, supplementary measures to make the pension system less generous are also needed.

***The recent proposals to reduce state ownership are a step in the right direction***

To spur potential output growth, product market reforms are needed as well. Norway has made a relatively late start compared with most OECD countries in relying more on market forces and less on the state in the provision of goods and services, the main exception being the reform of the electricity market in the early 1990s. Since 1994, Norway has been a member of the European Economic Area, and as such has been committed to deregulation of product markets in line with developments inside the European Union. Given the high share of public ownership, privatisation should be more rapid, especially in the banking, telecommunications and electricity sectors. Thus the proposals made in the April 2002 White Paper to reduce state stakes in enterprises are welcome. However, important elements were not endorsed by Parliament. In the electricity sector, competition is currently insufficient and the recent blocking of further concentration by the Norwegian Competition Authority is welcome. The same holds for its efforts to instill greater competition in the domestic airline industry, for instance by its decision to halt airline bonus programmes that were seen as unduly strengthening the position of the incumbent.

***Structural reform should also focus on reducing subsidies to agriculture***

Norway has not significantly reduced its heavy agricultural support in recent years. Two-thirds of Norwegian farm revenue is government aid, while consumers pay twice the world price for agricultural products and considerably more than in neighboring countries, causing substantial

cross-border shopping. Support should become less linked to output and better targeted so as to reduce the high costs to consumers and taxpayers while its regional policy goals should be pursued by other means. Furthermore, lower agricultural support and fewer restrictions on agricultural trade might lead to a valuable improvement in trade arrangements for fish products with the European Union.

### *Summing up*

While the oil wealth is benefiting the Norwegian population, it complicates the setting of macroeconomic policy and the implementation of structural reform. The rising assets of the Petroleum Fund lead to strong pressures from all quarters to raise public spending, stimulate rent seeking and encourage complacency on the need for structural adjustments. Both effective macroeconomic management and continued structural reforms to lift labour supply and productivity growth are essential to secure strong growth over the long term. The short-term outlook points to an acceleration in output growth while unemployment should remain low. Labour force growth has been negatively influenced by detrimental developments in early retirement, disability and sick leave. Labour shortages have led to strong wage increases, so that interest rates will need to stay high to comply with the inflation target of 2½ per cent. Fiscal policy should under no circumstance ease beyond the present fiscal rule, while additional government outlays should not take precedence over the tax cuts the government currently envisages. To ensure discipline on spending, the current fiscal rule should be supplemented by an explicit expenditure rule. Beyond the short term, if the planned public sector and pension reforms are not ambitious enough, a tighter fiscal rule will be needed. To improve public sector performance, the budget process should switch to multi-annual budgeting, while the funding of public services should become more activity-based and public sector management more performance-oriented. Furthermore, there should be a better link between local taxation and spending. The private sector should play a larger role in the provision of public services and user charges should be introduced or raised to reduce excessive demand. Measures to lower the levels of sick leave and to reverse the fall in the effective retirement age are urgently

needed. At the same time reducing state ownership further and, in several sectors, enhancing competition will improve productivity. Ensuring a stable macroeconomic environment and pursuing reforms of the public and private sector would improve labour productivity performance and raise the already high standard of living further.

## 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.

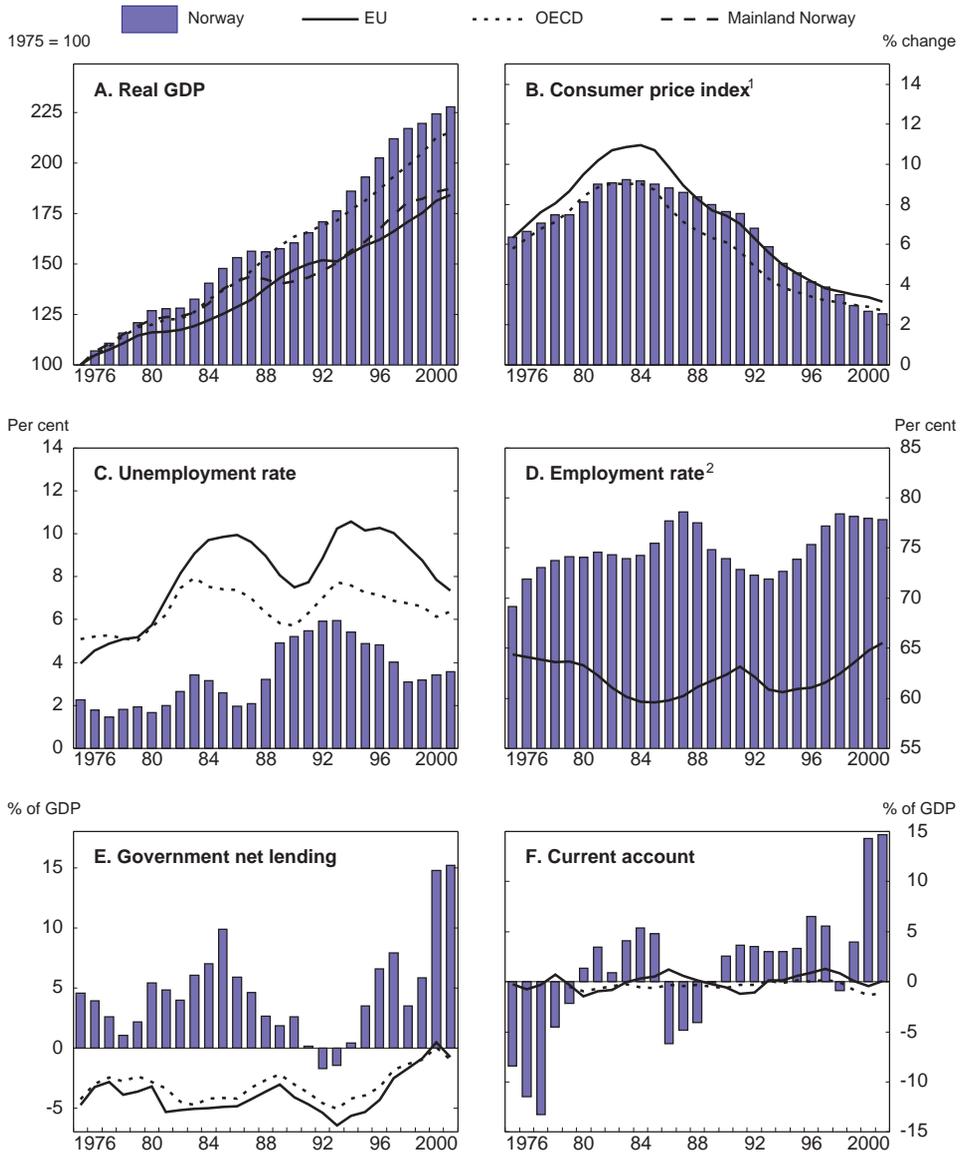
In March 2001, the large government surplus and the rapidly rising assets of the Government Petroleum Fund prompted a reform of the macroeconomic policy framework. The new fiscal policy rule sets the central-government non-oil structural deficit equal to the expected real return on the Petroleum Fund. 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 <sup>1</sup>		
					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 <sup>2</sup>	122.4	-4.2	7.1	-7.1	6.3	-15.2	-24.0
Stockbuilding <sup>3,4</sup>	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 <sup>3</sup>	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
<i>of which:</i>							
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.<sup>1</sup> 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 <sup>1</sup>	1995	1996	1997	1998	1999	2000	2001
<b>Total exports</b>	100.0	4.9	10.2	7.7	0.6	2.8	2.9	4.2
<b>Goods</b>	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
<i>of which: Manufacturing</i>	28.9	3.5	11.0	8.8	3.5	3.6	0.9	5.0
<b>Services</b>	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).<sup>2</sup> 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).<sup>3</sup> 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.\*

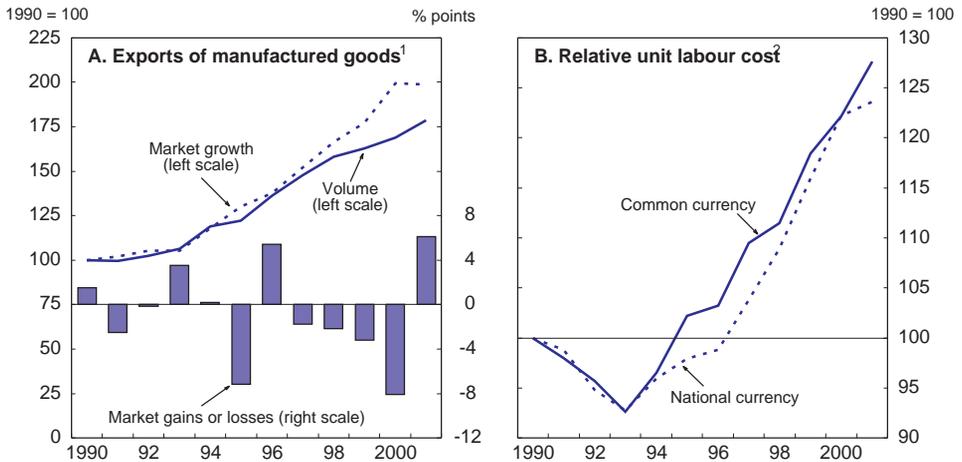
As productivity differences are relevant for competitiveness, an indicator based on unit labour costs is superior to one based on wages alone. In practice, however, a unit labour cost indicator can be biased due to measurement errors in productivity. According to the *Technical Reporting Committee for 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.

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\* 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.

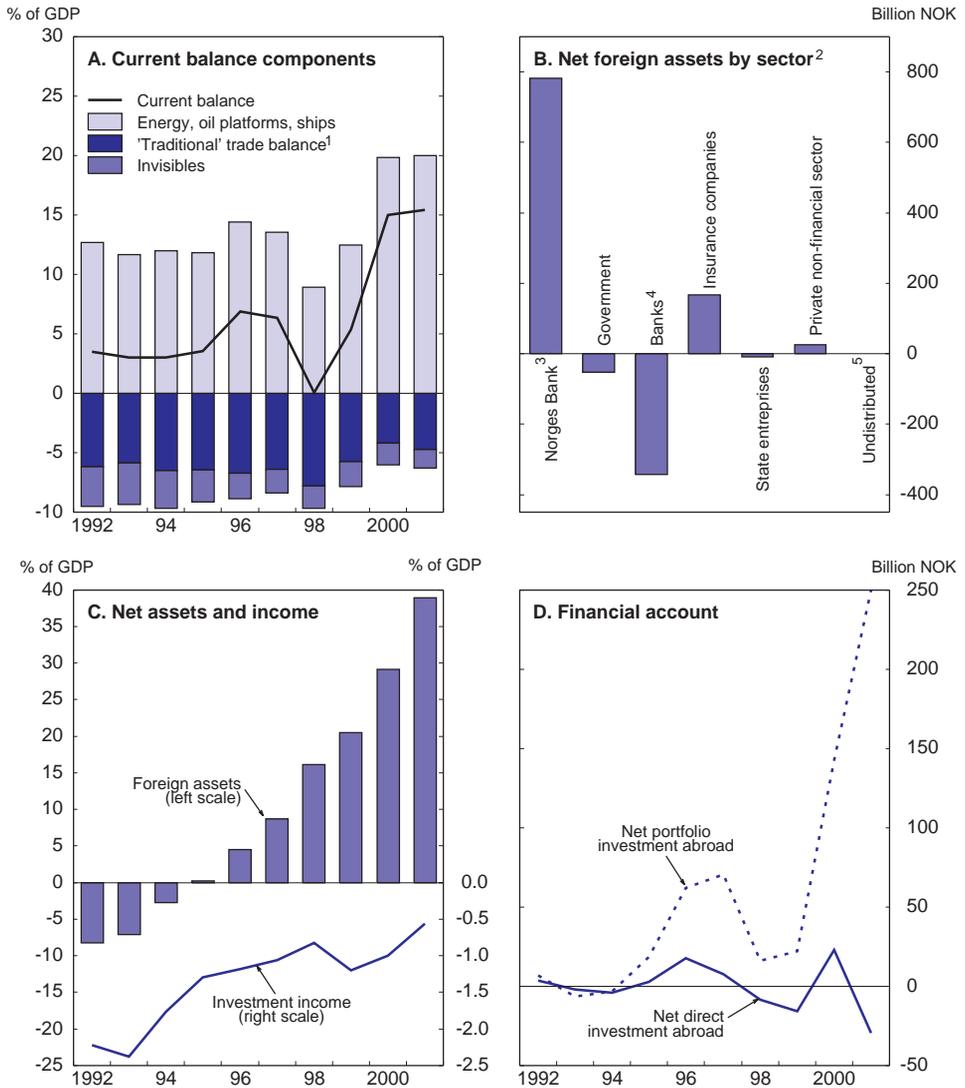
### **Import volume and prices were broadly flat**

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.<sup>4</sup> 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***

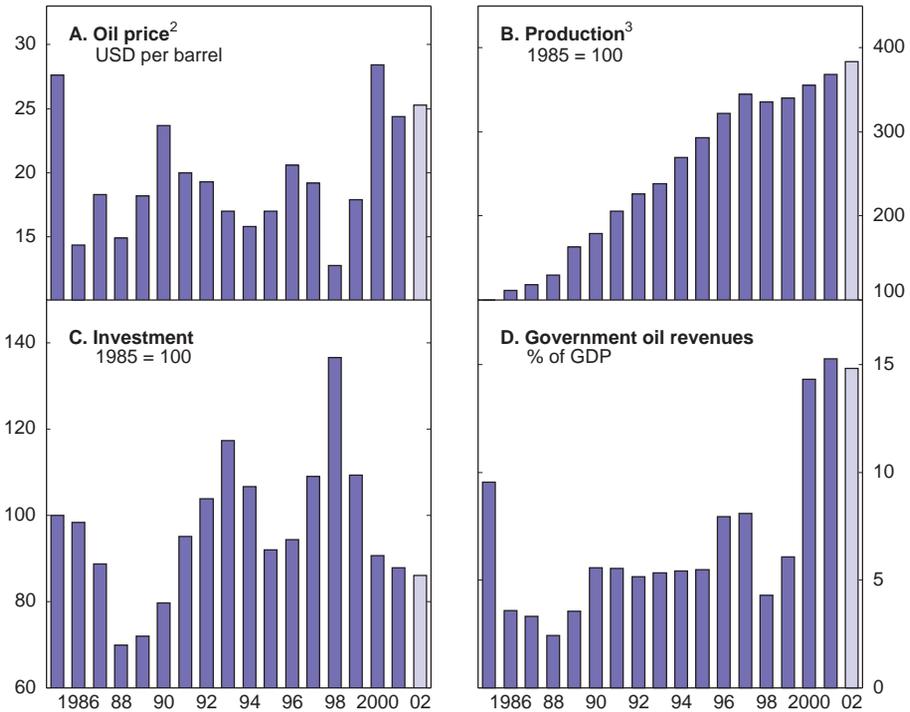
Private consumption increased by 2½ per cent in 2001, somewhat lower than in the two previous years and clearly less than the 4 per cent per year gain registered in 1994-98. The moderate pace in recent years reflects smaller real disposable income and employment gains, and higher debt servicing caused 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).<sup>5</sup> 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<sup>1</sup>

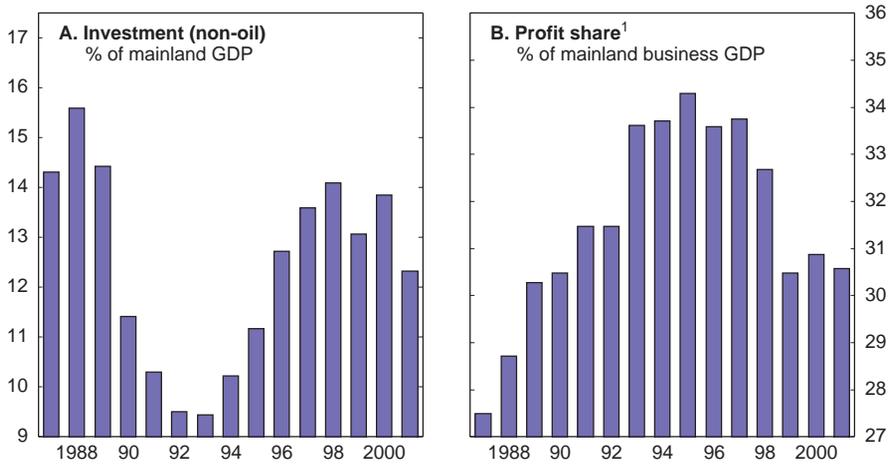


1. Data for 2002 are OECD projections.  
 2. Brent Blend. The estimate for 2002 shows the price of the latest available month.  
 3. Petroleum activities and ocean transport.  
 Source: Statistics Norway and OECD, *OECD Economic Outlook*, No. 71, June 2002, finalised in April 2002.

since the end of the 1980s.<sup>6</sup> 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.<sup>7</sup> 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

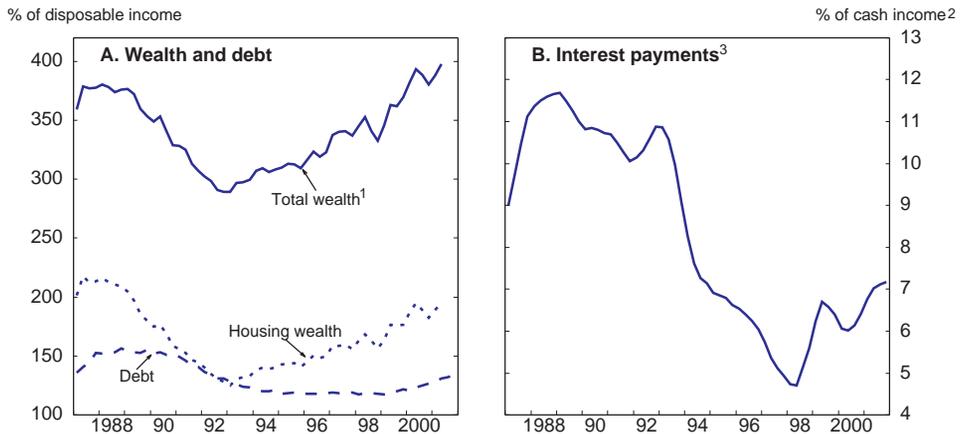
Figure 5. The business sector



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.<sup>8</sup> 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<sup>1</sup>**  
Percentage changes<sup>2</sup>

	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
<i>of which: Construction of oil       platforms and ships</i>	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 <sup>3</sup>	1.6	2.6	2.4	0.7	-1.1	-1.0
Labour productivity <sup>4</sup>		1.2	0.9	1.8	0.9	1.5	0.8
Participation rate <sup>5</sup>		79.2	80.4	80.9	80.7	80.6	80.3
Employment rate <sup>6</sup>		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.

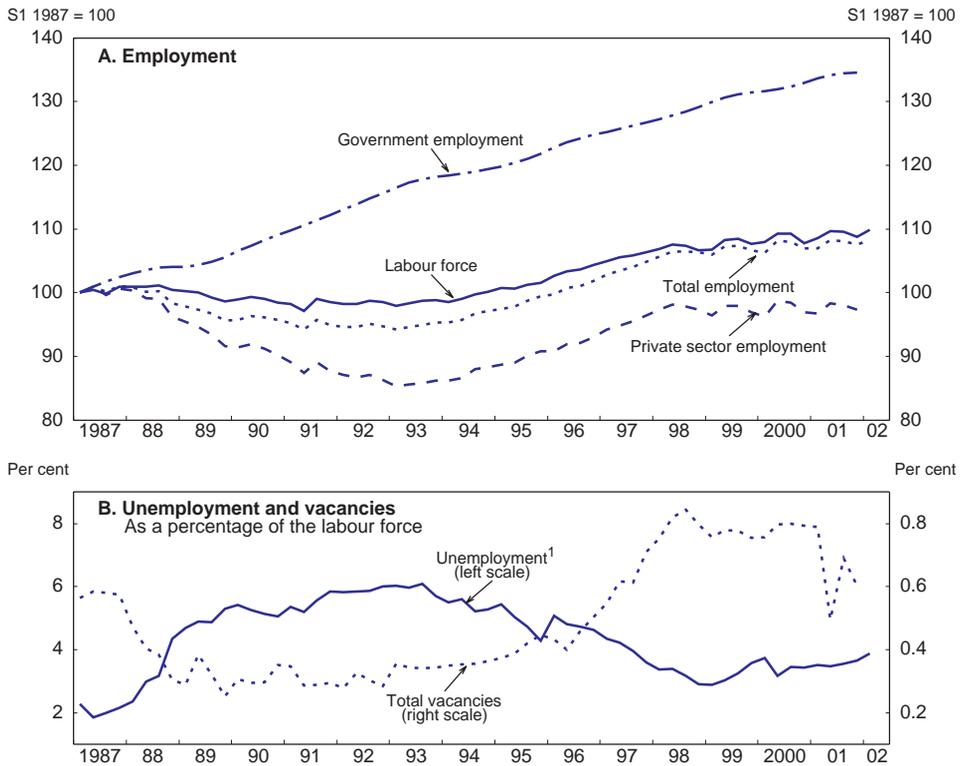
4. Per person, in the business sector.

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  $\frac{1}{2}$  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  $\frac{3}{4}$  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  $\frac{1}{4}$ - $\frac{1}{2}$  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.<sup>9</sup>

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.<sup>10</sup> 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).<sup>11</sup> 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

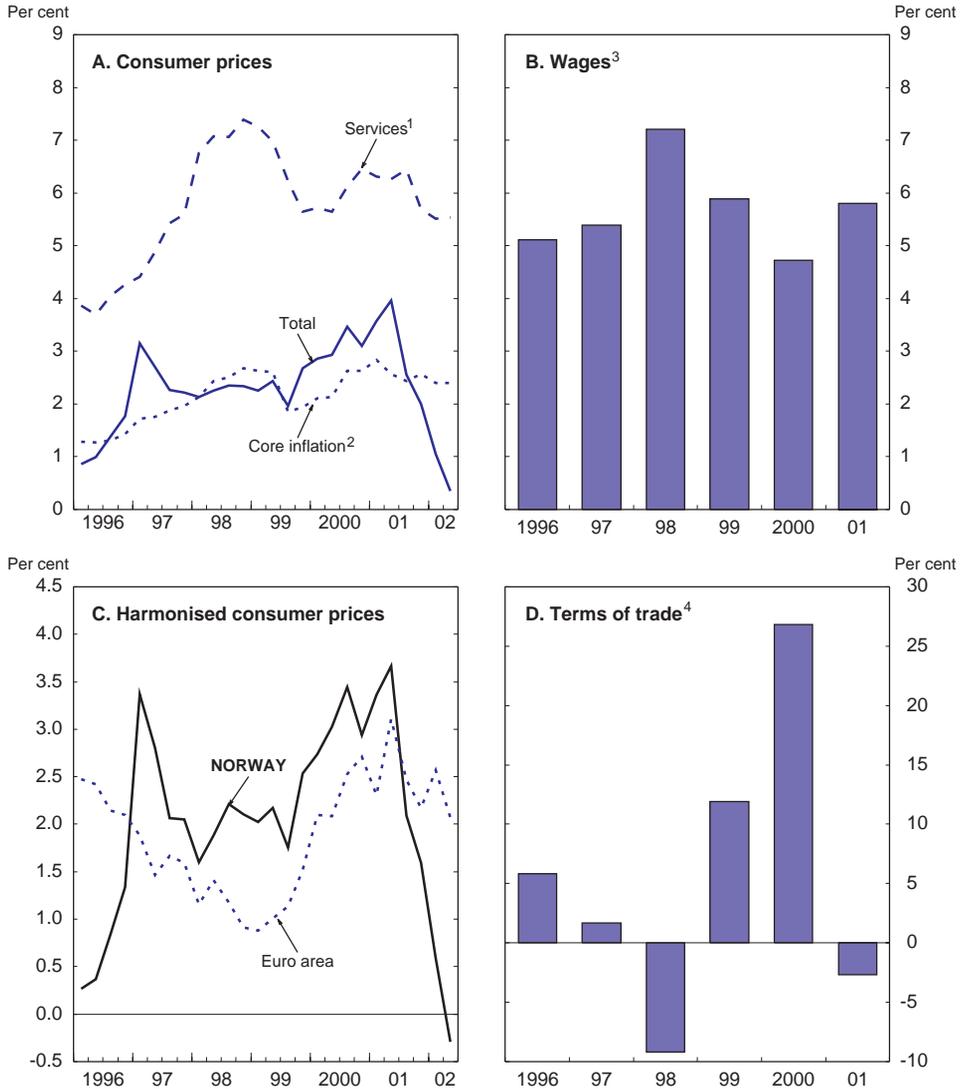
	1994	1995	1996	1997	1998	1999	2000	2001
Consumer price index	1.4	2.4	1.2	2.6	2.3	2.3	3.1	3.0
Harmonised	..	..	0.7	2.6	1.9	2.1	3.0	2.7
Core inflation (CPI-ATE) <sup>1</sup>	1.4	1.4	1.3	1.8	2.4	2.3	2.4	2.6
Private consumption deflator	1.2	2.4	1.4	2.3	2.5	2.0	3.3	1.8
Wage rate <sup>2</sup>	3.1	3.3	4.4	4.8	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.<sup>12</sup> 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.<sup>13</sup>

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.<sup>14</sup> 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.<sup>15</sup> 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,<sup>1</sup> 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:<sup>2</sup>

- 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.<sup>16</sup> 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.<sup>17</sup>

### ***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<sup>1</sup>**  
As a percentage of mainland GDP

	2000	2010	2020	2030	2040	2050
<b>Government revenues</b>						
Non-oil tax revenues	49.2	47.9	47.7	49.9	51.7	51.2
Oil revenues <sup>2</sup>	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
<b>Government outlays</b>	51.7	54.5	56.0	58.8	60.7	60.5
<i>of which: Pensions (old-age and disability)</i>	9.3	10.8	13.8	16.7	18.5	18.4
<b>Financial balance</b>						
General government financial balance	20.1	12.2	9.4	7.6	6.6	6.2
<i>of which: Non-oil central government balance</i>	-0.8	-5.3 (-4.4) <sup>3</sup>	-6.7	-7.0	-7.1	-7.2
Assets of the Government Petroleum Fund	37	145 (116) <sup>3</sup>	177	179	179	181
Petroleum wealth	224	117	78	52	37	25
Total public sector wealth <sup>4</sup>	261	262	255	231	216	226
Pension liabilities <sup>5</sup>	233	263	299	320	326	323
<b>% of total GDP</b>						
Government revenues <sup>6</sup>	53.1	57.5	59.7	62.6	64.5	64.4
Government outlays <sup>7</sup>	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 <sup>8</sup>	-2	5	6	-3	-9	-7
Government employment <sup>9</sup>	26.9	29.4	29.7	30.5	31.1	32.1
Mainland GDP volume growth <sup>10</sup>	1.8	2.0	1.7	1.3	1.2	1.3
Total GDP volume growth <sup>2, 10</sup>	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<sup>3</sup> o.e. (standard cubic metres oil equivalents) to a peak level of 281 million Sm<sup>3</sup> o.e. in 2004 and to fall thereafter gradually to 106 million Sm<sup>3</sup> 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.<sup>18</sup> 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.<sup>19</sup> 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.<sup>20</sup> 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.<sup>21</sup> 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.<sup>22</sup> 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.<sup>23</sup>

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.<sup>24</sup> 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.<sup>25</sup> 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 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).<sup>26</sup>

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.<sup>27</sup> 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.<sup>28</sup>

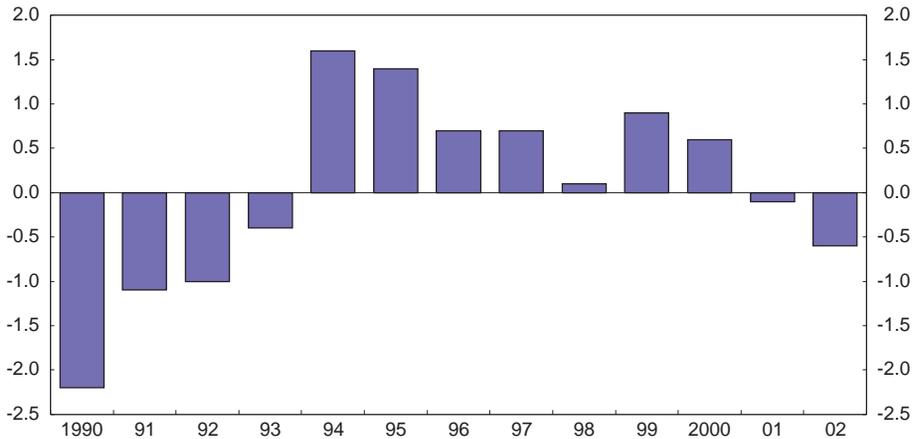
The explicit inflation target now in place is in line with international practice, has increased transparency and has made policy easier to communicate. The challenge for the central bank is to further strengthen its credibility, not only in the eyes of financial market participants but also among those involved in the wage negotiations.<sup>29</sup> 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).<sup>30</sup> 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<sup>1</sup>**  
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

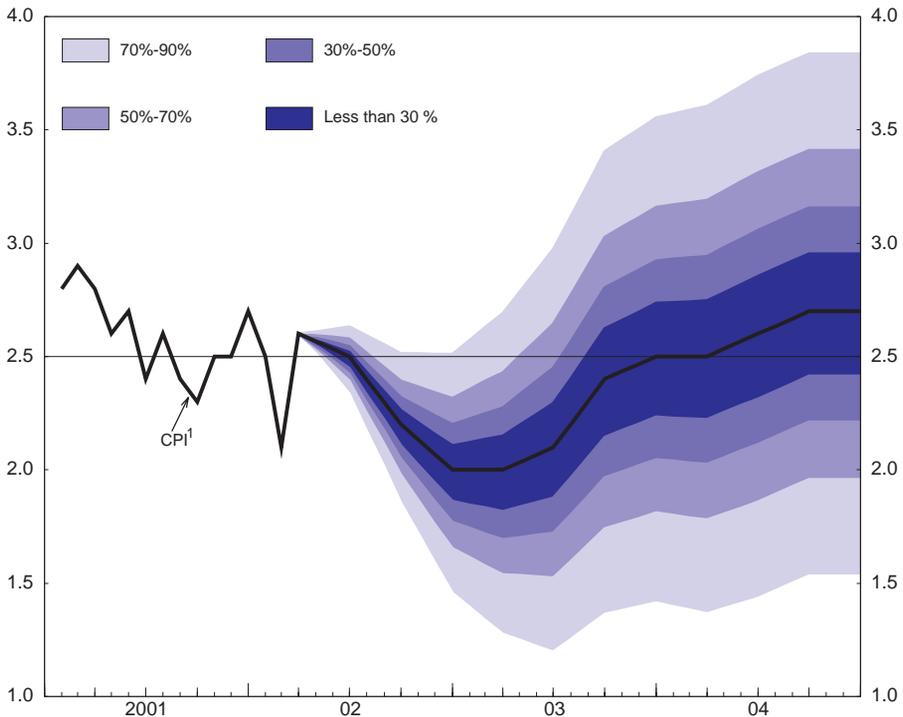
wage negotiations have traditionally focused on the manufacturing sector. Wage negotiations in this sector are held first during the biennial wage rounds and set the trend for the other sectors. This strong representation of manufacturing sector interests in the central wage negotiations has led to settlements and reforms that are less suited for other sectors (NOU, 2000).<sup>31</sup> 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.<sup>32</sup> 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.<sup>33</sup> 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



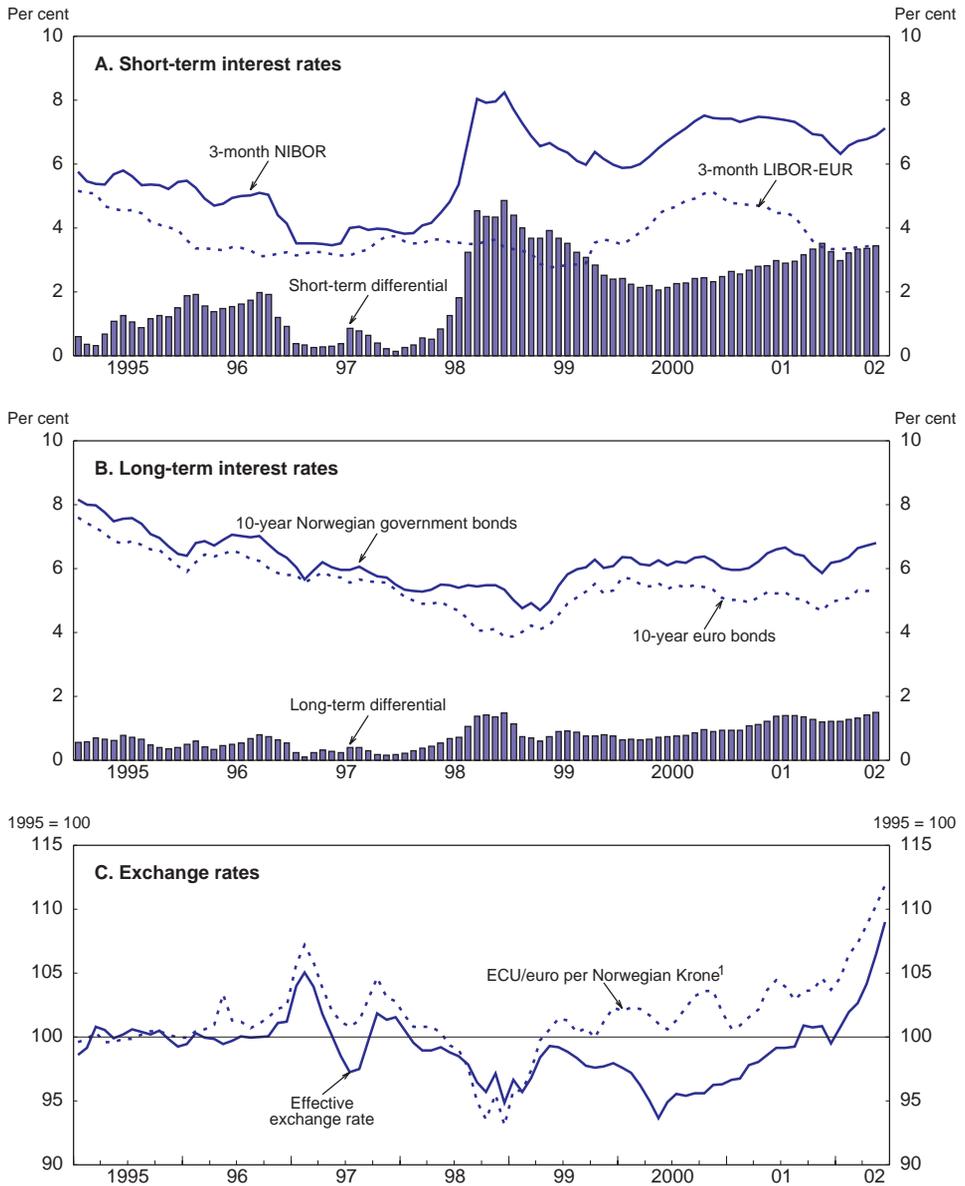
1. Consumer price inflation, adjusted for tax changes and excluding energy products. The bands indicate different probabilities for inflation.

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**<sup>1</sup>  
As a percentage of GDP

	1995	1996	1997	1998	1999	2000	2001	2002 <sup>2</sup>
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).<sup>34</sup> 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.<sup>35</sup> 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).<sup>36</sup> According to the revised

Table 7. **Budgetary plans and outcomes**<sup>1</sup>  
Billion NOK

	2001		2002	
	Budget <sup>2</sup>	Outcome <sup>3</sup>	Budget <sup>4</sup>	Revised Budget <sup>5</sup>
<b>Central government</b>				
<i>Excluding petroleum activities and Petroleum Fund</i>				
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
<i>Including petroleum activities and Petroleum Fund</i>				
Balance on a government accounts basis	192.2	258.8	193.4	164.6
Statistical discrepancy <sup>6</sup>	-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
<b>Local government</b> <sup>7</sup>				
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
<b>General government</b> <sup>8</sup>				
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.<sup>37</sup> 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).<sup>38</sup> 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 <sup>1</sup>	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 <sup>2</sup>	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 <sup>2</sup>	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 (%) <sup>3</sup>		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.

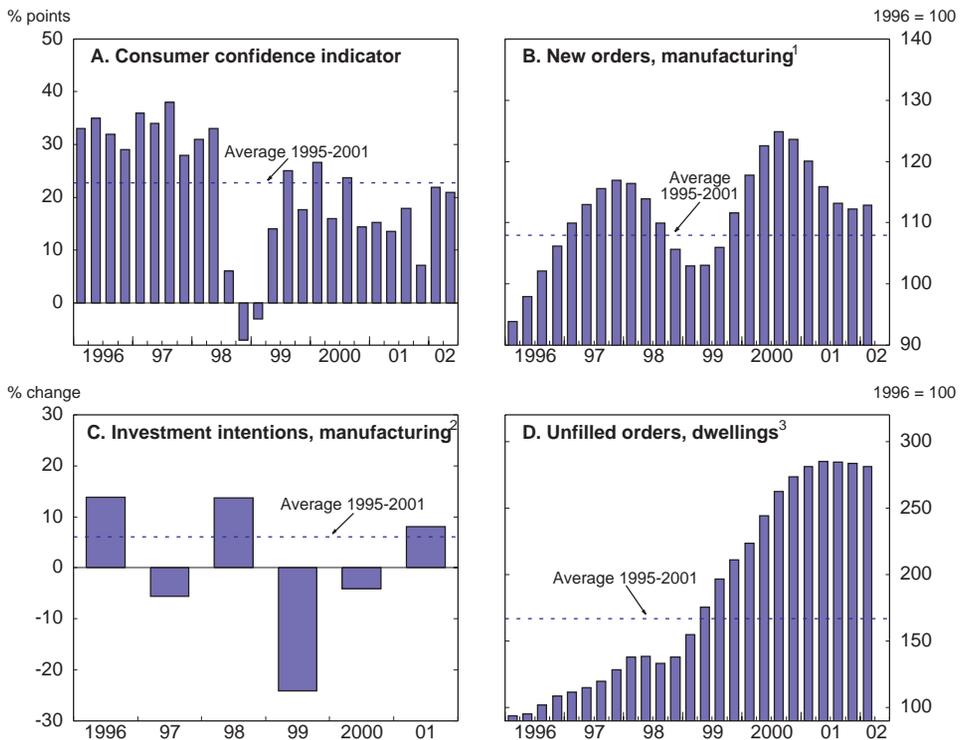
3. Mainland Norway.

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.<sup>39</sup> 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.<sup>40</sup> 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 down-sizing 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.

## II. Enhancing the effectiveness of public spending

At more than 50 per cent of mainland GDP, Norway's public spending is very high by international comparison. This partly reflects two important choices of Norwegian society, namely ensuring an extensive and universal welfare system and maintaining a decentralised settlement pattern in the country: local governments provide a wide range of public services, even in the most remote jurisdictions so as to retain people, and often at a high cost. Within this context however, the distribution of spending responsibilities across government levels also raises efficiency issues while the funding system of local governments does not provide strong incentives to contain local spending. Several additional factors contribute to high spending: the incentive structure for public bodies and their employees does not promote efficiency gains; competitive pressures on public service suppliers are largely lacking; and the use of price signals to contain demand for public services is limited. Abundant petroleum revenues have so far mitigated strains on public finances and the current double-digit budget surplus makes it politically difficult to implement public sector reforms. This economic context has also been reflected in the new fiscal framework, which is expansionary over the medium and long term. But tensions will arise with the projected decline in oil revenues beginning later in this decade. In particular, strong projected public employment growth seems unsustainable, as it crowds out private sector labour demand, creates wage pressures in the public sector and results in higher government outlays. Better control of public spending is necessary in order to cope with the fiscal consequences of ageing and of the depletion of oil reserves. It could also allow a reduction in the high tax burden, which would boost potential output growth.

This chapter identifies policy options to make government spending more cost-effective. The first section reviews the economic and social context shaping public spending in the recent past, the resulting level and structure of public spending viewed in an international context, and the forces shaping future developments. The second section presents the institutional settings within which public spending decisions are taken at both the central and local government level, and how this affects individual behaviour. More specifically, it assesses the

budget process, the principles of public management, the distribution of responsibilities across levels of government and the use of market mechanisms for providing publicly-funded services. The aim is to identify the key challenges which need to be addressed. As far as possible, this chapter considers some core public spending programmes to illustrate the issues at stake, in particular education, health, care for the elderly, and social benefits. The final section provides conclusions and policy recommendations.

## **Forces shaping public spending developments**

### ***Ambitious regional development objectives...***

A key objective of the Norwegian authorities has been to maintain a decentralised settlement pattern, raising the cost of providing high quality merit goods to every citizen. To retain households in remote areas and to attract others, the central government imposes on each municipality a relatively demanding set of regulations and standards for the provision of core public services, in particular for primary education, health care and care for the elderly. The quality and coverage of public services in the northern and the smallest municipalities are even above average, despite the higher costs of these services in such areas. This is underpinned by the system of local government funding which offsets differences in income and cost levels across jurisdictions, combined with specific grants for remote areas. Individuals and employers residing in these areas also benefit from several tax reliefs. No comprehensive estimate of the costs of regional policy is currently available but they are likely to amount to several percentage points of GDP.<sup>41</sup> Public administration, for instance, accounts for almost half of total employment in the northern part of Norway (Finnmark and the northern part of Troms county) compared with 32 per cent in the economy overall. Despite this, net migration outflows from rural regions have persisted.

### ***... and the development of the welfare state have contributed to raise public spending***

Considerable increases in the general coverage and quality of public services have also played an important role. Local governments saw employment growing annually by 2.1 per cent between 1988 and 1998, with demographic developments accounting for less than a quarter of this growth (Table 9, Panel B). This was most evident in care for the elderly, health care and non-primary education. Indeed, demographic pressures for increased care for the elderly and health care services have been partly compensated by a smaller number of children in the education system and lower family allowances. Price developments also contributed to the steady rise in public spending, reflecting the high labour intensity in the production of these services and the almost complete indexation of social transfers to wages.

Table 9. Population projections and impact on the demand for public services

Population projections					
	1999 level (thousands)	Changes (annual growth rates)			
		1980-99	1999-2010	2010-20	2020-30
0-15	947	-0.1	-0.1	-0.3	0.4
16-19	213	-0.9	1.7	-0.5	-0.4
20-66	270	0.7	0.7	0.2	0.0
67 and above	617	0.9	0.0	2.6	1.9
<i>of which:</i>					
67-79	427	0.3	-0.4	3.7	1.0
80 and above	190	2.4	0.9	-0.2	4.0
<b>Total</b>	<b>4 478</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>

Employment developments in local government<sup>1</sup> reflecting only demographic changes, i.e. assuming constant coverage and quality of the services provided (annual growth rates)<sup>2</sup>

	1998 level (million hours worked)	1988-98		1998-2010	2010-20	2020-30
		Observed change	Calculated growth rate			
Primary schools	95.5	0.3	0.5	0.5	-0.6	0.4
Secondary schools	49.4	1.3	-2.2	1.4	-0.5	-0.4
Other education	17.2	4.4	-0.5	0.8	-0.6	0.1
Hospitals	85.0	1.6	0.5	0.5	0.9	0.9
Kindergartens	48.3	7.3	1.6	-0.7	0.2	0.4
Care for elderly people	138.5	3.6	1.3	0.7	0.9	2.4
Mental health care	23.6	1.5	0.5	0.5	0.4	0.4
Other health and social services	39.3	4.4	1.0	0.4	0.8	1.5
Other municipal services	110.2	0.5	0.5	0.5	0.4	1.1
<b>Total</b>	<b>607.0</b>	<b>2.1</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>1.1</b>

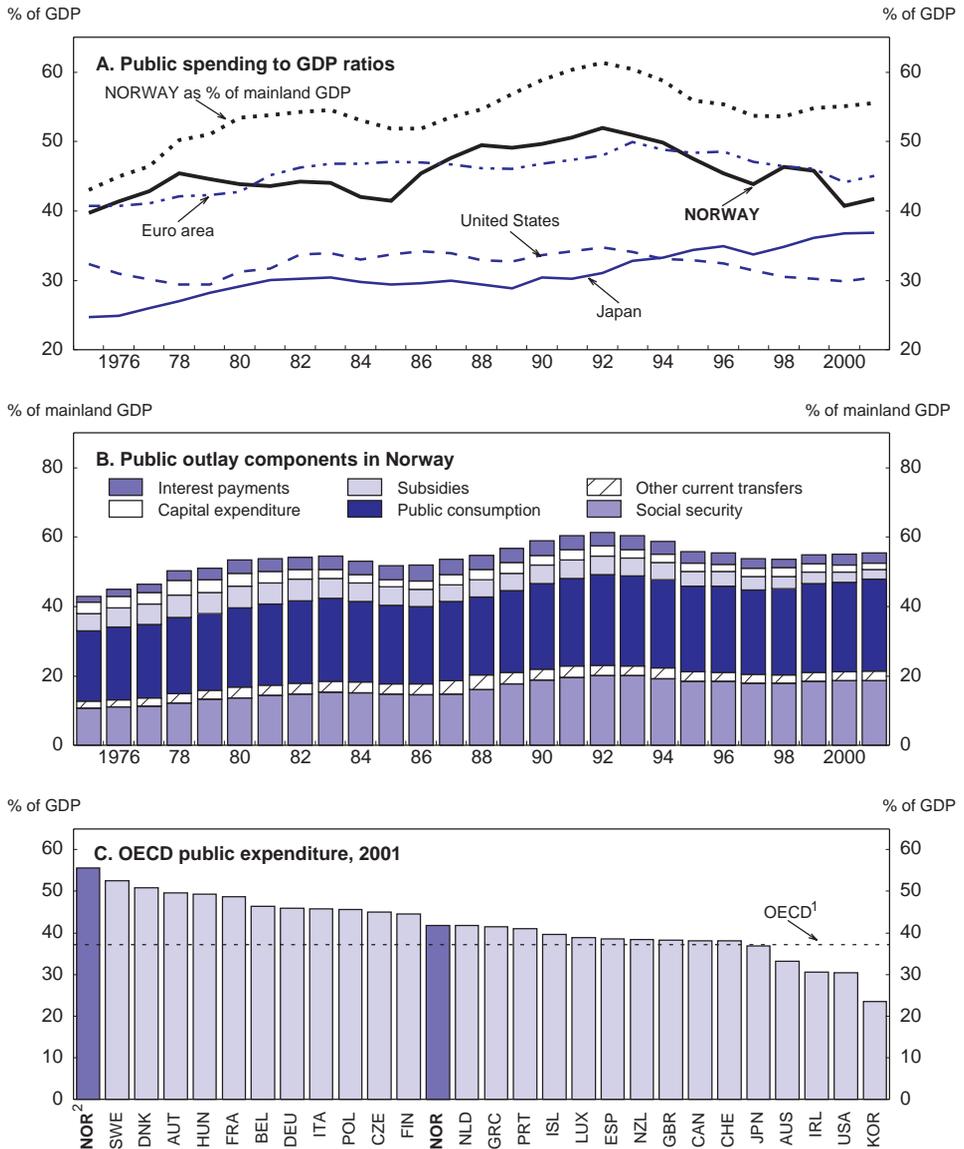
1. Including the hospital sector that became part of the central government sector in 2002.

2. These projections assume constant coverage and productivity of public services in contrast with Table 5 in Chapter I.

Source: National authorities, based on Statistics Norway and the MAKKO model.

While in many European countries slower growth during the 1990s triggered some adjustment in the welfare system to speed up fiscal consolidation, Norway has continued to benefit from the oil windfall. It has even extended its safety net to cushion slowdowns in mainland economic activity. Early retirement schemes were introduced in the late 1980s and gradually expanded thereafter while disability schemes have served as a quasi-permanent exit route from the labour market. This has created an asymmetry in spending behaviour over the cycle. Social security payments have tended to increase during economic slowdowns but have not fully adjusted downwards when the economy has recovered (Figure 13, Panel B). As a share of mainland GDP, Norway's public outlays are the

Figure 13. Public spending in international perspective



1. Weighted average.

2. Norway as a percentage of mainland GDP.

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

highest in the OECD (Figure 13, Panel C). Disability, sickness and family cash benefits as a share of GDP are all very high in international comparison (Table 10). As a share of total GDP, including off-shore activity, the public spending to GDP ratio is close to the euro area average, although much higher than in the United States (Box 5).

### ***Pressures on public spending are strengthening***

Double-digit budget surpluses since 2000 and substantial government assets associated with oil production are exacerbating pressures to raise spending, the more so since several imbalances have built up in the public sector over the past years. *First*, the public sector faces difficulties in attracting qualified personnel given severe labour shortages and relatively rigid and unfavourable pay conditions. For example, a large number of nurses prefer not to work in the health care sector because wages are higher in other sectors. The shortage of nurses results in an insufficient supply of outpatient care, raising the demand for more costly hospital care. Within hospitals, it leads to bottlenecks and makes it difficult to employ other hospital resources efficiently as is illustrated by the short opening hours for expensive surgery suits. The difficulties in recruiting qualified personnel are also severe for some remote local governments. Achieving the objective of high quality public services everywhere in the country will likely require an upward adjustment in public wages, at least for some professions at a local government level. Since the mid-1990s, wages of doctors and teachers have already been raised substantially. *Second*, the recent government commitment to raise the supply and quality of elderly care and kindergarten facilities, which are municipal responsibilities, further reinforces the existing pressures on public spending. Expenses on hospital care and social security are also increasing rapidly. *Finally*, changes in management for some public entities could create an additional pressure on public budget. The move from fixed budget appropriation to activity-based financing (see below) should promote cost-efficiency, but it may also raise the supply of public goods and services above the social optimum, if price signals do not constrain.

In the long term, as in most other OECD countries, population ageing will be significant and exert strong upward pressures on public spending. Starting from a rather favourable position in 2000, public pensions are projected to increase by about 13 percentage points of GDP between 2000 and 2050 on the basis of current benefit rules, one of the steepest increases in the OECD (Box 3 in Chapter I). Norway has, however, built up financial reserves in the Government Petroleum Fund to preserve an equitable share of the present petroleum revenues for future generations.<sup>42</sup> Nevertheless, the Fund is not sufficiently large to fund all pension liabilities while the ageing of the population will also result in higher spending, in particular on elderly and health care (Table 9).

Table 10. **Major current government outlays: an international comparison**  
1999,<sup>1</sup> per cent of GDP

	Merit goods					Income transfers						
	Total	Education	Health	Services for elderly and disabled	Family services	Total	Old-age pension	Survivors pension	Disability	Sickness	Family cash benefits	Unemployment
<b>Norway</b>	<b>18.6</b>	<b>6.8</b>	<b>7.1</b>	<b>3.4</b>	<b>1.4</b>	<b>15.2</b>	<b>6.0</b>	<b>0.4</b>	<b>2.8</b>	<b>1.5</b>	<b>2.2</b>	<b>1.4</b>
<b>Norway (using mainland GDP)</b>	<b>21.5</b>	<b>7.8</b>	<b>8.2</b>	<b>3.9</b>	<b>1.6</b>	<b>17.6</b>	<b>6.9</b>	<b>0.4</b>	<b>3.3</b>	<b>1.7</b>	<b>2.6</b>	<b>1.6</b>
Denmark	18.8	6.8	6.8	3.0	2.2	17.8	6.8	0.0	2.0	0.7	1.5	5.0
Finland	14.0	5.7	5.3	1.5	1.4	18.3	7.0	1.0	3.1	0.4	1.9	3.9
Iceland	16.8	6.5	7.0	2.1	1.1	8.2	3.8	0.5	1.5	0.1	1.2	0.5
Sweden	18.6	6.6	6.6	3.7	1.7	18.9	7.5	0.7	2.4	1.1	1.6	3.9
Belgium	11.4	5.0	6.1	0.1	0.2	18.1	7.3	2.5	1.7	0.4	2.0	3.8
France	15.0	5.9	7.3	0.7	1.2	19.7	10.6	1.6	1.1	0.5	1.5	3.1
Germany	13.7	4.4	7.8	0.7	0.8	18.0	10.5	0.5	1.4	0.3	1.9	2.6
Italy	10.8	4.8	5.5	0.2	0.3	19.1	12.8	2.6	1.0	0.7	0.6	1.4
Netherlands	12.1	4.5	5.9	1.3	0.4	16.1	6.2	0.8	2.4	1.0	0.8	3.9
Spain	10.2	4.4	5.3	0.3	0.1	13.9	8.1	0.8	1.3	0.9	0.3	2.2
United Kingdom	11.6	4.6	5.6	0.8	0.5	17.8	9.8	1.0	2.7	0.1	1.7	0.6
Canada	12.1	5.5	6.6	..	..	11.2	5.0	0.5	0.9	0.1	0.8	1.4
Japan	9.8	3.6	5.6	0.3	0.3	8.4	5.7	1.1	0.5	0.1	0.2	0.7
United States	11.0	4.8	5.8	0.0	0.3	8.2	5.1	0.9	0.9	0.2	0.2	0.4
EU average <sup>2</sup>	12.8	4.9	6.4	0.7	0.7	17.9	9.9	1.3	1.6	0.5	1.4	2.3
OECD average <sup>2</sup>	11.5	4.7	6.0	0.4	0.4	12.3	7.0	1.1	1.2	0.3	0.8	1.2

1. Or 1998 when not available. Education data always concern 1998.

2. Weighted average based on 1995 GDP and purchasing power parities (PPPs), excluding Korea, Luxembourg, Mexico and the Slovak Republic.

Source: OECD, *Social Expenditure Database* and *Education at a Glance – OECD indicators*, 2001.

### Box 5. **Measuring the size of the Norwegian public sector**

The ratio of public outlays to GDP is the most commonly used indicator for expressing public sector size in an international and historical context. Such comparisons should, however, be made with great care. In the case of Norway, there are two important factors to be considered:

- The taxation of social transfers, together with the extent to which countries provide social or economic assistance via tax expenditure, rather than direct government spending, may significantly blur international comparisons (Adema, 2000 and 2001). As with other Nordic countries, Norway's social transfers are taxed, increasing the public sector ratio: 17 per cent of gross social cash benefits were clawed-back through the tax system in 1997, compared with less than 5 per cent in Japan, the United Kingdom and the United States.
- The sizeable Norwegian offshore petroleum sector – almost a quarter of total GDP – creates a specific measurement problem. According to the new fiscal rule, the authorities aim to save the net factor income from the petroleum sector and to spend only the real returns from the Petroleum Fund. In this context, it is more relevant to measure the size of the public sector as a percentage of mainland GDP, which excludes factor income from the petroleum sector.\* The additional advantage is that this ratio is less volatile as it is not influenced by the strongly fluctuating oil price. Both indicators are shown in Figure 13 and Table 10 as is the practice of the Norwegian authorities.

\* Mainland GDP somewhat underestimates the relevant denominator as it does not include the return on the Petroleum Fund and on the remaining oil wealth. On the other hand, it does include indirect taxation which is relatively high in Norway and thus tends to give a downward bias in international comparisons.

## **Public spending management**

### *The budget process has improved...*

Fiscal rules anchor the annual budget process and discipline policy makers. The current fiscal rule, proposed in March 2001 by the previous government and approved by Parliament shortly thereafter, sets the central-government non-oil structural deficit equal to the expected real return on the Petroleum Fund and will lead to an expansionary fiscal policy in the coming years given the rise in Petroleum Fund assets (see Chapter I for a detailed analysis). Within the constraints set by the fiscal rule, the annual budget process is highly political. This is so partly because, in most cases, government coalition parties only agree on

broad principles when forming a government and political priorities are set during the budget process, which come on top of proposals for new initiatives by the various spending departments.<sup>43</sup> Moreover, governments in Norway rarely have a parliamentary majority and therefore have to find support from other parties in Parliament for their budget proposal. The ensuing compromises can lead to additional spending.<sup>44</sup> Indeed, in the past five years spending overruns increased real spending growth by ½ percentage point per year compared with the draft budget.

In recent years, the main budgetary reform was the switch in 1997 to a “top-down” approach for the central government budget. As a result, following a proposal by its Finance Committee, Parliament first decides on the income side of the budget and sets ceilings for 22 expenditure groups corresponding to the departmental structure. Those ceilings cannot be changed thereafter but, based on proposals of the relevant parliamentary committee, Parliament can reallocate outlays within the expenditure groups when it decides on the various chapters of the budget. This new procedural rule has improved prioritisation of expenditure and has provided local governments with earlier information about their revenues and duties.<sup>45</sup> Another commendable change to the budget process concerns the reduction in the number of budget lines, improving the possibility for managers and agencies to reach budget targets in the most effective way. For instance, Parliament no longer separates personnel and other running expenses.

In May, the Minister of Local Government and Regional Development sends a proposal on local government financial matters concerning the coming budget year to Parliament, which votes on it shortly thereafter.<sup>46</sup> Normally, local governments’ level of revenue proposed in the national budget of October is the same as that proposed in May. If tax revenues in the current year have changed as a result of unforeseen macroeconomic developments, this is usually offset by an adjustment in the local government share in taxes or in the level of block grants. This approach to some extent avoids the situation in many other countries where the balanced budget rule for local governments leads to pro-cyclical policies.<sup>47</sup> Concerning local governments, the quality of their budget process is also enhanced by the consultation process between central and local governments.<sup>48</sup>

### *... but lacks a medium-term perspective*

The Norwegian budget papers, which are sent to Parliament in early October, contain commendable analysis on some aspects of long-term budgetary developments. Such a long-term perspective is especially needed in the case of Norway with its falling petroleum revenues in the coming decades and sharply rising pension costs. In contrast to most OECD countries, generational accounts have been presented since 1995 (Annex I). The change in the generational balance from the previous year provides an assessment of the impact of measures announced in the budget. Nonetheless, generational accounting is very sensitive

to key assumptions and the confidence interval around the results is substantial. Even so, the fiscal authorities consider it as a valuable pedagogic tool with intuitive appeal also to the general public. While informative on the short and long run, the medium-term perspective of the budget papers is underdeveloped. The focus on annual budgeting may lead to short-sighted decisions and does not provide information on the consequences for the tax burden in the medium term.

Furthermore, cash accounting may lead to a misleading picture of commitments, since payments can be accelerated or deferred. Moreover, it does not provide sufficient information on the actual repercussions of current policy making. A committee is currently analysing the pros and cons of a switch to accrual accounting and will present its recommendations before the end of 2002. In addition, there is insufficient transparency concerning the cost of regional policy as the regional dimension influences almost all spending programmes, in many cases in an opaque way, and no estimate of the total cost is provided. In other respects, however, the budget papers are relatively transparent. For example, off-budget expenditures are limited and adequate information is provided on loan guarantees.<sup>49</sup> Results achieved in the previous year are reported in the departmental annexes of the annual draft budget, but this information only plays a minor role in the budgetary deliberations of the government and Parliament. Since the 1999 budget, tax expenditures are presented in the budget papers, but parliamentary discussion on tax expenditure has been limited up to now, even though it represents 1¾ per cent of mainland GDP.

### ***The incentive structure weakens the benefits of a more results-oriented management approach***

With a view to improving public spending outcomes, the authorities have gradually increased flexibility in budgeting and management and have heightened the emphasis on user-orientation for some public agencies. Since the mid-1980s, more than 50 public bodies have been given broader managerial autonomy. The “letters of allocation” introduced in 1996 – as part of a formalised dialogue between agencies and the relevant ministry – define their performance targets, the maximum budget appropriation at their disposal, and reporting requirements on actual performance. Giving the managers of these public bodies greater autonomy and flexibility in their day-to-day operations – in particular in choosing the most efficient mix of inputs to produce predetermined outputs – offers scope for efficiency gains. However, the one-year perspective of the budgetary process does not support an outcome focus, in particular as public entities are entitled to carry over only 5 per cent of unused appropriations for operating expenses to the next budgeting year – a much lower share than in a number of other OECD countries.<sup>50</sup> This gives an incentive to spend the authorised amount so as to reduce the probability of a cut in resources the following year. The system is, though, much more flexible for investment outlays as they can be carried over for several years.

As in many other OECD countries, measuring public sector outcomes remains the Achilles heel of the results-oriented management approach. Most public agencies have elaborated user charters (“service declarations”).<sup>51</sup> However, they vary widely as far as content and design are concerned. In some cases, it can be questioned whether the objectives laid down in the declarations are actually pursued. Benchmarking, in particular for municipal services, has also been developed. A comprehensive database (KOSTRA) provides useful comparisons on the coverage rates, prices and costs of services provided by local governments. This allows the municipalities to identify “best practice”. By contrast, the government has been reluctant to provide quality rankings of schools although this may change in the near future. The government also includes outcome targets in the budget documentation presented to Parliament. Nevertheless, they are not systematically compared against actual outcomes (OECD, 2002b) and auditing is generally based on financial accounting rather than on performance measurement (OECD 1997a). The 2000 crisis in the Norwegian public employment service (PES) – which for a long period provided exaggerated data on the number of job placements – illustrates the lack of control of effective performance of public bodies. For 2002, the PES has fourteen input and output targets which may blur the setting of priorities. In addition, pursuing too many targets makes it difficult to establish a link between its actual performance and budget appropriations.

*Financial incentives to reach the performance targets are weak*

A lack of incentive schemes weakens the performance of management and employees. For most public agencies, there is no link between performance in one year and grants provided through the annual budget process in the following year. On the contrary, if goals are politically important, poor performance in one year often entails higher grants next year. For some public entities, however, public funding has been made conditional upon activity indicators, creating stronger incentives to improve efficiency and satisfy clients’ expectations. In hospitals, a case-mix system was introduced in 1997 so as to create incentives to increase activity and thus reduce waiting lists (Box 6). Since then, the number of patients treated has increased sharply and the average length of stay in hospitals has continued to decline. This has contributed to the sharp reduction in waiting lists.<sup>52</sup> In similar fashion, central government grants to public universities from 2002 on will partly reflect the number of diplomas delivered, which should create incentives for universities to reduce the excessively long duration of studies.

The virtual absence of performance-based compensation schemes, combined with a *de facto* life-long tenure for most public sector employees, reduces public entities’ flexibility and fails to provide employees with appropriate incentives to improve their performance. This limits efficiency gains in the public sector. Despite the abolition of seniority-based wage elements, wages are

### Box 6. The move towards output-oriented management

The legal and regulatory framework for an output-oriented management is in place. However, there is still work to be done to implement it efficiently, in particular by shifting emphasis from inputs or outputs to outcomes. Defining clearly the objectives of public entities and introducing financial incentives are important conditions for increasing their efficiency. For universities and hospitals, central government funding has already been made partly conditional on performance. For most other public entities – including the public employment service (PES) – however, the link is much weaker between performance and the money they receive to perform their activities.

For **hospitals**, a new case-mix financing system was introduced in 1997. While before 1980 hospital costs were reimbursed on a *per diem* basis, from 1980 to 1997 hospitals were financed through an annual block grant, irrespective of the hospitals' activity. From 1997 onwards, an increasing fraction of the block grant from the central government to the county councils – which were until recently responsible for hospital care – has been replaced by a matching grant depending upon the number of patients treated, their diagnosis related groups (DRGs) and a national standardised cost per treatment. Initially set at 30 per cent in 1997, the activity-based component now accounts for 55 per cent of the hospitals' budget. As expected, the reform has contributed to increase the number of patients treated.\* Two factors have however undermined hospitals' incentives to increase activity. *First*, the activity-based financial component was granted to the counties which owned public hospitals up to 2001, and not directly to the providers (Kjerstad, 2001). In 1997, 15 out of the 19 counties introduced activity-based financing for their hospitals with remaining ones following in 2001. *Second*, the activity-based grant component may still be too low to cover the costs of a substantial increase in the number of cases treated since half of hospitals' financial resources does not reflect their actual activity. Based on a proposal in the revised national budget of May 2002, the Parliament increased grants to hospitals by NOK 2.1 billion. About NOK 1 billion was due to higher activity than projected in the national budget.

**Universities** receive a block grant from the central government authorising the boards to allocate funds across the various activities. Up to 2002, grants remained predominantly based upon historical costs, changes in the centrally-decided student admission capacity and standard unit costs per discipline (OECD, 1997b). From 2002, the central government grant has three components: *a*) a grant based on the number of graduations; *b*) grants based on research and teaching indicators; and *c*) a block grant irrespective of the universities' activities and results. On average, the first two activity-based components of the grant account for about 40 per cent of universities' financial resources.

For the **public employment service** (Aetat), performance measures have also been introduced but have no direct influence on the budget. For 2002, there are 14 performance measures, with a mix of input targets (*e.g.* the proportion of disabled and the proportion of people on disability pension participating in a

Box 6. **The move towards output-oriented management** (*cont.*)

labour market programme) and output/outcome targets (the number of job-seekers registered at the PES and the number of vacancies reported to the PES). Other performance measures place emphasis on customer satisfaction surveys, such as reported by the Aetat's annual satisfaction survey, and the number of hits on its Internet site.

\* The move to a case-mix system has also resulted in an upward adjustment in the coding of patients to enhance revenues ("DRGs creep"), signaling that hospitals have abused the system. To contain these pressures, the authorities set a limit on the number of yearly changes of case mix, but removed it in 2002.

still set in most cases by rigid pay scales. They are also, in general, lower than in the private sector and in many other OECD countries for similar positions, with only a small experience-related wage premium. The teachers' situation provides an example (Table 11).<sup>53</sup> This contributes to problems of recruiting and retaining some types of specialists, including nurses, IT specialists and engineers (OECD, 2001b). However, non-wage compensation for public employees is in several respects more generous than for private employees, in particular pension schemes. Permanent contracts are also predominant and job protection is strong. High severance payments were reconfirmed in September 2001.<sup>54</sup> This situation contrasts with an increased use of fixed-term employment contracts for public employees in several OECD countries (*e.g.* Denmark and New Zealand). In addition to poor incentives, the lack of flexibility in public employment also makes spending behaviour asymmetric. Public employment tends to adjust upwards when a new demand emerges in a specific sector (*e.g.* when the number of pupils rises), but fails to adjust downwards when demand wanes, thus contributing to the steady rise in the number of public employees since the early 1970s (Figure 14).

***The distribution of spending responsibilities across government layers raises efficiency concerns***

Local government has significant spending responsibility in Norway. There are two sub-national layers of governments, counties and municipalities, which provide most of the welfare services and merit goods (Box 7). Local government spending amounted to almost 40 per cent of general government expenditure, and was equivalent to 23 per cent of mainland GDP in 2001. The local authorities also employed about one-fourth of the total working population in

Table 11. **Teachers' salaries in selected OECD countries**  
1999

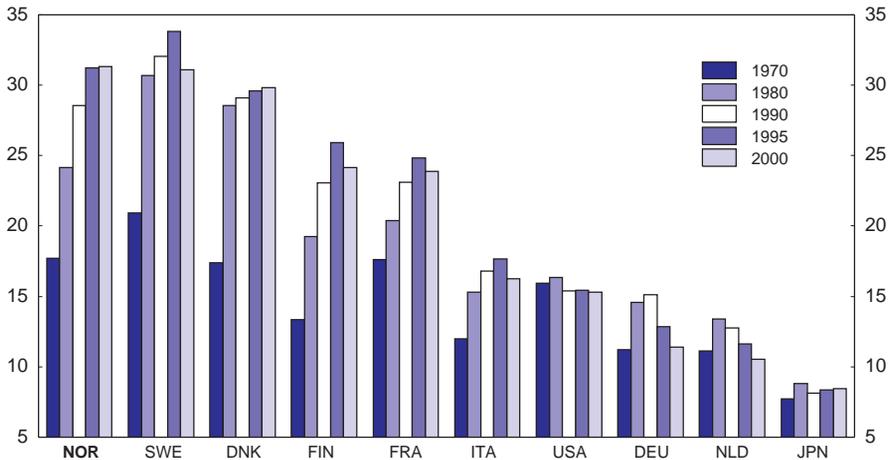
	Starting salary USD PPP	Ratio of starting salary to average production worker wage	Ratio of salary after 15 years to average production worker wage	Wage premium for experience
	(1)	(2)	(3)	(4) = (3)/(2)
Primary				
<b>Norway<sup>1</sup></b>	<b>22 194</b>	<b>0.80</b>	<b>0.93</b>	<b>1.16</b>
Denmark	28 140	0.88	1.02	1.16
England	19 999	0.73	1.23	1.68
Finland	18 110	0.76	1.04	1.37
Germany	29 697	0.98	1.19	1.21
Ireland	21 940	0.98	1.58	1.62
Sweden	18 581	0.83	1.09	1.31
United States	25 707	0.86	1.16	1.35
Lower secondary				
<b>Norway<sup>1</sup></b>	<b>22 194</b>	<b>0.80</b>	<b>0.93</b>	<b>1.16</b>
Denmark	28 140	0.88	1.02	1.16
England	19 999	0.73	1.23	1.68
Finland	20 394	0.86	1.18	1.38
Germany	33 196	1.10	1.27	1.16
Ireland	23 033	1.02	1.60	1.56
Sweden	18 704	0.83	1.09	1.31
United States	25 155	0.84	1.11	1.33
Upper secondary general education				
<b>Norway<sup>1</sup></b>	<b>22 194</b>	<b>0.80</b>	<b>0.93</b>	<b>1.16</b>
Denmark	29 986	0.94	1.25	1.33
England	19 999	0.73	1.23	1.68
Finland	21 047	0.88	1.24	1.40
Germany	35 546	1.17	1.38	1.17
Ireland	23 033	1.02	1.60	1.56
Sweden	20 549	0.92	1.09	1.28
United States	25 405	0.85	1.21	1.43

1. Teachers' pay has increased more than the average wage over 2000-02.

Source: OECD, *Education at a Glance – OECD indicators*, 2001.

Norway and accounted for 80 per cent of all employment in the public sector.<sup>55</sup> The requirement to provide high quality services in all jurisdictions, even the smallest and remote ones, entails high costs. The recent transfer of responsibilities for hospital care from the counties to the central government should bring efficiency gains. Since hospital care was the main responsibility of the counties, it also raises the question of their *raison d'être*. At the local level, municipalities vary significantly regarding size, topography and population. More than half have less than 5 000 inhabitants while ten have more than 50 000 inhabitants. To reap scale economies, the government is encouraging the merger of municipalities.<sup>56</sup> It pays

Figure 14. **Trends in general government employment**  
As a percentage of total employment



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

50 per cent of the preparatory work and refunds 40 to 60 per cent of the administrative costs related to the merger process. From 2002, merging municipalities retain the former level of grants for ten years, instead of five years previously, thus reducing the negative incentive to merge embodied in the grant system which contains a fixed component independent of the size of the municipality. However, political constraints working against merging are strong. Overall, while mergers occurred between the late 1950s and the mid-1960s and reduced the number of municipalities by some 40 per cent, there has been only one merger during the past ten years despite a wide recognition at the central government level that municipalities are too small and many of them are losing population.

*A lack of co-ordination across municipalities...*

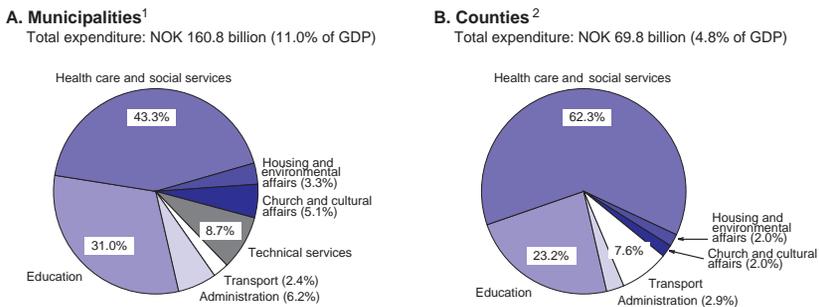
Co-operation across municipalities is limited, resulting in low cost-efficiency. To reap scale economies, municipalities frequently co-operate in some sectors such as waste disposal, water supply and auditing, and in the energy sector (through the joint ownership of power plants). However, in their core spending domains, co-operation is limited, partly reflecting the absence of appropriate compensation schemes between jurisdictions. Primary and lower secondary education provides an example. Each municipality has the obligation to deliver education to every resident child in the school nearest to his home but has no

**Box 7. Local government spending responsibilities**

The Norwegian government has three levels of administration: the central government, 19 counties and 434 municipalities. While responsible for the provision of many public services, local governments have to comply with national laws defining minimum quality standards for most of the services they provide. The primary education sector – under municipal responsibility – provides an example. The Ministry of Education and Research has full control over the core curricula and the maximum student numbers per class. Moreover, municipalities have very limited freedom to set teachers’ salary and work conditions. Other sectors are less regulated, such as elderly care, and could thus be the most affected by budget constraints. Counties and municipalities may also assume tasks or functions that have not been assigned to other levels of government.

The division of responsibilities between the various levels of government is set by Parliament. Over the past decades, there have been two trends: *i*) a shift of responsibilities from the counties to municipalities (in particular care for the elderly in 1988 and care for the mentally disabled in 1991); and *ii*) a regionalisation mostly reflecting a transfer of responsibilities from the counties to *ad hoc* regional bodies controlled by the central government. This concerned in particular university colleges with health education (1986), some cultural institutions (1995) and hospitals and psychiatric institutions (2002). Furthermore, the central government has regionalised police, justice, road maintenance and tax administration.

**Figure 15. Local governments’ spending by function 2000**



1. Excluding municipal and joint municipal enterprises with separate accounts or municipal joint-stock companies.  
 2. From 2002 onwards, counties are no longer responsible for hospital care.  
 Source: Ministry of Local Government and Regional Development.

**Box 7. Local government spending responsibilities** (*cont.*)

The central government is responsible for higher education and universities, the social security system, defence, the national road network, railways, labour market training schemes, justice and police force, prisons, foreign policy and since 2002 hospitals.

The counties are responsible for upper secondary schools, vocational training, child welfare institutions, institutions for the care of drug and alcohol abusers, county roads, provision of local public transport and museums (Figure 15).

The municipalities are responsible for primary and lower secondary schools, early childhood educational and care facilities, child welfare, primary health,\* care for the elderly and disabled, public libraries, fire departments, harbours, municipal roads, water supply, sewage, garbage collection and disposal, and the organisation of land use within the municipality.

\* The municipalities have to provide a variety of services (general practitioners, district and visiting nurses, 24-hour access to visiting help, nursing homes, and physiotherapy). They are free to organise these services in their own manner. They may employ people directly or enter agreements with practitioners providing services on a private basis.

incentive to accept non-resident pupils since it is not entitled to a corresponding compensation from the central government grant system. Municipalities could enter into bilateral agreements but these have been rare. This hampers an efficient use of existing capacities. Long distances within and between municipalities in some regions limit the scope for scale economies. Still efficiency gains could be exploited by enhanced co-operation. The lack of co-ordination partly explains why the number of pupils per class is well below the maximum level set by the central government. Overall, while expenditure per student at the primary and secondary levels is about 40 per cent higher than in the OECD on average – largely reflecting a very high teacher per pupil ratio – education outcomes as measured by the recent Programme for International Student Assessment (PISA) report (OECD, 2001c) are around the OECD average (see Chapter III). Norway's mediocre results in the OECD PISA study may be partly due to its inclusive approach to education, which makes the system less selective.

The situation is broadly similar for elderly care. A person can in principle benefit from the services offered by another municipality and the providing municipality can receive some financial compensation from the municipality of origin if they have reached a bilateral agreement. But since, in most cases, this compensation does not cover the actual costs of providing the service, co-operation agreements across municipalities remain rare and scale economies largely unexploited. For example in the context of care for the elderly, Norwegian

old-age homes are typically small with an average of 21 beds – about half the number of their Swedish counterparts (Szehebelly, 1999).

... *and across government layers*

- Hospital and primary health care are still financed by two different government layers

In the past, long waiting lists for hospital admission have co-existed with low bed occupation rates in some hospitals, in particular those located in rural areas. The slow transfer of those patients who no longer need acute care services to nursing homes and primary care services (bed blocking) has also contributed to the poor utilisation of health care resources. A key feature of the 2002 hospital reform is the transfer of responsibility for the provision of hospital services from the counties to the state. This should facilitate a more efficient allocation of services among the hospitals, thus contributing to improving the use of existing capacities, efficiency and quality of hospital care. However, the supply of preventive and outpatient care by the municipalities may remain lower than it should be, and thus could continue to strain hospital resources. In particular, municipalities have an incentive to postpone the reintegration of patients who are no longer in need of hospital-based medical treatment into the health care services they finance (in particular outpatient and elderly care), leading to longer hospital stays than necessary. Municipalities are allowed by law to wait for 14 days before assuming responsibility for patients who no longer need acute care. This may lengthen waiting periods for hospital treatment and raise health care costs.

- Public employment services and social assistance

The current sharing of financial responsibilities between municipalities and the central government for social assistance and public employment services has also raised concerns. Some municipalities have complained about their lack of control over the public employment service (PES) strategy to reduce the number of unemployed and to respond to new demands for active labour market programmes. Their main concern is that, because the PES fails to internalise the cost of social benefits paid by municipalities, it could under-invest in active labour market policies. In fact, more than a third of the 22 000 social assistance recipients in Oslo were defined as unemployed in 1998 and were thus receiving the highest benefits. One third of those defined as unemployed were not registered at the PES because the PES did not see them as fit to take up a job (Backer-Røed and Mannsåker, 2000). In particular, immigrants are required to sit a written language test to be registered. To facilitate the entry of the unemployed into the labour market, and thus reduce social assistance payments, some of the 25 Oslo districts started their own “miniature employment offices” in the late 1990s. These now refer the unemployed directly to vacant jobs through their own network of employers and have been successful in placing some of the non-registered unemployed.

### ***The funding of local governments fails to provide incentives to contain spending pressures***

Local government spending is mainly funded through central government grants and tax-sharing arrangements (Box 8). The move from earmarked to block grants in the 1980s was designed to increase local governments' ability to adapt their expenditure to their citizens' preferences and their incentives to increase cost efficiency. It was also aimed at reducing administrative costs associated with conditional grants. In 2001, conditional grants accounted for 16 per cent of local governments' total financial resources but this share has halved in 2002 partly as a consequence of the hospital reform. However, while *de jure* the share of funds not tied to a specific use is high by international comparison, the proliferation of norms and standards imposed by the central government *de facto* limits the scope for local governments to adjust to local citizens' preferences. For example, the Ministry of Social Affairs is considering introducing minimum quality standards for elderly care and has recently decided to introduce minimum standards for the housing of drug addicts and others living on the fringe of society. In addition, the central government has recently increased its reliance on temporary earmarked grant programmes to facilitate the attainment of national social objectives (*e.g.* the availability and quality of child and elderly care facilities).<sup>57</sup> This has given rise to strategic games between government levels, with municipalities waiting before investing in a specific domain to get the central government's support (though the system includes possibilities for "retrospective adjustments").

Incentives to improve the cost-efficiency of public spending programmes, and to cut local taxes, are hampered by some discretionary features of the grant system. All municipalities have kept the marginal personal income tax rate at the maximum level (set by law) since 1979 despite the fact that the tax equalisation scheme is based on actual tax revenues collected in their jurisdiction, and not on taxable incomes (*i.e.* potential revenues). This partly reflects the fear that any cut in local taxes would result in lower discretionary grants from the central government. Such discretionary grants to municipalities amounted to NOK 2.9 billion in 1999, *i.e.* 8.3 per cent of total grants received. An additional factor reducing local governments' incentives to cut personal income taxes is the lack of transparency since taxpayers are unaware of what proportion of their tax liability accrues to local *versus* central governments.

The sharing arrangement for income taxes between the local and central governments has also created incentives for local spending increases. Although central government grants are adjusted in the October Budget to reflect cyclical developments and their impact on tax revenues (see above), the central/local split of income tax revenues is often based on assumptions which have proved to be too conservative (OECD, 2000a). These local government tax windfalls are later absorbed through higher spending, although changes in the central/local tax

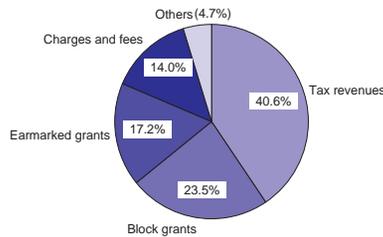
**Box 8. Local government funding**

Block grants and tax revenues are the two most important financial resources of both municipalities and counties and account for about 64 per cent of their current revenues (Figure 16, Panel A). Local governments have in principle full discretion over their use. However, the level and composition of these revenues are set by Parliament, which adjusts the total amount of financial resources available to local governments, their share of income taxes and the level of grants to reflect the economic situation. In addition to these unconditional forms of resources, local governments receive earmarked grants and are allowed to charge user fees. Overall, local governments have to comply with a balanced budget rule. In case of slippage, local governments have two years to restore a balanced budget. If they fail, they come under the supervision of the central government, which has to approve their budget and borrowing.

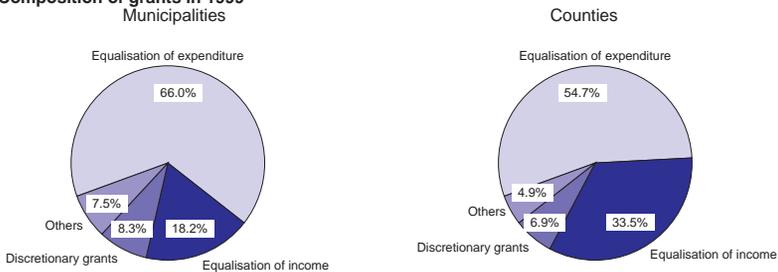
**Figure 16. Local governments' financial resources**

**A. Municipalities and counties: current revenues in 2000**

Total current revenues: NOK 230.6 billion (15.7% of GDP)



**B. Composition of grants in 1999**



Source: Ministry of Local Government and Regional Development.

Box 8. **Local government funding** (*cont.*)

**Tax revenues.** Proceeds from the personal income tax account for the bulk of local tax revenues. Though local governments are entitled to set the flat local tax rate on net income within a range set by the central government (14.55 to 17.65 per cent in 2000), in practice they all apply the maximum flat rate. Municipalities also levy a net wealth tax on the value of the taxpayer's net assets. The maximum rate and the tax base are decided by the Parliament. Similar to the tax on net income, municipalities all use the maximum rate for the net wealth tax (0.7 per cent, compared to a minimum rate of 0.4 per cent). In addition, municipalities may impose real estate taxes on housing, hydroelectric power plants and commercial buildings located within their jurisdiction. However, some regulations restrict the municipalities' right to impose real estate taxes (most importantly, they only apply to urban areas). There is also a maximum tax rate of 0.7 per cent. Overall, local governments' effective taxing power is rather limited by Nordic and international standards (Table 12). Apart from taxation, local governments are also free to impose user fees for specific goods or services, though they have to be set below production costs.

Table 12. **Local governments' taxing powers in selected OECD countries<sup>1</sup>**  
1995

	Local government taxes relative to:		Discretion to set taxes <sup>2</sup>	Summary indicator of taxing powers <sup>3</sup>
	Total taxes	GDP		
Sweden	32.6	15.5	100.0	15.5
Denmark	31.3	15.5	95.1	14.7
Finland	21.9	9.8	89.0	8.7
Belgium	27.8	12.4	57.9	7.2
Spain	13.3	4.4	66.6	2.9
Germany	29.0	11.1	12.8	1.4
United Kingdom	3.9	1.4	100.0	1.4
Netherlands	2.7	1.1	100.0	1.1
Austria	20.9	8.7	10.0	0.9
Portugal	5.6	1.8	31.5	0.6
<b>Norway</b>	<b>19.7</b>	<b>8.2</b>	<b>3.3</b>	<b>0.3</b>
<b>Mainland Norway</b>	<b>21.3</b>	<b>9.6</b>	<b>3.3</b>	<b>0.3</b>

1. The countries are ranked in descending order according to the value of the summary indicator of taxing powers.
2. The figures show the percentage of their total taxes for which local governments hold full discretion over the tax rate or both the tax rate and the tax base. A value of 100 designates full discretion.
3. The summary indicator is the product of the ratio of local government taxes to GDP and the degree of discretion to set taxes independently. Thus, it measures local government taxes with full discretion as a percentage of GDP.

Source: OECD, *Taxing Powers of State and Local Government*, 1999 and *Revenue Statistics 1965-2000*, 2001.

**Box 8. Local government funding (cont.)**

**Block grants.** The General Purpose Grant Scheme (GPGS) was introduced in 1986 and replaced a system of about 50 conditional grants. The GPGS puts great emphasis on equalising both actual tax revenues and expenditure needs across the country, with the objective of enabling all municipalities and counties to offer the same standard of service at the same price anywhere in the country. *The expenditure equalisation component* is based on a set of criteria (17 for the municipalities and 15 for the counties) which reflect: *a)* demand factors or objective needs given the age structure of its population and other characteristics (such as the share of unemployed and immigrants); and *b)* cost factors, as reflected in the share of the population settled in sparsely populated areas and the average travelling time from the jurisdiction centre to its boundary. *The tax equalisation system* is based on a comparison between a local government's (either a municipality or a county) actual tax revenue per inhabitant and the country average. If actual tax revenue of a local government falls below 110 per cent of the country average, this local government receives 90 per cent of the difference between its actual revenue and 110 per cent of the country average. If a local government's revenue exceeds 138 per cent of the country average, then it contributes to the tax equalisation scheme (50 per cent of its actual tax revenues above this threshold). This threshold will gradually be reduced to 130 per cent. Overall, since tax equalisation payments from rich to poor local governments do not balance, each municipality contributes to the tax equalisation scheme through a fixed per capita amount.

**Other grants.** Over the last decade, new earmarked grants have been introduced to influence local governments' priorities (*e.g.* to improve the supply of childcare and elderly care services or to renovate school premises). In some cases, these earmarked grants have later been incorporated into the block grant envelope when the original objective was largely met. "Ad hoc" (unconditional) grants have also been built into the system to respond to specific problems. The rather large "discretionary grant" element, whose distribution across local governments is largely decided by the central government, can provide some relief for local governments suffering from transitory financial difficulties. It also compensates local governments' financial losses resulting from the abolition of the local component of the corporate income tax in 1998 (these losses were only partly made up for by the rise in the local personal income tax component). The same rationale applies to the special grant to Oslo introduced in 1997. Other minor grants include the grant to northern Norway and the grant to remote regions.

Central government transfers and the tax system have a **bias in favour of peripheral regions**. Employers pay lower or no social security contributions with respect to employees who live in northern counties (compared with a 14.1 per cent rate paid by employers in core regions). Individuals living in the northern part of Norway (Nord-Troms and Finmark) also pay reduced rates of personal income taxes levied by the central government and are entitled to higher tax thresholds and a special tax allowance. VAT on electricity in northern parts of the country is zero-rated. A preferential tax treatment of self-employed people in agriculture and fisheries also exists and benefits more than proportionally the peripheral regions. In addition, northern counties benefit from more favourable agricultural support, support schemes for small and medium-sized enterprises located in rural areas and soft housing loans.

shares help to mitigate this bias in the initial phase of the budget. The abolition of the sharing arrangement for the corporate income tax in 1999 – replaced by a higher local share in personal income taxes which are less volatile – has eased this problem somewhat. Real estate taxes, fees and user charges are less volatile. Since their proceeds fully accrue to the municipality, they are more transparent, contribute to local governments' accountability and create more pressure to contain local public spending. Municipalities' effective power to set the rates and the base is however limited: they have to set rates at or below the ceiling imposed by the central government and strict conditions apply on their right to introduce a property tax (*e.g.* to introduce a property tax, a municipality has to provide street lights). In practice, about 200 of the 434 municipalities impose a property tax. Local governments have more freedom to set fees and user charges for locally-produced public services, though they cannot exceed unit costs.

### ***Price signals to restrain demand pressures are weak***

User charges have rarely been used in Norway as a device to influence demand. The absence, or low level, of user charges combined with activity-based financing systems for public entities, carries the risk of stimulating excessive demand and supply, driving spending to an unsustainable level. The lack of co-payments in the hospital sector, where an activity-based payment system is in place, may not matter since the price elasticity for inpatient care services is generally low.<sup>58</sup> For pharmaceuticals, co-payments are low – they will even be reduced from October 2002 for some groups – but consumption is also well below the OECD average.<sup>59</sup> In some sectors, however, the low level of user charges results in an extensive reliance on expensive services (*e.g.* tertiary education and elderly care). It also reduces demand-side pressures for better outcomes, and thus adversely affects supply-side efficiency. On the other hand, the introduction of, or increase in, user charges may raise equity concerns for some services since they would affect relatively more lower-income households. User fees may also result in an undesirable sorting of the population and entail cream-skimming if private and public providers do not apply the same fees – the education sector being a case in point.

*User charges have been increasingly used to reduce environmental damage...*

To promote waste reduction and recycling, the Pollution Control Act relies on the “polluter pays” principle and on price signals. The Act requires that municipalities charge fees for waste and wastewater treatment that fully cover their expenses. Likewise, toll systems for all inbound vehicles have been established around the city centres of Bergen, Oslo, Stavanger and Trondheim. However, except in Trondheim, toll rings merely serve to raise funds for investment in the local infrastructure while user fees do not really support traffic management

objectives: season tickets are available, and toll fees are hardly differentiated across the day.<sup>60</sup> In Trondheim, the toll system is also used for traffic management, as the toll fee is higher during peak hours (OECD, 1999), and has resulted in an estimated 10 per cent decrease in traffic since its introduction in 1991. The revision to the Road Act in 2001 has further increased the road pricing options to regulate traffic flows, by allowing a greater differentiation in fees between peak and non-peak times and by extending the domains for which the money raised may be earmarked (*e.g.* to cover public transport operating expenses).

*... but are virtually non-existent for tertiary education,...*

Spending on tertiary education is high by international standards. The absence of university tuition fees, combined with very generous student loans and grants schemes (Box 9), serves to raise incentives to invest in human capital which are low due to the compressed wage structure. However, the low opportunity cost for students may also generate excessive demand for tertiary education and contribute to weakening demand-side pressures for higher quality tertiary education. In fact, enrolment rates are high and the study duration long. Combined with the funding of universities that was largely based on the student admission capacity until 2002 (see above), the low opportunity cost of tertiary education for students has likely resulted in excessive spending.

*... and very low in the elderly care sector*

Spending on care for the elderly amounted to almost 3½ per cent of GDP in 1999, the highest ratio in the OECD after Sweden. Demand-side pressures are high, reflecting both the ageing of the population and the low cost of services to the users. For institutional care, users pay a fixed percentage (in general 75 per cent of their income up to NOK 54 000, and 85 per cent of their income above this level) but these payments cover only 16 per cent of the total expenses on average. The percentage of elderly in nursing homes remains high by international standards, though there has been a reduction since the early 1990s. Correspondingly, expenses related to residential care services as a share of GDP declined from 2.7 per cent in 1995 to 1.6 per cent in 1998, partly reflecting increased capacity in generally less expensive home-based services. Nevertheless, they were still the second highest in the OECD after Sweden (Table 13). For home-care services, user charges cover about 3 per cent of the total costs. Home nursing is provided free of charge. For home-help services, about 20 per cent of the municipalities charge only a subscription payment with no additional user fees. Such services are almost free for low-income pensioners. Low user charges, combined with relatively generous eligibility criteria, are reflected in a high share of elderly people receiving formal care at home by international standards.

Table 13. An international comparison of long-term care systems

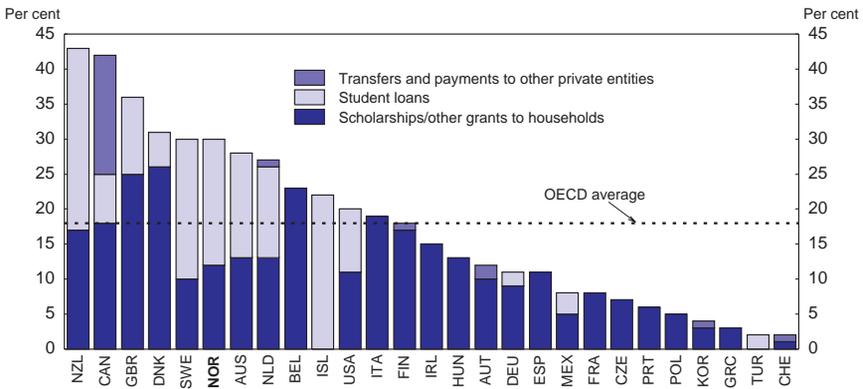
	Services for the elderly and disabled people Per cent of GDP					Share of population aged 65 and over in institutions	Share of population aged 65 and over receiving formal help at home	Share of private beds among institutions
	Total		<i>of which:</i> in 1998:					
	1980	1998	Residential care	Home-help services	Day care and rehabilitation service			
<b>Norway</b>	<b>1.2</b>	<b>3.4</b>	<b>1.6</b>	<b>1.0</b>	<b>0.5</b>	<b>6.6</b>	<b>17.0</b>	<b>10</b>
Denmark	2.7	3.0	1.1	1.5	0.1	7.0	20.3	n.a.
Finland	0.9	1.5	0.5	0.4	0.3	5.3 to 7.6	14.0	12
Sweden	1.7	3.7	2.3	1.0	0.1	8.7	11.2	n.a.
Austria	0.7	0.9	0.3	–	–	4.9	24.0	n.a.
Belgium	0.1	0.1	–	–	0.1	6.4	4.5	49
France	0.6	0.7	0.5	0.1	–	6.5	6.1	32
Germany	0.3	0.8	0.5	0.1	0.1	6.8	9.6	33
Netherlands	0.5	1.3	0.7	–	0.0	8.8	12.0	n.a.
United Kingdom	0.5	0.8	–	0.0	–	5.1	5.5	44
Australia	0.1	0.8	0.1	0.1	0.0	6.8	11.7	26
Canada	–	–	–	–	–	6.2 to 7.5	17.0	38
Japan	0.0	0.3	0.2	0.0	0.1	6.0	5.0	n.a.
United States	0.1	0.1	0.0	–	–	5.7	16.0	100

Source: Jacobzone (1999) and OECD, Social Expenditure Database.

**Box 9. Financial support to students in post-compulsory education**

Financial support to university students is extremely generous in Norway compared to most OECD countries. This reflects both the absence of tuition fees in upper-secondary education and public universities, and substantial loans and grants to students (Figure 17). Direct financial support to students accounted for 29 per cent of Norway's public budget for tertiary education, compared to 17 per cent on average in the OECD in 1998.

**Figure 17. Public subsidies<sup>1</sup> for tertiary education**  
1998



1. Public subsidies to the private sector, as a percentage of total government expenditure on education, by type of subsidy.

Source: OECD, *Education at a Glance – OECD Indicators*, 2001, Table B5.2.

**The State Educational Loan Fund (SELF)**

**Who qualifies?**

All students aged 19 and above are entitled to financial support via the State Educational Loan Fund (SELF), independently of their parents' income. Those living outside their parents' home received a monthly support of NOK 6 950 (*i.e.* about one fourth of after tax average household income) in 2001, 30 per cent in the form of a grant and the rest as a loan that is free of interest payments during the study period. Additional aid is granted to the student if he/she must support a spouse and children. This support will be raised further to NOK 8 000 from the second term of 2002. The grant component will also increase if the student passes

**Box 9. Financial support to students in post-compulsory education (cont.)**

the exams (from 30 to 40 per cent of the total as from November 2002). Students completing a degree requiring more than 5 years of study may after completion receive a grant (in the form of debt relief) corresponding to between NOK 23 000 and 54 000. There is a time limit for receiving support from the SELF, but it is quite generous (six years plus one year if the student fails an exam), and there is no upper age limit, reducing incentives to study efficiently.

Students aged below 19 in upper secondary education and living at home are entitled to asset-tested grants from the SELF. In 1999-2000, 45 per cent of pupils in upper secondary education received a support whose maximum monthly amount was NOK 1 210.

During the 1999-2000 academic year, 228 000 students received financial support from the SELF. Among them, 18 000 were enrolled in foreign-based institutions and many of them were eligible for a tuition grant (up to a maximum of NOK 51 340).

***The amount of outstanding loans***

In 2000, the total stock of outstanding loans amounted to 3.5 per cent of GDP, of which about 8.5 per cent were considered to be non-recoverable. Student loans can also be written off if the borrower dies or if the borrower becomes at least 50 per cent disabled and receives a disability pension. Borrowers can also apply at any time for deferment of an instalment and/or for an exemption from paying interest if they meet the conditions set out in the regulations.

***Does it promote equal opportunity in studying?***

The main goal of the generous financial support to students is to promote equal opportunity in studying, independently of the family's social and economic background. However, recent data from Statistics Norway reveal that the participation of young people in tertiary education is correlated with the educational attainment of their parents, as in many other OECD countries (Blöndal *et al.*, 2002). In fact, 55 per cent of university students have parents with a tertiary education background, compared to 36 per cent for all students, and 18 per cent for apprentices.

***Financial incentives to rely on generous social insurance schemes are high***

For some social insurance programmes, high replacement rates for recipients combined with the relatively low costs for individual employers and loose eligibility criteria have resulted in high spending by international standards.

This applies to the sickness benefit, which is characterised by generous provisions for those on sick leave and little incentive for employers to discourage its longer-term use, since they only contribute for the first 16 days (Chapter III). Likewise, the decline in the employment ratio for older workers largely reflects the introduction of an early retirement scheme in 1989 combined with the gradual lowering of the pensionable age and a wider coverage of employees during the 1990s (OECD, 2001d). Since individual private employers pay only 20 per cent of pension benefits of early retirees, there are incentives to use this scheme as a means for adjusting the labour force.<sup>61</sup>

The disability-related insurance benefit is also relatively generous, with a high replacement rate and no means-testing. The almost sole responsibility of treating doctors as gate-keepers in this process – who are often too “close” to the patients (OECD, 2002c) – appears to be another key factor for exceptionally high benefit award rates. In addition, the benefit rejection rate is very low by international standards, while appeals by rejected applicants are more frequently successful than in other countries. As a result, about 9 per cent of the working-age population is registered as disabled, the second highest proportion in the OECD area, after Poland but before the Netherlands. And only around 1 per cent of the disabled leave the benefit scheme each year due to recovery or work resumption. Overall, public spending on disability programmes, at 5.6 per cent of GDP in 1999 is higher in Norway than in any other OECD country (Table 14).

### ***There is little competition between public and private providers***

#### *Funding arrangements for hospitals and schools are unbalanced...*

The fact that individual users bear little or none of the costs of providing public services does not in principle preclude a choice among alternative suppliers so as to stimulate demand-side pressures to improve public sector performance. Promoting user choice has in fact become a recent policy *leitmotiv* in Norway. However, provision of services by the private sector is generally low by international standards. As an illustration, for-profit private hospitals provide only 60 beds, *i.e.* 0.5 per cent of current capacity, despite a relatively low number of acute-care hospital beds per capita and long waiting lists to receive hospital treatment.<sup>62</sup> This reflects both tight restrictions on establishing private hospitals and the need for such hospitals to reach an agreement with a regional health body to obtain public funding. In this context, there is no clear provision for ensuring that private hospitals get the same amount of public money for the same treatment as do public hospitals or that they get equal treatment with regard to investment costs. Likewise, in the education sector, only 2 per cent of the pupils are enrolled in private primary schools, which is much below the OECD average. And the funds per student received by private schools cover only 85 per cent of the working expenses per

Table 14. **Disability schemes**  
1999

	Spending on disability programmes (percentage of GDP)		Age-specific disability benefit inflow rates (per 1 000)						Benefit rejection rates	
	Disability benefits (percentage of GDP) <sup>1</sup>	All disability- related programmes <sup>2</sup>	20-34	35-44	45-54	55-59	60-64 <sup>3</sup>	20-64	Share of rejections among total application	Share of successful appeals among rejected applicants
<b>Norway</b>	<b>2.4</b>	<b>5.6</b>	<b>3.3</b>	<b>8.5</b>	<b>18.2</b>	<b>36.9</b>	<b>60.0</b>	<b>12.1</b>	<b>17</b>	<b>26</b>
Denmark	2.3	3.8	1.6	3.1	7.0	11.1	11.1	5.7	25	51
Sweden	2.1	4.7	1.9	5.0	9.6	19.8	31.6	7.6	–	–
Austria	1.8	2.9	0.7	2.2	9.5	34.9	5.1	5.8	49	11
France <sup>4</sup>	0.8	1.7	0.2	0.7	1.9	4.7	0.0	4.8	25	–
Germany	1.0	3.1	0.6	2.3	6.9	18.5	16.6	5.3	38	–
Italy <sup>4</sup>	1.0	1.8	0.1	0.4	2.8	1.4	1.5	7.1	68	–
Netherlands	2.7	4.6	8.3	11.6	15.6	12.0	12.5	10.4	37	12
United Kingdom	1.3	1.5	9.7	12.4	17.8	22.3	11.8	12.9	48	–
Canada <sup>4</sup>	0.7	1.3	0.4	1.0	2.4	4.7	4.1	4.3	55	11
United States	0.7	1.4	2.7	4.5	7.8	13.9	12.8	6.0	64	–

1. Include contributory (earnings-related) and non-contributory disability benefits. These data differ slightly from those contained in the OECD Social Expenditure Database, largely because disability benefits reported here exclude those granted to individuals below 20 and above 64 years old.

2. Include disability benefits, sickness cash benefits, work injury benefits and employment-related programmes for disabled people.

3. No inflow for this age group in countries with statutory retirement age below 65 (men and women in France, and women in Austria, Italy and the United Kingdom).

4. Age-specific rates for Canada, France and Italy do not include data for the non-contributory programmes, while the total for the 20-64 age group does.

Source: OECD (2002c).

pupil received by public schools and do not cover investment costs.<sup>63</sup> The discretionary right of the government to decide on the establishment of private schools has until now further restricted their development. Even if a private school meets all the criteria set in the law to qualify for public money, the final decision is currently still left at the discretion of the authorities.

*... though some efforts have been made in the early childhood educational and care system*

The early childhood educational and care sector (kindergartens) is an example where the central government has undertaken commendable efforts to level the playing field between public and private providers. It grants the same subsidy per child to publicly and privately-managed kindergartens (the subsidy covers on average about 40 per cent of the costs). In fact, publicly-funded private provision is high by Nordic standards, covering 40 per cent of the children in Norway in 2000, compared with 7 per cent in Finland, 13 per cent in Sweden and 30 per cent in Denmark. Municipalities have the duty to provide additional funding to their own and private providers, but often fail to adequately support the latter. As a result, private institutions receive less public financial support than institutions managed by the municipalities.

Imbalances in the funding arrangements between public and private providers of childcare co-exist with differences in parental fees and population covered. Private kindergartens usually apply a flat fee while fees in public kindergartens are in many cases means-tested. For low-income groups, fees in private kindergartens are about five times higher than in public ones in the Oslo and Bergen regions (Table 15). Differences in fee levels, especially for low-income families, may result in undesirable selection of children depending on their family background. Public institutions enrol most of the children with disabilities and other special educational needs, requiring in turn more public funding.<sup>64</sup> The average parental contribution to kindergarten costs (37 per cent in 2001) is also high by international standards – the average of twelve OECD countries is around 28 per cent, ranging from 17 per cent in Finland to over 70 per cent in the United States (OECD, 2001e). Combined with relatively high tax wedges on labour income, this may discourage labour participation. The relatively high parental contribution to kindergarten costs may also reduce the population covered by early childhood education, in particular for low-income families, a problem magnified by the late start of normal schooling in international comparison.<sup>65</sup> In 2002, a majority of the Parliament has decided to introduce a ceiling on fees charged by all kindergartens (at NOK 2 500 per month from August 2003 and 1 500 from August 2004). This may affect the government's plan to transform the current dual public support (activity-based grants from the central government and discretionary grants from municipalities) into a single and more generous grant per child, paid directly to kindergartens independently of their ownership.<sup>66</sup>

Table 15. Private and public kindergartens: market share, population and parental fees

	Public kindergartens	Private kindergartens
	Per cent, year 2000	
Share of children enrolled		
Total	59.5	40.5
From linguistic and cultural minorities	77.2	22.8
With special needs	83.9	16.1
	Person-year, year 2000	
Children per employee	4.5	5.3
	In Norwegian Krone, August 2001	
Annual fees for a full-time place in Oslo		
For a family with a NOK 100 000 gross annual income	8 800	42 398
For a family with a NOK 250 000 gross annual income	28 050	42 398
For a family with a NOK 500 000 gross annual income	40 150	42 398
Annual fees for a full-time place in Bergen		
For a family with a NOK 100 000 gross annual income	7 590	40 386
For a family with a NOK 250 000 gross annual income	31 750	40 386
For a family with a NOK 500 000 gross annual income	31 750	40 386
Annual fees for a full-time place in Trondheim		
For a family with a NOK 100 000 gross annual income	34 430	38 063
For a family with a NOK 250 000 gross annual income	34 430	38 063
For a family with a NOK 500 000 gross annual income	34 430	38 063

Source: Statistics Norway and Johnsen (2001).

The childcare cash benefit has extended parental choice on childcare arrangements, but has raised efficiency and social issues. Introduced in 1998, it has been substantially increased and its coverage broadened. It now covers all families with children between one and three years who do not attend the publicly-funded childcare facilities. The initial purposes were to provide roughly the same state benefits to families, independently of their use of kindergartens, and to relieve congestion in these services. The childcare cash benefit amounts to a maximum NOK 3 000 per month per child in 2002 (*i.e.* about one quarter of an average full-time salary net of taxes), broadly equivalent to the central government subsidy per child paid to kindergartens.<sup>67</sup> However, while the provision of publicly-funded childcare supports the development of children and facilitates parents' participation in the labour market, the cash benefit does not contribute equally to these aims. On the contrary, female labour supply declined by 2.1 hours per week for all mothers in the labour force since the introduction of the scheme in August 1998 and the end of 1999 (Knudsen, 2001). This partly reflected shorter working hours for mothers at work (a decline of about 1.5 hours per week), in particular for mothers with a high

education level (Hellevik and Koren, 2000).<sup>68</sup> The childcare cash benefit has also created strong incentives for low-income parents to quit their jobs, which may make their return to the labour market difficult, to care for their children at home.<sup>69</sup> As a result, children from less educated and immigrant families are more likely to be the last to enter formal childhood educational and care facilities, reducing their development opportunities and their knowledge of the Norwegian language. Furthermore, by creating uncertainties about the demand for childcare services, the introduction of the cash benefit may also have slowed the building of childcare facilities despite long-standing excess demand. Overall, positive results from this expensive measure (NOK 2.6 billion in the 2002 budget, *i.e.* almost ¼ per cent of GDP) appear meagre.

*Some efforts have been undertaken to raise competition in public procurement*

To achieve a more efficient public sector, the authorities have placed greater emphasis on competition in public procurement since the early 1990s. General government purchases amounted to NOK 149 billion in 2000, *i.e.* 25.7 per cent of public spending and 14 per cent of mainland GDP. Steps towards liberalisation include the removal of the obligation for public bodies to buy services from public enterprises. In particular, since 1993, ministries and government agencies are no longer obliged to rent buildings from *Statsbygg*, the state property company and since 1999, public bodies can buy catering services from companies other than the state-owned enterprise. The government is now considering extending tendering for ferry services across the Norwegian fjords. In addition, several measures have been taken to improve the information available on public procurement, to simplify the legislation and to raise competition. Specifically, the new public procurement law introduced in 2001 makes it mandatory to use competitive tendering for all public purchases, by both central and sub-central public authorities, above the thresholds set in the European Economic Area (EEA) agreement (NOK 200 000).<sup>70</sup> A separate body for settling disputes over public procurement decisions and a new network responsible for providing better and more uniform information have also been introduced.<sup>71</sup>

Transaction costs, due to the need to design and monitor external contracts, and tax rules still hinder competitive tendering, especially for small municipalities. Municipalities accounted for 37 per cent of general government procurement in 2000. The small size of many of these tends to make information and transaction costs a serious barrier to the wider use of competitive tendering. As an example, only 1 per cent of all municipalities have tendered institutional elderly care services and 3 per cent home services, compared with 17 per cent for the largest municipalities.<sup>72</sup> The Competition Authority launched a special initiative directed at the municipal sector in 1999. It met with the administrative and political leadership of selected municipalities, to inform them about their obligations and the merits of more outsourcing and competition. However, the VAT exemption for the services

provided by public bodies still leads to a distortion in competition. Since public bodies cannot deduct the VAT paid on inputs bought from the private sector, it may be cheaper to produce their own services than the outsourcing of similar services.<sup>73</sup> The Rattsø committee is currently investigating this distortion and is expected to present recommendations to the government by the end of 2002.

### **An agenda for raising the effectiveness of public expenditure**

The Norwegian authorities have recently elaborated a new agenda to improve efficiency in public spending. In the late 1990s, reforms of public entities' budgeting and management were undertaken so as to increase their cost efficiency and to facilitate a shift of resources from low to high priority public spending programmes. In its public sector modernisation programme presented to Parliament in January 2002, the current government has built upon the previous government's approach by putting more emphasis on user satisfaction and user choice, and on the provision by private producers. Key principles include:

- Increasing user choice, for example by granting individuals vouchers instead of direct financial support to service providers.
- Requiring public service providers to carry out systematic user surveys.
- Allowing for enhanced competition between public and private providers at the local government level.

This framework has now to be implemented and should be supplemented by a wider public sector reform. A large array of recommendations for increasing the effectiveness of public spending programmes further are highlighted in this section and summarised in Box 10. Priority should be given to: increasing transparency on the costs of regional policy; increasing flexibility in public sector wages and job status; changing local government financing to better match citizens' preferences with outlays as well as tax levels; increasing the role of the private sector in the provision of public services; relying more on user charges to curb excessive demand in particular for tertiary education; improving the incentive structure for sickness and disability schemes.

### ***Enhance fiscal sustainability***

Concerning the budget process, measures to curtail spending pressure and improve efficiency should be a priority. A shift towards multi-annual budgeting – currently explored by an official committee due to report before the end of 2002 – is likely to be helpful. In addition, the current deficit rule should be supplemented by an expenditure rule. It would reduce the risk that a non-oil tax windfall is immediately spent, as was the case in the revised 2002 national budget presented to Parliament in May 2002. It would also reduce the risk that the combination of spending pressure and the deficit rule causes a further rise in the

**Box 10. A synopsis of recommendations to improve public spending efficiency and effectiveness**

**Enhance fiscal sustainability**

- Consider a more comprehensive fiscal strategy by complementing the deficit rule by an explicit expenditure rule.
- Introduce a medium-term fiscal framework, in particular presenting detailed Fiscal Strategy Statements soon after a new government is installed.
- Consider applying the top-down approach to the parliamentary discussions in May/June on the revised national budget.

**Improve transparency**

- Introduce accrual accounting.
- Present estimates on the overall costs of regional policy in the budget papers.

**Move further towards a management approach geared towards outcomes**

- Reconsider the 5 per cent limit on public sector entities' ability to carry over unused appropriations.
- Redefine public entities' targets to be more outcome-oriented and develop instruments to evaluate their performance. Establish an independent body for this purpose and rely more on activity-based funding systems for public entities.
- Move towards wages reflecting market conditions for different professions while reducing current generous non-wage compensation components (long-life tenure and pension arrangements in particular). Consider greater reliance on performance-oriented pay schemes for public employees.

**Match local preferences better by reforming the funding system of local governments**

- Soften the existing regulations, which limit municipalities' right to introduce and adjust property taxes, but refrain from reintroducing a tax sharing arrangement for the corporate income tax.
- Improve local governments' incentives to lower tax rates on individuals' income by abolishing the discretionary component of the grant system and by raising transparency on the share which accrues to local governments and over which they have some powers. At the same time, the tax equalisation scheme should be reformed to reflect potential, instead of actual, tax revenues.

**Box 10. A synopsis of recommendations to improve public spending efficiency and effectiveness (cont.)**

**Raise the contestability of public service provision**

- Apply more consistently the “money follows the user” principle, both across public providers and between them and private providers. This should imply the same funding of public and private suppliers, and would require the development of cost-accounting, in particular for local governments.
- Simplify the licensing for private operators, in particular for hospital care and education and reconsider zoning regulations.
- For the employment services, apply the “money follows the user” principle and remove the existing restrictions on private work agencies.
- Implement the envisaged funding reform for early childhood care and educational services but reconsider the childcare cash benefit, which contributes to damping the supply of labour and may be less conducive to the cognitive development and social integration of children than the provision of formal educational and care services.
- Pursue efforts to encourage competitive tendering by local governments, possibly through technical support from the central government and the Competition Authority and/or through the use of inter-municipal agencies.
- Reform the special VAT treatment granted to public bodies which favours own-production.

**Intensify the use of price signals to contain excessive demand on public spending**

- Reduce public funding for tertiary education by raising fees for tuition, reducing the grant component of financial support for students and imposing more stringent limits on study duration. Equity considerations would be mitigated by introducing means-tested elements in tuition fees and/or to public support schemes for students.
- Consider higher user charges for elderly care and reinforce resource-testing elements.
- Reconsider the setting of parental fees by public and private kindergartens to avoid cream-skimming and ensure that the level of fees does not discourage labour supply and investment in human capital.
- Consider making municipalities responsible for buying hospital services so as to reduce incentives to under-supply preventive care and postpone the reintegration of patients who are no longer in need of hospital-based medical treatment.

**Improve incentives to reduce the excessive use of social insurance schemes**

- Reconsider the incentive structure for employees and employers so as to avoid excessive use of paid sick leave, early retirement and disability schemes.

tax burden, as for instance, occurred in 2000 and 2001. Concerning multi-year budgeting, it can be a useful pedagogic tool for politicians and the general public and is likely to lead to a better-informed policy debate. Most OECD countries now apply a medium-term framework of 3 to 5 years and many apply an expenditure rule, though recently many countries have shown slippage. Introduction of multi-annual budgeting would underscore that the room for additional spending is limited in the medium term, given rising spending on existing programmes and the aim of reducing the tax burden. This may lead to fewer proposals by spending departments for new programmes, especially those with limited outlay consequences in the short run but substantial ones in the medium term. Information on medium-term developments may also stimulate measures to make existing programmes more effective, notably if backed by external scrutiny. Cost-reducing measures may take time to show their effects and are therefore less interesting for spending departments to implement in the current annual budgeting process.

It may also be helpful to supplement the current Long-Term Programme, presented by the government before the general elections, with a detailed fiscal strategy statement of the new government soon after the general elections as is done in other OECD countries. In Australia for instance, the introduction of a fiscal strategy statement has helped to reduce spending pressures. The same holds for the detailed Coalition Agreements in the Netherlands. In Norway, it could create a strong budgetary anchor for the four-year parliamentary period and reduce short-sighted decisions. In addition to the deficit targets for the four-year period – targets that can be based on the current Petroleum Fund return rule – the Statement should contain expenditure and tax targets and rules on how to react to deviations from them. Such tax arrangements are likely to reduce uncertainty about the tax burden in the medium term and may therefore have a positive impact on the economy's growth potential. If such a fiscal strategy statement is introduced, Long-Term Programmes should still be presented before the elections but as a technical document aimed at stimulating and enriching the pre-election debate.

Finally, the top-down approach – already applied to the parliamentary discussion on the national budget in October-December – should be extended to the revised national budget in May/June. In 1996-2001, the revised national budget increased real spending growth by on average 0.7 percentage points per year compared to the budget approved in November/December. An explicit initial decision on total outlay changes would limit spending from creeping upwards. To avoid spending creep, it could also be considered to agree on an expenditure envelope in October-December, with the allocation decided later in May/June.

### ***Improve transparency***

Further measures should be taken to improve transparency. *First*, a move from cash to accrual budgeting would give better information on costs, especially

for investment, and may therefore promote cost effectiveness. A committee is currently exploring the possibilities and is expected to deliver its recommendation in December 2002. *Second*, based on the proper evaluation of their cost and the persons who benefit from them, tax expenditure should be discussed by Parliament on a regular basis. *Third*, the budget papers should present comprehensive estimates of the cost of regional policy.

### ***Move further towards a management approach geared towards outcomes***

Enhanced flexibility in budgeting and management should be supported by a proper definition of public sector objectives and by better instruments to assess performance. The introduction of the “letters of allocation” for public entities has been a welcome development. However, several changes would reinforce an outcome focus. *First*, cost-efficiency could be improved by removing the current low limit on the ability of public entities to carry over unused appropriations to the following budget year. *Second*, the targets of several public entities should be redefined, with a view to avoiding the proliferation of input/output targets, which may raise consistency issues and create prioritisation problems. This applies in particular to the PES, which has been assigned 14 input and output targets in 2002. For instance, measuring the performance of the PES using the proportion of people on disability pension enrolled in a labour market programme could create an incentive to retain these people longer than needed in these programme instead of facilitating their return to the labour market. The Swiss experience in defining clear priorities through a synthetic indicator for the PES performance could provide a valuable example (OECD, 2002d). Establishing an independent auditing body to assess public entities actual performance, as well as their impact on the population, is also desirable and should help to define appropriate performance targets.

Funding principles for public entities and compensation schemes for public employees should be reformed to provide stronger incentives to improve public spending. The introduction of a case-mix system for hospitals is a step in the right direction and performance-based schemes should be extended to other public entities. However, care should be taken that applying such activity-based funding schemes to sectors characterised by excess demand will not result in a rapid increase in spending. In particular, absorbing the long waiting lists in the hospital sector will create pressures on the budget. For universities, such a scheme could raise spending on tertiary education further from its already high level, unless action is also taken to raise the currently negligible opportunity costs for students. To create the appropriate incentives for public employees, public bodies should be able to use their efficiency gains to reward meriting employees. This would require reconsidering the rather rigid compensation arrangements for public sector employees, by relying more on performance-based wage systems for some sectors and

professions (in particular for those where the output can easily be identified). More generally, public employee compensation should better reflect labour market conditions. This could imply upward wage adjustments in some sectors if the quality and coverage of public services were to be maintained. In this context, the favourable non-wage compensation elements should be reduced concomitantly since they entail some segmentation in the labour market and hinder flexibility (in particular the *de facto* long-life tenure and more generous pension schemes).

### ***Reform the funding system of local governments and their spending responsibilities***

The grant and local tax systems should be tailored to enable local governments to match citizens' preferences better. The existing regulations, which limit municipalities' right to introduce and adjust property taxes, should be softened. Enhanced reliance on property taxes would have several advantages. Property taxes are more transparent for citizens than the sharing of income taxes, and may thus create more pressures to contain spending. Their proceeds are also more predictable and stable than those associated with most other tax bases, and they create few externalities that extend beyond the scope of the jurisdiction boundaries (*e.g.* on labour supply). For similar reasons, the idea of re-introducing a sharing arrangement between local governments and the state for the corporate income tax, which is currently discussed by the government, should not be implemented. In the absence of local governments' powers to adjust the corporate income tax rates, this arrangement could lead them to over-invest in business infrastructure and services to attract companies. Rather, local governments' incentives to lower their (flat) tax rate on labour income should be improved since they all currently apply the maximum rate despite the already high quality of public services and substantial revenues from electricity production in some of them. This would require the sharp reduction of discretionary grant elements, which have so far made local governments reluctant to lower tax rates because they fear becoming ineligible for some central government grants. Increasing transparency with respect to the share of the personal income tax which accrues to local governments and over which they have some powers is also desirable. Concomitantly, the tax equalisation system should be reformed, so as to reflect potential tax revenues, instead of actual revenues, so as to avoid that a cut by one jurisdiction being partly paid for by other jurisdictions. In addition, the grant system should be reformed to encourage the search for efficiency gains.

### ***Raise the contestability of public service provision***

*Strengthen user choice across jurisdictions...*

Enhanced competition between alternative suppliers of public services would also help to raise public spending efficiency and responsiveness to the

users' needs. Stimulating demand-side pressure to improve public sector performance would require removing the existing zoning restrictions on user choice. In 2001, the possibility for patients to choose among hospitals was introduced. However, user choice is still quite restricted for other services, in particular for primary schools and elderly care, as residents from one municipality are not entitled to use the services offered by another municipality. This largely stems from the funding system of municipalities whereby vertical block grants reflect the number of inhabitants, whether or not they use the services provided by their municipality of residence. Municipalities thus have no financial incentives to provide services to non-residents. In this context, the "money follows the user" principle could be applied more consistently, through compensation schemes between municipalities. Such schemes would facilitate the consolidation of supply across municipalities, and eventually contribute to more efficient and/or higher quality services, in the elderly care and education sectors in particular. Designing appropriate compensation schemes across jurisdictions would require accurate and transparent information on the cost structure of public service providers. To facilitate the development of cost-accounting, technical help from the central government to the municipalities, in particular the smallest ones, would be useful.

Implementing appropriate compensation schemes across jurisdictions would also make it possible to introduce a purchaser/provider split for some services. For those services whose responsibility is currently shared across levels of government, centralising financial responsibility – but not the supply – would contribute to avoid that different government layers shift the burden onto each other by restricting supply. As an illustration, this type of arrangement would allow municipalities with a high unemployment rate to "buy" more targeted services from the public employment service if they so desire to minimise the cost of social assistance benefits. Extending this form of arrangement to alternative (private) suppliers – and in this particular case to private work agencies as in Australia, the Netherlands and Germany – would have the advantage of raising competitive pressures.

*... and level the playing field between public and private providers*

Tight regulations on the establishment of private providers, together with a lower level of public funding per user, restrict competitive pressures. As a result, the market share of private suppliers for some key publicly-funded services is quite low by international standards. In the hospital sector, the very low number of for-profit private sector beds co-exists with long waiting lists, which have recently led the government to offer the possibility of being treated abroad for patients with a prospectively long waiting period.<sup>74</sup> In the longer term, an increased reliance on private sector provision would probably be less costly, stimulate more

changes in public hospitals, and be more satisfactory for patients who are often reluctant to be hospitalised far away from their family. This would require a level playing field between public and private providers, an easing of the regulations imposed on the establishment of private providers and some guarantee that the framework designed to encourage private provision will be stable in the long term. The same recommendations apply to the education sector where outcomes, as revealed by the recent PISA survey, are close to the OECD average despite significantly higher public resources devoted to education. To improve learning outcomes, the Norwegian authorities should follow the Swedish experience, which shows how enhanced competition can contribute to this objective (Lundsgaard, 2002). Thus, the recent proposal to facilitate the establishment of private schools and improve their funding should be implemented.

Funding rules for childcare services are closer to the “money follows the user” principle and the market share of private providers is already high. Under the recently proposed reform, public funding per user will be equal for public and private suppliers of early childhood care and educational facilities. This reform is desirable as it will foster competitive pressures, and should thus be rapidly implemented. However, existing differences in the setting of parental fees raise problems of “cream skimming”, with public facilities taking a greater share of the children from low-income families and with special needs. To mitigate the inherent risk of social segregation, two solutions could be envisaged. The public subsidy per child could be made dependent on family income, as is the case in Australia. Alternatively, parental fees and admission conditions could be made similar, whether a public or a private entity provides the services, as it is currently the case for primary schools in Sweden and the Netherlands (Lundsgaard, 2002). The amount of public support should also reflect the economic and social benefits associated with each form of childcare arrangement. Initially, the existing childcare cash benefit paid to parents was set broadly at par with the central government subsidy per child paid to kindergartens. It is conditional on children not attending subsidised childcare facilities, thus damping the supply of labour and/or encouraging parents to rely more on informal care which may be less conducive to the cognitive development and social integration of children. If this tendency is confirmed, the cash benefit should be reconsidered.

#### *Promote competitive tendering*

Increased recourse to competitive tendering could also bring cost savings and would thus contribute to lower spending as revealed by a number of empirical studies on several countries (Lundsgaard, 2002).<sup>75</sup> More contracting out and competitive tendering in Norway would require the elimination of two major obstacles. *First*, a reform of the VAT exemption for public bodies is required since the current system favours own production over outsourcing to the private

sector. Among the options for reducing this distortion, making public bodies subject to VAT is the first-best solution. *Second*, transaction costs associated with competitive tendering for the services sub-contracted should be reduced to a minimum. This could involve technical help from the counties, the central government, and/or the Competition Authority to improve the knowledge base for local governments.

### ***Increase the use of price signals to reduce excessive demand for costly public support***

There is scope to raise the price individual users pay for publicly-funded services, to avoid excess public spending without raising serious distributional concerns, at least in tertiary education and for elderly care. The participation of young people in tertiary education, in Norway as in most OECD countries, is highly correlated with the educational attainment of their parents, so that public funding for university students is often regressive. Several OECD countries have reduced public funding for tertiary education by raising fees for tuition and/or reducing the grant component of financial support for students, while introducing some elements of means-testing. This has not affected significantly either the aggregate participation in tertiary education or the relative demand by students from less affluent backgrounds (OECD, 2001f). The Norwegian authorities should thus envisage similar measures. They should also introduce more stringent limits on the duration of financial support to students to strengthen incentives to choose wisely in the first place and complete studies in a reasonable period of time. In the elderly care sector, there is also scope to raise user charges for formal help at home as well as for institutional care while considerable attention would need to be taken in setting prices for home care so that individuals are encouraged to live independently as long as possible. Tightening eligibility conditions, based on medical grounds, and reinforcing means-tested elements should be envisaged. However, careful design is needed to avoid negative effects on work and saving incentives through detrimental effects of means-testing on marginal effective tax rates. The previous *Survey* recommended to complement income-testing by charges on the estate: where higher user charges are above annual income, individuals could accumulate debits with the government which could be subsequently charged against the individual's estate, thus removing some of the more extreme effects of pure asset testing such as the forced sale of dwellings.

Higher co-payments in the hospital care sector may raise serious equity issues and may have little chance of contributing significantly to lower waiting lists. However, instead of charging individuals, municipalities could be made responsible for financing hospital care services. They would buy specialised care services from hospitals and would thus be encouraged to shift their demand away from expensive hospital care towards more prevention and outpatient care for patients who are no longer in need of hospital-based medical treatment. The

Swedish experience reveals that the management of hospital resources was significantly improved by the shift in financial responsibilities for elderly care to the municipalities in 1992. However, this approach would be difficult to implement for small municipalities because the pooling of risk may not be sufficient. In this context, several solutions could be envisaged, such as excluding the smallest municipalities or the most expensive treatments from this purchaser/provider model.

***Improve incentives to reduce the extensive reliance on social insurance schemes***

Incentives should be changed to reduce the extensive reliance on costly social insurance schemes. To reduce the frequency of sick leaves, early retirement and disability, which are all high in international comparison, the authorities should reconsider the incentive structure and tighten eligibility conditions (see also Chapter III). Benefit entitlements should be designed so as to encourage work. The authorities should also envisage obliging employers to continue wage payments over a longer period of paid sick leave and raising the contribution levels of individual employers using early retirement schemes. In addition, incentives concerning work injury programmes should be reshaped, following the practice of some OECD countries which base work injury insurance premiums on the individual employer's experience (OECD, 2002c).

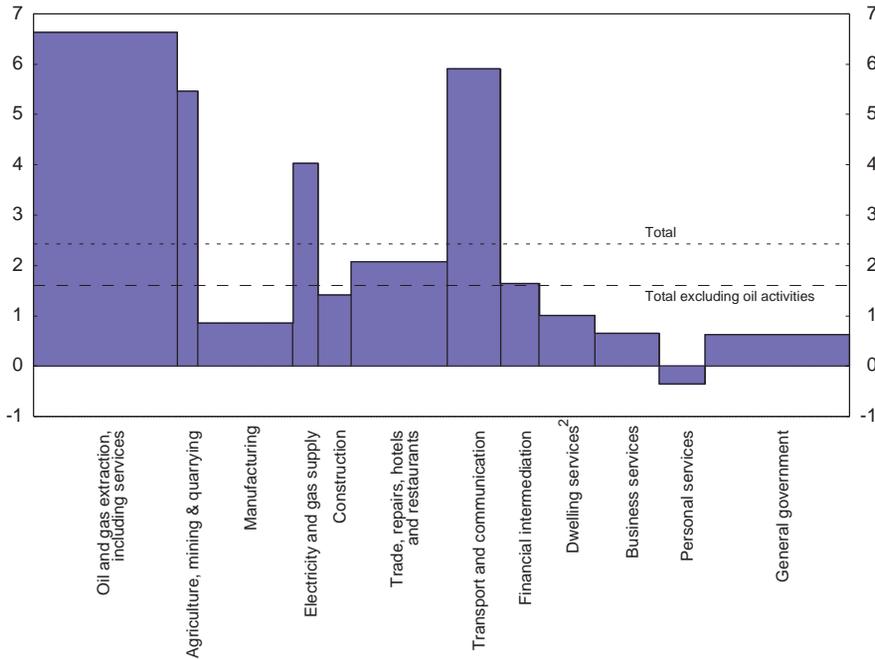
### III. Policies to boost potential output growth

While there are features of the Norwegian economy that favour strong growth in its already high standard of living, there are also some key weaknesses that significantly hamper progress. National income per capita will continue to be boosted by additional revenues due to the natural resource wealth. Furthermore, the institutional framework of the Petroleum Fund reflects a commitment to prevent a surge in spending from being costly through a rapid structural shift from the exposed to the sheltered sectors. Other aspects of the Norwegian economy also favour high living standards. In particular, Norway's tradition of work-oriented social inclusion encourages high labour force participation, and ensures that only a small minority of households plays no active role in the economy, thus reducing the risk that growth is associated with a sharp widening of the income distribution. At the same time however, the oil-wealth has created supply bottlenecks, masked the need for reforms, especially in product markets, and has encouraged a large government sector that lacks strong incentives to make efficiency gains (Chapter II). This chapter begins with a broad overview of the main growth challenges facing Norway and then analyses key developments in labour, product and capital markets as well as taxation issues.

#### **Key obstacles to higher growth**

The presence of significant oil revenues has weakened, through various channels, productivity growth in Norway's mainland activities, and this presents a challenge for the future (Figure 18).<sup>76</sup> Labour productivity growth has been weak compared, for example, to that of neighbouring Sweden (Boug and Naug, 2001). Also, an international comparison of the level of productivity shows Norway to be middle ranking (Figure 19). Weak productivity performance in resource-rich economies is often associated with a high and volatile real exchange rate resulting from the surge in commodity exports and this squeezes traditional exporting industries. This can be damaging for labour productivity growth, as there are typically more opportunities for capital deepening and the use of new technologies in manufacturing compared with services. Also, a smaller traded goods sector may hinder productivity through reduced exposure of the business sector to foreign competition and new technologies.<sup>77</sup> Furthermore, there may be wasteful

Figure 18. **Labour productivity by sector<sup>1</sup>**  
Average annual percentage change, 1988-2000



1. Value added per hour worked. The width of the bar represents the share of each sector in total value added in basic prices in 2000.

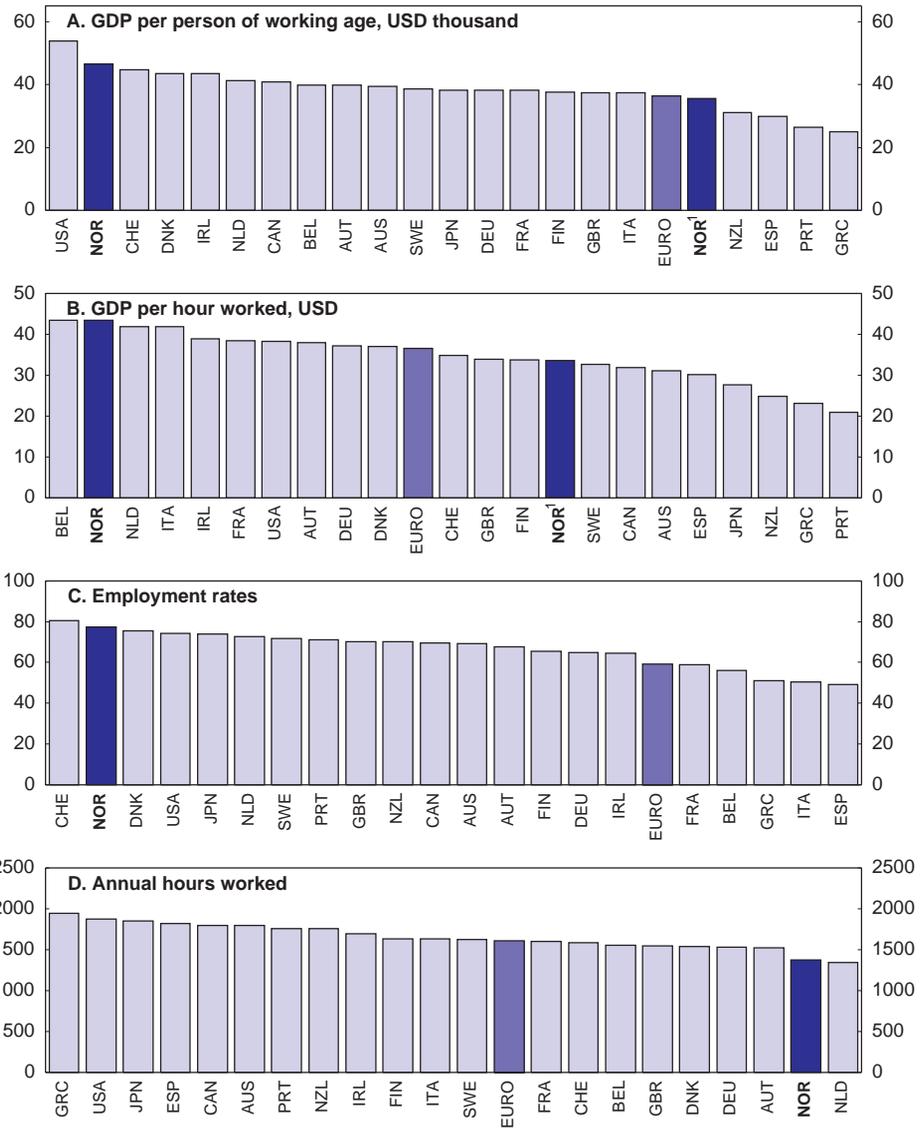
2. Dwelling services includes rental income which accounts for a sizeable share of the economy.

Source: Statistics Norway, May 2002.

capital-scraping and subsequent re-investment if the squeeze on manufacturing is short-lived and adjustment costs are high. The rewards of improving mainland trend productivity growth is illustrated by Bergo (2002). This study suggests that an increase of trend productivity growth from the current rate of about 2 per cent to 2¼ per cent would increase GDP by more than the total return on the petroleum wealth.

Despite high participation, labour supply has become a key constraint towards raising GDP per capita faster, as evidenced by an extended period of very low unemployment accompanied by real wage increases that have clearly out-paced productivity gains. A policy priority should therefore be to relieve labour market pressures, in particular by preventing the erosion of the high employment

Figure 19. **GDP per capita, labour productivity and utilisation**  
2000



1. Mainland Norway.

Source: OECD, *National Accounts and Labour Force Statistics*.

rate through early retirement, by reversing the long-run decline in hours worked that are already relatively low by international standards and by limiting employment growth in the public sector by raising efficiency.

Many standard growth issues are also relevant for Norway. As highlighted in the recent OECD Growth Study (OECD, 2001g), rising living standards are partly driven by advances in technology. Thus, there is a need to encourage an appropriate mix of private and public research and to enhance the capacity for adopting new technologies through investment in physical and, via education, in human capital. Product-market competition and efficiency also matter for growth and Norway is undergoing or has completed similar reforms as other countries in these areas, although it is lagging in some.

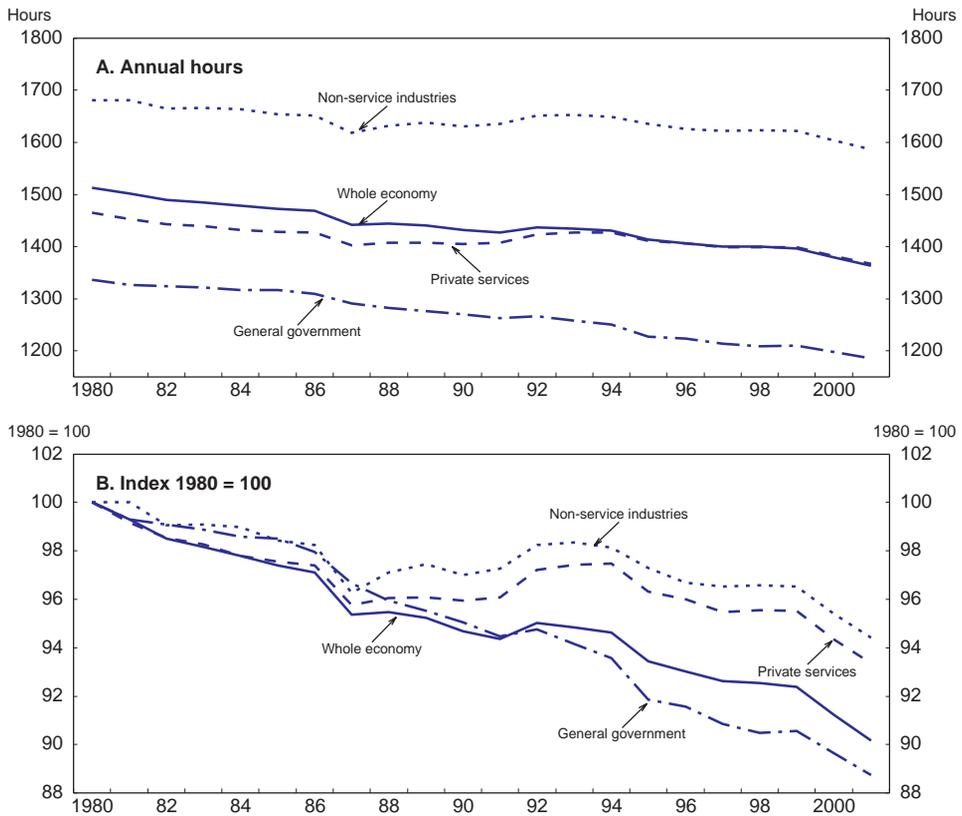
### **Labour market and social issues: maintaining labour supply remains a challenge**

A shortage of labour is one of the main factors that has affected Norway's growth in recent years and will probably remain a binding constraint in the future. Tight labour market conditions have led to concerns about overheating and have necessitated a tight monetary stance. A decline in the traditionally high employment rate or a further reduction in the already low annual working hours would aggravate the situation and affect progress in living standards. Thus, the Norwegian authorities and social partners have to pay particular attention to policies that influence individual decisions to take up work, hours of work and the efficiency with which working time is used. Of particular concern is the questionable effectiveness of recent measures to reduce the high level of sickness absence and the slow pace of reform in policies which affect retirement decisions. Tight labour markets intensify the need to ensure efficiency and relevance of education and training. In this regard the average skill level of the workforce is very high and there is a commendable commitment to furthering this through adult learning. However, the education system itself is relatively expensive, middle-ranking in international comparisons of academic achievement in compulsory schooling and encourages students to remain for excessively long periods in tertiary education (see also Chapter II).

### ***The damaging influence of sick leave on working hours looks set to continue***

On average Norwegian employees currently work a little under 1 400 hours per year, equivalent to about 26½ hours per week, once account is taken of part-time work, overtime, holidays and sickness absence.<sup>78</sup> By comparison, employees in most European countries work between 29 and 32 hours per week on an annualised basis and in the United States, 36 hours. As in many other countries, average working hours show a long-run downward trend, partly due to increasing part-time work but also due to reductions in the length of the full-time

Figure 20. Annual hours worked per employee by sector



Source: Statistics Norway, May 2002.

working week and more holidays. The share of general government employment has risen over the 1990s, and as average hours of general government employees fell more rapidly than in other sectors this had a strong influence on the overall trend (Figure 20). Thus the exploitation of feasible avenues to alter norms in public sector employment should be among the measures to increase average working hours. Another important, and broad, influence on the choice of working hours in Norway is the high tax rate on labour income that implies both low returns on additional hours in employment and a greater incentive to “do-it-yourself” production of goods and services. The present government’s strategy of reducing taxes implies that some softening of this influence may occur.

Table 16. **Increases in sick leave and recipients of disability and AFP pensions**  
In thousands

	1997	1998	1999	2000	2001
Increase in sick leave estimated in person-years <sup>1</sup>	11.6	7.4	9.5	9.4	11.0
Increase in stock of disability pensioners <sup>2</sup>	7.1	11.6	11.7	9.7	5.8
New persons in the AFP scheme <sup>2</sup>	7.9	13.1	10.1	12.1	7.6
<b>Total</b>	<b>26.6</b>	<b>32.0</b>	<b>31.3</b>	<b>31.2</b>	<b>24.4</b>
<i>Memorandum item:</i>					
Increase in full-time equivalent employment	54.9	46.7	13.6	5.9	7.7
Full-time equivalent employees and self-employed	1 907	1 954	1 967	1 973	1 981

1. Based on government figures for the percentage increase in sick leave and the estimate in the report of the *Sandman Committee* that a 10 per cent increase in sick leave is equivalent to loss of approximately 11 000 person-years.

2. Norwegian government figures.

Source: Ministry of Finance and Statistics Norway.

A specific concern about working hours is the rapid rise in sick leave. Currently about 25 sickness days per worker are taken per year and the increase in sick leave in recent years has been equivalent to a loss of between 7 500 and 11 500 person-years annually, or about  $\frac{1}{4}$ - $\frac{1}{2}$  per cent of total employment (Table 16). The trend is partly due to a generous sick leave scheme that now provides up to one year of benefit at a level equal to previous earnings for most employees. Furthermore, employers have little incentive to discourage long-term absence, paying for only the first 16 calendar days of sick leave, after which payment is covered by the National Insurance Scheme (NIS).<sup>79</sup> With tacit complicity by the medical profession, sick leave in Norway can be abused to the advantage of both employer and employee, for example as an alternative to lay-offs.

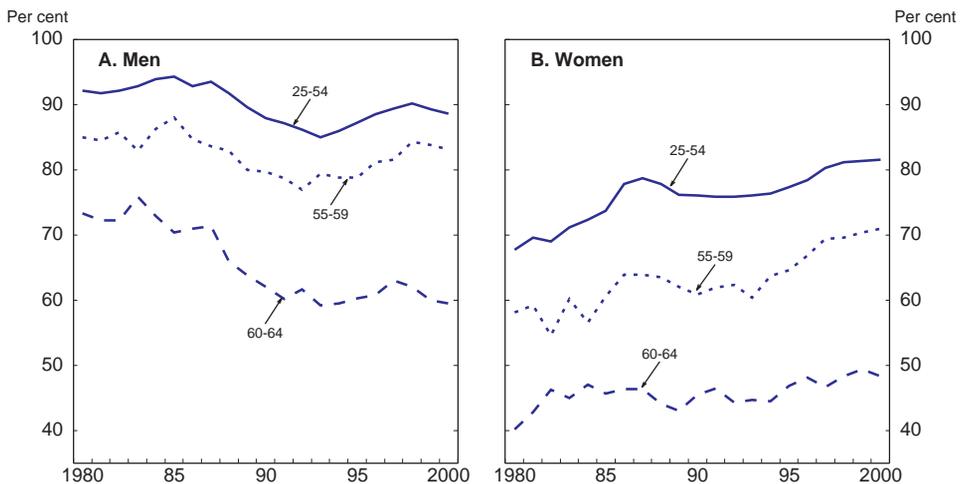
The long-recognised need for reform resulted in a tripartite agreement in October 2001 aimed *inter alia* at reducing sick leave, although it is questionable whether its impact will be strong. This agreement, brokered between the previous government and the social partners, sets three objectives: a reduction in sickness absence by at least 20 per cent by 2005, a greater share of disabled persons in employment and an increase in the effective retirement age. It aims to achieve these goals via voluntary company-level agreements between the employers and the National Insurance authority. Significantly though, the obligations for employers and employees are not clearly spelled out while the government's concessions are rather more concrete. Importantly, the government has agreed to abstain from proposing changes to the regulations of the NIS sickness benefits. Thus, the recommendations of the *Sandman Committee* to lengthen the duration of the employer's contribution and to reduce benefits will not be implemented. In addition, the government is committed to reducing employers' social security contributions for workers aged 62 years or older by 4 percentage points and to increase wage subsidies for enterprises that employ disabled persons. The

reduction in social security tax was implemented in July 2002. In a move that is more likely to increase rather than decrease sick leave, employees engaged in a company-level agreement will be allowed “extended self reporting”. They will be able to take off up to eight days consecutively without a doctor’s certificate, instead of the normal three days, for up to 24 days per year. In June 2002, only 7 per cent of all employees were covered by company-level agreements, of which the vast majority is employed in the public sector. The re-evaluation of the agreement due in mid-2003 should revisit the recommendations of the *Sandman Committee*.

### **Action is still needed to stem flows into early retirement**

As highlighted in the special chapter of the 2001 *Survey* (OECD, 2001d), withdrawal from the labour force before the standard pensionable age of 67 years has become increasingly common in Norway. This is illustrated by the substantial drop in employment rates among men aged 60-64 years and weak growth in the rates for women in this age group compared with their younger counterparts (Figure 21). Early retirement is strongly influenced by the NIS disability pension and by AFP (*Avtalefestet pensjon*) early retirement schemes negotiated at the sectoral level.<sup>80</sup> Incentives to retire early under both of these schemes are enhanced by the favourable tax treatment granted to pensioners.<sup>81</sup>

Figure 21. **Employment rates<sup>1</sup>**



1. Share of persons in employment over the population of the same age.  
Source: OECD, *Labour Force Statistics*.

Norway's disability pension scheme is large, about one quarter of those aged 55 to 59 and about one third of 60 to 66 year olds are recipients. And total spending is equivalent to about 2½ per cent of GDP, among the highest in the OECD (Table 14).<sup>82</sup> Arguably the scheme goes too far towards fulfilling a role as a quasi-early retirement scheme as well as a disability scheme and there has been widespread recognition that reform is needed. A prime cause for the widespread take-up in Norway is due to weaknesses in the assessment procedures in which the applicant's doctor is relied on too heavily for advice and decision-making (OECD, 2002c). Although rejection rates have increased from less than 15 per cent in 1997 to nearly 24 per cent in 2001, they are nevertheless low in international comparison as elsewhere rejection rates of 50 per cent are not uncommon.<sup>83</sup> Only about 1 per cent of those with disability pensions in Norway leave the rolls each year due to recovery or work resumption, a figure relatively low by international standards. In this regard, a positive step was taken in 2001 with the introduction of an experimental scheme in which an assessment is made of a disability pensioner's potential for returning to work. In its present form the scheme has a mechanism to stop benefits if individuals refuse to attend their assessment interview. However, follow-up action, such as participation in rehabilitation programmes, is at present voluntary and the scheme would be more effective if some form of sanction could be applied here too. As of spring 2002 about 8 000 of the total of more than 280 000 disability pensioners have been interviewed. Another measure taken will enforce the requirement to participate in a rehabilitation programme more strictly before a disability pension can be granted. In terms of other measures to reduce the number of disability pensioners, it seems doubtful that the tripartite agreement discussed in relation to sick leave (see above) will make much progress with regard to its objective of increasing the share of disabled persons in employment. A greater impact is likely to come from the reform of the disability pension scheme proposed by government in June 2002 and to be implemented in July 2003. As recommended by the Sandman Committee in 2001, the government has proposed to Parliament to introduce a temporary disability benefit. This benefit will be granted for a period of one to four years and can be extended once thereafter while a permanent disability pension will only be granted to individuals evaluated as having no potential work capacity. In order to stimulate participation in rehabilitation programmes, the temporary disability pension is 60 per cent of the former income, 6 percentage point less than received while participating in a rehabilitation programme.

Although not funded in the same way, the AFP early-retirement schemes effectively represent an extension of the standard NIS pension system to those aged 62 to 66 and about 20 per cent of this age group is currently retired early under this scheme. As discussed in the 2001 *Survey*, a general criticism of this programme is that the link between contributions and pension benefits is weak. The eligibility rules are fairly undemanding in terms of previous earnings whilst

the pension benefits themselves are calculated favourably, as though the person retired on the standard NIS pension scheme at the age of 67 (OECD, 2001d). The AFP schemes should be substantially overhauled, or replaced by an alternative, if the government wishes to move to a more actuarially-based provision of early retirement. One solution would be to abolish the scheme and simply extend the old-age pension to those aged under 67 but with full actuarial adjustment.

### ***New work permits provide some relief to key labour shortages***

Positive steps towards relieving Norway's labour supply problems are being taken through a more open stance with regard to the granting of work permits aimed principally at shortages in certain private services.<sup>84</sup> As of 2002, job seekers from outside the EEA with a craft certificate or a more advanced qualification are allowed to apply for jobs from within Norway and checks as to whether a similar competence is available will no longer be made.<sup>85</sup> In addition, a quota for qualified labour was introduced, of 5 000 persons in 2002. Furthermore, it is now possible to apply for a work permit at some Norwegian embassies, and employment regulations applying to foreign students and seasonal workers have been relaxed.<sup>86</sup> A new committee has been appointed to propose a new immigration act in which further changes to the work permit system may be included.<sup>87</sup>

### ***Other labour market and social policy developments***

#### *Regulation still restrains employment agencies and temporary-work arrangements*

No major changes have yet been made in the regulation of employment agencies in the wake of the 2000 reform that saw the abolition of the public monopoly on job placement. In the reform, temporary work agencies had restrictions lifted on the categories of workers and sectors in which they could operate, although limits on the type of work in which temporary contracts can be used remain.<sup>88</sup> As yet it is still too early to gauge the impact of these reforms. In a welcome move and in line with OECD recommendations, the public employment service's fee-based activities, introduced in 2000, were discontinued in January 2002. Following the report of the *Colbjørnsen Committee*, a new committee was mandated in 2001 to propose a thorough revision of Norway's labour law in which further changes to temporary-work regulation are likely. The committee is due to report in 2003.<sup>89</sup>

#### *Education and training: new OECD study prompts reform*

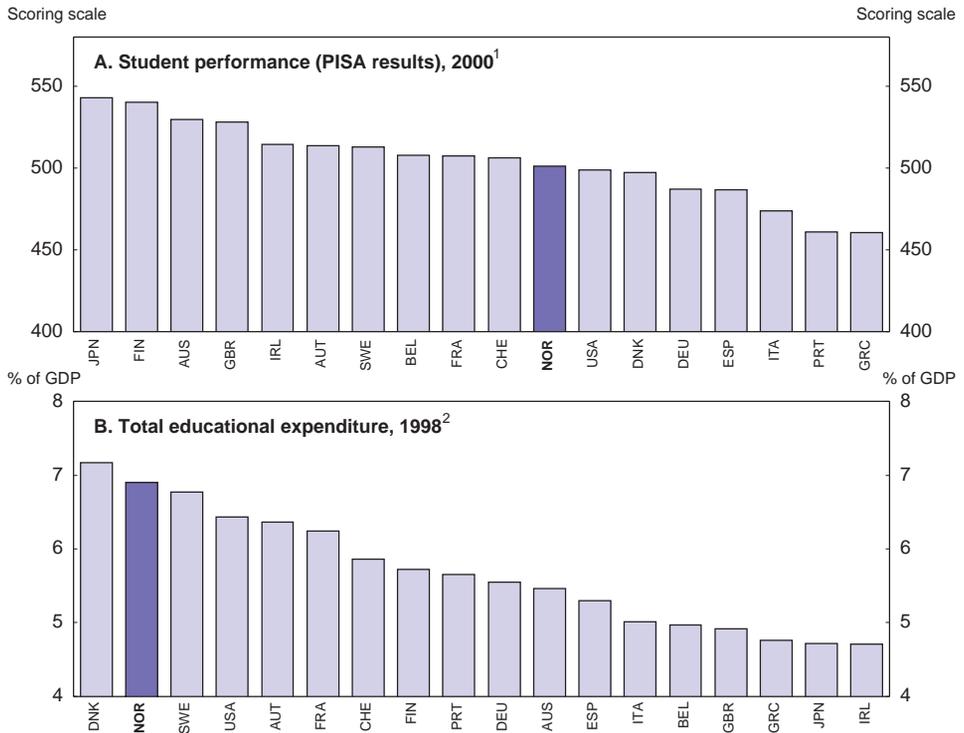
The fundamental role education plays in fostering technological progress and economic growth is not only intuitive but also has considerable empirical support.<sup>90</sup> Education in Norway, as in other OECD countries, occupies a large proportion of individuals' lives. Given current enrolment rates at the different stages

of education, the expected time spent in full-time schooling in Norway is nearly 18 years, a relatively high figure by OECD standards.<sup>91</sup> As schooling has become longer, policy attention has shifted from the length of education to the efficiency with which it is delivered and on ensuring that schooling pays sufficient attention to the acquisition of skills that are in line with current and projected labour market demands. This latter issue has been particularly relevant for Norway in recent years as certain vocational skills have been in short supply. In this regard various measures have been taken, including efforts to increase awareness about vocational careers and to improve the flexibility of vocational programmes within the education system.<sup>92</sup> The “Quality Reform” in higher education will address these challenges by reducing the time required to obtain degrees and by achieving a more effective transfer of knowledge from universities to work life.

The OECD’s Programme for International Student Assessment (PISA) identifies some important challenges for the Norwegian school system (OECD, 2001c). In broad terms the study reconfirms that in international comparison the Norwegian secondary school system produces only an average student performance despite large resources devoted to education (Figure 22).<sup>93</sup> The tests of literacy, mathematics and science skills sat by 15 year-olds for PISA place Norway in the middle of the rankings.<sup>94</sup> Interestingly, this picture contrasts with the results of the more work-oriented tests used in the widely quoted *International Adult Literacy Survey* (IALS) in which Norway is one of the top-ranking countries (OECD, 2000b). Thus, it would seem that although the Norwegian working-age population has relatively good job-related skills as tested in IALS, the performance of current cohorts of students in the rather more academic tests of PISA is less impressive. One factor explaining the IALS results is probably that Norway’s high employment rates help maintain a high level of work-related skills. The PISA results also point to weaknesses in student interest and learning. In particular, the gender gap in the literacy score is one of the largest among OECD countries, suggesting that the education system needs to address males’ reading ability. This could partly relate to results showing that Norwegian students, especially males, spend relatively little time reading for pleasure compared with other countries. The results also indicate a low motivation in mathematics and key learning strategies appear to be relatively weak.<sup>95</sup> In response to PISA, the Ministry of Education has announced a number of initiatives, including increased teaching of Norwegian, greater use of new technologies in learning and the establishment of a committee that will focus on compulsory schooling (the *Committee of Quality*).<sup>96</sup> In addition, a white paper on teachers’ training has recently been presented to the Storting.

Full implementation of the tri-partite *Competence Reform*, that focuses on adult learning, is being held up by the issue of financial support for study leave (OECD, 2002e).<sup>97</sup> Initial problems in reaching an agreement led to the establishment of the *Johansen Committee*. The Committee’s report, published in 2001, supported the use of the State Education Loan system to fund adults attending

Figure 22. Student performance and educational expenditure



1. Average performance across the combined reading, mathematical and scientific literacy scales.

2. Total expenditure on educational institutions as a percentage of GDP.

Source: OECD, *Knowledge and Skills for Life – First Results from PISA 2000*, Table 3.6. and *Education at a Glance – OECD Indicators*, 2001, Table B2.1a.

secondary education courses, but it did not agree on how subsistence benefits for those in post-secondary adult education should be financed.<sup>98</sup> At present the level of pecuniary support for adult education is relatively low. However, there is trade-union pressure for it to be comparable with the level of unemployment benefits. The implications of making support more generous and widening it beyond secondary education should be carefully assessed. Given the large number of potential applicants for adult study leave, such moves could be expensive and may significantly reduce labour supply.

*Pension reform: another committee appointed*

The 2001 *Survey's* assessment of ageing issues stressed the need to reform the standard pension system as well as the various schemes encouraging early retirement. The main recommendations of the report include:

- Measures should be introduced to increase actuarial fairness through: abolition of pension accrual during early retirement, the calculation of pension points over the entire work history of an individual (rather than the best 20 years) and abolition of tax incentives to retire early.
- The distinction between the role of the basic pension as a re-distributive tier and the earnings-related supplementary pension as a defined-benefit tier should be developed further.
- Indexation of pension benefits should be based on a combination of price and wage increases rather than on wage increases alone.
- Better transferability of pensions between the public and private sector is required so as to improve the efficiency of the labour market.
- Consideration should be given to the use of Norway's oil wealth to facilitate a smooth transition to a defined-contribution system. For example it could be used to pre-fund a system in which fictive contributions are included in the defined contribution accounts of existing employees reflecting their work history.

Progress towards reducing the dominance of "pay-as-you-go" (PAYG) pensions in Norway has been made with the introduction of tax allowances for employers paying into funded schemes. Such allowances, which were previously only given in connection with defined benefits, were extended in January 2001 to defined contributions. The role of occupational pensions was discussed in the 2002 wage negotiations.<sup>99</sup> However, no nationwide agreement to alter current arrangements was reached and discussions will continue at the local level. A new high-level committee on NIS pension reform was formed in 2001, the third in six years, and is due to provide an interim report in autumn this year and a full report in 2003. However, allowing for the usual period of hearings following a committee's report, the time necessary to prepare draft laws and parliamentary deliberation, significant pension reform is unlikely to take place before 2007.

**Product markets: a slow pace of reform**

As concluded in the recent OECD Growth Study (OECD, 2001g), policies that increase product market competition generally promote growth.<sup>100</sup> In many OECD countries, the main initiative in recent times has been the reduction of state involvement in the economy and a concomitant switch from provision via the state (or state-owned monopolies) to competitive market provision. Since the EEA Agreement came into force in 1994, Norway has introduced deregulation measures

and has reduced subsidies mostly in line with the EU countries. In this context, the agricultural sector has been the exception. However, Norway has made a relatively late start concerning privatisation compared with other OECD countries and, partly as a result of this, it does not typically rank highly in comparisons of international competitiveness.<sup>101</sup> The government continues to exercise considerable influence across much of the economy through subsidies, regulations or ownership (Annex II). Although state-owned enterprises (SOEs) have independent boards, the legislation on SOEs allows the relevant ministries to exercise proprietary authority in varying degrees. In March 2002, the government announced it would ensure at least 40 per cent female board membership of SOEs within one year, while it intends to implement similar legislation for private companies in 2005.

### ***Competition policy is strengthened***

As discussed in the 2001 *Survey*, competition policy has been strengthened. The National Competition Authority (NCA) now has powers to block mergers and acquisitions pending its investigations and also greater possibilities to co-operate internationally, including the right to exchange information subject to secrecy with foreign competition authorities.<sup>102</sup> An example of the latter is the recent co-operation with other Nordic countries regarding airlines (see below). The NCA's position has been strengthened by the dismantling of the network of regional offices and by concentrating resources in the Oslo headquarter.

The Norwegian Competition Act of 1993 has been operating in parallel with the competition rules set out by the EEA Agreement. The government is finalising the implementation of decentralised enforcement mechanisms for the EEA regulations on agreements preventing competition (Article 53) and abuse of a dominant market position (Article 54). The *Graver Committee*, appointed to submit a draft of a new Competition Act, presented interim recommendations in 2001 and recommended that these EEA competition rules shall serve as a model for the new Norwegian competition act. The final implementation of these changes awaits decisions on the EU's competition policy reform.

The mandate of the Graver Committee has been widened following the appointment of the new government. In line with previous OECD recommendations, the Committee will consider whether an independent appellate body should replace the current arrangement in which appeals are handled by the relevant Ministry. In addition, the Committee is requested to assess the merits of centralising the sector-based regulatory authorities into the NCA so that all aspects of competition are dealt with by one body. Finally, and also in line with OECD recommendations, the new mandate asks the Committee to consider enhancing the accountability of the public sector by requiring a response by ministries to issues raised by the Competition Authority within certain time limits.<sup>103</sup>

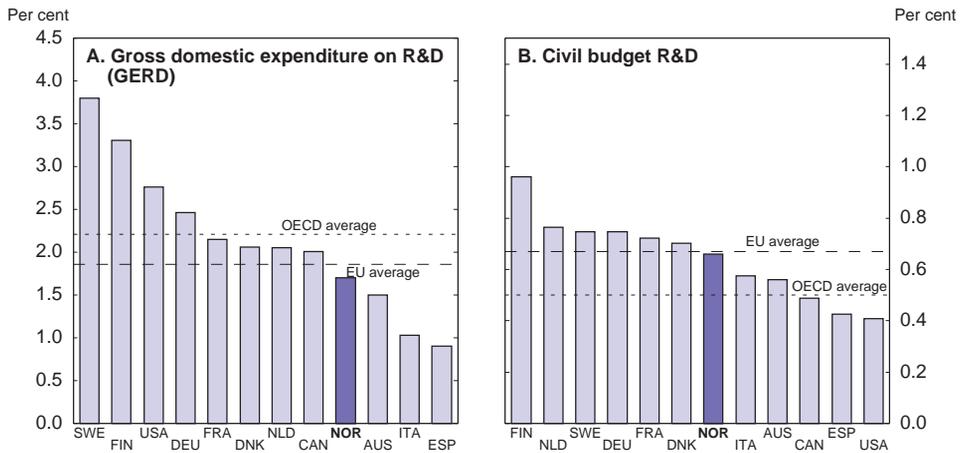
### ***Research and development assistance focuses on small and medium-sized enterprises***

Much evidence points to a connection between research and development (R&D) and growth and, like other countries, the government provides support through various channels.<sup>104</sup> A targeted tax credit system has recently been implemented, replacing a grant system that was set up in 2001. The grant system (FUNN) was administered by the Research Council of Norway (RCN) and granted 25 per cent subsidies, with a limit of NOK 1 million per enterprise, for R&D purchases from universities and public R&D laboratories. In January 2002, the FUNN scheme was replaced by a tax credit for small and medium-sized firms that includes internal R&D expenditure as well as purchases from universities and public R&D authorities.<sup>105</sup> The tax credit is set at 20 per cent of R&D expenses and can be applied for up to NOK 4 million expenses for internal R&D and NOK 8 million expenses for external research. The tax credit system is more focused on small and medium-sized enterprises (SME), and has the advantage of being more neutral with regard to internal R&D than the FUNN scheme. However there is some concern that control over the cost of the scheme is more difficult and it is likely to be more expensive. The FUNN's annual grant would have been NOK 400 million, while in contrast it is estimated that the tax credit system will reach a yearly cost of NOK 510 million.

A large proportion of the government's R&D spending consists of direct block grants to universities and public research institutes. In addition, about 25 per cent of public R&D is funded by ministries via the RCN. The RCN not only manages these funds but also has a role as adviser to government on research policy and has a strategic responsibility for the research institute sector. A recent evaluation of the RCN echoed the OECD recommendation that public research spending should have a stronger focus on productivity issues through better links between fundamental and applied research.<sup>106</sup>

In terms of R&D activities, Norway's record is mixed. Norway spends a somewhat lower percentage of GDP on R&D compared with the OECD average (Figure 23, Panel A). Indeed a target of current policy is to reach the same level of R&D activity as the OECD average by 2005. Pursuit of this goal should, however, be tempered by the fact that Norway's current industry-mix is not rich in R&D intensive industries, such as defence, engineering or pharmaceutical industries. Excluding defence-related R&D Norway compares more favourably and is close to the EU average, although still behind Denmark, Finland and Sweden (Figure 23, Panel B). In addition, Norway has a relatively large number of researchers per head of population compared with other countries (OECD, 2001h), although the rapid growth areas in recent years have been in the social sciences where the link between research and productivity is typically weaker than in areas such as science and engineering. In terms of ICT use, although a large majority of Norwegian enterprises are connected to the Internet, the density is lower than in the other Nordic countries. And Norway also lags behind its neighbours in other respects,

Figure 23. **R&D expenditure in international perspective**  
As a percentage of GDP, 2000<sup>1</sup>



1. Or latest available year.

Source: OECD, *Main Science and Technology Indicators*.

for example it has a lower share of enterprises with homepages or intranets and a relatively small share of enterprises conducts sales via the Internet (Statistics Norway, 2002a).

### ***A white paper gives further impetus to state sell-offs***

Partly for historical reasons, there is a diverse portfolio of state holdings in Norway. In a welcome move, a white paper published in April 2002 evaluates the need for state ownership in some 40 companies. The government proposes complete withdrawal from a number of enterprises and, as a general rule, proposes minimum stakes of one third in those companies where state shares are retained (Table 17). These proposed minimum stakes represent a reduction from previous levels, but it is clear the government wishes to continue as an influential shareholder in a broad range of activities. Through combined ownership with the Danish and Swedish governments, the airline company SAS is to remain 50 per cent state-owned.<sup>107</sup> Furthermore, the execution of sell-offs has often been slow. For example although the current policy is to allow a 33 per cent private shareholding in Statoil, the government continues to own 80 per cent of the shares, and though the minimum state stake in Telenor has been reduced from 51 per cent to 34 per cent, its actual stake is still over 75 per cent.<sup>108</sup> Furthermore, the White Paper recommends

Table 17. **State enterprises in Norway<sup>1</sup>**

Company	Number of employees <sup>2</sup>	Activity	Current level of state ownership (per cent)	2002 White Paper proposal on state shareholding
Norsk Hydro ASA	35 567	Oil and oil-related products, aluminium and agricultural products	44	Reduce minimum to 34% <sup>3</sup>
Posten Norge BA	32 365	Postal services	100	Maintain current level
SAS AB	31 035	Airline	50 <sup>4</sup>	Maintain current level
Telenor ASA	22 000	Telecommunications	78	Maintain minimum at 34% <sup>5</sup>
Statoil ASA	16 408	Oil production and downstream activities	82	Maintain minimum at 66%
NSB BA	10 029	Rail transport	100	Maintain current level
DnB Holding ASA	7 236	Banking	47	Maintain minimum at 34%
Kongsberg Gruppen ASA	4 012	Maritime technology, defense and aerospace	50	Reduce minimum to 34% <sup>3</sup>
Norsk rikskringkasting AS	3 486	Radio and television production	100	Maintain current level
Cermaq ASA	2 686	Fish products and fish feed	79	Reduce minimum to 34% <sup>6</sup>
Nammo AS	1 521	Munitions manufacture	45	Withdraw completely <sup>3</sup>
AS Vinmonopolet	1 461	Alcohol distribution	100	Maintain current level
Statkraft SF	1 187	Electricity provider	100	Move towards partial privatisation <sup>7</sup>
Raufoss ASA	1 090	Manufacturing	51	Withdraw completely <sup>8</sup>
Statnett SF	785	Electricity distribution network	100	Maintain current level
Grødegård AS	700	Catering	100	Withdraw completely
Arcus ASA	466	Alcoholic drink producer and importer	34	Complete withdrawal underway
Norsk Tipping AS	273	Lottery	100	Maintain current level
Store Norske Spitsbergen Kulkompani A/S	249	Coal mining	100	Maintain current level
Statskog SF	248	Forestry	100	Maintain current level
Moxy trucks	220	Heavy truck manufacture	49	Complete withdrawal underway
A/S Olivin	194	Olivine mining	51	Complete withdrawal underway
BaneTele AS	160	Fibre-optic cable network	100	Maintain current level

Table 17. **State enterprises in Norway**<sup>1</sup> (cont.)

Company	Number of employees <sup>2</sup>	Activity	Current level of state ownership (per cent)	2002 White Paper proposal on state shareholding
NOAH AS	102	Waste processing and recycling	71	Withdraw completely
Gassco AS	100	Gas distribution network (main pipelines)	100	Maintain current level
Total (in thousands)	174			
<i>Memorandum items:</i>				
Total employment (in thousands) <sup>9</sup>	2 316			
General government employment (in thousands) <sup>9</sup>	725			

1. Various entities with small numbers of employees reviewed in the White Paper are not included in this table, including various government investment funds and entities based in Svalbard.

2. As reported in the White Paper on state ownership, including employees abroad and therefore not fully comparable with memorandum items.

3. The June 2002 Parliamentary guideline is to not reduce the current state stake for the time being.

4. The stake of the Norwegian government is 14.3 per cent while that of the Swedish and Danish government is 21.3 and 14.3 per cent, respectively.

5. In June 2002, Parliament gave authority to government to reduce the stake to 51 per cent; except in case of a government approved takeover by Telenor, when state stake can be reduced to 34 per cent.

6. In June 2002, Parliament has asked for further considerations of state interests in the aquacultural sector in connection with the 2003 Budget.

7. According to the June 2002 Parliamentary decision, before any action, the government has to send a paper to Parliament on the company's wider role in the Norwegian society.

8. The June 2002 Parliamentary guideline is to maintain the minimum at 34 per cent.

9. 2001 figure, Statistics Norway.

Source: Norwegian Government White Paper, *Reduced and Improved State Ownership*, 2002.

retaining full state ownership in activities for which many countries have at least considered some privatisation, notably postal services. In its debate in June 2002, Parliament did not endorse important elements of the white paper (Table 17).

### ***Policy challenges remain for network industries***

#### *Concentration is a concern for the wholesale electricity market*

The NCA is concerned about the growing concentration in the wholesale electricity market. At times of peak utilisation, the choice for large-scale industrial users has become restricted because the grid system has a limited capacity for transferring electricity between northern and southern regions. This market segmentation adds to concerns about the increasing influence of the state-owned power utility, Statkraft. Indeed, in March 2002 the NCA blocked its acquisition of 45.5 per cent in the energy company Agder Energi which would have raised the market share of Statkraft (including companies where it has a dominant position) in southern Norway from 40 to nearly 50 per cent. Statkraft has subsequently appealed the NCA's ruling. The NCA has upheld its decision and referred the case to the Ministry of Labour and Government Administration. The recent White Paper on state ownership recommends that this enterprise be transformed into a joint stock company, with a view to less than full state ownership for the future. Statkraft was reported in April 2002 to be demanding a capital injection from the government of NOK 40 billion to assist the transformation. In a separate development, Statkraft's advantage in hydroelectricity investment, through exemption from certain rules in contracts for waterfall use, will be removed in 2003 following pressure from the European Free Trade Association (EFTA) Surveillance Authority. Under previous arrangements, municipalities, counties or state-owned undertakings were exempt from a 60-year limit on the length of concessions and a requirement that installations must be returned to the state without compensation at the termination of the concession.

#### *Telenor continues to dominate telecommunications*

Following the complete liberalisation of the telecommunications market in 1998 the incumbent, Telenor, is still dominant. Although its market shares are declining, Telenor nevertheless has a particularly large share of the market for fixed-line telephony, plays a significant role in mobile telephony and is common owner of telephone and cable networks. The licensing of two new GSM operators (Global System for Mobile communication) at the end of 2001 should bring welcome competition to this market as soon as the licensees have established their network.<sup>109</sup> Evidence suggests that competition in broadband Internet markets is severely compromised where there is common ownership of telephone and cable networks. An additional factor in assessing Telenor is the increased cross-national consolidation of telecommunications companies, as exemplified by the recent merger

between Telia of Sweden and Sonera of Finland. Recent measures to promote competition in fixed telephony have included deregulation of access to local telephone loops. As elsewhere, third-generation licence holders have experienced difficulties and the Norwegian Post and Telecommunications Authority is reviewing some of the licence conditions.<sup>110</sup>

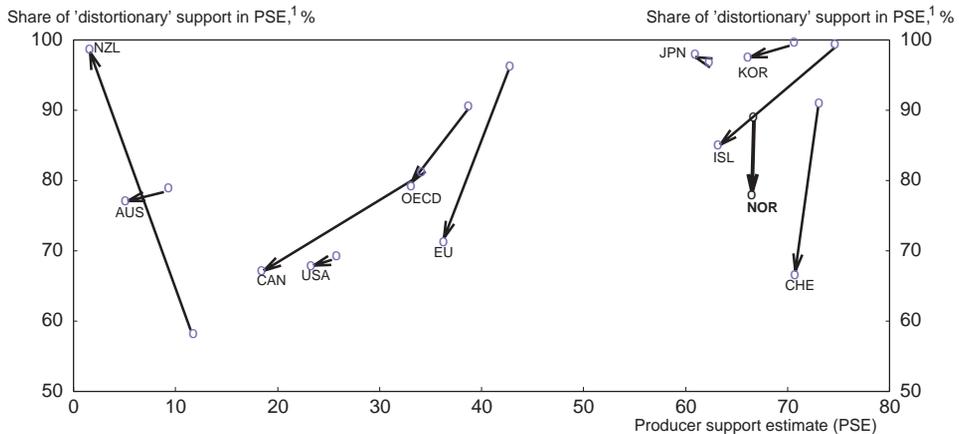
### ***Greater competition is urgently needed in domestic air travel***

In November 2001 the NCA allowed Scandinavian Airlines System (SAS) to take over Braathens as a solution to the latter's extreme financial difficulties.<sup>111</sup> This, however, has created a monopoly in domestic air travel and the NCA has since redoubled efforts to create conditions that stimulate new entrants and competition (see also Nordic Competition Authorities, 2002). As of August 2002 airline bonus programmes will be disallowed by the NCA on domestic flights in a move to lessen customer loyalty in SAS/Braathens. The appeal against the move has been rejected by the Ministry of Labour and Government Administration. In addition, the Authority is exploring other ways of promoting competition, such as the removal of discriminating reservation systems and travel agency agreements, and is formulating a co-ordinated plan with other Nordic authorities to increase competition in international air travel.<sup>112</sup> Norwegian Air Shuttle AS (NAS), a privately-owned company that has operated smaller planes and ambulance services, has announced it will start operating in autumn 2002 on the major domestic routes (Oslo-Bergen, Oslo-Trondheim and Oslo-Tromsø). Recently, NAS acquired the framework contract of the central government for travel by its employees on the major inland routes from 1 September 2002, which was formerly held by SAS. Low-cost carriers have recently expressed an interest in competing in the domestic flight market and the NCA should continue to maintain close surveillance of SAS to prevent unfair pressure on new entrants.<sup>113</sup>

### ***Support for agriculture remains excessive***

There is a low level of market orientation in Norwegian agriculture with heavy protection from world markets largely via production-linked subsidies (OECD, 2002f). An estimated two thirds of Norwegian farm revenue is derived from measures to support agriculture, much higher than the OECD and even EU averages. The consumer prices are over 100 per cent above world prices.<sup>114</sup> Furthermore, Norway has not reduced its overall level of support in recent years and there continues to be a heavy bureaucracy with approximately one civil servant for every 30 farmers. However, there have been reductions in the most distorting forms of support; a smaller share comes from market price support and payments based on output and input use (Figure 24). Also, in 2001 the support system for grains and oilseeds moved to the more market oriented target price system that applies to other commodities and there has been some narrowing of

Figure 24. Progress in agricultural policy reform



1. "Distortionary" support comprises market price support and payments based on output and input use in the Producer Support Estimate (PSE) for the years covered. The tail of an arrow refers to 1986-88 and the head refers to 1999-2001. Source: OECD, PSE/CSE database, 2002.

the gap between loan interest rates charged to farmers and market rates (OECD, 2002f). As a result of the 2002 Agricultural Agreement, measures to promote structural adjustment will be taken, such as the introduction of a less regulated, partly market-based milk quota system and reallocation of support from small part-time farms to larger units. The agreement is likely to lead to a price rise of agricultural products of 3 to 5 per cent. One of the main reasons for the continuation of substantial support for farmers is that the government attaches great importance to non-commodity outputs. In the view of the Norwegian authorities, strong complementarity between commodity and non-commodity outputs restrains possibilities to reduce the current level of support. This view, however, should not restrain efforts to monitor the efficiency of complementary relationships and to consider the viability of alternative solutions in which non-commodity output is separated from commodity production (OECD, 2001i).

The fish product industry, especially aquaculture, is seen as having the potential for substantial growth beyond current levels (Ministry of Fisheries, 2001). One issue facing this sector is that export markets may experience difficulties due to the expansion of the European Union. In particular, existing free-trade agreements with EU candidate countries, such as that with Poland, will cease to apply and new arrangements via the EEA Agreement will have to be found; this issue is being given special priority in the government's work with the EEA.<sup>115</sup> But the desire to improve trade relations concerning fish products may be hampered if Norway continues to adopt its restrictive stance on agricultural trade.

## Financial markets and government funds

### *Further consolidation of state banking interests*

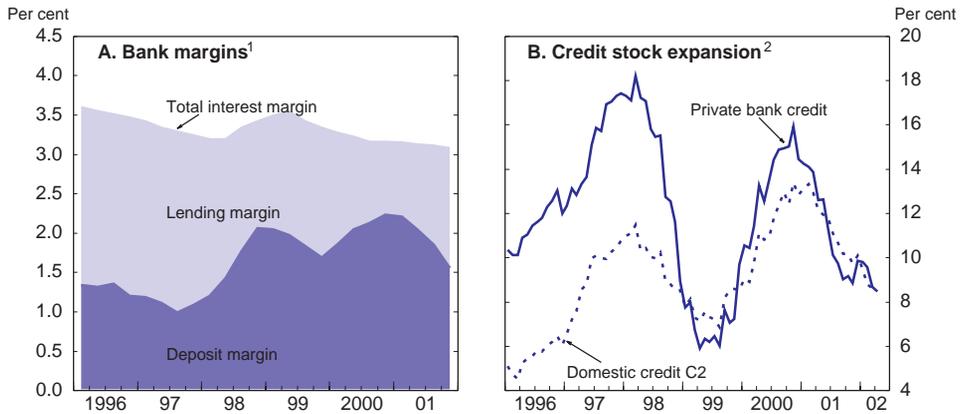
Financial markets play a role in economic growth principally through their role in mobilising savings, transforming saving into investment, and influencing the type of investment undertaken. In Norway there has been a reduction of state shareholdings in banking and finance although the government still retains significant control over one of the major financial institutions. Following a series of mergers, the Norwegian banking sector is now dominated by three financial groups (DnB, Gjensidige NOR and the foreign-owned Nordea Bank Norge). The state has consolidated its banking interests in the largest group, DnB, with a stake of 48 per cent.<sup>116</sup> The recent White Paper on state ownership proposes to reduce the state's share in DnB to one third (Table 17), which would be a useful step towards a more hands-off government approach to the financial sector. DnB is meanwhile expanding its foreign interests. In 2002, for example, it is completing its acquisition of the Swedish Skandia group's asset management business.

Norwegian ownership rules for the financial sector mean that control over just 10 per cent of shares can be used to block a merger. An interesting instance of this so-called "10 per cent rule" occurred in 2001 when the Finnish banking group Sampo failed to secure the 90 per cent minimum shareholding in the Norwegian insurance company Storebrand due to a 9.9 per cent shareholding by DnB.<sup>117</sup> This was followed by DnB making a friendly bid for Storebrand in May 2002 but in June 2002 the merger collapsed.<sup>118</sup> Such a move would have raised questions of concentration and competition in some areas of the banking and insurance sector. The original merger with Sampo might well have taken place if recent proposals to increase the flexibility of ownership rules in the financial sector had been in place. The *Selvig Committee* on ownership rules in the financial sector has proposed lowering the current holding requirement in the case of take-overs of financial institutions to 67 per cent, in combination with a system of notification and assessment that will also apply to substantial changes in holdings below this figure. The system of notification and assessment is based on EEA directives. As yet the guidelines that will be used for assessing significant changes in holdings are unclear, although it is likely these will allow government some powers to prevent "undesirable" take-overs.<sup>119</sup>

### *Increased uncertainty in the banking sector*

Pre-tax operating profits in the banking sector weakened in 2001 and in the first quarter of 2002 (Norges Bank, 2002b) mainly due to a drop in the overall interest margin (Figure 25), and an increase in recorded losses due to higher loss loan provisions. However, despite the lower earnings, banks' return on equity in 2001 remained healthy at about 12.5 per cent. Household debt is still growing

Figure 25. Bank margins and credit



1. Moving averages over the past four quarters. The lending (deposit) margin is the difference between the market rate of interest and a reference rate that reflects the financial opportunity cost of loans (or deposits).

2. Year-on-year percentage changes.

Source: Norges Bank.

rapidly, at a faster rate than disposable income, but is backed by additional collateral as it is largely linked to the accumulation of wealth in the form of housing and financial assets. Nevertheless, the high debt and the interest burden combined with cyclically sensitive wealth, means households have a weaker ability to withstand a strong economic downturn, thus raising somewhat risks to the financial sector. There has been somewhat slower growth in enterprise debt reflecting weaker growth in fixed investment. However, weakening earnings are nevertheless making the servicing of debt more difficult and there was a marked increase in bankruptcies in 2001 compared with the previous year. Nevertheless, Norges Bank considers credit risk connected with loans to the enterprise sector as moderate. Any effects on financial markets from the recent changes to legislation that allow savings banks to convert to private banks (*i.e.* as limited companies) have yet to be felt.<sup>120</sup>

### ***The stock market has become a public limited company***

Up to the third quarter of 2001, the share index of the Oslo Stock exchange (the Oslo børs) has been following a similar general trend of decline as other equity indices. However it experienced a sharper decline than elsewhere following the events of 11 September although, as in other markets, by the second quarter 2002 the index returned temporarily to close to the pre-11 September level. Following the recent Stock Exchange Act the Oslo stock exchange became a

public limited company in May 2001. As part of this conversion, supervisory duties were transferred to *Kredittilsynet* (the Banking, Insurance and Securities Commission of Norway), a move that represents a useful consolidation of financial supervision. Development of a fully integrated stock exchange across the Nordic bourses continues under the NOREX alliance. In October 2001 a common set of trading rules was established, that now apply to the Oslo stock exchange following the implementation of the common trading system (SAXESS).<sup>121</sup>

### ***The purpose of the National Insurance Fund should be clarified***

The Norwegian government maintains a diverse range of bodies that make strategic investments, or provide grants or subsidies. The motivation and form of most of these institutions is often similar to arrangements in other countries. For example, a system of regional subsidies and loans are provided through the Norwegian Industrial and Regional Development Fund (SND), student loans are provided through the State Education Loan Fund and the State Housing Bank provides loans to vulnerable groups. In addition, there is the National Insurance Fund (*Folketrygdfondet*). The original purpose of the fund, established in 1966, was to provide supplementary funding to the national insurance scheme. In reality it has not performed this role and is effectively a mixture between an off-budget item and an investment fund. Most of the approximately NOK 130 billion fund is, by statute, held in cash balances or government and government-guaranteed securities. These holdings would appear to do little more than complicate government accounts. The remainder, about 15 per cent (NOK 21 billion in 2000), is held in Norwegian equities.<sup>122</sup> In June 2002, the Storting agreed to extend its equity investment to non-listed shares. The purpose of the equity holding of the National Insurance Fund should be clarified.

## **The tax system**

### ***A strongly dual tax system...***

Norway's sizeable tax burden means that taxation may have an important influence on growth.<sup>123</sup> Norway has a broad-based dual tax system with capital income taxed at a low flat rate and labour income taxed progressively.<sup>124</sup> The main advantage of such a system lies in its neutrality with respect to doing business and funding investment. However, specific aspects of the tax system do not fit with this broad approach and are of concern for efficiency. For example, the 2002 White Paper on state ownership recommends a reduction in the net wealth tax. In its current form the wealth tax, in combination with the lenient approach to property taxation, biases the accumulation of wealth towards the housing stock and away from other assets such as shares. Positive moves to remove discrepancies in other areas include the abolition of the exemption-ridden 7 per cent investment tax and

some broadening of capital taxation through lower depreciation rates.<sup>125</sup> In addition the range of goods and services covered by VAT has been widened, but as the previous *Survey* points out this move could have been bolder, especially in services.

### ***... strengthened by the abolition of the dividend tax***

The use of a dual system in a high-tax country such as Norway creates tensions that are difficult to resolve. In particular, the need for large tax revenues combined with a desire to keep capital-income tax low pushes the burden of tax onto labour income and indirect taxes. The resulting difference between marginal tax rates on labour and capital creates problems. The top tax rate paid on labour income is currently 55.3 per cent, having increased by 6 percentage points in 2000, whilst the flat tax rate on capital income is 28 per cent.<sup>126</sup> For distributional reasons, the previous government reduced this tax differential with the introduction of a supplementary 11 per cent tax on share dividends in January 2001 but the current government decided against this move and it was abolished in January 2002. In economic terms the dividend tax may, if it was permanent, have reduced tax planning but at the same time it reduced the neutrality of capital income taxation.

### ***A general review of the tax system is underway***

A new committee on taxation has been formed and is due to deliver its final report at the end of 2002. The committee's mandate includes a review of the relation between the taxation of labour and capital income as well as the taxation of wealth. It will also evaluate the effect of taxes on Norway's international competitiveness as well as assess the importance of stability and predictability of tax policy. The latter issue has arisen from concerns that cases of policy reversals or explicitly temporary measures, such as the dividend tax, may have damaged the efficiency and credibility of the tax system. The committee is also asked to consider how a net reduction in tax of NOK 8-10 billion should be used and which tax reductions should be given the greatest priority. If tax reductions are feasible, efforts should focus mainly on reducing taxes on labour income so as to reduce tax planning, increase work incentives and boost the returns to vocationally orientated education. At the same time, a weather eye needs to be kept on goods and services taxes, particularly in relation to those in Sweden with perhaps further cuts needed if cross-border shopping on a large scale persists.

### ***New tax rules for large-scale LNG facilities***

Changes to the tax rules with regard to the development of large-scale liquified natural gas (LNG) facilities were introduced in October 2001, applicable to the large Snow White gas field off the coast of the sparsely populated region of

Finnmark.<sup>127</sup> However, the EFTA Surveillance Authority claimed that the use of tax changes in this way might be in violation of the EEA Agreement. Subsequently the government proposed to apply the new tax rules only in Finnmark and four municipalities in the northern part of Troms and the EFTA Surveillance Authority accepted the new tax rules. Aside from this development, the petroleum tax system has remained more or less unchanged since revisions were made in 2000. These revisions included: removal of incentives to move onshore activities into entities subject to the petroleum tax and measures to increase investment incentives for new entrants.

### Scope for further action

In broad terms, policy with regard to labour and product markets is moving in the right direction, but further structural reforms could significantly improve growth prospects and standards of living. Table 18 provides a synopsis of the recommendations for further structural reform. Inertia and a tendency for somewhat tepid solutions to problems are making progress slow. With regard to labour supply, the October 2001 agreement between social partners seems unlikely to achieve its goals and the re-evaluation due in mid-2003 should be used to push for more cutting reforms, such as those recommended by the *Sandman Committee*. The latest committee on pensions should be followed up this time by policy action to ensure, *inter alia*, that there is progress towards actuarially sound early-retirement and pension opportunities. For product markets, the recent White Paper on state ownership signals a welcome commitment to accelerating the withdrawal of unnecessary strands of government influence. Also, the new government's orientation towards tax cuts presents an opportunity to redress some imbalances, notably those generated by the steep income tax schedule.

Table 18. **Recommendations for further structural reform and actions taken**  
Based on previous and current *Surveys* and action taken since early 2001

	Recommendations	Actions taken
	<b>Labour market and social issues</b>	
2001	<i>Sickness benefit.</i> Prolong the employer contribution and reduce generosity of benefits as proposed by the <i>Sandman Committee</i> .	A tripartite agreement in October 2001 aims to reduce sickness payments through voluntary workplace agreements. Progress with the agreements is as yet slow and the sickness benefit scheme itself will remain unchanged. A reduction in employers' social security contributions for older workers, which forms part of the deal, was implemented in July 2002.
2001	<i>Early retirement and disability schemes.</i> (See recommendations on ageing.)	(See recommendations on ageing.)
1997	<i>Unemployment benefit.</i> Ensure appropriate incentive structures in both full-time and part-time unemployment benefits.	With effect from 2002, the period a temporary laid-off worker can receive an unemployment benefit is reduced from 52 to 26 weeks.
2001	<i>Fixed term contracts and working hours.</i> Further progress is needed in the easing of rules on fixed-term contracts and working hours.	In June 2002, the government proposed Parliament to replace the current cap on overtime per week and four consecutive weeks by a less restrictive cap of 48 hours a week on average over a four month period.
2001	<i>Public employment services.</i> Guarantee a level playing field between private temporary work agencies and the PES.	Competitively advantageous fee-based services provided by PES were discontinued in January 2002.
1997	<i>Education and training.</i> Ensure that education and training meet evolving needs of labour market. Evaluate the 13-year compulsory schooling system concerning quality, duration and input of resources. Exercise caution in widening pecuniary support for adult learning.	<i>Committee of Quality</i> on compulsory schooling set up in 2001. It will include assessment of the length of compulsory education.
2002	<i>Wage setting.</i> Increase flexibility by using more local negotiation. Reduce the narrowing of the wage dispersion by shifting from equal increases in krone for all employees to equal increases in percentage terms.	The 2002 wage agreement leads to more room for local negotiations in the local-government and hospital sectors.
	<b>Product markets</b>	
2001	<i>State ownership.</i> Reduce the number and size of state shareholdings in Norwegian companies, including municipality shareholdings in electricity utilities so as to increase competition and efficiency.	In April 2002 a White Paper on state ownership proposes cuts in state ownership. The cuts could be deeper and the issue of municipality holdings is not covered.

Table 18. **Recommendations for further structural reform and actions taken** (*cont.*)  
Based on previous and current *Surveys* and action taken since early 2001

	Recommendations	Actions taken
2001	<p><i>Regulation of network and transport industries.</i> Work towards effective systems of regulation and supervision that ensure efficient competition.</p> <p>Telecommunications. Divest Telenor of its cable television networks as a means of spurring competition in the broadband network.</p> <p>Domestic air travel. Ensure competition is introduced.</p>	<p>Access to local telephone loops deregulated.</p> <p>In May 2002 the NCA halted airline bonus programmes on domestic flights and it is considering other measures to raise competition.</p>
1999	<p><i>Regulation of product markets in general.</i> Aim at lighter regulation.</p>	<p>Pharmacy sector partially deregulated.</p>
1999	<p><i>Agricultural support.</i> Reduce agricultural subsidies. Support should become less linked to output and better targeted to reduce overall costs. Review the complementarity between the production of commodity and non-commodity outputs.</p>	
2001	<p><i>Oil sector.</i> Continue taking measures to increase the efficiency of the oil sector. Government involvement in the oil sector should be diminished. Competition on the Norwegian shelf should be enhanced.</p>	<p>Government ownership in the oil industry has been reduced through the partial privatisation of Statoil and the sale of some SDFI assets.</p>
2001	<p><i>Competition legislation.</i> Strengthen the position of the National Competition Authority (NCA) and review the supervisory role of ministries.</p>	<p>The NCA has been given more effective powers in the blocking of mergers and acquisitions and has a stronger mandate to co-operate with other competition authorities. Competition legislation and the supervisory structure are under review by the <i>Graver Committee</i>.</p>
	<p><b>Financial markets</b></p>	
2000	<p><i>State shareholdings and competition issues.</i> The government should evaluate its role in DnB in the light of changing market structures. Take competition effects into account in assessing further concentration in banking and insurance services.</p> <p><i>Reform regulation.</i> Relax the strict take-over regulation. Allow the conversion of savings banks into limited companies.</p>	<p>The White Paper on state ownership recommends a reduction of the minimum shareholding to one third (shareholding is currently 48 per cent).</p> <p>In 2002, the <i>Selvig Committee</i> recommended relaxing take-over rules but as yet no action taken. In 2001, savings banks have been allowed to convert to limited companies.</p>

Table 18. **Recommendations for further structural reform and actions taken** (*cont.*)  
Based on previous and current *Surveys* and action taken since early 2001

	Recommendations	Actions taken
	<b>Ageing issues (special topic in 2001 Survey)</b>	
2001	<i>General reform.</i> Separate the minimum pension from the earnings-related part and move to one earnings-related pension scheme without a benefit ceiling. Consider the use of a part of the Petroleum Fund to finance the pension system.	Committee on pension reform set up in 2001, due to report in October 2003.
2001	<i>Benefit levels and actuarial fairness.</i> Reduce the former and increase the latter through changes to indexation, qualification criteria and size of supplementary pension.	
2001	<i>Early retirement.</i> Abolish old-age pension accrual during early retirement. Revisit the <i>Sandman Committee</i> recommendations on disability pensions. Abolish tax incentives to retire early.	An experimental system of compulsory assessments of work capacity among disability pensioners has been introduced. Additional sanctions would improve the strength of the scheme.
	<b>Tax system (special topic in the 2000 Survey)</b>	
2000	<i>Tax on labour.</i> Consider the impact of the tax schedule on the supply of labour and returns to education in reforms.	A committee has been mandated to make a broad examination of the tax system and will report at the end of 2002.
2000	<i>Indirect taxes.</i> Widen the VAT base to include more services. Reduce tax and reduce exemptions on indirect taxes in general.	Some widening of the VAT base in 2001 but it could be extended further for services. Excise on liquor reduced by 15 per cent, on all other beverages by 5 per cent.
2000	<i>Property, wealth and capital taxation.</i> Broaden the tax base for property and income tax concerning owner-occupied housing. Move away from the net wealth tax to an extended property tax.	Property tax reduced in 2002, widening imbalances in taxation across different forms of wealth.
	Abolish the investment tax.	The investment tax will be abolished in October 2002. Also, the temporary dividend tax was abolished in January 2002.
2000	<i>Tax planning.</i> Reduce incentives for tax planning in the dual income system and between the mainland and the petroleum tax regimes.	
	<b>Sustainable development (special topic in 1999 Survey)</b>	
1999	<i>Economic instruments.</i> Increase the use of economic instruments (taxes, subsidies and tradable permits) to realise greater cost-effectiveness of environmental measures.	
1999	<i>Reduce greenhouse gas emissions.</i> Comply with Kyoto agreement target of limiting the increase in greenhouse gas emissions to 1% relative to the 1990 outcomes. Aim at an economy-wide national trading system for greenhouse gas emissions if no global trading system is implemented.	In May 2002, Norway ratified the Kyoto protocol.

Source: OECD.

## 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 take-over 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/](http://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 Braathens'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 *Statens Bankinvesteringfond* (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

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

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

## Bibliography

- Adema, W. (2000),  
 “Revisiting real social spending across countries: A brief note”, *OECD Economic Studies*, No. 30, 2000/1, Paris.
- Adema, W. (2001),  
 “Net social expenditure, second edition”, *Labour Market and Social Policy – Occasional Papers*, No. 52, OECD, Paris, [www.oilis.oecd.org/OLIS/2001DOC.NSF/LINKTO/DEELSA-ELSA-D\(2001\)5](http://www.oilis.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](http://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](http://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](http://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](http://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](http://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://applied.oecd.org/olis/2002doc.nsf/linkto/eco-wkp\(2002\)19](http://applied.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](http://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/d0b85697890d0e6ac12565970076aaf267f53c89fe3427e2c1256b0d004ac7b8?OpenDocument](http://www.konkurransetilsynet.no/kunder/konkurransetilsynet/index.nsf/d0b85697890d0e6ac12565970076aaf267f53c89fe3427e2c1256b0d004ac7b8?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](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/priceandcostcompetitiveness\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/priceandcostcompetitiveness_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](http://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](http://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](http://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](http://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](http://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.oilis.oecd.org/OLIS/1999DOC.NSF/LINKTO/DEELSA-ELSA-WD\(99\)1](http://www.oilis.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](http://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/2001/11sam.htm](http://www.nova.no/publis/rapport/2001/11sam.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/dtbc141.pdf](http://www.bcentral.cl/Estudios/DTBC/141/dtbc141.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](http://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](http://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://applied.oecd.org/olis/2002doc.nsf/linkto/eco-wkp\(2002\)17](http://applied.oecd.org/olis/2002doc.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/rep063.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](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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://www.npt.no/no/publikasjoner/aarsrapporter/arsrapport2001/index_eng.htm)
- OECD (1997a),  
*Managing across levels of government*, [www.oecd.org/pdf/M00004000/M00004166.pdf](http://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](http://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](http://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](http://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](http://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](http://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](http://www.oecd.org/pdf/M00018000/M00018622.pdf)
- OECD (2001h),  
OECD Science, Technology and Industry Scoreboard, towards a knowledge-based economy, Paris.

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

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\* 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 (0-1¼ 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, % <sup>1</sup>	Employment % <sup>1</sup>
<b>Oil and gas extraction</b>	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).	<b>23.3</b>	<b>1.0</b>
<b>Agriculture, forestry, fishing, mining</b>	Substantial state subsidy to the agricultural sector, mostly reflecting regional policy motives.	<b>1.8</b>	<b>4.3</b>
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
<b>Manufacturing, construction and energy supply</b>		<b>14.4</b>	<b>19.5</b>
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 "research 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, % <sup>1</sup>	Employment % <sup>1</sup>
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
<b>Activities in general government</b>		<b>14.5</b>	<b>31.0</b>
Local government	Includes public health and education sectors.	10.4	24.4
Central government		4.1	6.6
<b>Service industries excluding general government</b>		<b>36.7</b>	<b>44.2</b>
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 loses 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.

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