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Norway

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Norway

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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– to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;

– to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and

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Publié également en français.

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BASIC STATISTICS OF NORWAY (1999)

THE LAND

Area (1 000 km^2):		Major cities (thousand inhabitants, 1.1.2000):	
Total	385.2	Oslo	507.5
Mainland	323.8	Bergen	229.5
Agricultural	10.4	Trondheim	148.9
Productive forests	70.5		

THE PEOPLE

Population (thousands, 1.1.2000)	4 478.5	Total labour force (thousands)	2 330
Number of inhabitants per km^2	11.6	Civilian employment (thousands)	2 230
Net natural increase (thousands, 1998)	14.2	Civilian employment (% of total):	
Net migration (thousands, 1998)	13.8	Agriculture, forestry and fishing	4.4
		Industry and construction	22.0
		Services	73.4

PRODUCTION

Gross domestic product:		Gross fixed capital investment:	
NOK billion	1 192.8	% of GDP	22.2
Per head (US$)	34 160	Per head (US$)	7 595

THE GOVERNMENT

Public consumption (% of GDP)	21.2	Composition of Parliament (number of seats):	
General government (% of GDP):		Labour	65
Current and capital expenditure	46.2	Progressive	25
Current revenue	51.0	Christian Democrats	25
		Conservative	23
		Centre	11
		Socialist Left	9
Last general elections: 15.9.1997		Other	7
Next general elections: September 2001		Total	165

FOREIGN TRADE

Exports of goods and services (% of GDP)	39.0	Imports of goods and services (% of GDP)	33.0
of which: Oil and gas	13.8		
		Main commodity imports (% of total):	
Main commodity exports (% of total):		Ships	3.6
Fish and fish products	8.5	Raw materials (including fuel	
Base metals and products	10.9	and chemicals)	9.8
Machinery and transport equipment		Base metals and products	8.2
(excluding ships)	10.7	Machinery and transport equiment	
Mineral fuels	53.0	(excluding ships)	34.8

THE CURRENCY

Monetary unit: Krone		December 2000, average of daily rates:	
		NOK per US$	9.07
		NOK per euro	8.13

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

This Survey is based on the Secretariat's study prepared for the annual review of Norway *by the* Economic *and* Development Review Committee *on* 15 *January* 2001.

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After revisions in the light of discussions during the review, final approval of the Survey *for publication was given by the* Committee *on* 2 *February* 2001.

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The previous Survey *of* Norway *was issued in February* 2000.

Assessment and recommendations

The rebound in activity has kept the labour market tight…

The Norwegian economy has rebounded from a short and benign growth pause that ended in mid-1999 largely due to an easing in monetary policy and strong external demand. Growth of mainland Gross Domestic Product (GDP) (*i.e.* excluding shipping and petroleum extraction activities) picked up from ¾ per cent in 1999 to an estimated 2¼ per cent in 2000. While growth has remained clearly below its strong performance in 1994-98, in large part because investment in the offshore petroleum sector has continued to contract sharply, capacity constraints remain. The rebound in activity has kept the labour market tight, with vacancies at a high level while the unemployment rate, at 3.4 per cent, has remained very low. As a consequence, wages have risen faster than in the euro area, adding to the cost pressures prompted by the oil price hike and inflation accelerated from 2.3 per cent in 1999 to 3.1 per cent in 2000. The central bank reacted swiftly to rising inflation pressures and raised its key deposit rate.

… while the high oil price has led to substantial windfall gains

As the world's second-biggest net oil exporter, Norway has benefited tremendously from the sharp rise in oil prices since early 1999. The major improvement in the terms of trade led to an increase in national income by an estimated 17 per cent in 2000 and to double-digit current account and government budget surpluses as a share of GDP. At the same time, the task for the authorities to steer a sound macroeconomic policy became more complicated, especially due to the mounting pressures to spend more of the oil wealth now.

A mild slowdown is projected

Mainland GDP growth is projected to slow down somewhat to slightly below 2 per cent in 2001 and 2002, reflecting the recent monetary tightening, the tapering-off of world trade and the return to a normal level of electricity production, which will only be partly offset by a less negative development of petroleum-sector investment. The output gap, however, is likely to remain positive and the labour market tight. As a result, the rise in labour costs will remain strong and core inflation (*i.e.* excluding energy) could drift up. The risks to the growth and inflation outlook appear to be more balanced in the light of weak activity in recent months. Demand could be boosted, if the tight labour market induces stronger than projected wage gains in 2002 after the expiration of the current two-year wage settlements. The high oil price may also imply stronger oil investments than projected. Moreover, slippage on public outlays, as has occurred in recent years, could also fuel domestic demand. On the other hand, weak demand in the second half of 2000 may indicate that interest rate changes are influencing private consumption more strongly than in the past.

The policy framework has come under strain

The current macroeconomic policy framework, the so-called *Solidarity Alternative*, has three pillars: *i*) monetary policy, which aims at maintaining a stable exchange rate against the European currencies (the euro since 1999); *ii*) fiscal policy, which aims at stabilising the economy, with budget surpluses generated by the government's petroleum revenues reinvested in financial assets abroad; and *iii*) incomes policy, *i.e.* co-operation between the government and the social partners, which aims at moderate wage settlements to ensure full employment and to prevent an erosion of the traditional exposed sector. Monetary policy is the pillar that has evolved most, which should prevent a pro-cyclical monetary policy stance that on occasions occurred in the past. However, influenced by mounting labour market tensions and the high oil revenues, neither fiscal nor incomes policy have fully fulfilled their objectives, placing a heavier burden on monetary policy.

The monetary authorities have tightened policy swiftly to head off overheating risks…

Since early 1999, operational procedures of monetary policy have evolved and the monetary authorities are emphasising now 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. Accordingly, the Norges Bank moved quickly and raised the key deposit rate by

1½ percentage points to 7 per cent when inflationary pressures rose during 2000. This has undoubtedly increased the credibility of the new approach and avoided imbalances from building up even further. If, as projected, demand slows down and inflationary pressures abate, monetary policy could be eased somewhat during the projection period. However, if the upside risks to the projection materialise, the monetary authorities may need to tighten further.

... while fiscal policy has remained neutral, raising concerns about the policy mix

Since possibilities to adjust the budget during the budget year to offset unexpected changes in demand are limited, fiscal policy is not a very flexible demand-management instrument. The fact that monetary policy, rather than fiscal policy, reacted to signs of overheating in 2000 would thus appear appropriate. However, the fiscal authorities should have tightened the fiscal stance for 2001 to reduce the burden on monetary policy, thus ensuring a more balanced policy mix. They decided, however, to maintain the neutral stance and fiscal policy will therefore neither cool nor boost the economy in 2001. The current mix of a neutral fiscal stance and a tight monetary policy means interest rates are higher than they otherwise need to be which could put the exchange rate under upward pressure and could lead to a crowding-out of the exposed sector. Such a crowding-out might also take place if continuing increases in public expenditure, that might seem affordable in view of Norway's oil wealth and the assets accumulated in the Petroleum Fund, compete away scarce labour resources from the private sector.

A rising tax burden may have adverse effects on potential economic growth

To cover rising public expenditure and ensure a neutral fiscal stance, taxes will increase in 2001 by even more than in the previous year. This is in sharp contrast with the trend in other European countries. A dividend tax has been introduced, increasing the tax on capital income, and the VAT (value-added tax) rate has risen by 1 percentage point to 24 per cent, only partly to be offset by the halving of the VAT on food. The rise in the tax burden is likely to have a negative impact on potential output. In this context, it is a handicap that there is no clear medium-term budgetary framework, comparable with the Stability Programmes of the euro area countries. Such a programme would provide an anchor to the budget deliberations and could help contain the upward trend in government outlays and taxes. It would also bring to the fore the long-term consequences of fiscal policy as regards issues such as the distribution of real resources between the public and private sector.

The modernisation of the public sector should be pursued vigorously

The government has recently stressed the need to improve public sector efficiency. It is crucial that concrete measures be taken soon to attain this goal. If not, practically the complete rise in labour supply in the coming decade will be absorbed by the public sector, the rise in public expenditure will be substantial and the tradeables sector will inevitably be squeezed. There is plenty of room for increased outsourcing of auxiliary services, especially by local governments. More fundamentally, collective provision of goods does not necessarily imply production by the public sector and a shift of production to the private sector could lead to efficiency gains.

Incomes policy fails to deliver moderate wage growth

The performance of incomes policy, the third pillar of the macroeconomic policy framework, has been mixed. The rather centralised wage negotiation system has probably contributed to dampen wage growth, in particular in the first half of the 1990s, when unemployment was still high by Norwegian standards. However, it did not prevent the excessive rise in earnings in 1998, although it contributed in avoiding an escalating wage-price spiral thereafter. Since 1995 Norwegian labour costs have risen consistently by more than among its trading partners, leading to a deterioration in competitiveness. Moreover, the highly-centralised wage negotiations have reduced flexibility at the micro level, especially in the public sector, and have induced policy concessions such as the early retirement scheme with clearly negative long-run consequences.

More room for local wage negotiations would be desirable

After the expiration of the current wage settlements in early 2002, income policy will face another crucial test. The tight labour market could lead to wage gains outstripping that of trading partners for the eighth successive year. Strong wage gains would necessitate a tightening of the macroeconomic policy stance and could undermine the credibility of the current policy framework. In 2000, a government committee concluded that the current policy framework has contributed to the sound and balanced economic development, especially the favourable labour market situation, but acknowledged explicitly at the same time certain weaknesses of the current centralised wage negotiations. Its recommendation to allow greater room for negotiations at the local level within the centralised framework should be taken up as it would make wage setting more flexible, particularly in the public sector. Furthermore, the liberalisation of the strict rules on labour contracts and overtime should be seriously considered. It remains to be seen, however, whether the implementation of these recommendations would lead to incomes policy fulfilling its objective of moderating wage growth better than in recent years and whether it would reduce markedly the costs of the centralised approach.

Measures are needed to curtail sick leave

Despite strong wage rises in recent years, Norwegian employment performance is outstanding in a number of respects: the employment rate is one of the highest in the OECD, while the unemployment rate is among the lowest. But measures are needed to reverse some worrying trends such as the rapid rise in early retirement, sick leave and disability pensions. A drop in the labour force participation rate should be avoided as labour market bottlenecks are already substantial and as it would make it more difficult to cope with the ageing of the population in the coming decades. Concerning sick leave, the recent proposals by an official committee to tackle the sharp rise in absenteeism should be implemented rapidly. The committee suggested that employers should start to pay 20 per cent of the sickness payments from the 16th day of absence onwards and that these payments should be reduced from 100 to 80 per cent of earnings in the first 16 days of sick leave. Implementing these measures would still leave sickness benefits which are generous by international comparison, so that they may have to be complemented by a tighter follow-up of those on sick leave.

Government involvement in telecommunications should be reduced further

Not only labour market reform but also product market reform is needed to underpin solid, non-inflationary growth in the longer run. Product markets are still characterised by substantial state ownership and by high government support, especially to the agricultural sector. In the 1990s, deregulation has been carried out to improve competition, while so far not much emphasis has been put on privatisation of public enterprises. The partial privatisation of the public telecommunications operator at the end of 2000 is, therefore, a welcome step and is likely to improve competition and efficiency further. However, the authorities intend to keep a stake of 51 per cent in the long term while many other countries have opted for complete privatisation. Government involvement should be reduced further. Strict regulatory supervision of the incumbent will be indispensable to prevent an abuse of its dominant market position.

Competition in the energy sector should be raised

Norway could also benefit from increasing competition in the electricity sector. A further unbundling of production and distribution of local government electricity utilities would enhance competition and improve efficiency. Furthermore, ownership of such utilities by municipalities should be reconsidered as they may not be sufficiently professional owners in an electricity market that is becoming more complex and sophisticated. As for the oil sector, the recent decision to create room for more players in the exploration market is welcome. But this needs to be amplified, as proposed by the government, by privatisation of the state-owned oil company so as to improve efficiency. While recognising that there are difficult issues in assuring that the state effectively keeps the resource rent, the government proposal of a somewhat smaller involvement of the government through the *State Direct Financial Interest* is also welcome.

Structural reform should also focus on reducing subsidies to the agricultural sector

Because of participation in the European Economic Area (EEA), structural reforms have been fastest and deepest in sectors benefiting from the EU's liberalisation agenda. This will continue in the future. The government should therefore pay great attention to sectors that are not directly influenced by the EEA agreement, such as agriculture. Support to the agricultural sector, which is among the highest in the OECD, should be scaled back and regional policy goals pursued by other means. Specifically, agricultural support should be less linked to output and better targeted to reduce the high costs to consumers and taxpayers. In this context, the reduction of VAT on food in 2001 may limit tax evasion through cross-border shopping slightly, but it could even increase the overall burden of agricultural protection on the rest of the economy.

Unexploited scale economies may remain in the financial sector

With respect to structural reform of financial markets, the Norwegian authorities have recently sold their one-third stake in the second-largest bank. There is also a decision to reduce the state stake in the largest bank, but only from 60 per cent to a third. In this context, it is relevant that economies of scale and scope may exist in the banking sector and that the international trend is towards greater size, while Norwegian banks are small, even in a regional context. However, further concentration around this partially state-owned bank may affect competition negatively for some banking and insurance services.

Pension payments will rise substantially in the future

The special chapter of this *Survey* reviews the impact of ageing on the Norwegian economy and the scope for reform. Norway, like most OECD countries, will experience a significant ageing of its population. It starts, however, from an enviable position. The employment rate of older people is among the highest in the OECD, pension outlays are currently relatively low and substantial financial assets have been accumulated in the Government Petroleum Fund. However, without reform, due to the maturing of the pension system, the ageing of the population will lead to a bigger run-up in spending than in most other OECD countries over the next 50 years despite a somewhat less rapid ageing process.

Early-retirement schemes should be overhauled

A key problem over the past decade has been a fall in the effective age of retirement. This has been encouraged by the implementation of the early retirement scheme (AFP), which provides fairly generous benefits and strongly encourages retirement before 67. And, since it allows individuals to accrue old-age pension rights while receiving AFP benefits, it reduces the tax base while keeping old-age pension outlays unchanged. This scheme should be abolished and replaced by a system of flexible retirement where benefits would be actuarially adjusted. Finally, changes in the tax code to remove incentives to retire early would be welcome. Measures are also needed to contain the inflow into disability pension schemes. Implementing the recent proposal of an official committee to introduce temporary disability pensions, which are automatically reassessed after a couple of years would improve screening. Meanwhile, the programme to re-examine eligibility for receiving a disability pension, which will be implemented in 2001, is a step in the right direction.

The public old-age pension system may have to become less generous

Reforms within the current public old-age pension system should also be on the agenda. Future spending pressures could be reduced by shifting the indexation of pension benefits partly from wages to prices, as many OECD countries already have done, and by calculating pension rights over the entire work history instead of the best twenty years. The fact that not all individuals are covered by the occupational schemes makes the system unequal, although recent legislation on private sector occupational schemes is likely to increase their coverage. The authorities should assess the desirability of merging the two types of earnings-related pension schemes (the supplementary pension scheme within the public *National Insurance Scheme* and occupational schemes) to ensure full coverage of the retired population and to streamline the pension system. However, such a merger should be carefully designed to avoid a sharp rise in overall pension expenditure.

Using the Petroleum Fund to create a funded system should be considered

The use of the Government Petroleum Fund for funding pensions should be assessed. The Fund is not sufficiently large to fund all pension liabilities. However, one option is to earmark part of the Government Petroleum Fund for new pension rights. This could also facilitate reforms of the current pension system and might help to contain the pressure to raise other government outlays in the future. On the other hand, earmarking would also pre-empt alternative uses of the assets accumulated in the Fund and risk locking in social security entitlements. More radical options should also be considered when redesigning the earnings-related component of the pension system. A first option would be to move to a "virtual" defined-contribution arrangement, as in Sweden and Italy. Under this system, individuals accumulate "contributions" in fictive accounts over their working lives with the individual receiving an "annuity" based on the cumulated contributions on retirement. The Petroleum Fund could be used to prefund this system. A second option could be a mandatory system outside the public sector with individual accounts. In this case, the Petroleum

Fund could be allocated to individual accounts on the basis of previous lifetime earnings. In this approach, saving through individual accounts would replace taxation for the pay-as-you-go system, which could well strengthen incentives to work, save and invest.

Measures are needed to restrain the rapid rise in care costs

The financial burden of the health and old-age care systems could rise rapidly in the coming decades given current use patterns – with an extensive use of some high cost services – and the low level of user charges paid by the beneficiary. Some containment of the ageing-induced rise in health and care expenditure seems possible through improvements in health care system efficiency, for instance through a better consolidation of supply across municipalities. While there are distinct advantages to having responsibility for some welfare services at different government levels, the present arrangements could encourage municipalities and counties to shift part of the burden onto each other. Arrangements should be changed to remove these incentives. More generally, charges for health care may need to be increased to better reflect overall resource costs. Public spending on long-term care in Norway is particularly high by international standards and with the number of the very old tending to increase more rapidly than the total number of individuals of retirement age, these costs could continue to increase. To ease the financing of the costs, the government could consider requiring a larger share of the overall cost to be paid for by beneficiaries. Introducing such measures is often politically contentious because they can require individuals to sell off assets such as housing. But with careful design, such measures can circumvent such problems while avoiding distorting effects on the volume and allocation of savings.

Summing up

Norway is currently benefiting tremendously from the high oil price. At the same time, however, this has complicated the pursuit of a sound macroeconomic policy stance. Looking ahead, given the tight labour market situation, a major challenge in securing a stable economic development with robust growth will be to contain inflation. In this context, the monetary authorities should be commended for their swift reaction to the mounting inflationary pressures while the fiscal authorities should, at a minimum, resist the temptation to fuel demand further. A change in the policy mix, including fiscal tightening, would be appropriate, especially if upside risks materialise. It will also be essential that the authorities continue to save the major part of oil revenues. This will reduce the need to increase the tax burden in coming decades when ageing will push up expenditure and oil revenues will fall. In this context, the use of the Government Petroleum Fund for developing a funded pension system should be assessed. It will also be crucial for the government to end the rapid rise in early retirement, sick leave and disability pensions. This would also boost labour supply and prevent the crowding out of private sector labour demand due to the projected strong increase in government employment. At the same time, efficiency-enhancing measures are needed to prevent such a strong rise in government employment. The pace of structural reform has been slow. Concerning product and financial markets, the recent privatisations are a step in the right direction but more remains to be done. The standard of living could be improved further by taking measures that would help to increase productivity growth in the future. Obtaining the major benefits of the rapid development of information and communication technology, and of the new economy, will depend on putting the proper policy conditions in place. To take advantage of policy complementarities, reforms should be comprehensive, covering a wide range of structural policies. This would help to increase living standards and to maintain prosperity in an ageing society.

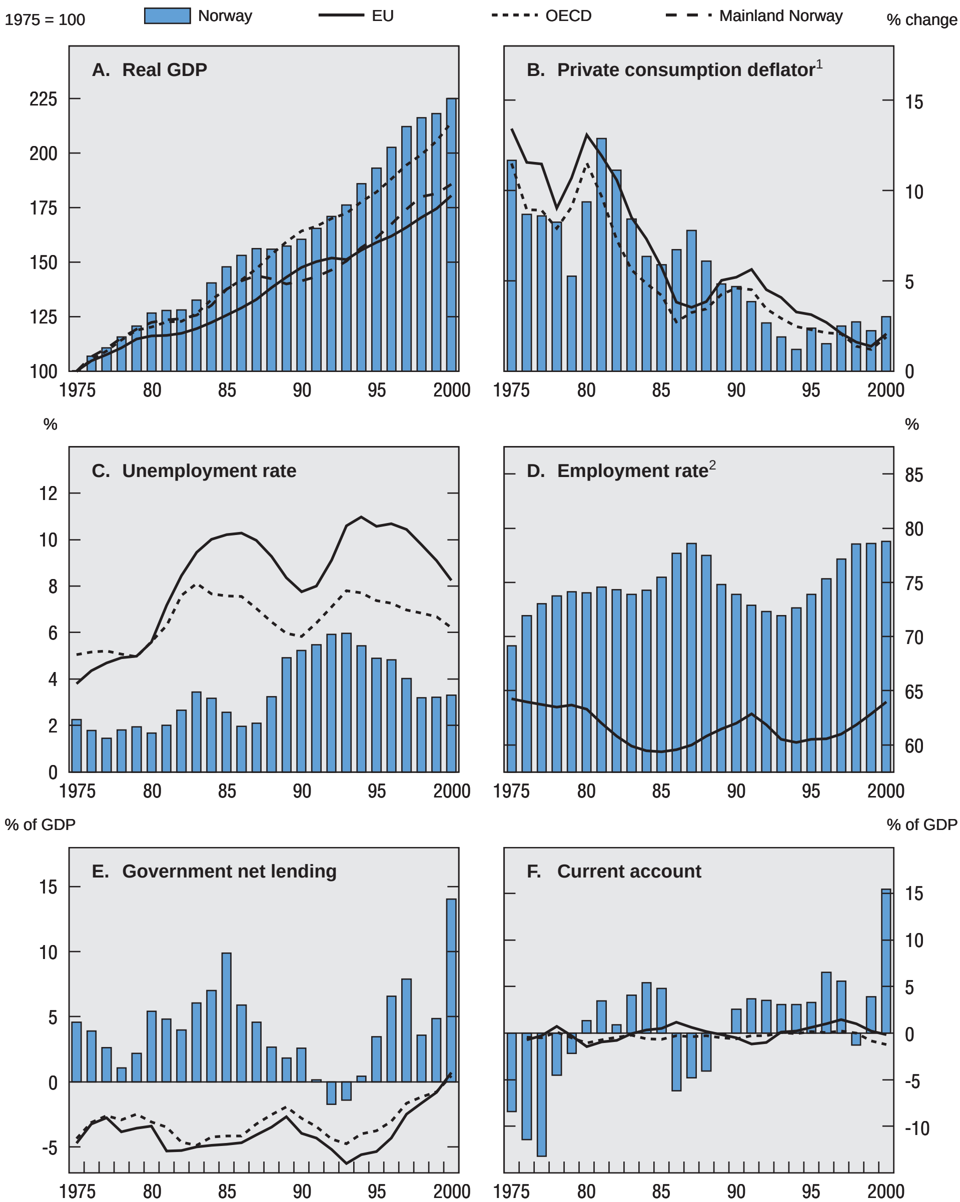
I. Macroeconomic performance

After a short growth pause, the Norwegian economy has rebounded owing to a pick-up in exports and domestic demand. Mainland GDP is estimated to have increased by 2¼ per cent in 2000 following growth of less than 1 per cent in 1999. The rebound was somewhat quicker than expected in the last *Survey* despite weak domestic demand in the second half of 2000. As a result of the pick-up in activity, the labour market has remained tight. The unemployment rate is, at 3.4 per cent, among the lowest in the OECD area, while vacancies are at a high level. The tight labour market has led to wage settlements for 2000-01 that will keep wage increases above the trading partners' average. The sharp oil price rise and the continuing wage push have led to a further acceleration in inflation to 3.1 per cent, ¾ percentage point above the euro area average. The central bank reacted swiftly to the increased inflationary pressures and lifted its key deposit rate by 1½ percentage points to 7 per cent between April and September. The oil price shock, together with higher oil production, boosted the current account surplus and the government budget balance to record levels. The stance of the approved budget for 2001 is neutral, with tax increases covering additional spending.

The growth pause from mid-1998 to mid-1999 followed a period of exceptional strength (Figure 1). Since the recovery got well underway in 1993, mainland GDP has risen by an average of 3¼ per cent per year, 1¼ percentage points higher than the euro area average. Unemployment was almost halved while the employment rate rose substantially. The impetus for this favourable development came from an effective exchange rate depreciation in the early 1990s and an expansionary fiscal policy, made possible by the considerable oil revenues. In the first years of the recovery, the improvement in competitiveness was maintained due to moderate wage rises, but from 1998 onwards price and cost inflation picked up as excess supply dissipated. This has created considerable tensions in the policy framework.

This chapter discusses recent macroeconomic developments and policy responses in more detail. It concludes with a review of the economic prospects for 2001 and 2002, together with an assessment of the risks related to the projections and the challenges for macroeconomic policy.

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



1. OECD excludes high inflation countries.
2. Total employment as a per cent of working age population (aged 16-64).
Source: OECD (2000), *Economic Outlook No. 68,* December.

Macroeconomic developments: tight labour and product markets

The surge in oil production boosts exports

The rise in oil production and the pick-up in world demand for manufactured goods boosted Norwegian exports in 2000 (Tables 1 and 2). Volume growth accelerated from 1.7 per cent in 1999 to an estimated 4.5 per cent in 2000.[1] Oil and gas exports, by far the largest single export category (representing more than 40 per cent of total exports in 2000), expanded by an estimated 7 per cent, after falling in 1998 and 1999. The rebound in oil and gas activity began at the end of 1999 as new fields started producing. Another reason was the gradual lifting of production restrictions.[2] Since the complete lifting in July 2000, production has

Table 1. **Demand and output**

Percentage change from previous period, volume

	1997 Current prices NOK billion	1998	1999	2000[1]	Annual rate[2] 1999 1st half	1999 2nd half	2000 1st half
Private consumption	520.8	3.3	2.4	2.9	2.1	3.6	3.2
Government consumption	218.4	3.8	2.7	1.8	2.5	2.8	1.2
Gross fixed capital formation	252.1	5.8	–5.6	–2.9	–20.2	13.1	–2.5
Public sector	38.0	4.9	1.3	1.0	3.0	5.8	0.8
Petroleum production and pipeline transport	62.3	20.4	–12.6	–30.8	–23.4	–25.5	–27.2
Residential	30.4	–0.9	–2.2	1.8	–4.4	13.6	–4.8
Other private[3]	121.5	0.3	–4.4	11.8	–28.2	46.5	10.1
Stockbuilding[4, 5]	22.9	1.4	–1.2	1.1	–1.0	–2.6	3.0
Total domestic demand	1 014.2	5.4	–0.9	2.4	–4.8	2.6	4.5
Exports of goods and services	448.0	0.3	1.7	2.2	4.1	7.7	–2.2
Traditional goods	169.2	3.3	2.6	4.6	0.6	9.8	2.1
Crude oil and natural gas	163.7	–3.6	–0.1	6.1	3.5	8.8	2.8
Ships and platforms	13.3	–16.4	21.0	–61.6	181.0	–0.2	–92.3
Services	101.9	3.8	1.0	1.0	0.6	3.5	1.0
Imports of goods and services	366.1	9.3	–3.1	2.1	–9.2	3.4	4.2
Foreign balance[4]	81.9	–3.0	1.8	0.2	5.0	1.8	–2.3
GDP	1 096.1	2.0	0.9	2.4	0.3	4.4	1.9
of which: Mainland	893.6	3.3	0.8	1.8	–0.1	3.0	1.9

1. First three quarters of seasonally adjusted data; growth over same period of previous year.
2. Seasonally adjusted data; growth over previous period.
3. Including shipping.
4. Contribution to GDP growth.
5. Includes statistical discrepancy.

Source: Statistics Norway and OECD Secretariat.

Table 2. **Exports by commodity**

On a national accounts basis, percentage volume changes

	1999 % of total exports[1]	1994	1995	1996	1997	1998	1999	2000[2]
Total exports	100.0	8.7	4.3	9.3	6.1	0.3	1.7	2.2
Goods	76.5	11.0	6.3	10.5	6.5	–0.8	2.0	2.6
Crude oil and natural gas	34.7	11.9	9.2	13.7	2.9	–3.6	–0.1	6.1
Ships and oil platforms	2.7	–10.2	–1.0	–17.4	40.7	–16.4	21.0	–61.6
Traditional products	39.0	12.5	4.5	10.0	8.1	3.3	2.6	4.6
of which: Manufacturing	36.3	13.2	3.6	10.4	8.6	3.2	2.1	3.4
Services	23.5	2.7	–1.3	5.8	4.7	3.8	1.0	1.0
Gross receipts, shipping	11.2	4.5	3.9	0.8	3.7	2.1	0.2	2.9

1. Current prices.
2. Estimate based on first three quarters of data; growth over same period of previous year.

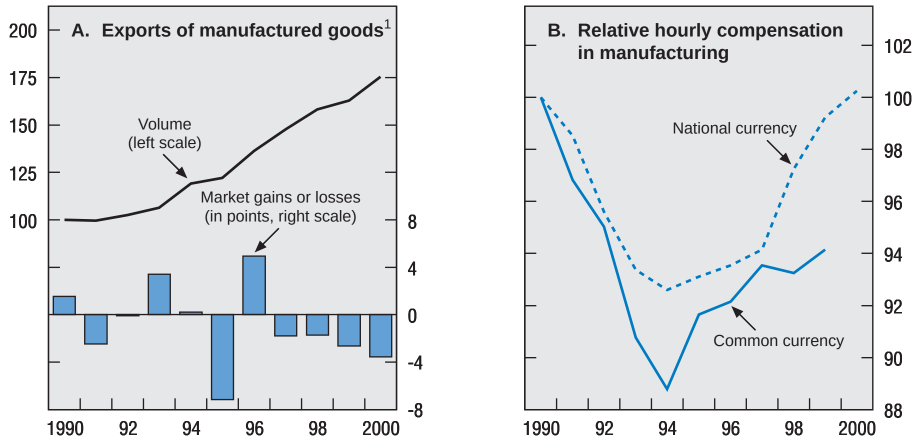
Source: Statistics Norway and OECD Secretariat.

been at the short-term technical maximum level and, as a consequence, strong world demand and the high oil price have had no immediate impact on production volumes. In the longer term, an extended period of high oil prices would increase production on the Norwegian continental shelf as it would encourage additional investments in existing fields and the development of new higher-cost fields.[3]

Given the sharp pick-up in world demand, manufactured exports were relatively sluggish in 2000. They are estimated to have risen by only 7½ per cent,[4] while export markets expanded much faster, by 12 per cent. This loss of market share was caused by the deterioration in competitiveness in 2000 and previous years and by capacity constraints, especially in the processing industries (Figure 2 and Box 1).[5] Between 1994 and 2000, manufactured exports lagged market growth by around 2 percentage points per year on average. Exporters have so far limited the market share loss by reducing profitability but in the longer term this may lead to lower investment and therefore affect export performance even more. Much more favourable in recent years has been the export development of farmed fish. The loss in competitiveness has also had a negative impact on services, particularly tourism,[6] even though strong world trade, especially of crude oil, boosted shipping services. Between 1995 and 1999, Norwegian service exports lagged considerably – by almost 3 percentage points per year – the growth of service imports in the OECD area.

Manufactured export prices rose sharply in 2000 caused by the weakening of the krone against the US dollar and the pick-up in world demand. Furthermore, it was underpinned by price rises for commodity-based products (aluminium,

Figure 2. **Export performance and cost competitiveness**
1990 = 100



1. Excluding ships and oil platforms.
Source: Statistics Norway, Ministry of Finance and OECD Secretariat.

other basic metals, basic chemicals and pulp and paper) which account for a relatively high share of manufactured exports. Prices are estimated to have increased by 3½ per cent in 2000 after remaining broadly stable on average over the three previous years.[7] With world oil prices up by more than 60 per cent measured in US dollars and the krone depreciating against the dollar by more than 10 per cent, export prices of goods and services are estimated to have risen by almost 40 per cent. The price rise of imports of goods and services was much smaller, estimated at 6.7 per cent, and less than that of the other European countries reflecting the low share of oil in total imports and the appreciation of the krone *vis-à-vis* the euro. Furthermore, the import price rise was softened by a continuing noticeable shift to imports from low-cost countries in Eastern Europe and Asia.

After declining by 3 per cent in 1999, imports of goods and services increased slightly in 2000, by an estimated 1½ per cent. Import growth was restrained by the continuing sharp contraction in oil investment, only partly offset by a somewhat stronger increase in private consumption and by the turnaround in mainland business investment.[8] Moreover, electricity imports fell substantially because of very strong electricity production due to high water reservoir levels caused by heavy rainfall.[9] As a result of the weak import growth and the pick-up in exports, the contribution of net exports to GDP growth was positive for the second consecutive year.

Box 1. Does Norway suffer from the Dutch disease?

Since the extraction of oil and gas resources started on the Norwegian continental shelf in 1971, the petroleum sector has grown rapidly. In 2000, the offshore petroleum sector accounted for over 20 per cent of GDP and more than 40 per cent of total exports. The second half of the 1970s and the first half of the 1980s were characterised by high growth in industries which are sheltered from international competition, while the share of export-oriented and import-competing mainland activities diminished. As a share of GDP, non-oil exports declined substantially, from 21 per cent in 1970 to 16½ per cent in 1986. This phenomenon arises from the extensive export of primary resources, oil and gas in the case of Norway, which pushes up the currency in real terms. As a result, the traditional industries exposed to international competition become less competitive and lose market share, and domestic resources are reallocated from the exposed to the sheltered sector. Moreover, as a second symptom, public spending rises very rapidly as the export of primary resources generates large proceeds for the state, thus softening the budget constraint.

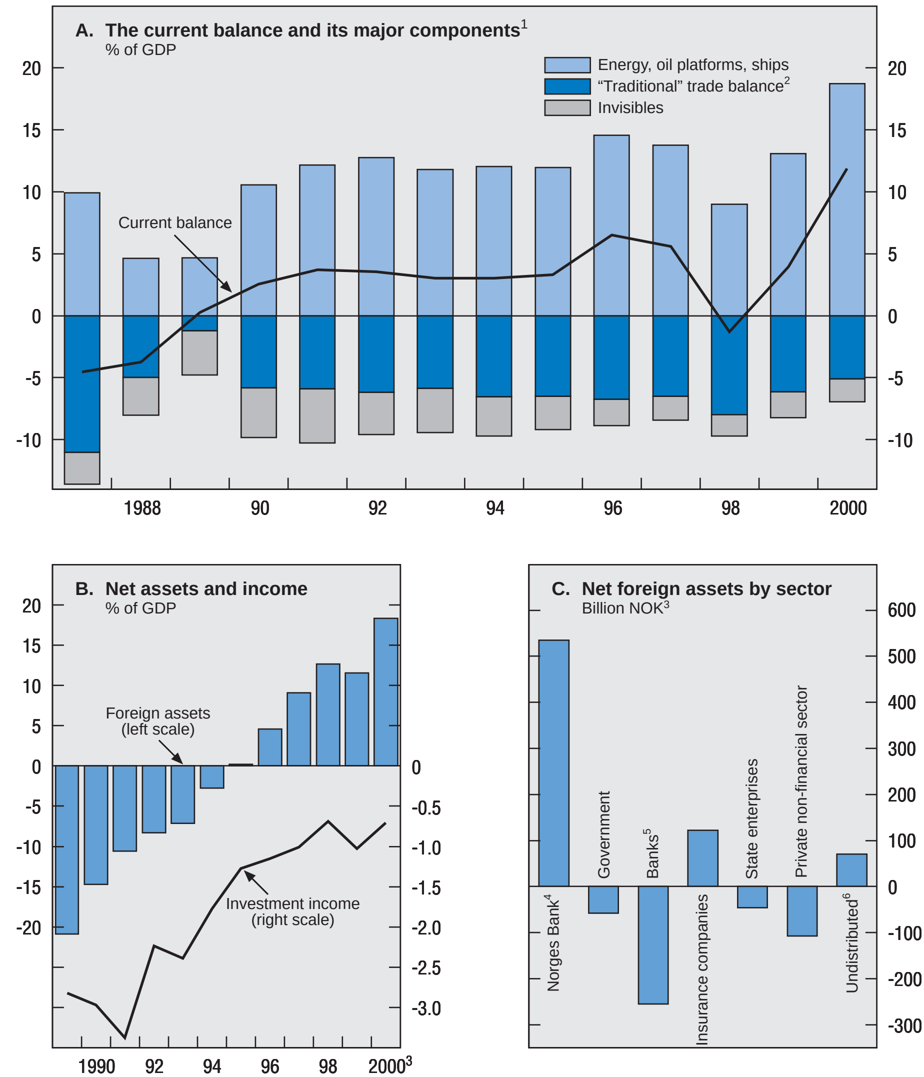
In the 1970s, government expenditure and social programmes were expanded rapidly. This development went too far and Norway suffered from the "Dutch disease"* after the 1986 drop in oil prices. Thereafter, the Norwegian government has aimed to prevent the Dutch disease by saving the major part of the petroleum revenues in the Government Petroleum Fund and by an incomes policy geared towards maintaining the current size of the exposed sector through moderate wage increases. This contributed to the improvement in competitiveness during the first half of the 1990s and the increase in the share of non-oil exports in GDP to 20 per cent. In recent years, however, competitiveness has deteriorated again.

If petroleum exports remain high, reallocation of resources from the exposed sector to the sheltered sector reflects a change in relative prices and raises welfare. "Dutch disease" symptoms will develop, however, if petroleum revenues fall significantly and permanently and the economy is not flexible enough to allow a quick shift of resources back to the exposed sector, and if the necessary downward correction of public spending is difficult to engineer. This would result in a protracted period of slow growth and probably high unemployment.

* It is called the Dutch disease because the Netherlands experienced these phenomena due to rapidly rising gas revenues from the end of the 1960s, followed by a rapid fall in the 1980s, with policy errors in the 1970s felt till the mid-1990s.

Reflecting this outcome and the sharp improvement in the terms of trade, the current account surplus surged to an estimated 15 per cent of GDP in 2000, up by 11 percentage points from the previous year (Figure 3). The service balance became less negative as net receipts from shipping rose noticeably. The net

Figure 3. External position



1. Break in series in 1990. Figures for 2000 are estimates based on data up to October.
2. Total exports and imports excluding petroleum, oil rigs and ships.
3. At end October 2000.
4. Including the Government Petroleum Fund.
5. Commercial and savings banks, mortgage and financial companies.
6. Including errors and omissions.

Source: Statistics Norway, Norges Bank and OECD Secretariat.

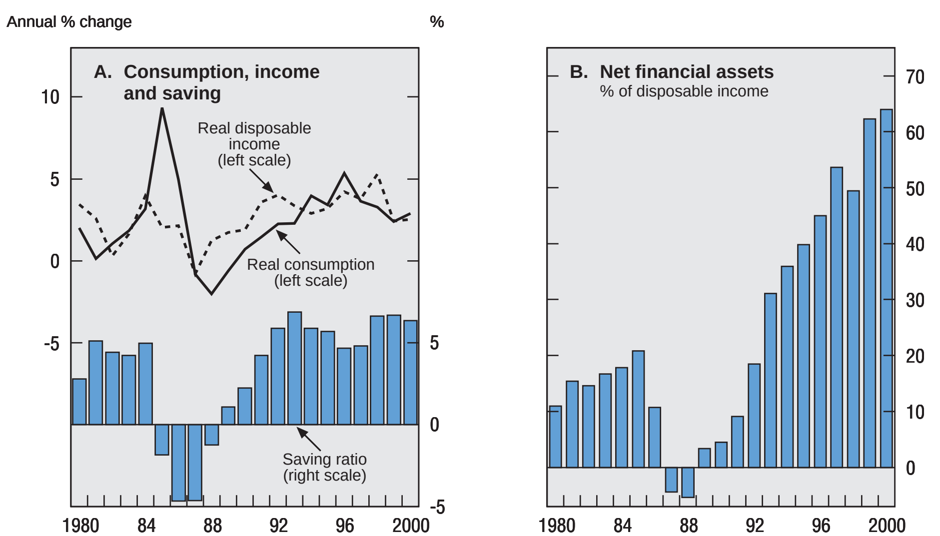
foreign asset position improved substantially from 16 per cent of GDP at the end of 1999 to 18 per cent in October 2000. Nevertheless, the net primary income from abroad dropped substantially but remained in deficit, at an estimated ¾ per cent of GDP, compared to a record level of over 3 per cent of GDP in 1991.

Private consumption rebounded

After mitigating the slowdown in 1999, private consumption supported the pick-up in 2000 (Table 1 and Figure 4). It is estimated to have increased by 2.9 per cent which is still well below the robust growth of 4 per cent on average in 1996-98. In the second half of 2000, however, consumption was weak, probably as a result of the monetary tightening since April.[10] The saving ratio is estimated to have decreased marginally to 6½ per cent in 2000 reflecting the improvement in consumer confidence and the strong rise in asset prices (Figure 5), which was only partly offset by the rise in interest rates.

In the recent past, rising house prices have had a significant negative impact on the saving ratio in OECD countries (OECD, 2000). The stable saving ratio in Norway in recent years is therefore remarkable. Despite the rise in households' net financial assets, from around 10 to 65 per cent of disposable income between 1992 and 2000, the sharp rise in housing assets, and the relatively limited rise in the debt servicing

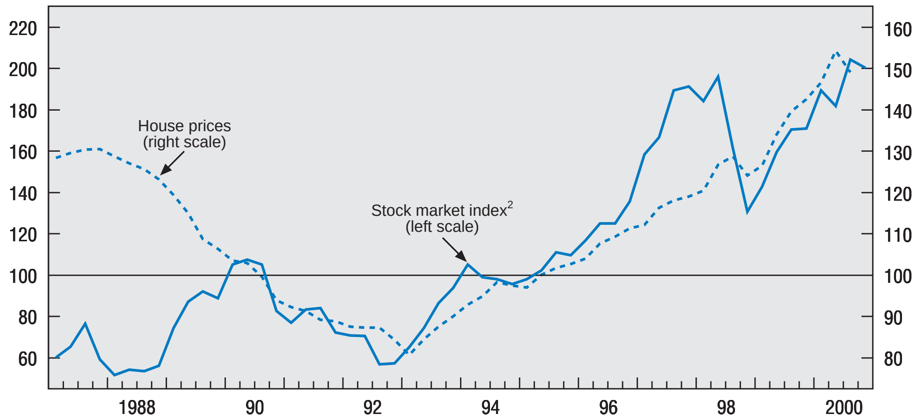
Figure 4. **Household consumption**



Source: Statistics Norway, Ministry of Finance and OECD Secretariat.

Figure 5. **Asset prices**

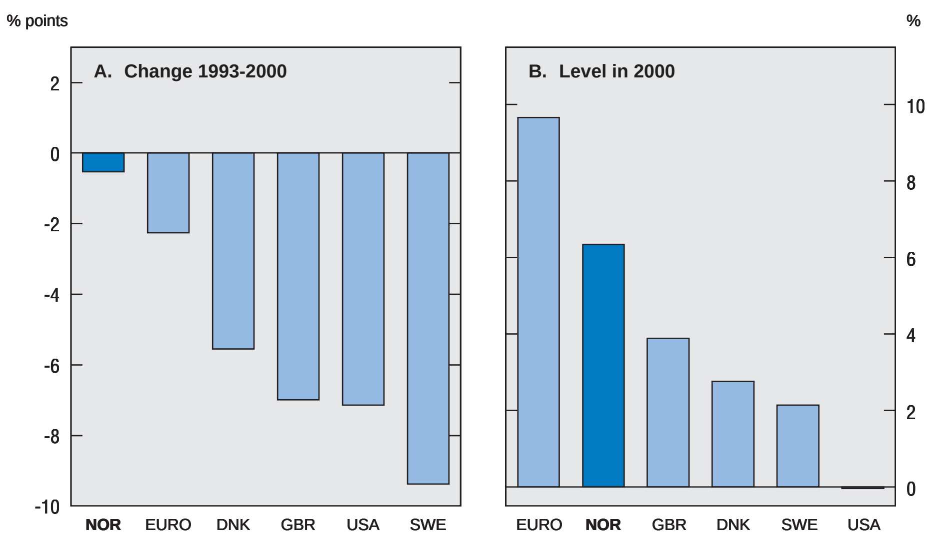
Real prices,[1] 1990 = 100



1. Deflated by the consumer price index.
2. Oslo all share index, quarterly average.

Source: Statistics Norway and Ministry of Finance.

Figure 6. **The saving ratio in international perspective**



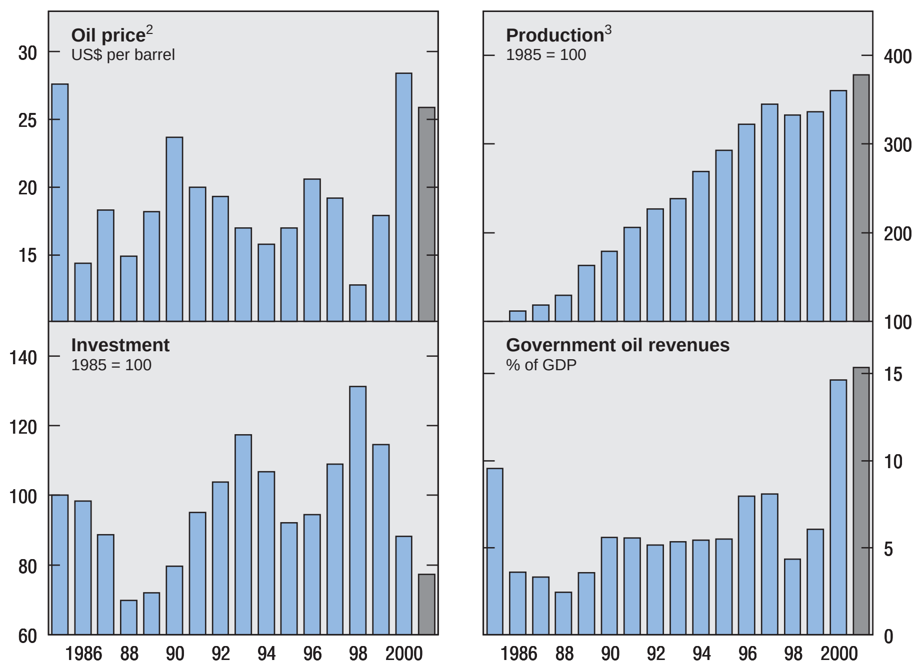
Source: OECD Secretariat.

burden, the Norwegian household saving ratio has remained broadly unchanged hovering around 6 per cent throughout the period, while many other countries experienced a sharp decline (Figure 6). The relatively recent experience of Norwegian households of the serious consequences of the housing market crisis in the late 1980s could be one explanation for this reluctance to lower savings, but the Swedish and British experience with sharply falling house prices is almost as recent and as severe.[11] The stable saving ratio in 1999 and 2000 is the more remarkable as some kind of Ricardian effect of higher petroleum wealth might have been expected.[12]

Investment continues to fall due to the oil sector

Total fixed capital formation continued to fall in 2000 reflecting the sharp decline in oil investment (Table 1 and Figure 7). Offshore investment by the

Figure 7. **The oil sector**[1]

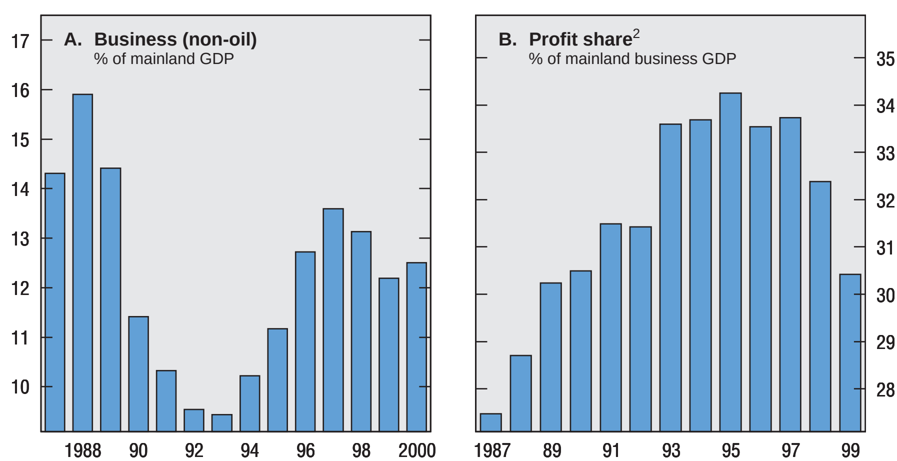


1. Data for 2001 are OECD Secretariat estimates.
2. Brent Blend. The estimate for 2001 shows the price of the latest available month.
3. Petroleum activities and ocean transport.
Source: Statistics Norway and OECD Secretariat.

petroleum sector, which accounts for approximately one-fifth of total fixed investment, dropped by around a quarter, bringing it closer to a more normal investment level after very strong activity in 1997 and 1998. The drop knocked about 1 percentage point off total GDP growth in 2000.[13] All other investment categories recovered from the drop in 1999 (Table 1). Supported by strengthening domestic demand and higher non-oil commodity prices, mainland business fixed investment rose by an estimated 3 per cent despite the recent monetary tightening, rapidly rising labour costs, and the weak demand outlook in the shipbuilding and oil platform construction industry (Figure 8).

After contracting for almost two years, residential investment revived in mid-1999 and rose significantly in 2000.[14] Lack of skilled construction employees and the shortage of building sites may have restrained construction from rising even faster, especially in the Oslo area and other major cities where domestic migration is leading to strong population growth. While there has not yet been a noticeable impact of the rise in interest rates on residential construction orders, house prices were affected. They fell in the third quarter by 3 per cent compared with the previous quarter, but were still 12 per cent higher than a year earlier. They have risen steadily since the trough in 1993, only temporarily interrupted in the second half of 1998 as a consequence of the strong monetary tightening. On

Figure 8. **Business investment**[1]



1. Data for 2000 are projections.
2. Mainland business GDP less compensation and net indirect taxes.
Source: Statistics Norway and OECD Secretariat.

average, house prices have increased by 80 per cent since 1993 in real terms, with much stronger rises in the Oslo region (Figure 5). Favourable income developments, expectations of further house price rises and migration to growth centres drove this upward trend. It was compounded by supply constraints in the construction sector and by the low housing construction relative to population growth in the aftermath of the sharp drop in house prices at the end of the 1980s and in the early 1990s. The sharp rise in house prices since 1993 is mostly a correction to the preceding severe fall. The price of existing relative to new houses does not indicate that a house market price bubble has developed. For the country as a whole, this relative price was 84 per cent in 1998/99, still clearly below 100 per cent although higher than the 78 per cent of 1993. Only in the Oslo region has the relative price surpassed 100 per cent, indicating that a future downward correction is likely.

The labour market: vacancies are at a high level

The labour market response to the pick-up in activity has been rapid, with employment gains increasing from ½ per cent in 1999 to an estimated ¾ per cent in 2000 (Table 3). The cyclical improvement has also led to stronger mainland labour productivity growth. Employment developments have diverged considerably between sectors, with employment in private sector services and government

Table 3. **Employment developments**

Percentage change

	1994 Thousand persons	1995	1996	1997	1998	1999	2000[1]
Labour force	2 151	1.7	2.4	2.1	1.6	0.5	0.8
Employment[2]	2 035	2.2	2.5	3.0	2.5	0.5	0.7
Private sector[3]	1 423	2.3	1.9	3.5	2.6	0.1	–0.1
of which: Construction of oil platforms and ships	32	3.7	–2.7	10.5	4.0	–2.1	–9.8
Government[3]	640	1.6	2.6	1.7	1.9	1.9	1.9
Central (civilian)	104	0.7	2.1	2.2	–0.3	0.3	0.6
Local	489	2.3	2.9	2.1	2.7	2.4	2.4
Labour productivity[4]	..	0.2	1.2	0.9	1.1	0.7	1.8
Hours worked (total)[3]	2 951[5]	0.8	1.6	2.5	2.3	0.3	0.3

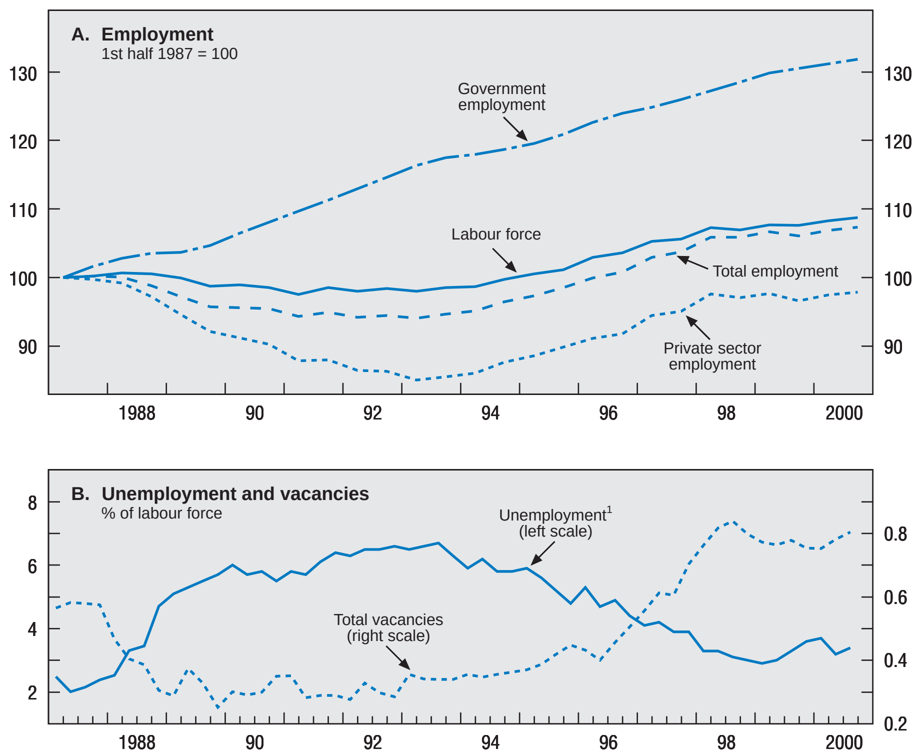
1. Estimate. For employment and hours worked growth is based on the first three quarters over the same period of the previous year.
2. Measured in persons.
3. National accounts.
4. Mainland.
5. Million hours.

Source: Statistics Norway and OECD Secretariat.

up by 1.3 and 1.7 per cent, respectively, in the first three quarters of 2000 (compared to the same period of the previous year), while manufacturing employment fell by 3.1 per cent. Employment dropped the most (9.9 per cent) in the shipbuilding and oil-platform construction industry.

The pick-up in employment growth was mainly reflected in higher labour force growth while the unemployment rate – 3.4 per cent in 2000 – has remained broadly unchanged (Figure 9). The current rate is somewhat below the OECD Secretariat's estimate of the structural unemployment rate (NAIRU) of 3.7 per cent (OECD, 2000*b*; Richardson *et al.*, 2000). The labour force participation rate reached a new record high of 81½ per cent, 5 percentage points above the trough in 1993.[15] This increase happened despite the further rise in persons exiting the labour

Figure 9. **Labour market**



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

Source: Statistics Norway, Directorate of Labour and OECD Secretariat.

market through disability and early retirement. Those outside the labour force are currently mainly disabled, early retired or students, indicating that any further increase in the participation rate is likely to be very limited unless the number of disability and early-retirement beneficiaries can be reduced.[16]

The rebound in activity has kept the labour market tight, with vacancies staying at a high level.[17] Around one in five companies reported that labour supply was a bottleneck for production. Recruitment problems were strongest in the health sector and in the construction industry, partly reflecting the departure of Swedish nurses and construction workers due to the improved labour market situation in Sweden.[18] Geographically, the labour market tensions are strongest in the south of the country, with a registered unemployment rate of around 2 per cent, compared with around 5 per cent in the most northerly region. Finally, the tight labour market led to a drop in the number of temporary and other atypical jobs.

Wage inflation remains above the euro area average

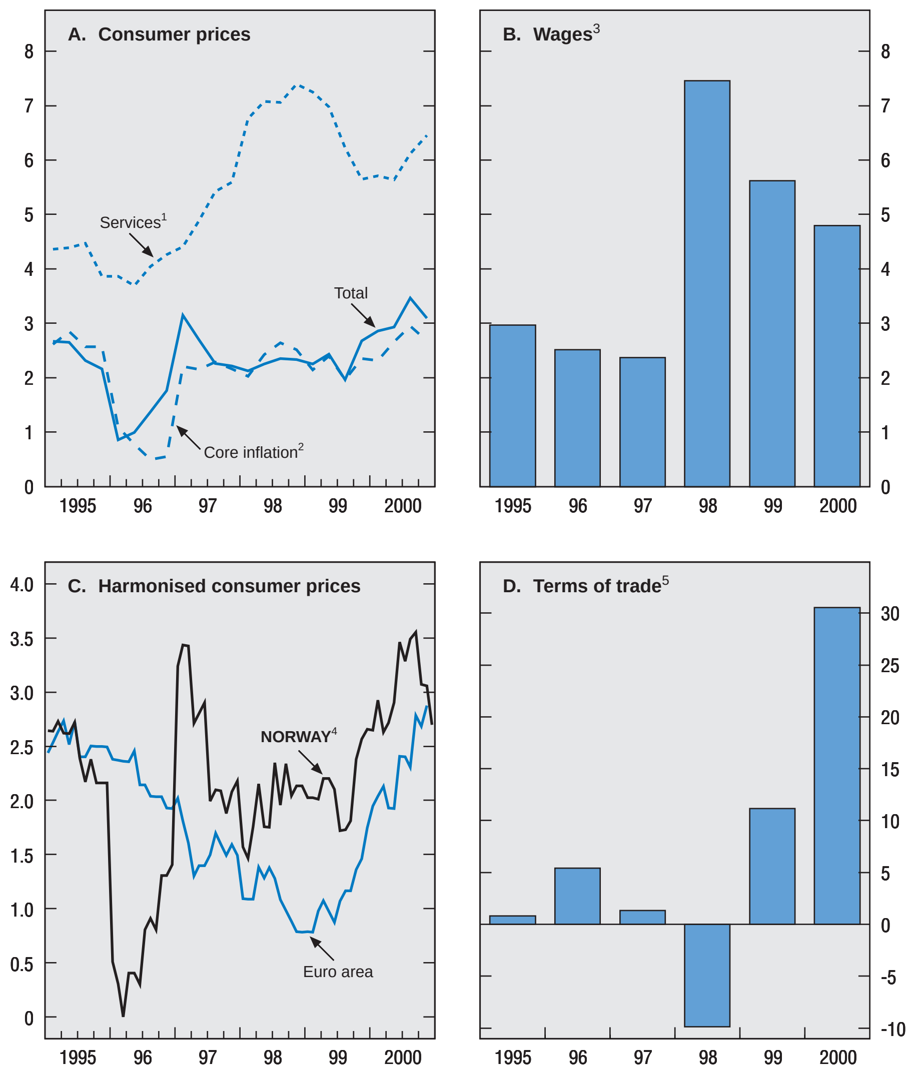
With the labour market tight, wages have continued to rise rapidly, although the increase has slowed down since 1998. The two-year wage settlement has led to an estimated wage growth of 4¼ per cent in 2000, down by 1¼ percentage points from 1999 and 2¾ percentage points below the 1998 peak (Table 4 and Figure 10).[19] Based on unchanged wage drift, wage growth of 4 per

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

	1993	1994	1995	1996	1997	1998	1999	2000
Consumer price index	2.3	1.4	2.4	1.3	2.6	2.3	2.3	3.1
Excluding food and energy	3.1	1.6	2.6	0.7	2.2	2.4	2.3	2.7
Harmonised	..	..	..	0.7	2.6	2.0	2.1	3.0
Private consumption deflator	2.0	1.2	2.4	1.5	2.5	2.7	2.2	3.0
Hourly earnings per employee[1]	3.5	3.0	4.6	4.6	5.0	6.4	5.3	4¾[2]
of which:								
Mainland	3.3	3.0	4.6	4.6	5.0	6.4	5.4	..
Manufacturing	2.8	2.9	4.6	4.5	4.4	5.9	5.6	..
Personal services	3.0	2.8	4.7	4.6	4.6	6.1	5.0	..
Public sector	3.4	3.2	4.6	4.5	4.9	6.2	5.3	..
Relative compensation per hour[3]								
Local currency	–2.4	–0.8	0.6	0.4	0.7	3.3	2.0	1.0[2]
Common currency	–4.5	–2.2	3.3	0.6	1.4	–0.3	0.9	..

1. Earnings per man-hour worked on a national accounts basis.
2. Ministry of Finance estimate.
3. Manufacturing.
Source: Ministry of Finance; Statistics Norway; OECD, *Main Economic Indicators* and OECD Secretariat.

Figure 10. **Wage and price developments**
Annual percentage change



1. Services with wages as the dominating price factor.
2. Non-food, non-energy.
3. Compensation rate in the private sector on a national accounts basis.
4. Non-harmonised data for 1995.
5. The change in the ratio of prices of exports/prices of imports for goods and services.

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

cent is projected in 2001.[20] The wage increases are, however, higher than agreed by the social partners and the government in the *Arntsen Committee* in early 1999. It was then agreed that wages should increase in line with trading partners in 2000. However, wage increases have surpassed the euro area and trading partner averages by 2½ and 1¾ percentage points, respectively. Moreover, labour costs are increasing by even more than wages due to the granting of two extra days of vacation in both 2001 and in 2002, adding ¾ percentage point per year to the rise in hourly labour cost. The overall wage rise in the private sector has been consistently higher than in the euro area since 1995, by on average 3 percentage points per year.

Price inflation accelerates

The strong increase in oil prices was the main cause for the acceleration in consumer price inflation from 2.3 per cent in 1999 to 3.1 per cent in 2000, the highest rate since 1991.[21] Measured by the twelve-month change in the consumer price index, inflation has accelerated from a trough of 1.9 per cent in August 1999 to a peak of 3.5 per cent in September 2000 and was 3.0 per cent in December 2000. In 2000, petrol prices were around 15 per cent higher than in 1999. Oil prices were, however, not the only factor for the pick-up in inflation. Excluding energy and food, inflation has also accelerated substantially, from 2.1 per cent in August 1999 to 2.8 per cent in December 2000,[22] largely due to higher indirect taxes and housing rent increases.[23] Prices in service sectors have continued to rise rapidly, especially those dominated by wages which increased by 6.0 per cent in 2000, ½ percentage point less than in 1999. Based on the harmonised consumer price index, inflation exceeded the euro area average for the fourth consecutive year. With inflation also veering up in the euro area, the difference was, at ¾ percentage point, broadly unchanged.

Macroeconomic policy: the framework remains under pressure

The macroeconomic framework has been reconfirmed

The current macroeconomic policy framework, the so-called *Solidarity Alternative*, has three pillars: *i*) monetary policy, which aims at maintaining a stable exchange rate against the European currencies (the euro since 1999); *ii*) fiscal policy, which aims at stabilising the economy, with budget surpluses generated by the government's petroleum revenues reinvested in financial assets abroad; and *iii*) incomes policy, *i.e.* co-operation between the government and the social partners which aims at moderate wage settlements so as to ensure full employment and to prevent an erosion of the traditional exposed sector. The framework was laid down in 1992, but a similar policy had been already pursued before, reflecting the long-standing Norwegian tradition of centralised wage bargaining between social partners with the government playing an active role. Monetary policy is the pillar that has evolved most, which should prevent a pro-cyclical monetary policy stance that occurred on occasion in the past. However, influenced by mounting labour market tensions and the high oil revenues, neither fiscal nor incomes policy have fully fulfilled their objectives, placing a heavier burden on monetary policy.

The authorities and social partners have confirmed repeatedly their support for this three-pillar policy framework. Most recently, the H*olden* C*ommittee* – set up against the backdrop of the high wage growth in 1998 and including representatives from the social partners and government – considered it desirable to continue with the current framework and its centralised wage negotiations.[24] In its report presented in June 2000 (NOU, 2000), incomes policy co-operation is considered the best way to safeguard high employment levels and a stable economy. The aim of incomes policy should be to maintain real wage growth in line with productivity growth in the economy as a whole to keep structural unemployment low. It confirmed the need to have nominal wage growth at the level of Norway's trading partners in order to have a sound and balanced development of the Norwegian economy and it confirmed that the exposed sector should remain the trend-setter in wage negotiations.

At the same time, the Committee acknowledged certain weaknesses of the current approach. It stressed that highly centralised wage negotiations can hamper the room for manoeuvre of individual enterprises. In this context, it recommends more room for negotiations at the local level, especially in the public sector, within the centralised framework. Furthermore, it acknowledged that the strong representation of manufacturing sector interests in the central wage negotiations has led to settlements and social reforms that are less suited for other sectors. It recommends, thus, raising the representation of non-manufacturing sectors at the central level.[25] Finally, it pointed out that the bargaining system in the public sector has led to large wage differences between highly-skilled employees in the private and public sector which has made it difficult for the public sector to hire highly-skilled workers. To change this, the Committee has recommended more emphasis on local negotiations in the public sector. This would allow greater flexibility in setting remuneration, as in the past the public sector often granted wage increases in absolute rather then relative terms (as in some private sector agreements), which has reduced wage dispersion.

The centralised wage system will be tested again in 2002 after the expiration of the current wage settlement. Adjustments – minor or more radical – will depend on the economic situation and the strength of the various actors. Existing trends, such as the shift from manufacturing to services and increasing globalisation, are likely to make it difficult to continue with the current centralised approach. However, irrespective of the structure of the wage bargaining process, the projected tightness of the labour market will probably lead to continuing wage growth above the euro area average – for the eighth year in a row.

Monetary policy is directed towards safeguarding the preconditions for exchange rate stability

The policy framework has evolved

Since the Norwegian authorities had to abandon the fixed exchange rate regime in December 1992 due to the persistent turmoil in currency markets, monetary policy has been geared at maintaining a stable external value of the krone against European currencies. The government issued official guidelines for the implementation of monetary policy by Norges Bank in the Royal Decree 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). Since January 1999, the anchor currency is the euro.

The various episodes of international financial turbulence have made it clear that the central bank cannot fine-tune the development of the exchange rate and that extensive and prolonged currency market interventions yield poor results. Thus, more emphasis has been placed on guaranteeing the fundamental preconditions for exchange rate stability rather than retaining the exchange rate as an operational monetary policy objective. Since the last serious episode of unrest in late 1998, Norges Bank has highlighted more than in the past the need to bring price and cost developments in line with the price stability objective of the euro area, defined by the European Central Bank as inflation of below 2 per cent. In the view of Norges Bank, price and cost inflation that remain above the objective of the ECB will result in exchange rate instability. Given the poor results with currency market interventions in the past, the interest rate is, in practise, the only monetary policy instrument available to Norges Bank to arrest upward or downward pressures on the currency.

In the 2001 budget paper, the government reiterated that "balanced economic growth with low price and cost inflation is a precondition for exchange rate stability over time" and that "monetary policy instruments must thus be oriented in such a way that they, in conjunction with the other economic policy instruments, contribute to fulfilling this precondition". With this, it has underlined the complementarity of monetary and fiscal policy instruments for sustainable growth. The fiscal authorities also mention explicitly in the 2001 budget paper that if fiscal policy is too expansionary, interest rates may remain higher in Norway than in other countries.

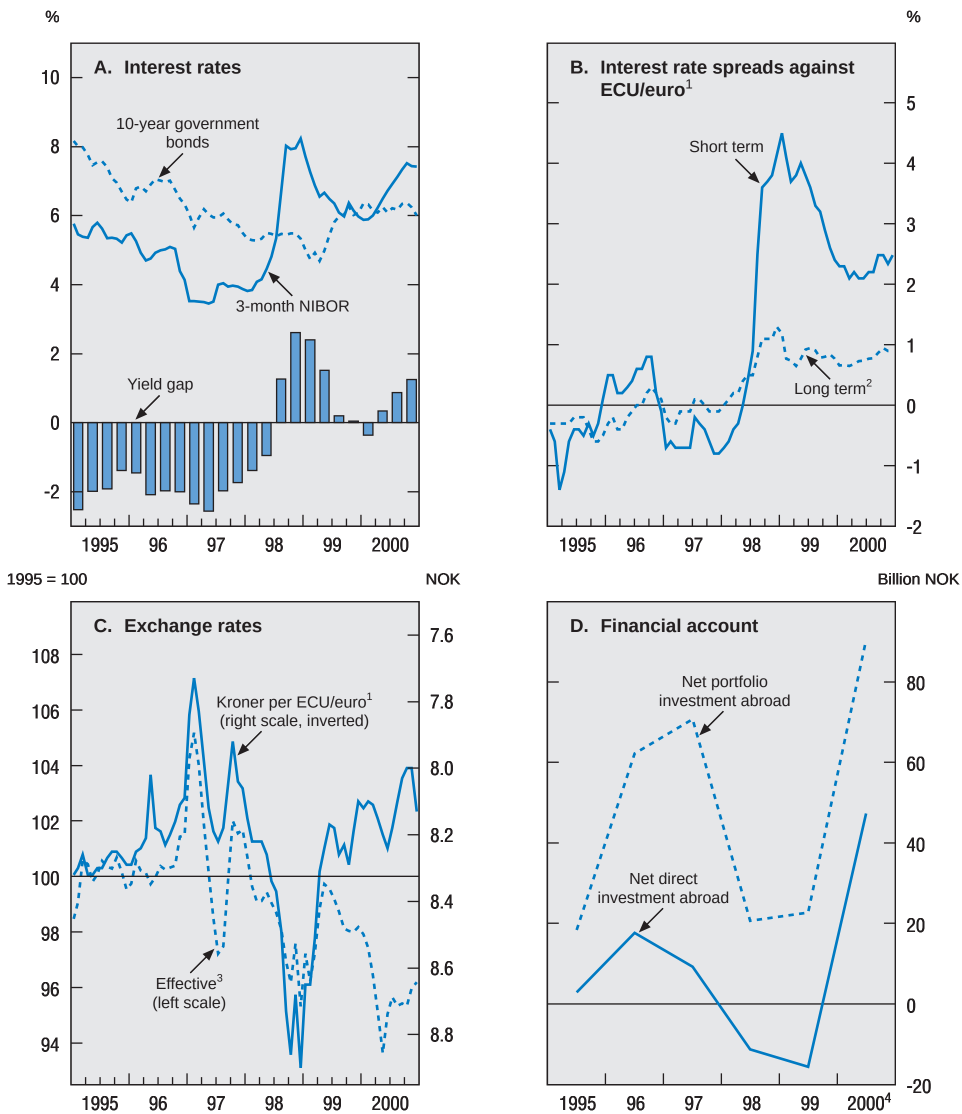
With the current interpretation of the mandate of Norges Bank, Norwegian monetary policy will resemble pure inflation targeting under most circumstances. There will, however, be a difference in a situation whereby the Bank is not capable of returning the exchange rate to the initial range without risking an acceleration in inflation or a deflationary recession.[26] In such cases, the central bank will inform the government that other measures than those available to the central bank are required. One possibility could then be for Norges Bank to recommend fiscal measures that make it possible to bring the krone exchange rate back towards its "initial range". In the event of major and lasting shifts in the economy, fiscal policy and wage formation must, in the view of Norges Bank, contribute to restoring balance in the economy. However, if fundamental conditions were to be permanently changed for the Norwegian economy, it may also, according to Norges Bank, be appropriate to consider changes to the guidelines for monetary policy.

Monetary policy has been tightened in response to inflationary pressures

Norges Bank reacted swiftly to the increasing inflationary pressures in the course of 2000. After reducing its key deposit rate from 8 to 5.5 per cent between January and September 1999, the Bank increased its rate between April and September 2000 in four steps to 7 per cent. In September, based on a projected economic slowdown and assuming a neutral fiscal policy stance in the coming years, the Norwegian central bank switched its monetary policy bias from upward to neutral. Some upward drift in the long-term interest rate accompanied the rise in the short-term interest rate but the differential *vis-à-vis* the euro area has remained broadly unchanged (Figure 11).[27] The pick-up in economic growth was accompanied by a strong acceleration in domestic credit growth from 8.4 per cent in December 1999 to 12.7 per cent in November 2000 (year-over-year) (Figure 12).[28] Credit to households accelerated from 8.1 to 10.8 per cent while money supply growth was at 10.4 per cent broadly unchanged. The monetary policy tightening has therefore not yet led to a deceleration in credit and money supply growth.

Despite strong movements in the oil price and the euro against the US dollar, the Norwegian krone has been relatively stable *vis-à-vis* the euro in 2000 (Figure 11). The currency traded in a range of NOK 8.34-7.87 per euro.[29] At the end of December, the rate was 8.23, within the "initial range" (approximately NOK 8.2-8.4 per euro) and a depreciation of around 2 per cent since the end of 1999. In nominal effective terms, the Norwegian krone fell by 2 per cent, influenced by the strong depreciation against the dollar and some appreciation *vis-à-vis* the Swedish krone. Nevertheless, monetary conditions have become tighter due to the interest rate rises. In the light of the strong rise in the oil price and the increase in the short-term interest rate differential, the depreciation in 2000 is somewhat surprising, especially as recent research has confirmed the impact of

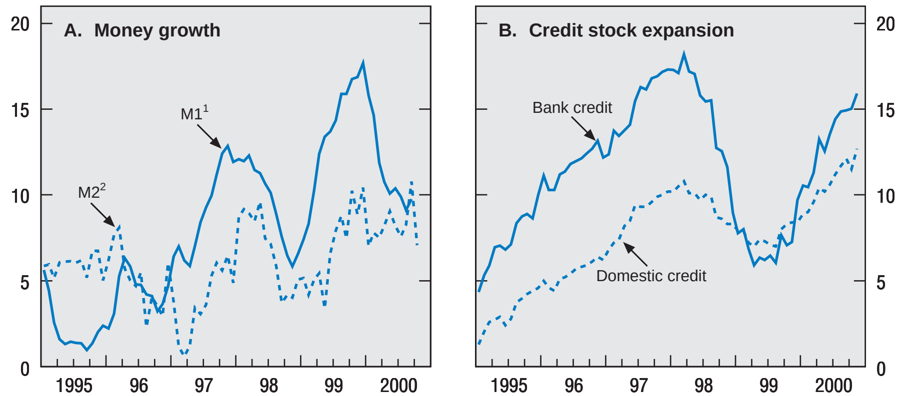
Figure 11. **Interest rate and exchange rate developments**



1. Theoretical ECU up to end 1998, euro as from January 1999.
2. Differential between the effective yield on Norwegian government bonds and the rate on ECU/euro denominated government bonds, both with 10 years to maturity.
3. For calculation method see notes on Annex Table 39 in the "Sources and Methods" of the *OECD Economic Outlook.*
4. January-October.

Source: Norges Bank; Statistics Norway; OECD, *Main Economic Indicators* and OECD Secretariat.

Figure 12. **Money and credit**
Year-on-year percentage change



1. Cash, demand deposits and unused credit held by the public; each observation represents a 3-month right adjusted moving average.
2. M1 plus time deposits.

Source: Norges Bank and OECD, *Main Economic Indicators*.

the oil price on the krone exchange rate in the past (Akram, 2000; Norges Bank, 2000).[30] The persistent price and wage inflation differences with the euro area in recent years and the strong capital outflow through the Government Petroleum Fund could be factors offsetting the effect of the oil price hike.

Fiscal policy: neutral stance in 2000 and 2001

Fiscal developments in 2000

The stance of fiscal policy is estimated to have been broadly neutral in 2000, as measured by the change in the central government cyclically-adjusted primary non-oil budget balance (Table 5). This followed a clear tightening of ¾ percentage point in 1999. Real underlying central government spending rose by an estimated 2¼ per cent in 2000, ½ percentage point more than in the previous year. In volume terms, the underlying growth was ¼ percentage point less than proposed in the draft budget of October 1999, but this was due to the stronger than previously projected price and wage rises.[31] This is in clear contrast with the previous five years in which underlying growth surpassed the draft budget proposal by ¾ percentage point per year on average. Nominal expenditure growth was higher – an estimated NOK 11 billion (1 per cent of mainland GDP) – than

Table 5. **Budgetary plans and outcomes**[1]

Billion NOK

	Outcome			2000		2001
	1997	1998	1999	Budget[2]	Estimate[3]	Budget[3, 4]
Central government						
Excluding petroleum activities						
Revenues	370.4	398.7	424.0	441.9	456.8	473.4
Expenditure	390.4	416.1	436.0	455.2	466.2	485.4
Balance	–20.1	–17.5	–12.1	–13.3	–9.5	–12.0
Petroleum revenues (net)	86.8	45.0	44.6	85.1	161.1	189.0
Balance including petroleum activities	66.7	27.5	32.6	71.8	151.6	177.0
Petroleum Fund						
Transfer from central government	64.0	28.0	26.1	71.8	151.6	177.0
Return on financial assets	2.7	6.2	7.3	7.4	11.0	15.2
Balance						
On a government account basis	66.7	34.2	33.4	79.2	162.6	192.2
Statistical discrepancy[5]	19.0	18.9	33.4	12.1	52.9	–13.0
On a national accounts basis	85.7	53.1	66.8	91.4	215.5	179.2
as a per cent of GDP	7.8	4.8	5.6	7.4	15.4	12.7
Local government[6]						
Revenue	168.8	178.2	189.0	194.9	200.4	213.4
Expenditure	170.6	184.4	200.1	198.2	210.8	222.8
Balance						
Cash basis	–1.8	–6.2	–11.0	–3.2	–10.4	–9.5
Accrual basis	0.7	–11.4	–9.3	–3.8	–10.0	–5.5
as a per cent of GDP	0.1	–1.0	–0.8	–0.3	–0.7	–0.4
General government[7]	86.4	39.6	63.0	91.4	205.4	173.7
as a per cent of GDP	7.9	3.6	5.3	7.4	14.7	12.3
Memorandum items:						
General government consumption, volume growth (% change)	1.9	3.8	2.7	1.5	2.8	2.4
Real underlying central government expenditure (% change)	2.0	2.0	1.8	2½	2¼	2½
Change in cyclically-adjusted central government primary surplus[8]	¾	¼	¾	0	0	0
Underlying projections						
Oil price (krone per barrel)	136	96	141	125	235	180
Oil and gas production[9]	229	223	227	271	252	269
Mainland GDP volume growth (%)	4.2	3.3	0.8	0.7	2.2	1.8

1. Based on the central government account definitions unless indicated otherwise.
2. October of the preceding year.
3. December 2000.
4. Approved budget.
5. Definitional differences between central government account and national accounts; surplus in other central government and social security accounts; direct investment in state enterprises.
6. On a national accounts basis and a cash basis.
7. Net lending.
8. Corrected for cyclical developments, net interest payments, petroleum revenues and technical adjustments; as a per cent of mainland GDP.
9. Million standard cubic metres of oil equivalents.

Source: Ministry of Finance.

proposed a year earlier. Non-oil central government expenditure is estimated to have risen by 7 per cent in nominal terms, with transfers to local government and subsidies rising fastest.[32]

In order to finance higher spending and achieve a neutral stance at the same time, the central government increased taxes slightly in 2000, by NOK 4 billion (0.4 per cent of mainland GDP), mainly through a higher excise tax on energy. Taxes were also increased on capital income and higher labour income but this was almost completely offset by tax cuts on lower labour income. The top rate for labour income was increased by 6 percentage points, lifting it to well over 50 per cent. The total rise in non-oil tax revenues is estimated at NOK 30 billion (7½ per cent), NOK 15 billion more than anticipated in October 1999. Reflecting the surge in oil prices and the increase in production, the net proceeds from petroleum production are estimated to have almost quadrupled to NOK 160 billion in 2000, leading to a sharp rise in the assets of the Government Petroleum Fund.[33]

Due to the sharp rise in oil revenues, the central government surplus has more than quadrupled to NOK 163 billion in 2000, while the non-oil budget deficit dropped by NOK 2.6 billion to NOK 9.5 billion. As a percentage of GDP and on a national accounts basis, the central government surplus increased by 10 percentage points to a record 15½ per cent (Tables 5 and 6), by far the highest surplus in the OECD.[34] The local government deficit is estimated at slightly below 1 per cent of GDP in 2000, unchanged from the previous year, but higher than in the early 1990s (Box 2).[35] Real local government expenditure rose more strongly in 2000 than projected a year earlier.[36] The general government surplus is estimated to have risen by 9.4 percentage points to 14.7 per cent of GDP, with the oil revenues pushing up

Table 6. **Public finances**[1]

Per cent of GDP

	1994	1995	1996	1997	1998	1999	2000	2001
Expenditure	49.9	47.7	45.5	43.9	46.5	46.3	41.6	43.7
as a per cent of mainland GDP	58.8	56.1	55.5	53.9	53.9	55.5	55.4	55.6
Revenue	50.4	51.2	52.1	51.8	50.1	51.5	56.3	56.0
of which: Oil revenues	5.4	5.5	7.9	8.1	4.3	6.1	..	..
Net lending	0.4	3.5	6.6	7.9	3.6	5.3	14.7	12.7
Excluding oil revenues	–5.0	–2.0	–1.4	–0.2	–0.8	–1.2	..	..
Gross debt	37.3	35.4	31.6	28.0	26.5	23.8	20.6	21.1
Net financial assets	30.8	32.8	36.7	43.0	48.1	49.6	55.5	65.2

1. On a national accounts basis.
Source: Ministry of Finance.

Box 2. Budgetary developments between 1993 and 1999

Between 1993 and 1999, the general government budget balance (*i.e.* including petroleum revenues) swung from a small deficit to a sizeable surplus (Table 7). The main reason for this favourable development was a substantial reduction in government outlays relative to GDP, but rising mainland tax revenues and petroleum proceeds also played a role. On the expenditure side, subsidies dropped most, but lower social transfers to households – mainly due to the decline in unemployment – and a fall in general government consumption also contributed to the decline in public spending. In volume terms, however, government outlays excluding interest payments increased substantially, by a cumulated 8.8 per cent, surpassing the euro area growth rate of 7.5 per cent. On the revenue side, the overall tax burden increased significantly. Higher corporate tax revenues due to strong economic growth are a major reason for this. Furthermore, income taxes soared owing mainly to bracket creep (taxpayers moving to higher income brackets) and to a much lesser extent to the rise in income tax rates. In addition, total revenues from the petroleum sector increased considerably.

There was a substantial difference between central and local government budgetary developments (Table 7). While the central government balance moved from a slight deficit in 1993 to a substantial surplus, the local government accounts moved from close to balance in 1993 to a deficit of nearly 1 per cent of GDP in 1999, mainly due to a school reform reducing the school entry age from 7 to 6 years and the reform increasing capacity and standards in care for the elderly. Subsidies and social transfers to households declined but this was more than offset by higher investment expenses owing mainly to the reforms. Also interest payments increased. The drop in total outlays at the local level was modest, only ¼ per cent of GDP, compared with the central government spending decline amounting to 5¼ per cent of GDP. As a percentage of mainland GDP, however, there was a clear upward trend. With the population ageing and local governments responsible for care and health facilities, it is likely that this upward pressure on local government outlays will remain strong in the coming years.

the revenue ratio and pushing down the outlay ratio through a denominator effect (Table 6). As a share of mainland GDP, however, outlays were, at 55.5 per cent, unchanged from the previous year. Total general government net financial assets are estimated to have risen to above 50 per cent of GDP at the end of 2000.[37] This is an underestimate as some assets are not based on market values, but is nevertheless already unique in the OECD area.[38]

The 2001 Budget

The approved 2001 Budget has a neutral stance to prevent "triggering a rise in price and cost inflation". This stance (measured by the change in the central government cyclically-adjusted primary non-oil budget balance) is the result

Table 7. **Central and local government budget**[1]

As a per cent of GDP

	General government[2]			Central government[2]			Local government[3]		
	1993	1999	Change 1999-93	1993	1999	Change 1999-93	1993	1999	Change 1999-93
Total expenditure	51.1	46.3	–4.8	42.0	36.7	–5.3	17.0	16.6	–0.3
Property expenditure/interest payments	2.1	2.4	0.3	1.2	1.1	–0.1	0.9	1.3	0.5
Transfers to the private sector	22.7	19.7	–3.0	20.6	17.9	–2.7	2.1	1.7	–0.4
Subsidies	4.4	2.8	–1.6	3.9	2.4	–1.5	0.5	0.3	–0.2
Social transfers	18.3	16.9	–1.4	16.7	15.5	–1.2	1.6	1.4	–0.2
Other current transfers paid	1.0	0.8	–0.2	8.7	7.8	–0.8	0.2	0.2	–0.1
of which: Intra government	..	..	..	7.7	7.1	–0.7	0.2	0.1	0.0
Consumption	21.8	21.2	–0.6	9.0	8.3	–0.8	12.8	13.0	0.2
Capital outlays	2.1	2.4	0.3	1.2	1.1	–0.1	0.9	1.3	0.4
Total revenue	49.6	51.1	1.4	39.6	41.3	1.8	17.0	15.8	–1.1
Property income	6.2	4.3	–1.9	5.8	3.8	–2.0	0.4	0.5	0.1
Taxes and current transfers received	43.1	46.4	3.3	33.7	37.5	3.8	16.3	15.0	–1.3
Oil sector	4.2	5.3	1.2	4.2	4.3	0.1	..	..	..
Non-oil sector	38.9	41.0	2.1	29.5	33.2	3.7	..	..	..
of which: Intra government	..	..	..	0.2	0.1	–0.1	7.8	7.2	–0.5
Operating surplus	0.3	0.3	0.0	..	..	..	0.3	0.3	0.0
Capital revenue	0.1	0.1	0.0	0.1	0.1	0.0	..	..	..
Net lending or borrowing	–1.4	4.8	6.3	–2.4	4.7	7.1	0.0	–0.8	–0.8

1. On a national accounts basis. Intra-government transfers are consolidated for general government but not for central and local government. As a result, total expenditure and revenue from central and local government do not add up to general government. Other figures do not always add up due to the cash/accrual difference and rounding.
2. On an accruals basis.
3. On a cash basis.

Source: Statistics Norway and OECD Secretariat.

of a rise in government expenditure somewhat above that of trend output offset by tax increases.[39] Underlying central government spending is projected to increase by 2½ per cent in real terms, ¼ percentage point more than in 2000.[40] The budget does not include any major new expenditure initiatives and the rise in outlays is almost completely the result of underlying spending pressures, for instance in sickness and disability benefits. In nominal terms, central government spending is expected to increase by 4 per cent, down from 7 per cent in 2000.[41]

As in the previous year, taxes will increase to accomplish both higher spending and a neutral fiscal stance. The tax increases amount to NOK 9 billion on a cash basis, twice as much as in 2000. The main tax increase is the rise in the VAT rate from 23 to 24 per cent on 1 January 2001, only partly offset by the halving of the VAT on food on 1 July 2001. Furthermore, the petrol tax is cut but this is almost fully offset by a rise in the taxes on electricity and heating oil. Another main tax measure concerns the introduction of an 11 per cent dividend tax, with a revenue of

NOK 1.2 billion (see also the tax section in Chapter II). These tax increases are partly offset by a lowering of the personal income tax on labour income (NOK 1.2 billion), that largely benefits low-wage earners. With the introduction of the dividend tax and the cut in the income tax for low-income earners, the government aims at a more equitable distribution of income.[42] Furthermore, the budget includes proceeds of NOK 6 billion from the reduction of state ownership in Den norske Bank (DnB), the privatisation of the Oslo Stock Exchange, and auction proceeds of licences for fish farming, commercial television and new second-generation mobile telephone networks.[43] The total increase in non-oil central government revenues is projected at NOK 17 billion, a rise of 3¾ per cent. Although the budget is based on a drop in the oil price of almost a quarter to NOK 180 per barrel (approximately US$20) on average in 2001, net oil revenues are projected to rise by 17 per cent to NOK 189 billion on a cash basis as oil taxes and related government revenues are paid with some delay.[44] As a result, almost one-third of the revenues will originate directly from the petroleum sector in 2001, twice as much as two years earlier.

On a national accounts basis the central government surplus is expected to drop 2¾ percentage points to 12¾ per cent of GDP.[45] The local government deficit is projected to shrink somewhat to 0.4 per cent of GDP despite a strong rise in consumption.[46] As a consequence, the general government surplus is projected to drop by 2½ percentage points to 12¼ per cent of GDP. Taking into account the rise in pension obligations and petroleum depletion, total real public wealth may nevertheless drop (Box 3).

Box 3. An additional indicator to improve fiscal transparency

An important element of fiscal transparency is an accounting system that delivers an accurate picture of the government's overall financial position. This has led several countries, especially Australia and New Zealand, to make increased use of accrual accounting methods which recognise the financial implications of transactions and obligations when they occur, irrespective of whether cash is paid or received. This is especially important for a proper assessment of the fiscal implications of long-term pension obligations.

The Norwegian government has introduced some elements of accrual accounting in the 2001 budget paper to assess the change in total public wealth, although the budget is still based on traditional cash accounting. The calculations presented show that, in spite of the high budget surplus of NOK 198 billion, real public wealth (excluding capital gains due to changes in oil and equity prices) is projected to decline by NOK 44 billion (almost 3 per cent of GDP) in 2001. This is mainly caused by a drop in petroleum wealth due to extraction (NOK 130 billion) and by an increase in pension obligations (NOK 100 billion).

Prospects and policy challenges ahead

Slowdown insufficient to ease labour market tensions

The rise in interest rates in 2000, the return to a normal level of electricity production and somewhat less buoyant world trade are projected to lead to a slight deceleration in mainland GDP growth from an estimated 2¼ per cent in 2000 to somewhat below 2 per cent in 2001 and 2002 (Table 8).[47] With petroleum pro-

Table 8. **Short-term projections**
Percentage change, constant prices

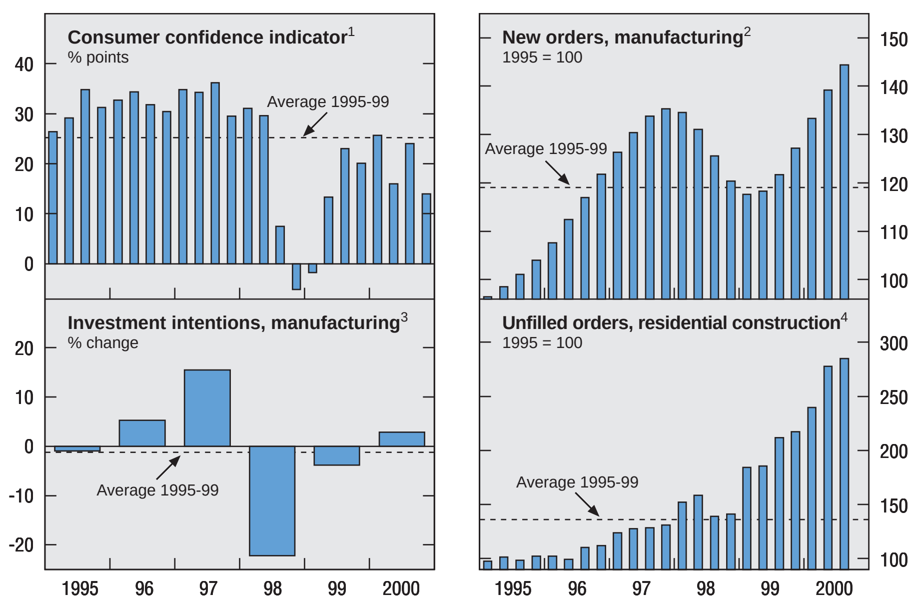
	1997 Current prices NOK billion	1998	1999	2000	2001	2002
Private consumption	520.8	3.3	2.4	2.9	2.0	2.0
Government consumption	218.4	3.8	2.7	2.8	2.4	2.0
Gross fixed investment[1]	252.1	5.8	–5.6	–2.2	–2.2	0.9
of which:						
Oil sector[1]	62.3	20.4	–12.6	–23.0	–12.4	3.6
Mainland business sector	108.5	1.2	–3.3	2.9	–0.8	–0.6
Residential construction	30.4	–0.9	–2.2	10.6	8.6	2.4
Public sector	38.0	4.9	1.3	2.0	–3.0	0.7
Stockbuilding[2]	22.9	1.4	–1.2	0.2	–0.1	0.0
Total domestic demand	1 014.2	5.4	–0.9	1.8	1.0	1.6
Exports of goods and services	448.0	0.3	1.7	5.0	4.8	3.4
of which:						
Non-manufactured goods (including energy)	213.4	–2.8	2.4	7.4	5.0	2.0
Imports of goods and services	366.1	9.3	–3.1	1.6	2.5	3.6
Foreign balance[3]	81.9	–3.0	1.8	1.5	1.1	0.2
GDP	1 096.1	2.0	0.9	3.1	2.4	1.9
of which: Mainland	893.6	3.3	0.8	2.3	1.8	1.9
GDP deflator	..	–0.8	6.6	16.1	7.5	1.0
Private consumption deflator	..	2.7	2.2	3.0	2.8	2.6
Short-term interest rate (%)	3.7	5.8	6.5	6.7	7.4	7.2
Employment	2 194.9[4]	2.5	0.5	0.7	0.7	0.6
Unemployment rate (level)	4.0	3.2	3.2	3.3	3.3	3.4
Private sector compensation per employee	..	7.5	5.6	4.8	6.0	4.8
Output gap[5] (%)	1.1	1.9	0.8	1.0	0.8	0.8
Current balance (% of GDP)	5.6	–1.3	3.9	15.4	20.5	19.7
Net government lending (% of GDP)	7.9	3.6	4.9	14.0	14.8	14.4

1. Includes platforms under construction, crude oil production, oil drilling and pipeline transport.
2. Contribution to GDP growth, excluding platforms under construction.
3. Contribution to GDP growth.
4. In thousand persons.
5. Mainland Norway.

Source: OECD (2000), *Economic Outlook* No. 68, December.

duction projected to increase by 5 per cent, real total GDP could expand somewhat more, by 2½ per cent in 2001. Growth in real national income (real GDP adjusted for the terms of trade) is projected to slow down from 17 per cent in 2000 to 6½ per cent in 2001 and ½ per cent in 2002. The fiscal stance is assumed to be neutral over the projection period. The monetary tightening in 2000 should slow down activity, however, especially private consumption, both through increased debt servicing and through weaker consumer confidence. Mainland business investment will also be affected. Moreover, it will be negatively influenced by the deterioration in competitiveness and the slowdown in demand. Construction orders (Figure 13) indicate that housing investment growth will remain strong in 2001 despite the recent rise in interest rates, before levelling off in 2002. After the completion of a number of large investment projects on the Norwegian continental shelf, petroleum investment is expected to continue to contract in 2001, although less dramatically than a year earlier, before showing some increase in 2002.

Figure 13. **Leading indicators**



1. Quarterly average of monthly data.
2. New orders received, trend series.
3. According to the November quarterly investment survey; investment intentions for the following calendar year.
4. Value.

Source: Statistics Norway and Ministry of Finance.

The deterioration in competitiveness should lead to a further loss of market share by manufacturing exporters. However, with a continued rise in petroleum exports and more expansion of farmed-fish exports, a significant rise in exports of goods and services is projected for 2001, of 4¾ per cent, before falling back to 3½ per cent in 2002. This projection is based on a year-on-year rise in the world oil price from US$28.3 per barrel in 2000 to US$29.5 in 2001, before falling to US$27.5 per barrel in 2002. In combination with the depreciation of the krone against the US dollar and the lagged adjustment of gas prices to oil prices, export prices of petroleum products measured in Norwegian kroner are assumed to rise substantially again in 2001, by around 15 per cent. This and the further rise in petroleum extraction could increase the current account surplus further to the OECD-wide record level of slightly above 20 per cent of GDP in 2001, before edging down to somewhat below 20 per cent in 2002.

Despite slower economic growth, the output gap is expected to remain positive. The economy will continue to operate close to full capacity and the labour market will remain tight. The unemployment rate is expected to stay at 3¼ per cent, but recruitment problems may become even more severe. Wage growth in 2001, largely determined by the two-year agreements reached in 2000, is projected at 4½ per cent, broadly unchanged from the previous year. On top of this, hourly labour costs will be pushed up by ¾ percentage point per year as a consequence of the two extra days of vacation in both 2001 and 2002. The tight labour market may lead to some acceleration in wage growth in 2002. The strong rise in labour costs is likely to have an upward effect on consumer price inflation.

The scenario presented in Table 8 was finalised in early November and is based on the draft budget. The approved budget is changing the outlook somewhat but not fundamentally. As the proposed supplementary payroll tax of 1.5 per cent is not to be introduced, labour costs will rise less in 2001 and the deterioration in competitiveness is somewhat smaller. On the other hand, indirect taxes are rising more than proposed in the draft budget, partly offsetting the indirect effects on inflation of the decision on the supplementary payroll tax. The VAT rate was increased by 1 percentage point on 1 January while the VAT rate for food will be halved on 1 July. Overall, these changes will have a broadly neutral effect on consumer price inflation in 2001, but will contribute to lower price inflation in 2002. Furthermore after finalising the scenario, relatively weak national accounts data for the third quarter of 2000 were released; moreover, GDP growth in the second quarter was revised downwards. However, this new information does not give reason to change the projections for 2001 and 2002 significantly although GDP growth in 2000 may be somewhat weaker than estimated. Oil prices have fallen significantly since early November. If the oil price would stay at its level of January 2001, of around US$25 per barrel, the current account surplus and the government surplus would be substantially smaller than in the scenario presented in Table 8 but would still remain at a double digit level as a percentage of GDP.

The risks to the projections are more balanced

The risks to these projections are more balanced in the light of weak activity in recent months. The high oil price may imply stronger oil investments than projected, while the tight labour market could lead to stronger than projected wage rises in 2002, which would boost private consumption. Furthermore, the current level of petroleum revenues is leading to substantial pressures for higher government outlays. On the other hand, domestic demand growth may be lower as weak domestic demand in the second half of 2000 may indicate that interest rate changes are influencing private consumption more strongly than in the past. Furthermore, if oil prices remain high, the krone could appreciate. This would slow down the economy and damp inflationary pressures.

Macroeconomic policy in the coming years: substantial challenges lie ahead

With a neutral stance in 2000 and 2001, fiscal policy does not increase the already existing inflationary pressures further. However, it does not contribute to reducing the tensions between overall demand and supply either, although, according to the macroeconomic policy framework, fiscal policy should aim at stabilising the economy. As a consequence, the monetary authorities have carried the burden of policy adjustment alone in 2000. Based on the current outlook, this is likely to remain so in 2001. Given the propensity to spend more than budgeted in the past, that may recur, the government may even need to take additional measures in May 2001 in the Revised Budget to prevent the budget from becoming expansionary.

Fiscal policy has important responsibilities for economic development in the long term. The fiscal authorities have succeeded in saving almost all oil revenues in 2000, transforming petroleum wealth into financial wealth, which will facilitate coping with the fiscal implications of ageing in the coming decades. Calculations presented in the 2001 budget paper indicate an approximate balance in the intergenerational accounts. The oil price assumption underlying the 2001 draft budget is fairly conservative, although higher than in previous draft budgets. If the oil price were to stay closer to the current oil price, with all other things equal, the intergenerational budget will move into a surplus.[48] In 2001, there could therefore be tensions between the short-term demand-management objective of fiscal policy and the budgetary options arising from an intergenerational accounting point of view due to strong oil revenues.

Another policy challenge would arise if the krone were to appreciate, which cannot be excluded if the oil price remains high and the fiscal stance stays neutral. The monetary policy authorities are unlikely to counterbalance this automatically by a cut in interest rates if this would stoke inflationary pressures.

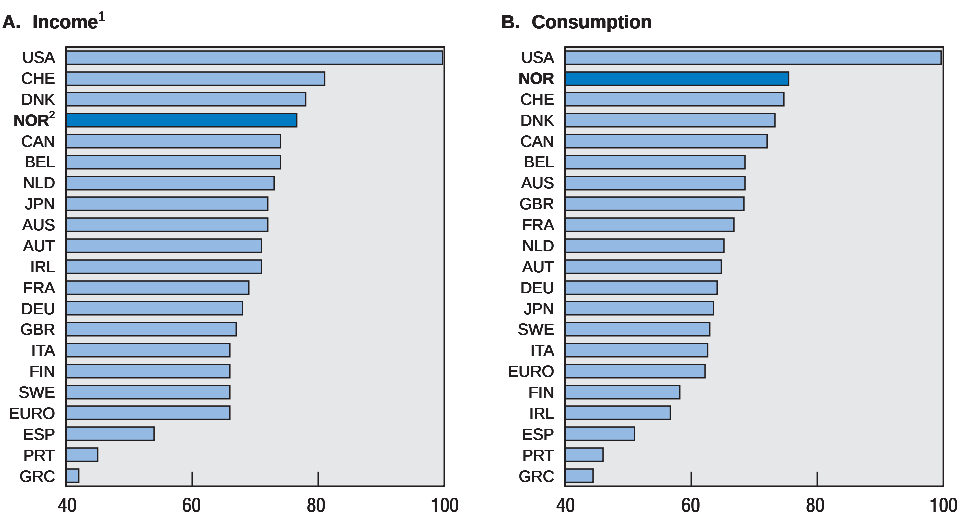
A tight labour market situation in 2002 could lead to wage increases once again outpacing the trading partners' average. Fiscal and monetary policy would need to react to this. Moreover, this would mean that in eight successive years, incomes policy has not been able to deliver a wage outcome on par with the trading partners' average. This could undermine the credibility of the macroeconomic policy framework and put a heavier burden on monetary policy. Finally, if oil prices remain high, the pressures towards increased spending of oil revenues could be mounting. This could challenge the overall macroeconomic policy set-up. Increased spending of oil revenues would mean a more expansionary fiscal policy, which has to be counteracted by a tighter monetary policy to prevent inflationary pressures, especially in the current tight labour market situation.

II. Structural policy surveillance

Norway's economic situation is very favourable in an international comparison. Its living standard was the highest in the OECD in 1998 after the United States and Luxembourg, with income per head 16 per cent lower than in the United States but 23 per cent higher than in the euro area (Figure 14).[49] The high income from oil production is the main reason for this very favourable situation, while mainland GDP per head, which excludes oil production and other offshore activities, was close to those countries in the euro area with the highest incomes, although still the fifth ranked country in the OECD.[50] Due to a high investment ratio, Norway's positive difference with the euro area average is somewhat smaller

Figure 14. **Income and consumption per capita**

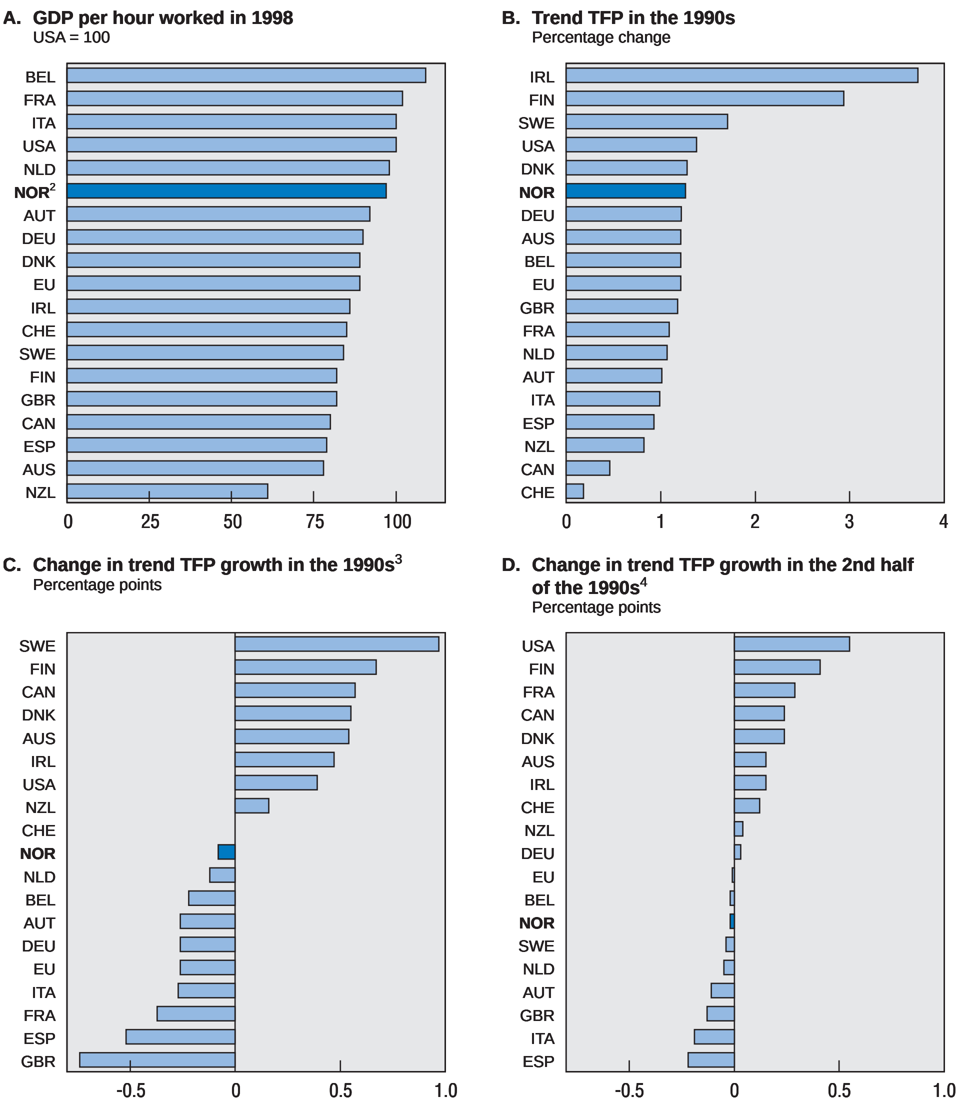
1998, USA = 100



1. GDP.
2. Mainland Norway.

Source: Scarpetta *et al.* (2000) and OECD Secretariat.

Figure 15. **Productivity**[1]



1. TFP is total factor productivity in the business sector (mainland only for Norway).
2. Mainland Norway.
3. Compared with the 1980s.
4. Compared with the first half of the 1990s.

Source: For panel A – Scarpetta *et al.* (2000) and for the other panels – database of the *OECD Economic Outlook, No. 68*, December 2000 and Giorno *et al.* (1995).

for consumption per head.[51] Furthermore, leisure time should be taken into account when assessing welfare. In 1998, an employed person worked 27 hours per week on average (including holidays), 31 and 16 per cent less than in the United States and the euro area, respectively. This, however, must be seen in connection with the high female participation rate and the considerable amount of part-time work in Norway, including students working only a few hours.[52]

Also Norway's growth performance has been good in the 1990s. Adjusted for cyclical developments, output growth per capita for mainland Norway was 2¼ per cent per year in 1990-98, on par with the United States and ¾ percentage point above the euro area average, while there were only five OECD countries with a better growth performance.[53] Strong growth was mainly due to a rapid rise in the employment rate while productivity gains, measured by trend total factor productivity, were only slightly stronger than in the euro area and clearly weaker than in Finland and Sweden (Figure 15).

The current high living standard and the good growth performance should not lead to complacency, however. The standard of living could be improved further by taking measures that would increase productivity growth in the future. Moreover, the strong performance in recent years could be jeopardised by negative trends, especially in the labour market. Furthermore, if the right framework conditions are not put in place, there is a risk that new economic and technological opportunities will not be taken up swiftly (Box 4). Against this background, this chapter reviews recent developments in the labour, product and financial markets and in the public sector, and analyses the scope for action to lift the standard of living more rapidly.

Downward pressures on labour supply raise labour market tensions

Lower participation due to early retirement,...

Since 1997, the unemployment rate has been below 4 per cent while the employment rate is currently the third highest in the OECD and long-term unemployment has become very limited (Table 9). This full-employment situation distinguishes Norway from most other European OECD countries. Despite this favourable situation, there are labour market problems, some of which may become more serious in the coming years due to the ageing of the population. The effective retirement age, for instance, has declined during the 1990s, although from a high level in international comparison. In 1999, the effective retirement age was 62.7 years, more than a year lower than in 1995 due to the steep rise in the number of persons on disability pensions and in the early-retirement scheme. In 1999, the previous government stressed the need to curb this negative trend, but by early 2000, on the eve of the wage negotiations, it decided not to put forward measures that were strongly opposed by the main trade union confederation. The drop in the retirement age and the policy challenges due to ageing are

Box 4. Has the "new economy" affected Norway?

ICT (Information and Communication Technology) is diffusing rapidly in the Norwegian home and in the workplace. Already in 1994, more than one in two employees used a personal computer (PC) and in 1998 more than one in two persons had access to a PC at home and one in five had Internet access (OECD, 2000*c*). In June 1999, more than half of Norwegians had a mobile phone, the second-highest penetration rate in the OECD (OECD, 2000*d*). The number of Internet hosts per inhabitant is one of the highest in the OECD (OECD, 2000*e*) and almost all Norwegian banks have established some form of Internet banking. By the end of 1999, two in three Norwegian enterprises had access to the Internet, almost half of these had a home page and one in ten had turnover from electronic commerce (Statistics Norway, 2000).[1] E-commerce turnover has remained low, however, as it amounted to less than 2 per cent of total turnover for almost half of the enterprises with Internet commerce. Manufacturing of ICT goods is very limited in Norway – its share in total employment is less than ¾ per cent (OECD, 2000*f*) – with almost all ICT goods being imported. In 1999, ICT imports were more than three times exports and net imports of ICT goods were NOK 19 billion (1½ per cent of GDP).

The rapid ICT development has led to sharp falls in import prices of ICT goods. Better information flows may also have contributed to quicker changes in sourcing imports in reaction to changes in relative prices, damping import prices of consumer goods (Norges Bank, 2000). There is, however, no robust empirical evidence for a spillover of ICT use into stronger productivity gains (Figure 15).[2] This may be partly explained by the very small ICT manufacturing industry, whereas in the United States or Finland the large ICT sector was instrumental in boosting overall productivity performance. In Norway, in contrast, the new economy can be more easily found offshore than onshore. The development of seismic techniques and satellite surveillance to discover oil fields has more than doubled the drilling success rate, reducing long-term marginal costs, and oil rigs contain more computer chips than most modern office buildings (Greenspan, 2000). Another offshore industry with "new economy" characteristics is the rapidly developing fish farming sector with its close links to biotechnology.

Much of the ICT potential has yet to be reaped and this will depend on policy conditions. In common with a number of EU countries, Norway may have some systemic weaknesses that limit its ability to adjust to and capitalise on new economic and technological developments (Andersson, 2000). It could benefit, for instance, from measures fostering closer science-industry linkages, better ICT infrastructure, an education system more focused on labour market needs and the lowering of obstacles to entrepreneurship.

1. This concerns enterprises with ten or more employees.
2. Scarpetta *et al.* (2000) report an upward shift in trend total factor productivity (TFP) growth from the 1980s to the 1990s. This result is, however, not confirmed by trend TFP growth based on the de-trending method described in Giorno *et al.* (1995). Moreover, Scarpetta *et al.* report a deceleration of trend TFP growth from the first to the second half of the 1990s. According to Norges Bank, there is no basis for assuming that the new economy is feeding through to productivity growth in general (Norges Bank, 2000*b*). It has characterised productivity growth in recent years as "disturbingly" low (Norges Bank, 2000*c*). Finally, in the 2001 budget paper, the Ministry of Finance assumes total factor productivity growth for mainland Norway for 2002-04 at 1.2 per cent, which is the same as for 1978-99.

Table 9. **Unemployment developments**

	1990-94 average	1995	1996[1]	1997	1998	1999	2000
Unemployment rates[2]							
(per cent of labour force in same category)							
Total	5.6	4.9	4.8	4.0	3.2	3.2	3.6
By sex							
Male	6.1	5.1	4.8	3.9	3.2	3.4	3.8
Female	5.0	4.6	4.9	4.2	3.3	3.0	3.3
By age group							
16-24	12.9	11.8	12.4	10.9	9.1	9.6	10.7
25-54	4.6	4.0	3.8	3.2	2.3	2.4	2.7
55-74	2.6	2.4	2.4	1.7	1.9	1.2	1.4
Unemployment duration[2]							
(per cent of total)							
Persons unemployed for more than 6 months	37	37	29	26	20	16	15
Active labour market programmes[3]							
(participation as a per cent of working age population)	..	2.9	2.5	2.0	1.7	1.6	1.7

1. Break in series for unemployment data (Labour Force Survey).
2. For 2000 the estimate is based on the average of the first three quarters.
3. Including special measures. Figures before 1996 include occupationally disabled in waiting phase or undergoing assessment. For 2000 the estimate is the average of monthly data to September.

Source: Statistics Norway, Ministry of Labour and Government Administration, and OECD Secretariat.

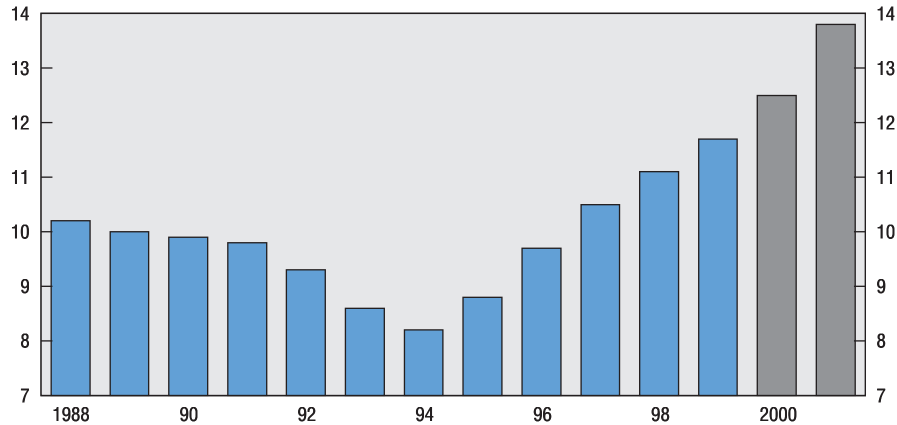
discussed in detail in Chapter III of this *Survey*.[54] The following paragraphs review other downward pressures on labour supply and assess their likely medium-term consequences.

... the rise in sick leave,...

Labour supply is not only curtailed by the sharp drop in the effective retirement age but also by the substantial rise in sick leave (Figure 16). Sick leave increased by 9½ per cent per year between 1996 and 2000 and is projected to increase by 10 per cent in 2001. This is equivalent to a reduction in the labour force of around 10 000 person-years or ½ percentage point per year. The rise in sick leave may be partly due to the favourable economic development (Rhum, 2000; Askildsen *et al.*, 1999).[55] The average number of sickness days per worker in 2000 is estimated at 25 days, reducing the number of days worked by around 10 per cent. Employers pay benefits for the first 16 calendar days of a sickness spell while the National Insurance Scheme (NIS) pays beyond that up to one year. Around half of the sickness days are in the NIS period, of which almost half are sickness spells of more than eight weeks. Apart from negative effects on activity, this strong upward trend has negative budgetary consequences. If sick leave had

Figure 16. **Sickness absence**

Average number of days per year per employee (private sector)[1]



1. Days from the 16th day of a sickness absence onwards (the "NIS" period). In 2000, the average number of sick days per employee – including the first 16 days (the "employer" period) – was around 25 days.

Source: Ministry of Health and Social Affairs, and Ministry of Finance.

remained constant after 1996, sickness benefits would be NOK 8 billion lower in 2001, ¾ per cent of mainland GDP. The continuation of the current trend increase in sick leave would mean that an additional NOK 1.5 billion would have to be spent on additional sickness benefits annually, reducing substantially the room for new expenditure initiatives or tax cuts. The current sickness benefit scheme is very generous. In the private sector, the statutory benefit fully compensates the income loss up to about the average wage (6 G), while for higher-wage earners, firms top-up NIS sickness benefits to 100 per cent of the salary for around a third of employees. In the public sector all employees receive full sickness pay.[56] Furthermore, the use of the scheme is not curtailed by rigorous medical controls. International comparative analysis of sick leave and benefit schemes is scarce and is plagued by measurement problems. The available evidence indicates, however, that days lost due to sick leave are relatively high in Norway while the Norwegian benefit scheme is generous, as many countries have waiting days and benefit rates of less than 100 per cent (Prins *et al.*, 1998; Askildsen *et al.*, 1999; European Commission, 2000).[57]

In September 2000, a government-appointed committee, the *Sandman Committee*, proposed to introduce economic incentives in the benefit scheme to reduce sick leave (NOU, 2000*b*).[58] To ensure better control, it proposed that employers should pay 20 per cent of the sickness payment during the NIS period, in addition to full payment for the first 16 days. The committee, with the exception of the trade union representatives, also proposed to reduce sickness payments from 100 to 80 per cent of the salary for the first 16 calendar days.[59] To compensate for the reduction in sickness payments, the committee proposed to reduce the employees contribution to the national insurance scheme.[60] Furthermore, the committee proposed changes to the disability pension scheme. Its main proposal was to introduce temporary disability pensions, which would be automatically reviewed after three to four years. There is not yet an official reaction to the report; the government intends to present its views during the first half of 2001.[61]

... the introduction of the childcare cash benefit,...

Labour supply has also been reduced since the introduction of the childcare cash benefit in 1998-99 that allows parents to care for their 1 and 2 year-olds at home. While the scheme reduces labour supply in an already tight labour market, it may be justified by longer-run social objectives. The level of the benefit is high (NOK 3 000 per month per child in 2000), approximately one-quarter of an average full-time salary, not means-tested and not taxed.[62] Costs are estimated to have risen by somewhat more than 15 per cent in 2000 to NOK 2.8 billion (¼ per cent of mainland GDP). A survey of eligible families comparing labour market participation before and after the introduction of the scheme found that the labour force participation of women has declined by around 4 000 person-years, ¼ per cent of total person-years worked (Langslet *et al.*, 2000). Almost 20 per cent of the women receiving the benefit indicated a reduction in their working hours due to the childcare cash benefit, on average by around 1½ hours per week. In 2000, the negative impact on labour supply may have increased further given the strong rise in benefit levels and greater take-up. In 2001, the government will present a white paper evaluating the scheme. Limiting payments to those parents who are looking after their children full time may be proposed.

... and possibly the introduction of the right to study leave

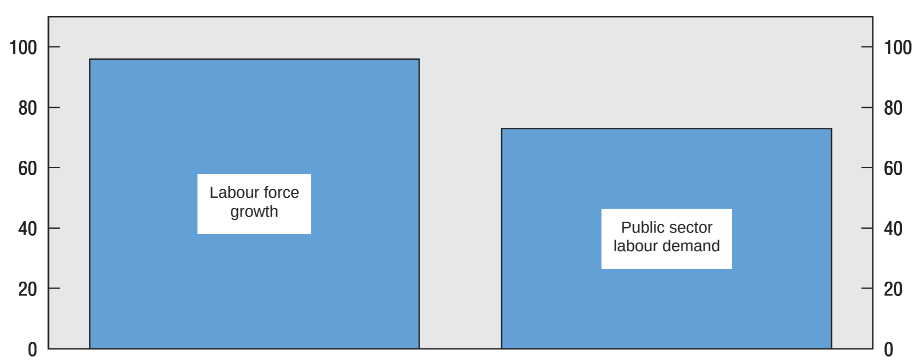
In 2001, labour supply could be reduced somewhat by the introduction of an individual right to study leave.[63] This is part of the *Competence Reform*, a tripartite effort initiated in 1999 to raise competencies of the labour force, which is in line with OECD recommendations (OECD, 1996). Apart from the right to study leave, the programme also facilitates the certification of "non-formal" training, and the right of adults to free basic education up to the upper-secondary level (OECD, 2000*g*). In early 1999 during the wage negotiations, the government promised to spend NOK 400 million on a Competence Building Programme in the coming two to three years if wage growth were to develop in line with trading partners. Although this condition was not met, the draft 2001 budget allocates

NOK 150 million to this programme, a rise of NOK 50 million compared with the previous year. In addition, NOK 50 million is allocated to other measures related to the Competence Reform.[64] Those on study leave can obtain study loans through the State Educational Loan Fund, but total pecuniary support is limited and no big temporary withdrawal from the labour market is therefore expected in 2001. This could change in the future if a leave benefit were to be introduced at a level comparable to the unemployment benefit. The main trade union confederation, one of the driving forces behind the programme, aims at the introduction of a leave benefit. The 2000 wage negotiations resulted in the appointment of a government committee to consider the issue of subsistence support during leave of absence.

The public sector could fully absorb the future rise in labour supply

These developments will contribute to raise labour market tensions in the coming years given the tightness of the labour market. The labour force may increase by 96 000 persons in the current decade due to immigration and other demographic developments, while public sector employment – due to demographic developments, measures already taken and less working time – is estimated to increase by 73 000 persons (Figure 17 and Table 10). This employment

Figure 17. **Future labour force and public sector labour demand**[1]
2000-2010, thousand persons



1. The rise in public labour demand is based on demographic developments leading to an increase in health and care labour demand, on constant man-hours per user (after taking into account the upward impact of policy measures already taken), on the shortening of working days due to the 2000-01 wage agreement and on no shift of services to the private sector. The rise in labour force growth is based on constant participation rates by age cohort. Two-thirds of the rise in the working-age population and the labour force is due to net immigration.

Source: Ministry of Finance.

Table 10. **Long-term labour market developments**[1]

Annual percentage change

	1999 Thousand persons	Average 1995-99	2000[2]	2001-05[2]	2006-10[3]	2011-20[4]
Working age population[5]	2 891	0.5	0.7	0.8	0.8	0.2
Labour force	2 329	1.6	0.9	0.5	0.3	0.2
Employment	2 281	2.0	0.8	0.5	0.3	0.2
Private sector	1 577	2.1	0.5	0.1	0.3	0.2
of which: Construction of oil platforms and ships	37	2.6	–3.7	–0.7	7.8	–1.4
Government	704	1.9	1.5	1.3	0.3	0.2
Central (civilian)	109	1.0	1.1	0.9	–0.7	0.0
Local	552	2.5	1.9	1.7	0.4	0.3
Labour productivity[4]	..	1.4	1.8	1.7	1.1	1.7
Hours worked	3 182[6]	0.5	0.7	0.8	0.8	0.2

1. See the footnote to Figure 17 for an explanation of the assumptions made for these projections.
2. From the National Budget 2001.
3. From the Holden Committee, the Reference alternative.
4. Mainland Norway.
5. Age 16-66.
6. Million.

Source: Ministry of Finance.

estimate is based on constant productivity after taking into account the impact of policy measures already taken, on no shift of services to the private sector, on no further shortening of working days after the introduction of a fifth week of holidays in 2001-02 and on demographic developments leading to an increase in health and care labour demand. Such a development could imply a substantial crowding-out of private sector labour demand. The projection underlines the need for public sector efficiency improvements to reduce the increase in employment in the public sector as well as the need to refrain from additional measures which increase public sector labour demand.[65] On top of the quantitative tensions in the labour market, there are frictions due to skill mismatches.

Limited labour market deregulation in 2000

In July 2000, the public monopoly on job placement was abolished and private employment agencies were given the right to carry out placement and recruitment services.[66] Furthermore, temporary work agencies are now allowed to hire out all staff categories to all sectors. Before, hiring out was only for secretarial, canteen and warehouse work. However, agencies can only hire out in the cases where temporary job contracts are allowed (*i.e.* only to replace regular staff absent because of illness, leave or holidays, and in case of seasonal labour demand peaks) or if agreed by union representatives.[67] At the same time, the Public Employment Service has been granted permission to introduce fee-based employment services. This could put private agencies at a competitive disadvantage.[68] To raise transparency and eventually prevent this, the Ministry of Labour and Government Administration has demanded that the fee-based services be organised in an independent unit within the Public Employment Service (PES). While the abolishment of the public monopoly on job placement is a step in the right direction, developing more competitive and efficient employment services may require further changes in regulations.

In December 1999, a government appointed committee, the *Colbjørnsen Committee*, reported on the need for more flexible rules on working time and labour contracts (NOU, 1999). These rules are relatively strict in Norway (OECD, 1999). The committee was in favour of more flexible rules on standard working time and overtime. The committee was, however, split on labour contract reform, with the representatives of employers' organisations in favour of easing restrictions on temporary contracts while the union representatives were strongly in favour of maintaining existing rules. Less stringent rules could be important, especially for the development of a new economy in Norway. The government has not yet decided whether it will propose reforms on these issues.

Product markets: more remains to be done

Past product market reforms have included the liberalisation of international trade, the EEA agreement with the EU (Box 5),[69] the liberalisation of various sectors, privatisation, the introduction of new regulatory frameworks and the reduction of subsidies.[70] In the electricity sector, Norway was among the first countries to implement deep reforms but in other sectors it is lagging and more remains to be done (Figure 18). Moreover, rapid technological changes and internationalisation will require further adjustment of existing regulations in the future (Box 4). The current Norwegian product market regulations are relatively unfriendly to market mechanisms in international comparison, primarily because of the extremely high import tariffs on agricultural products and the substantial public ownership in many sectors (see the previous *Survey* and Nicoletti *et al.*, 1999).[71]

The position of the Competition Authority has been strengthened somewhat

In 2000, Parliament approved amendments to the 1993 Competition Act aimed at strengthening the position of the Norwegian Competition Authority (NCA). The NCA can now prohibit mergers and acquisitions (M&As) pending its analysis of the competition consequences. In the past, speedy integration of companies made it difficult for the NCA to block some M&As. The NCA has also been

Box 5. Norwegian economic policy making is strongly influenced by the European Union

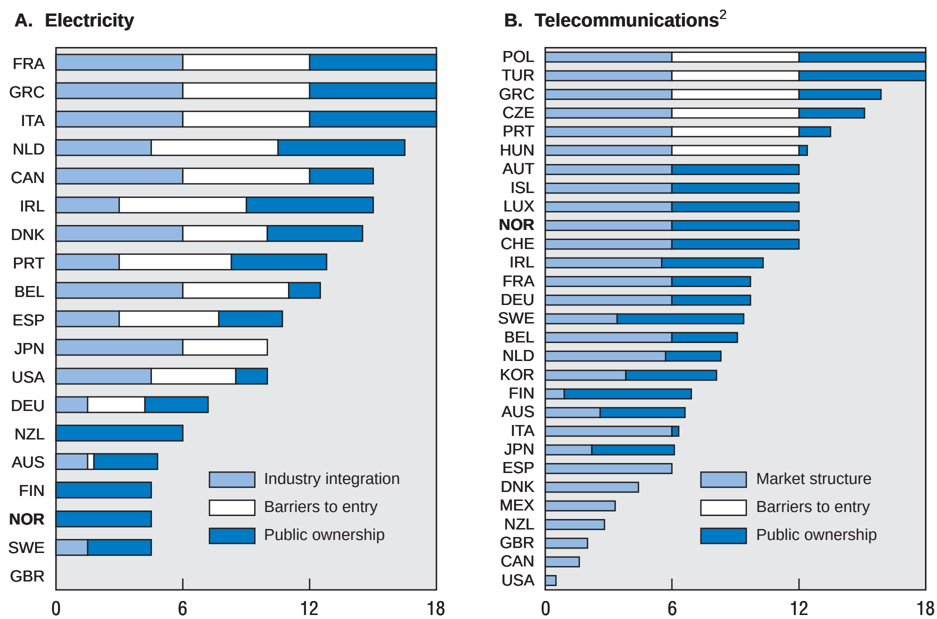
Norway decided in the 1972 and 1994 referenda to stay out of the European Union (EU). It is, however, heavily influenced by it in various respects. As a member of the European Economic Area (EEA), the EU's single market programme is also implemented in Norway, with agriculture as a major exception. Directives adopted by the Community have to be integrated in Norwegian law. The European Commission is required to co-operate with experts of the other EEA countries before drawing up proposals and to inform and consult the other EEA countries after sending proposals to the European Council. The other EEA countries are, however, not involved in the final discussions and negotiations on directives in the Council. Rejection of the implementation of an EU directive by Norway would lead to discussion in the EEA Joint Committee, taking no longer than six months. If no agreement can be reached, the EEA Agreement allows the European Union to take retaliatory measures. Up to now no directive has been rejected by the Norwegian government or Parliament. The EU's current liberalisation efforts therefore have a substantial impact on Norwegian product markets, although in some markets (especially the electricity market) deregulation happened earlier in Norway.* In November 2000, there were 1 316 EEA directives with which Norway has to comply (ESA, 2000). Norway had 3.7 per cent of the Single Market directives not or not fully implemented; three EU countries had a bigger transposition deficit. The main directives not yet implemented by Norway concern the gas market, food additives and biotechnology patents.

The European Union also has a significant influence on the Norwegian medium-term growth prospects as it is by far the biggest trade partner of Norway. In 1999, 74 per cent of goods exports went to the Union while 68 per cent of its imports came from the Union. Due to the substantial trade with Denmark and Sweden, the respective numbers for the euro area are substantially lower: 41 and 37 per cent. Simulations with the Secretariat's INTERLINK model indicate that an increase in the EU's domestic demand by 1 per cent has, in case of sufficient spare capacity, a positive impact after two years on Norwegian exports and GDP of 1 and ¼ per cent, respectively.

* Furthermore, the Norwegian administration is influenced by new EU practices on policy reporting. Recently, it published an Employment Paper (Ministry of Labour and Government Administration, 2000) and it is planning to publish a "Cardiff" product market paper in early 2001.

given more possibilities now for bilateral co-operation with other national competition authorities. With the increase in international mergers, there is a growing need for exchange of confidential information and other co-operation. Moreover,

Figure 18. **Regulatory and market environment**[1]
1998



1. Industries with non-competitive segments. Indicators are computed by simple average of each component with a scale of 0-6 from least to most restrictive. Scores on the three regulatory areas are aggregated in an indicator with a 0-18 scale.
2. Fixed telephony: trunk and international.

Source: Gonenc *et al.* (2000), "The implementation and the effects of regulatory reform: Past experience and current issues", *OECD Economics Department Working Papers*, No. 251, June.

if the government's proposal to dismantle its regional offices were to be approved, this would reduce its overhead costs somewhat.

A committee has been appointed to submit a draft of a new competition act based on among others the experience with the 1993 Competition Act and on the developments in EU competition policy. The draft will not be submitted before the European Union has taken a decision on the modernisation process of its competition policy, *i.e.* decentralisation. The draft will also contain proposals on the appeal process. Currently, decisions of the NCA can be appealed at the Ministry of Labour and Government Administration. The ministry has occasionally overruled decisions for reasons other than competition enforcement, thereby eroding the credibility of the NCA. In addition, a decision has to be taken on the local representation in the EEA state aid surveillance, which will be set up. One option would be, as is the case in Denmark, to make surveillance the responsibility of the competition authority.

Privatisation moves have remained hesitant until recently

Mainly due to the fear it would eventually lead to a relocation of head-quarter functions to other countries and that it could have undesirable regional consequences, structural reform has been characterised by a reluctance to privatise state-owned companies. In the 1990s, Norway had the lowest privatisation proceeds (US$1.8 billion) in the OECD after Luxembourg and Iceland (OECD, 2000*h*), even though public ownership is extensive. The value of the government's stake in enterprises in 1999 is estimated at NOK 900 billion (75 per cent of GDP) by the Norwegian Financial Service Association (FNH).[72] The partial privatisation of the public telecommunications operator and the sale of the one-third stake in the second-largest bank in 2000 are, however, encouraging. The same holds for the plans to reduce its stake in the largest bank and in the state-owned oil company in 2001. Cross-country evidence suggests that on balance privatisation in OECD countries has improved the performance of enterprises (OECD, 2000*i*; Gonenc *et al.*, 2000). In general, managerial incentives to improve efficiency are enhanced by privatisation while dead-weight costs associated with influence-seeking activities are lowered. Moreover, privatisation may stimulate entry of new enterprises as (perceived) incentives of the government to engage in behaviour that favours the state-owned company at the expense of other firms disappear. Finally, the available international evidence shows that public service obligations (*e.g.* universal service obligations) can still be fulfilled after privatisation, sometimes at lower costs.

Subsidies decline for most activities, but rise for agriculture

Subsidies to the manufacturing and service sectors have dropped further in 2000

Central government subsidies are estimated to have dropped somewhat further in 2000, to 1.8 per cent of GDP (Table 11). Concerning industrial activity, subsidies to shipyards declined most – although less than projected in the 2000 Budget – as under EEA regulations all operating support for shipbuilding is to be phased out by 1 January 2001. Regional support has remained stable but, as presented in Table 11, it is very narrowly defined. A broader measure of regional support, which is not available, would show a much higher share of GDP as the key policy objective to keep remote areas populated requires a substantial amount of public funds to maintain employment there.[73] Most sectoral support programmes, including that for agriculture, at least partly reflect regional concerns, while government investment in infrastructure and subsidies to public transport

Table 11. **Support programmes**

Amount of subsidies budgeted, in billion NOK, 1999 prices[1]

	1995	1996	1997	1998	1999	2000[2]	2000 % of GDP[3]
Industry	6.3	6.3	5.7	5.4	5.3	5.0	0.5
Sectoral	2.7	2.9	2.0	2.4	2.5	2.1	0.2
of which: Shipyards	1.4	1.3	0.9	1.4	1.7	1.3	0.1
Regional	1.6	1.4	1.6	1.4	1.3	1.4	0.1
Research and development	0.7	0.8	0.9	0.7	0.7	0.7	0.1
Small and medium-sized enterprises	0.5	0.5	0.8	0.5	0.4	0.4	0.0
Export promotion	0.3	0.4	0.3	0.3	0.3	0.2	0.0
State enterprises	0.4	0.3	0.1	0.1	0.1	0.3	0.0
Agriculture, forestry and fishing	14.2	13.8	13.5	13.4	13.1	13.2	1.3
Labour market programmes	0.3	0.2	0.2	0.1	0.0	0.1	0.0
Environment and energy	0.2	0.1	0.2	0.2	0.2	0.2	0.0
Other	0.1	0.0	0.2	0.1	0.0	0.0	0.0
Total	21.0	20.5	19.7	19.1	18.6	18.5	1.8
as a per cent of mainland GDP	2.4	2.3	2.1	2.0	1.9	1.8	

1. Using the GDP deflator for mainland Norway.
2. Estimate.
3. Mainland GDP.

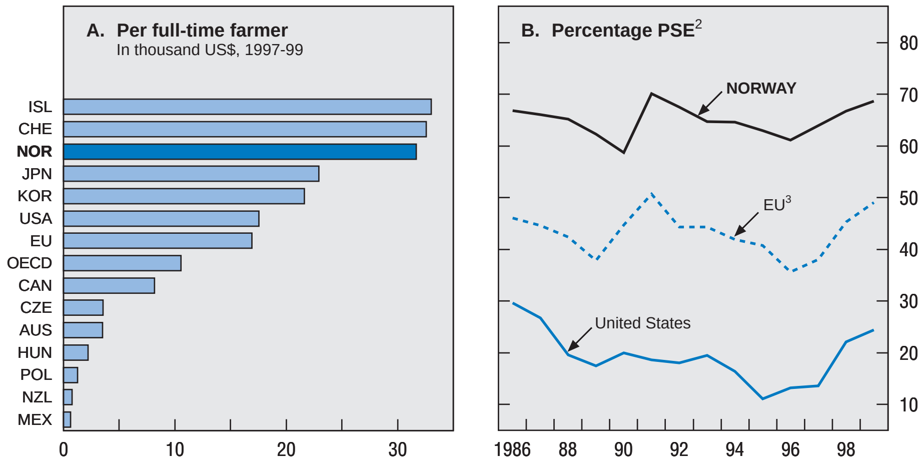
Source: Ministry of Finance (2000), St.*meld. nr.* 1, N*asjonalbudsjettet* 2001 and OECD Secretariat.

also have a clear regional dimension. Furthermore, central government transfers and the income tax share of local government have a bias in favour of peripheral regions and the northern regions benefit from substantial tax preferences. Northern counties are exempt from VAT on electricity and from the electricity tax, pay lower or no employer's social security contributions and benefit from the preferential tax treatment of self-employed people in agriculture and fisheries. Finally, the central government uses licensing, for instance in the fishery industry, to assist remote areas.

Government support to agriculture increases further

Support to the agricultural sector is substantial in Norway and among the highest in the OECD (Figure 19). In 1999, total transfers from taxpayers and consumers associated with agricultural policies were 1.9 per cent of GDP (OECD, 2000*j*). Consumers are paying a surcharge of more than 100 per cent on world market prices for agricultural products. Support payments (direct support and market price support derived from border protection) account for 70 per cent of gross farm receipts. Support is currently higher than in 1986-88.[74] It dropped between 1991 and 1996 as the rise in world market prices reduced market price support somewhat, but this was more than offset thereafter by the sharp drop in

Figure 19. **Agricultural support**[1]
Producer support estimate (PSE)



1. Provisional data for 1999.
2. Support as a percentage of gross farm receipts.
3. EU-12 up to 1994, EU-15 from 1995, EU includes ex-GDR from 1990.

Source: OECD (2000), *Agricultural Policies in OECD Countries. Monitoring and Evaluation.*

world market prices which was not matched by a decline in domestic prices. Market price support is mainly based on higher domestic market prices due to extremely high import tariffs. Payments based on historic entitlements and payments based on overall farm income – forms of support that distort trade and production less – do not exist in Norway. However, the existing capping of some support based on output should reduce the distorting effect of support on trade.[75]

The high subsidies reflect: *i)* the low-yield conditions in Norway – costs in dairy and cereal production are four to seven times above those in the most efficient producer countries; *ii)* the aim of maintaining a level of agricultural income comparable with that in other sectors;[76] and *iii)* the importance attached to non-commodity output, also called non-trade concerns (NTCs), such as national food security, the viability of rural areas, the agricultural landscape and agro-biological diversity (Ministry of Agriculture, 1999 and 2000). In the view of the Norwegian authorities, the strong "degree of jointness" between commodity and non-commodity outputs (also called the multifunctionality of agricultural production) restrains the possibilities to reduce the current level of support. The importance of NTCs is acknowledged in the Uruguay Agreement on Agriculture and was reconfirmed by the OECD's Agricultural Ministers in 1998 (OECD, 2000*j*), but is no reason to stall agricultural reform aimed at increased market orientation. Some non-commodity output currently produced by the agricultural sector may be produced by other sectors at a lower cost. Moreover, the "degree of jointness" of commodity and non-commodity output may be reduced by changes in agricultural production practices[77] and agricultural support may be shifted to less distorting support measures without jeopardising non-commodity output. Finally, too much weight may be attached to some non-trade concerns.

Major and increasing price differences with Sweden have led to significant purchases of agricultural goods by Norwegian consumers in Sweden. Meat prices are 21 per cent cheaper in Sweden (NILF, 1999), while food in general is 12 per cent cheaper. In Sweden, the VAT rate on food is 12 per cent, compared to 24 per cent currently in Norway. In July 2001, the VAT on food will be halved. This may reduce cross-border shopping and tax evasion to some extent, but it could even increase the overall burden of agricultural protection on the rest of the economy.

Sectoral issues

Government proposes to reduce its stake in the oil sector

In December 2000, the government proposed to Parliament to reduce the state stake in the oil sector (Ministry of Petroleum and Energy, 2000). Government proposals were originally envisaged for early 2000 but heated political debate, in combination with the aim to have wide parliamentary support for major policy changes for the crucial oil sector, led to a postponement. The wave of mergers and acquisitions that took place in the international oil industry, the increased competition due to the opening up of new production areas and the maturing of production on the Norwegian continental shelf have led to the reconsideration of state ownership. State involvement in the oil sector is substantial through the fully state-owned oil company Statoil, the partly (44 per cent) state-owned oil company Norsk Hydro and through the State Direct Financial Interest (SDFI; the direct participation of the state in oil and gas fields). The current combined share of Statoil and the SDFI in petroleum production is slightly above 50 per cent, while Norsk Hydro's share is around 8 per cent. The government intends to float 10 to 25 per cent of Statoil on the stock market in 2001, primarily through issuing new shares. In the longer term, it intends to reduce its stake in Statoil to two thirds. Statoil will be allowed to enter equity-based strategic alliances with other companies. Furthermore, the government wants to sell 15 per cent of the SDFI assets to Statoil and 5 per cent to Norsk Hydro and other companies. It intends to continue to reserve assets for the SDFI in future licensing rounds and will establish a new state-owned company to manage the SDFI portfolio; Statoil currently manages this portfolio. Finally, an independent company will be established for the transportation of natural gas on the Norwegian Continental Shelf; and this company will be partially privatised later.

In June 2000, the government published a more limited white paper on petroleum policy. The white paper underlines the willingness of the government to simplify procedures and regulations to bring down the overall cost level. The major measure, aimed at increased competition on the Norwegian shelf, is to allow oil production by smaller companies, downstream companies and companies from the offshore industry. Later in the year, non-oil companies were invited for the first time to bid for an exploration licence.[78] This measure will strengthen the competitive position of the Norwegian shelf. Competition would be further strengthened if the recommendations of the expert committee on petroleum taxation were to be followed (see the section on taxation below).

Norwegian energy policy could be strongly influenced by recent structural changes in the European gas market, which is partly due to the adoption of the EU Gas Directive. The EU Gas Directive is leading to increased competition in the gas market and to a smaller role for traditional long-term contracts, which link gas to oil prices. As a member of the EEA, Norway has to implement the directive in national legislation, which could lead to adjustments in the current resource management system. Competition for Norwegian gas is currently limited as customers cannot negotiate with individual licence holders but have to negotiate with the Gas Negotiation Committee (GFU), while gas sales agreements are not field specific. The government, advised by the GFU and the GSC (the Gas Supply Committee, representing the major licensees on the Norwegian shelf), allocates sales contracts to specific fields. The Directive was not implemented in Norway by 10 August 2000, the time set for the EEA member states. Norway has requested a transition period for the implementation of the Directive in Norway. The European Commission has recently informed Norway that such a transition period is not acceptable and that it is necessary to transpose the Directive into national legislation and to develop and implement a new resource management system within a reasonably short time frame.[79] Norway is currently in active consultations with the Commission on this issue.

The privatisation of the public telecommunications operator has started

As one of the last OECD countries, Norway started in 2000 with the privatisation of its fully state-owned telecommunications operator Telenor.[80] Despite the gradual opening up to competition since the end of the 1980s (see Annex I), Telenor has remained the dominant telecommunications enterprise in Norway with a market share of 90 per cent for ordinary telephone subscriptions and 75 per cent of mobile telephone subscriptions, while it is still the major Internet provider. In December, 21 per cent of Telenor was privatised through an initial public offering (IPO) with a discount for small investors.[81] Parliament has authorised the reduction of the state's stake to 51 per cent in the long term. To reduce frictions between the role of the government as supervisor and owner, the responsibility for managing the Norwegian state's shareholding in Telenor was transferred from the Ministry of Transport and Communications to the Ministry of Trade and Industry. To keep a long-term state stake of 51 per cent, as decided by Parliament, is high in international comparison. Already in 1998, the state shareholding in (former) public telecommunication operators was down to 51 per cent on average in the OECD, and has substantially declined thereafter (Boylaud and Nicoletti, 2000).

Between 1989 and 1999, due to deregulation and technological developments in the telecommunications sector, price declines ranged between 13 per cent for local phone calls during daytime and 89 per cent for long distance and international phone calls; only the price of local phone calls during the evening rose, by 102 per cent (PT, 2000). Moreover, the tariff structure has become closer to underlying costs and consumer choice has been substantially enhanced. At the end of 1999, around 10 per cent of the subscribers to Telenor's network used carrier pre-selection (transmission of calls without having to dial the selected provider prefix). To reap the full benefits of the deregulation and rapid technological developments it is essential that regulators ensure fair competition and prevent abuse by the incumbent of its still dominant market position. The independent sectoral regulator should make sure that other companies have access at cost-based interconnection charges to the network of the incumbent, especially to the local loop.[82] Guaranteeing unbundled access to the local loop will be essential for the rapid development of e-commerce.[83] When Telenor is further privatised, consideration should also be given to splitting its fixed line, mobile and Internet businesses so that the three are conducted under separate ownership. Such structural changes would not only tend to increase competition in telephony and Internet access services, but they would also considerably alleviate the task of properly regulating Telenor.

The electricity sector does not yet function fully as intended

The liberalisation of the electricity sector – described in Annex I – has led to an end to over-investment and smaller price differentials for consumers. The electricity price has been substantially reduced, while transmission charges have been relatively stable. Following liberalisation, suppliers were forced to renegotiate existing contracts and to offer new tariff structures. In the first quarter of 2000, 12 per cent of Norwegian households had a non-local supplier (Ministry of Finance, 2000). The deregulation has led to mergers and acquisitions in order to achieve economies of scale in production. Government involvement in electricity production has remained very strong, however, with 57 per cent of the electricity generation capacity owned by local government, 30 per cent by the state through Statkraft and 13 per cent by private companies (Ministry of Petroleum and Energy, 2000*b*). Moreover, almost all private companies are subsidiaries of major energy-intensive manufacturing companies.

Although Norway was one of the first countries to deregulate the electricity sector, further measures would help to reap greater efficiency gains. The 1993-97 accounts of utilities show that returns were virtually independent of costs, although this may be due to long-term contracts (Bøeng and Bye, 1999). Capital market discipline may be too soft for municipal utilities, leading to sub-optimal decisions, and municipalities may not act in a sufficiently professional way in a rapidly internationalising electricity market. However, municipal utilities are increasingly turned into joint-stock companies, with separate subsidiaries for different business segments. Furthermore, there are still substantial barriers to private sector investment, for instance concerning concessions.[84] Moreover, municipalities might be entitled to 10 per cent of the potential production at cost when a new hydropower plant is constructed on their territory. Given the ongoing consolidation in the industry, efficiency improvements may call for stronger unbundling requirements for local government companies than the current separate accounting for distribution and production. The ongoing consolidation is also leading to more partnerships between Statkraft and local electricity companies. As Statkraft already has 30 per cent of the Norwegian production capacity, this may have negative consequences for competition in the electricity sector, although the common Nordic electricity market (consisting of Denmark, Finland, Sweden and Norway) reduces the possibilities for a dominant player to abuse market power.[85]

State steps into fish farming

While the state is reducing its ownership in the telecommunications sector, it has stepped into the fish farming sector in 2000. It made a capital injection of NOK 1.2 billion in the 80 per cent state-owned Statkorn to guarantee "adequate national shareholding in one of Norway's most important future industries". In the longer term, it intends to reduce its stake to 34 per cent, but no precise time schedule has been set and the reduction will probably occur through issuing new shares and not by the sale of shares currently owned by the government. Until the early 1990s, Statkorn had the monopoly on grain imports and is still the main grain trader in Norway. Moreover, it is the world's biggest manufacturer of salmon feed but is currently not active in Norway in fish farming.[86] The new state activity is in reaction to the sale of Hydro Seefood, the fish farming subsidiary of the 44 per cent state-owned Norsk Hydro, to the Dutch company Nutreco. As fish farming is heavily regulated, the possibility of conflicts between the government's role as owner and as regulator are non-negligible. Moreover, in November 2000, the EFTA Surveillance Authority (ESA) also received a complaint concerning government support to Statkorn, which may be in conflict with the EEA Agreement.[87]

Some further deregulation of pharmacies and the taxi industry in 2000

The major liberalisation measures in 2000 concerned pharmacies and the taxi industry. Parliament has approved a new Pharmacy Act, which will make it somewhat easier to establish pharmacies; from 2001 onwards, pharmacists no longer have the exclusive right to own pharmacies.[88] This change has already led to a sharp increase in pharmacy acquisitions. Furthermore, in July 2000, the regulation concerning maximum prices was modified. Maximum prices are now set close to the average price level of the three cheapest countries of the EEA excluding the southern European members. There have been examples in other OECD countries where a combination of lower entry barriers and too high maximum prices led to inefficient entry and oversupply. Despite the recent measures, the pharmaceutical sector remains heavily regulated. Pharmacies still have a monopoly, even on the distribution of non-prescriptive drugs, while pharmacy distribution by mail and the Internet remains heavily restricted. Furthermore, concerning the wholesale sector, which was liberalised in 1994, there are complaints that the former monopoly is abusing its strong market power. With regard to taxis, since May 2000, the Norwegian Competition Authority no longer sets maximum taxi prices in cities with two or more taxi centrals, which has led to some increase in prices.

Financial markets: further drop in state ownership

The government's involvement in the banking industry dropped further in 2000 due to the takeover of Kreditkassen (Christiania Bank og Kreditkassen), the second largest and 34.7 per cent state-owned commercial bank, by the Swedish/Finnish MeritaNordbanken.[89] Already in September 1999, MeritaNordbanken made a takeover bid for Kreditkassen but the bid was turned down because of the 1997 parliamentary decision to keep a government stake of at least a third in DnB (Den norske Bank) and Kreditkassen.[90] In December 1999, Parliament decided that the government should concentrate its interests as an owner in one entity and that it should own at least one third of this entity. Based on this, the Ministry of Finance asked the Government Bank Investment Fund (GBIF) to consider solutions for DnB and Kreditkassen with the objective to establish a strong financial entity with stable national ownership and to keep main strategic functions (headquarters) in Norway. In May, against the background of a document by the GBIF, the government decided however to sell its shares in Kreditkassen and to concentrate state ownership in a national unit constructed "around" DnB. In October, the GBIF sold the state stake to MeritaNordbanken after a closed bidding round, and in December the Ministry of Finance gave its approval for the takeover of Kreditkassen.[91] The government intends to reduce its stake in DnB, the largest Norwegian bank (Table 12), from 60.6 per cent to a third, if market conditions permit.[92]

Recently, the government-appointed *Hope Committee* (NOU, 2000*c*) pointed out that state ownership in the financial sector, and thereby the objective to main-

Table 12. **Market shares of banks and other financial institutions**
Per cent of total market, at end September 2000

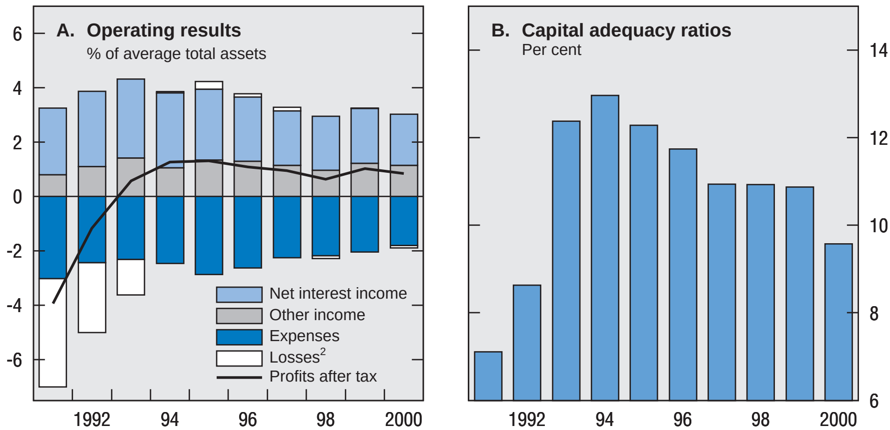
	Banks	Mortgage and credit companies	Investment firms	Non-life insurance	Life insurance	Total
Financial groups	74	28	73	45	74	67
DnB Postbanken	24	5	22	0	18	20
Gjensidige NOR	14	12	21	27	16	15
CBK/Nordea	15	9	10	13	6	12
Sparebank 1/Sam.arb.spb./VÅR	14	2	9	5	3	10
Storebrand/Finansbanken	2	0	10	0	31	7
Fokus/Den Danske Bank	4	0	2	0	0	3
Other	26	72	27	55	26	33
Total all companies[1]	100	100	100	100	100	100

1. Excluding foreign companies engaged in cross-border activities in Norway.
Source: Kredittilsynet.

tain long-term Norwegian ownership in this sector, may lead to a lower capitalised value for existing institutions and may make issuing of share capital more expensive. The committee also indicated that, given the small size of the Norwegian market, Norwegian financial enterprises may not fully reap the benefits of economies of scale and scope in areas such as payments systems, securities trading, investment management and non-life insurance. To overcome these cost disadvantages, mergers, acquisitions or alliances may be needed.

At the moment, the Norwegian financial sector is in good shape and, taking into account their small size by international standards, banks have low costs. Banks showed a marked profit improvement in 1999 (Figure 20). The capital adequacy of commercial banks and saving banks is strong, although somewhat falling due to strong credit growth (Kredittilsynet, 2000; Norges Bank, 2000*d*). Foreign funding of banks has increased further, reflecting among others the thin Norwegian capital market. Loan losses are very low but are expected to rise in the longer term. Life insurance companies' buffer capital improved markedly in 1999, but fell in the first half of 2000 and may need strengthening, especially with a continued increase in equity investment as a share of overall capital. Households' gross loan debt has increased only somewhat faster than income while the net financial position of households improved due to the strong rise in housing wealth. Enterprise debt is now somewhat below the record level of the end of the 1980s. In view of the lower cost associated with debt-servicing, *i.e.* lower interest rates, and the increase in equity relative to debt over the 1990s, Norges Bank still assesses the soundness of the financial system as satisfactory.

Figure 20. **Profits and capital adequacy ratios of commercial banks**[1]



1. Data for December, except for 2000 which shows September.
2. Losses on loans and guarantees; write-downs and gains/losses on securities held long-term.

Source: Norges Bank.

In 2000, legislation was approved allowing for the first time defined-contribution occupational pension schemes, which may increase the coverage of pension schemes for small and medium-sized enterprises. It also approved legislation making the setting-up of defined-benefit occupational pension schemes more attractive.[93] The government has not yet reacted to the 1998 proposal of the Bank Law Commission to allow mutual savings banks to convert into private or public limited companies. In August 2000, the financial conglomerate Gjensidige NOR asked the government to allow its savings bank to convert into a public limited company. A decision is still pending.

Mostly reflecting the importance of oil-related and shipping companies and the limited importance of ICT companies, the share index of the Oslo Stock Exchange performed better than those of most other stock markets during 2000. Nevertheless, at the end of December, the index was 2 per cent below the end-1999 level and 17 per cent below the 2000 record high. In 2000, the new Stock Exchange Act was approved, which allows the conversion of the Oslo Stock Exchange into a public limited company and which shifts its supervision to Kredittilsynet (the Banking, Insurance and Securities Commission of Norway). The Oslo Stock Exchange is preparing its conversion, which could take place during the first quarter of 2001. In October 2000, the board of the exchange approved the participation in NOREX, the alliance of Nordic stock exchanges. The participating exchanges will have a common electronic share trade system, allowing brokers to trade in shares listed on the other participating exchanges without extra charges.

The tax system: welfare gains of the 1992 reforms threatened

The previous *Survey* contained a special chapter on the Norwegian tax system. It concluded that considerable progress had been made in easing the distortions typically associated with a high tax burden. Tax reforms in the early 1990s led to a considerable broadening of tax bases and to a lowering of top marginal income tax rates. The introduction in 1992 of a pure dual income tax system – with all capital income taxed at a low flat rate and labour income at higher and progressive rates – was favourable for economic efficiency and enhanced the neutrality of the system with regard to doing business and funding investment. Furthermore, labour market participation is encouraged by a lower marginal tax wedge for lower-paid labour than in most other OECD countries with a similar tax burden, made possible by the broad income tax base, the strong emphasis on indirect taxation and the sizeable tax yield from oil and gas activities.

The previous *Survey*, nevertheless, concluded that there is scope for further improvements. Scope for reform concerns, for instance, the current low valuation of dwellings subject to the property and wealth tax and the income tax on imputed rent, which leads to distortions in investment and saving behaviour with substantial negative efficiency effects. A broadening of the property tax base would improve efficiency and could also provide local government with a stable own tax base which would improve local authorities' budget management. The *Survey* also recommended a review of the tax incentives for specific industries and remote regions, the removal of opportunities for tax planning in the dual income tax system, the closing of loopholes for mainland industries that result in an abuse of the petroleum tax regime and the widening of the VAT tax base. Finally, it acknowledged the need to bring some indirect tax rates more in line with lower levels of indirect taxation in neighbouring countries to reduce cross-border shopping.

The broadening of VAT to services from July 2001 is disappointingly timid. Many services – for instance transport services, hotel and camping accommodation and circuses – will be exempt.[94] A real broadening might well have avoided the increase of the standard VAT rate from 23 to 24 per cent in January 2001. Moreover, the broadening of the VAT base may lead to a distortion of competition between public bodies' own provision of services and similar services provided by the private sector subject to VAT. To reduce cross-border shopping, the VAT rate on food will be halved in July 2001. The reduction in cross-border trade may, however, be limited as the 12 percentage points VAT reduction on food will not fully offset the 21 per cent price difference in meat prices with Sweden. The substantial excise tax differential for liquor was not reduced. The reduction of VAT on food may limit tax evasion through cross-border shopping slightly, but it could even increase the overall burden of agricultural production on the rest of the economy.

The introduction of a dividend tax in 2001 is likely to reduce the efficiency gains from the tax reforms of the early 1990s. The 11 per cent tax on dividends received by Norwegian personal taxpayers – with a basic deduction of NOK 10 000 – is intended to enhance the distributional profile of the tax system.[95] The dividend tax will reduce the neutrality of the tax system and companies will probably increase retained profits, which will lead to a less efficient allocation of capital,[96] and the dividend tax will make it less profitable for Norwegian investors to invest in domestic shares, which may lead to an increase in foreign ownership (Norges Bank, 2000). Moreover, it will make debt financing of investments more attractive. On the other hand, it may reduce the incentives for tax planning by small businesses. The current emphasis on redistribution, rather than efficiency considerations, was already evident in 2000, when the top rate of labour income was increased by 6 percentage points, lifting it well over 50 per cent.[97]

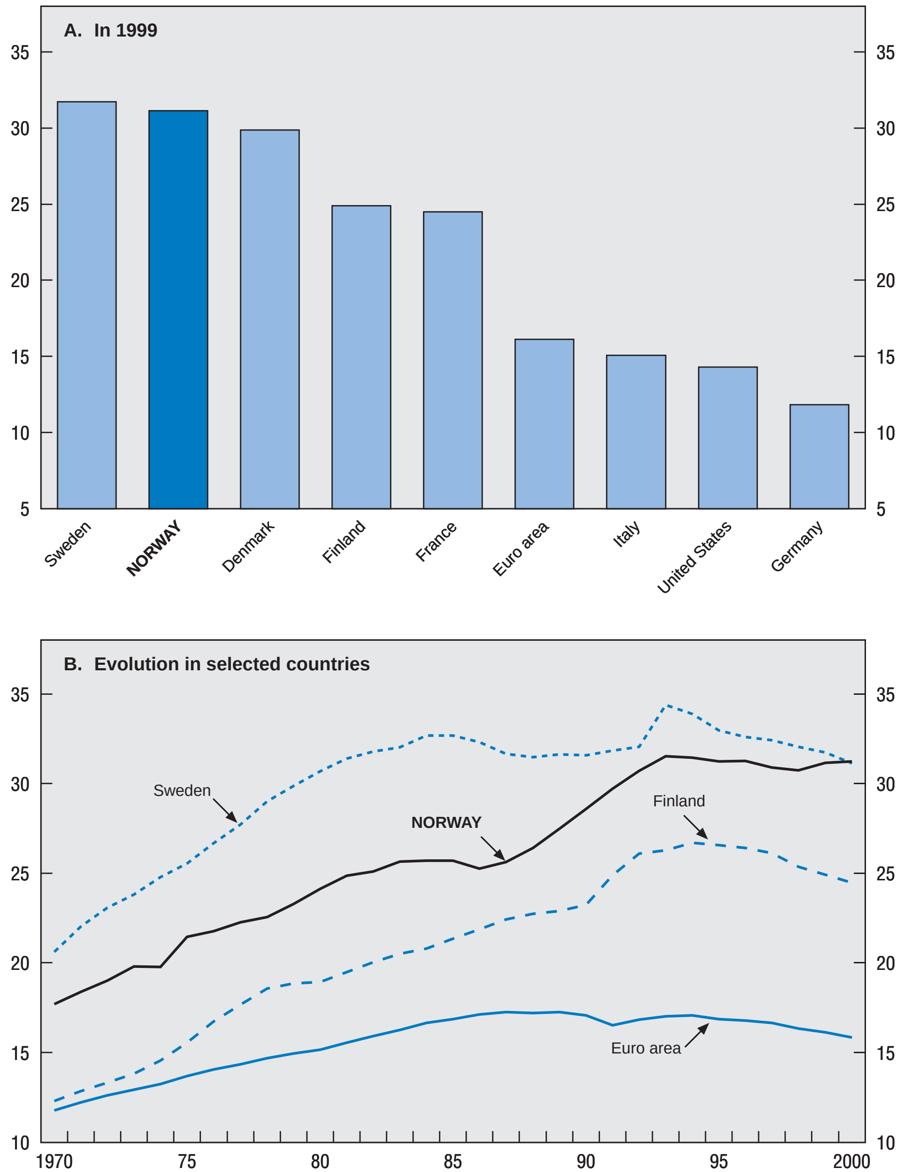
In line with the recommendations of the previous *Survey*, the rules of the split model will be tightened in 2001.[98] The taxation of income from small businesses will, however, remain the Achilles heel of the dual income tax system. Furthermore, the abolition of the 7 per cent investment tax from April 2002 is welcome as this rather unique tax is distorting, not the least due to the many exemptions that have been introduced over time. Finally, the depreciation rates for most assets were lowered in 2001 leading to a broadening of the tax base. No measures were taken concerning the preferential shipping tax regime which was recently identified by the OECD as potentially harmful (OECD, 2000*k*).

Recently, a government-appointed expert committee proposed changes to the taxation of the oil sector which are in line with the recommendations of the previous *Survey* (Ministry of Finance, 2000*b*). It recommended measures to prevent the erosion of the oil tax base by removing tax benefits from moving onshore activities into entities subject to the petroleum tax, measures to prevent excessive capital investment in the oil sector and measures to create investment incentives for companies without current oil income.

Public sector efficiency could be improved

Currently, almost one in three employed persons is working for the government, the second-highest share within the OECD (Figure 21).[99] Moreover, unlike in most OECD countries, the share has continued to rise in the 1990s. The increase in employment was stronger in local government than in central civilian government, with cumulated increases of 32 and 17 per cent, respectively.[100] With so many services produced collectively, the efficient use of resources in the public sector is of tremendous importance for overall economic performance. There are strong indications of substantial scope for further efficiency improvements:

Figure 21. **Government employment**
Per cent of total employment



Source: OECD Secretariat.

significant differences in efficiency have been found between municipalities in nursing homes and in home-based care (Erlandsen and Førsund, 1999; Edvardsen *et al.*, 2000), between hospitals (Hansen, 2000), between colleges (Erlandsen *et al.*, 1998) and in other parts of the public sector (Erlandsen and Kittelsen, 1998). An overall potential for efficiency gains of around 20 per cent could be present in the local government sector (Askildsen *et al.*, 1999*b*).[101]

To improve efficiency, to cope with the increasing workload and to have more customer-oriented government services, public sector reforms have been carried out in the 1980s and 1990s, but with reluctance and at a slow pace (Eriksen, 1997). The pace of the reforms may be influenced by the strong financial position of the government sector due to the substantial oil revenues. While most OECD countries were forced to initiate public sector reforms and to some extent scale back the public sector due to a weak and deteriorating financial situation, the budget constraints may have been perceived as less severe in Norway. Furthermore, there was substantial opposition to reforms by the strong public sector trade unions.

To improve the use of resources, managerial autonomy has been increased by transforming parts of ministries into executive agencies, and by transforming agencies into state enterprises.[102] Moreover, performance-related contracts for agencies were introduced as well as a new contract scheme for top management. Since 1996, the letter of allocation – the contract between a ministry and its subordinate agency – has to focus on performance requirements and reporting (OECD, 1999*b*). At the same time, a top management contract scheme was introduced that allows a performance-related bonus of 20 per cent of the basic salary.[103]

There have also been efforts to lower spending and raise quality by outsourcing auxiliary services. Since 1993, ministries and government agencies are no longer obliged to rent buildings from Statsbygg, the state property company. This was accompanied by abandoning a system in which government agencies were not charged rentals in favour of a system in which the users of government buildings are charged for building expenses. Since 1999, public bodies can buy catering services from companies other than state-owned Statens Kantiner. However, the company is still by far the most dominant catering service for the public sector while its market share in the total Norwegian market is around 20 per cent.

A government-appointed committee, the *Sandbekk Committee*, recently recommended increased use of competition in the public sector by outsourcing, vouchers and benchmarking (NOU, 2000*d*). The committee stressed, however, that improved know-how in local and central government is needed to be able to contract out in a cost-effective way and it indicated that some own production may be needed to assess price proposals of private suppliers. Improvements are also possible in procurement by the local government sector. The new law concerning mandatory use of competitive procurement rules for municipalities below the thresholds stated in the EEA Agreement is therefore welcome. The same holds for the setting-up of a separate body for settling disputes over public procurement decisions.

Another important public sector reform in the 1990s concerned the central government budget process. Since 1997, Parliament decides at an early phase on a budget framework for the different policy areas, for municipality finances and taxation (OECD, 1998). Parliamentary committees have to make departmental budget decisions within the boundaries set. Moreover, Parliament no longer makes decisions on the number of civil servants and does not separate personnel and other running expenses. The reform has improved the first phase of the budget process and has reduced fiscal slippage there. Comparable improvements were, however, not implemented for the Parliamentary decision making process on the revised national budget in May/June of the budget year and on the final supplementary budget at the end of the budget year.

To make the government more service-oriented, agencies introduced service declarations in 1999 and 2000 comparable with the Citizen's Charter in the United Kingdom. According to the authorities, the experience with the declarations is positive and the introduction has clarified the tasks of agencies. Furthermore, information technology (IT) is increasingly used to improve the quality of government services. In 2000, *www.norge.no* was established as a common gateway to all public information on the Internet. Income tax declarations can be sent through the Internet while the Public Employment Service has created an Internet site to match vacancies and job-seekers. The Tax Office is about to implement a system for accepting most tax payments via Internet bank services. Steps have also been taken to make it possible for companies to report to a single central register, which will provide public agencies with the specific information they require. Furthermore, local government services have become more customer-friendly with the creation of "one-stop-shops", but not much progress has been made on this by central government agencies. For 2001, the creation of "one-stop-shops" for local and central government services together are planned in all the municipalities of the biggest county.

The modernisation of the public sector is one of the key objectives of the current government. Further reforms are indeed needed to improve efficiency of the public sector and to prevent strong public sector employment growth from crowding-out private sector labour demand. Performance management could be developed further. Ministries could set clearer goals for subordinate executive agencies and could improve the monitoring of performance. Mergers of agencies or transformation of agencies into state enterprises could be considered to reduce costs and improve the quality of services. Changes in the division of responsibilities between local and central government may also lead to improvements (NOU, 2000*e*); the same holds for mergers of municipalities, many of which are too small to provide the necessary services in a cost-effective way. Furthermore, there is plenty of room for increased outsourcing of auxiliary services by central government and even more by local government. More fundamentally, collective provision of goods and services should not necessarily mean production by the government sector and a shift of production to the private sector could lead to efficiency gains.

Sustainable development

The 1999 *Survey* contained a special chapter on environmentally sustainable economic growth. Norway has traditionally held a leading position in the international discussion of sustainable development and stands out for its valuable efforts to stimulate international co-operation on environmental and resource management issues. Substantial initiatives have been undertaken, for instance the development of an integrated institutional framework, and government policy succeeded in reducing the emissions of a large number of pollutants. Direct regulation has remained an important policy instrument but since the late 1980s tax instruments, including a carbon dioxide (CO_2) tax, have played an increasingly important role in providing incentives for cleaner production and consumption patterns. The *Survey* concluded that there is scope for realising greater cost-effectiveness of environmental measures by increasing the use of economic instruments, such as taxes, subsidies and tradable permits.

At the end of 1999, a commission of experts published a report on how to establish a domestic trading system for greenhouse gas emissions based on the Kyoto Protocol. It recommended the introduction of domestically tradable certificates in 2008 that would give the right to emit a certain quantity of CO_2-equivalents covering close to 90 per cent of Norway's total emissions. It argued that the necessary institutions (exchanges and brokers) could be established without government intervention. The domestic system envisaged would be compatible with the use of Kyoto mechanisms. The government would lose the revenues from existing CO_2 taxes (NOK 8 billion in 1999) if the emissions trading system were in place. Based on a price of NOK 125 per tonne of CO_2-equivalent, the Norwegian tradable certificates for the period 2008-12 are worth NOK 33 billion. The majority of the commission recommended that the government should refrain from issuing certificates free of charge. The government will react to the report in a white paper on future climate policies during spring 2000.[104]

As in other OECD countries, the high oil prices have led to pressures to lower excise gasoline duties. In 2001, excise tax on petrol and diesel will be cut by almost NOK 1.2 per litre in real terms at a direct budgetary cost of NOK 1.8 billion (0.1 per cent of GDP). While recent fuel price rises will help to reduce CO_2 emissions, facilitating compliance with the Kyoto Protocol, they are partly the result of high demand worldwide, which in itself makes it more difficult to contain emissions. Furthermore, in assessing the tax cut, it should be taken into account that national projections still indicate that Norway will not reach its Kyoto target without additional measures. The CO_2 taxes on petrol are still higher than taxes on other fossil fuels and a cost-effective implementation of the Kyoto commitment implies therefore that taxes on other fuels should be raised in relative terms and exemptions from the CO_2 tax should be abolished.

In March 2000, Parliament voted that regulation of gas-fired power stations concerning greenhouse gas emissions should not be stricter than elsewhere in the EEA, thereby repealing the government's previous decision that gas-fired power stations should have very low emissions of CO_2.[105] In October, the government brought the licenses for the construction of two gas-fired power plants in line with the new parliamentary decision. If the two plants are built, this will reduce electricity imports. Based on studies carried out by central research institutions on energy issues in Norway, the government has the view that the plants will reduce CO_2 emissions in northern Europe as they will replace production by coal-fired power plants in other countries.

Scope for further action

Norway's longer-term growth prospects and its standard of living would be improved by structural reforms. Table 13 provides a summary of recent reforms and a follow-up to the recommendations of previous *Surveys*. The key objectives of the current government – preventing a drop in labour force participation and modernising the public sector – are in line with the recommendations presented in Table 13. It is crucial that concrete measures are taken soon to attain these goals. Such measures would not only strengthen the Norwegian economy structurally but would also improve the macroeconomic policy environment. To take advantage of policy complementarities, reforms should be comprehensive, covering a wide range of structural policies.

Table 13. **Recommendations for further structural reform**

Based on previous and current *Surveys* and action taken since early 2000

Previous *Survey*	Action taken	Current *Survey*
LABOUR MARKET		
A. Reform unemployment and related benefits		
Introduce longer waiting period for unemployment benefits and reform part-time unemployment benefits.		Recommendation maintained.
B. Reduce incentives for early retirement		
a) End pension accruals during the period of early retirement and favourable tax treatment of early retirement benefits. Reconsider the possibilities in the public sector to retire early with full pension.	Perverse effects of combining early retirement and part-time work were reduced in June 2000.	Recommendation maintained.
b) Introduce more restrictive medical criteria for disability pensions to reduce the increasing inflow into the scheme.	The entitlement criteria were tightened as vocational rehabilitation must be tried before a disability pension can be granted. A programme to re-examine eligibility for receiving a disability pension will be implemented in 2001. An official committee has proposed to introduce disability pensions which are automatically reviewed after three to four years.	The proposed time-limited disability pension should be implemented rapidly.
C. Increase employment flexibility		
Ease the rules on fixed-term contracts and working hours.	Rules on hiring-in and hiring-out were somewhat liberalised. The government has not yet reacted to a report of an official committee to relax rules on working time and labour contracts.	Recommendation maintained as further progress is needed.
D. Make active labour market programmes (ALMPs) more effective		
a) Closely monitor labour market developments by occupation and skill level and target training programmes on emerging mismatches. ALMPs should not only focus on preserving existing competencies but should also take into account restructuring needs of the economy.	The effectiveness of the ALMPs is assessed annually. Programmes for shipbuilding and petroleum-related mainland industries will be carried on, according to need.	Given the full employment situation, ALMP spending has become very low, but mismatch is still of concern.

Table 13. **Recommendations for further structural reform** (*cont.*)

Based on previous and current *Surveys* and action taken since early 2000

Previous *Survey*	Action taken	Current *Survey*
b) Open up job brokerage to private services. Guarantee a level playing field between private temporary work agencies and the PES.	Public monopoly on job placement has been abolished. PES has been granted permission to introduce fee-based employment services.	Guarantee a level playing field between private temporary work agencies and the PES.
E. Improve labour force skills and competencies		
Ensure that education and training meet evolving needs of labour market.	In 2001, an individual right to unpaid study leave has been introduced. The government intends to follow the proposals of a government committee to adapt higher education better to labour market needs and to develop shorter and more effective studies.	Implement the proposals concerning higher education. Evaluate the 13-year compulsory education concerning quality, duration and input of resources.
F. Increase wage and labour cost flexibility		
Review the possibilities to decentralise wage negotiations in order to enhance the allocative role of the wage system. Do not "buy" wage moderation by policy concessions.	The government has not yet reacted to a report of an official committee to increase the room for local negotiations, especially in the public sector. However, for the public sector, a larger part of total wage growth in 2001-02 is already allocated to local negotiations.	Wage setting should become more flexible with more room for local negotiations, especially in the public sector. End the narrowing of the wage dispersion, especially in the public sector, by shifting from equal increases in kroner for all employees to equal increases in percentage terms.
PRODUCT MARKETS		
A. Improve product market regulation and promote entrepreneurship		
a) Speed up the privatisation of wholly and partly state-owned enterprises.	The public telecommunications operator was partially privatised. Local government ownership in the electricity sector was somewhat reduced, partly due to takeovers by the state-owned electricity company.	The authorities should reconsider their intention to keep a stake of 51% in the public telecommunications operator. Ownership of electricity utilities by municipalities should also be reconsidered.
b) Reduce agricultural subsidies. Support should become less linked to output and better targeted to reduce overall costs.	No progress made.	Recommendation maintained.
c) Aim at a lighter regulation of product markets.	Pharmacy and taxi sectors somewhat deregulated.	Further progress needed.

Table 13. **Recommendations for further structural reform** (*cont.*)

Based on previous and current *Surveys* and action taken since early 2000

Previous *Survey*	Action taken	Current *Survey*
d) Government involvement in the oil sector should be diminished by a partial privatisation of Statoil. Competition on the Norwegian shelf should be enhanced.	Government proposed to privatise Statoil partly and to sell SDFI shares in fields with limited profitability. To reduce overall costs, non-oil companies were invited for the first time to bid for an exploration licence.	Continue taking measures to increase the efficiency of the oil sector.
B. Enhance competition		
Strengthen the position of the Norwegian Competition Authority and review the supervisory role of ministries.	The NCA can now prohibit M&As pending its analysis of the competition consequences, thereby strengthening its position substantially.	The supervisory role of ministries will be reviewed by a committee which will draft a new Competition Act.
FINANCIAL MARKETS		
Enhance competition		
a) Speed up the privatisation of wholly and partly state-owned enterprises.	The state sold its one-third stake in the second-largest bank.	Government should reconsider keeping a stake in the largest bank in the light of existing economies of scale and scope. Take competition effects into account in assessing further concentration in banking and insurance services.
b) Relax the strict takeover regulation. Allow the conversion of saving banks into limited companies.	The government has not yet reacted to the 1998 proposal of the Bank Law Commission to allow mutual saving banks to convert into private or public limited companies.	Recommendation maintained.
c) Move the supervision of the stock exchange to the Banking, Insurance and Securities Commission. Convert the Oslo Stock Exchange into a limited company.	Both implemented in 2000.	No further action required.
PUBLIC SECTOR		
A. Raise public sector efficiency		
a) Reduce government outlays to make income tax cuts possible.	Developments are in the wrong direction.	Recommendation maintained.
b) Increase economic efficiency of local government services, for instance by outsourcing.	No major progress made. Municipalities took some action (*e.g.* outsourcing) but not for the most resource-intensive parts of the public sector.	Further action needed.

Table 13. **Recommendations for further structural reform** (*cont.*)

Based on previous and current *Surveys* and action taken since early 2000

Previous *Survey*	Action taken	Current *Survey*
B. Improve health sector efficiency		
Introduce better incentives for health providers to raise efficiency.	Free hospital choice since January 2001. To increase efficiency, the government intends to move ownership of hospitals from the counties to the national level in 2002.	Ensure that the intended reforms result in efficiency gains and quality improvement of health services.
C. Continue with reforming the tax system		
a) 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.	No progress made.	Recommendation maintained.
b) Remove incentives for tax planning in the dual income system.	Rules on the split model were tightened.	Further progress needed.
c) Limit the incentives for tax planning from the mainland to the petroleum tax regime.	An official committee has proposed to limit these incentives but the government has not yet reacted.	Recommendation maintained.
d) Widen the VAT base to include services.	The widening to services in July 2001 is disappointingly timid.	Further progress needed.
e) Abolish the investment tax.	Investment tax will be abolished from April 2002.	No further action required.
SUSTAINABLE DEVELOPMENT		
a) Increase the use of economic instruments (taxes, subsidies and tradable permits) to realise greater cost-effectiveness of environmental measures.	No progress made.	Recommendation maintained.
b) Aim at an economy-wide national trading system for greenhouse gas emissions if no global trading system is implemented.	The Hague climate conference did not bring the ratification of the Kyoto Protocol closer. A White Paper on Climate Policies will be presented in Spring 2001.	
c) Comply with the Kyoto Protocol target of limiting the increase in greenhouse gas emissions to 1% relative to the 1990 outcomes.	The CO_2 tax on petrol and diesel will be cut in 2001, hence reducing the difference between different CO_2 tax rates and making emission reductions more cost effective.	Current emissions are far above the Kyoto Protocol target (7% above in 1998). Recommendation maintained.

Source: OECD Secretariat.

III. How should Norway respond to ageing?

Introduction

Norway, like most OECD countries, will experience a significant ageing of its population, although it will be less dramatic than elsewhere. Ageing will affect public finances through rising spending on pensions and on health care for the elderly. But Norway starts from an enviable position. Employment rates for older people are among the highest in the OECD and the level of early retirement is less of a problem. Furthermore, pension expenditure relative to GDP is relatively low, and pensioners currently enjoy reasonable replacement rates.

When evaluating the challenges that ageing poses, Norway differs markedly from most other countries. The government has substantial petroleum revenues and possesses ample financial assets, mostly accumulated in the Government Petroleum Fund (Box 6). Generational accounting, which is an integral part of the central government budget paper, reveals that the generational transfer problem stemming from the ageing of population is broadly under control when future petroleum revenues and the current assets of the Petroleum Fund are taken into account. Finally, with the financial assets accumulated in the Government Petroleum Fund, the government could introduce funding in the pension system, enhancing its ability to finance higher pension expenditure, without taxing a generation twice.

Nevertheless, there are important problems facing the future of the pension system. Absent reforms, the ageing of the population combined with a still maturing pension system could result in one of the steepest increases in pension expenditure in the OECD in the next 50 years. Pension outlays, including disability pensions, of the National Insurance Scheme are projected to more than double, from the current 7.3 per cent of GDP to 17 per cent in 2050. This chapter analyses the reasons for the sharp rise in the financial burden of ageing and discusses options for reform. The first section describes the demographic and employment structure of the Norwegian economy. In brief, the population is ageing less rapidly than the OECD average and a high proportion of the population is employed. But employment rates of older workers, although high, have been falling, as has been the effective age of retirement. The following section describes the current system of support for the elderly and the incentives to retire early. Various issues concerning the economic position and health care

Box 6. The assets of the Government Petroleum Fund will rise substantially in the coming years

The Government Petroleum Fund was established in 1990 to build up financial reserves to preserve an equitable share of the present petroleum revenues for future generations and decades, and to prevent short-term fluctuations in the oil price from influencing spending in the current and next year's budget. It remained empty until 1996, as a result of the recession of the early nineties, but has seen a rapid build-up in assets in recent years. The Fund is managed by Norges Bank, but separated from the management of official currency reserves and from ordinary central bank functions. Investment guidelines have been issued by the Ministry of Finance and require the Bank to invest the Fund's capital exclusively in foreign fixed-income assets and, since early 1998, in foreign equities. Currently, 60 per cent of the portfolio is allocated to fixed-income assets and 40 per cent to equities. Geographically, the fund is diversified, with 50 per cent invested in Europe, 30 per cent in America and 20 per cent in Asia and Oceania. The ministry sets a benchmark portfolio and determines the maximum investment risk the Bank is allowed to take. The Bank aims at a maximum return within the risk range set by the ministry. It has succeeded in outperforming the benchmark portfolio; its excess return was 2.2 percentage points from early 1998 till the third quarter of 2000 (Norges Bank, 2000*e*). By then, the value of the Petroleum Fund was NOK 357 billion (25 per cent of GDP). Based on a cautious oil price assumption, the Ministry of Finance has projected that total Petroleum Fund assets will reach NOK 589 billion (40 per cent of GDP) at the end of 2001 and NOK 1 070 billion (72 per cent of GDP) by the end of 2004.

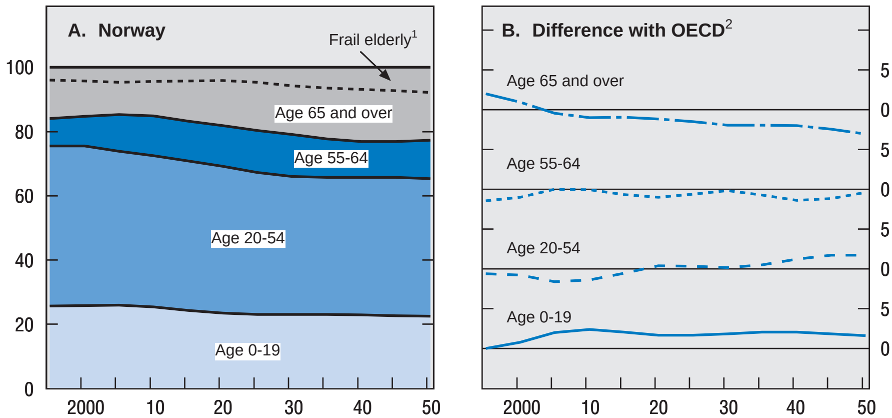
for the rising number of elderly persons in future years are also considered. The chapter then reviews the impact the demographic changes will have on public finances, as both the number of pensioners and average pensions in the earnings-related scheme could grow by more than 50 per cent over the next 50 years, while health care spending and the cost of care for the frail elderly are also likely to rise substantially. The final section lays out the policy options to cope with ageing.

The old-age burden facing Norway

The old will represent a quarter of the population in 2040

The Norwegian population will age somewhat less rapidly over the next 50 years than the OECD average but the proportion of those 65 or older will increase from around 15 per cent of the population to 23 per cent by 2040 (Figure 22).[106] The old-age dependency ratio (those 65 and older relative to those of working age) is expected to increase from 26 per cent to 43 per cent by 2040, as compared with more than 50 per cent for the OECD (Figure 23, Panel A). The number of people of working age per old-age person will thus fall from 4 to 2.3.

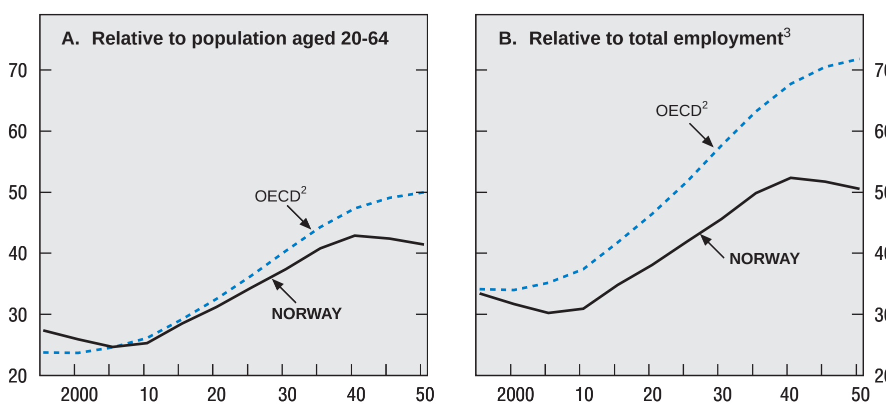
Figure 22. **Population trends**
Per cent of total population



1. Age 80 and over.
2. Excluding Mexico and Turkey.

Source: Statistics Norway, Eurostat, United Nations and OECD Secretariat.

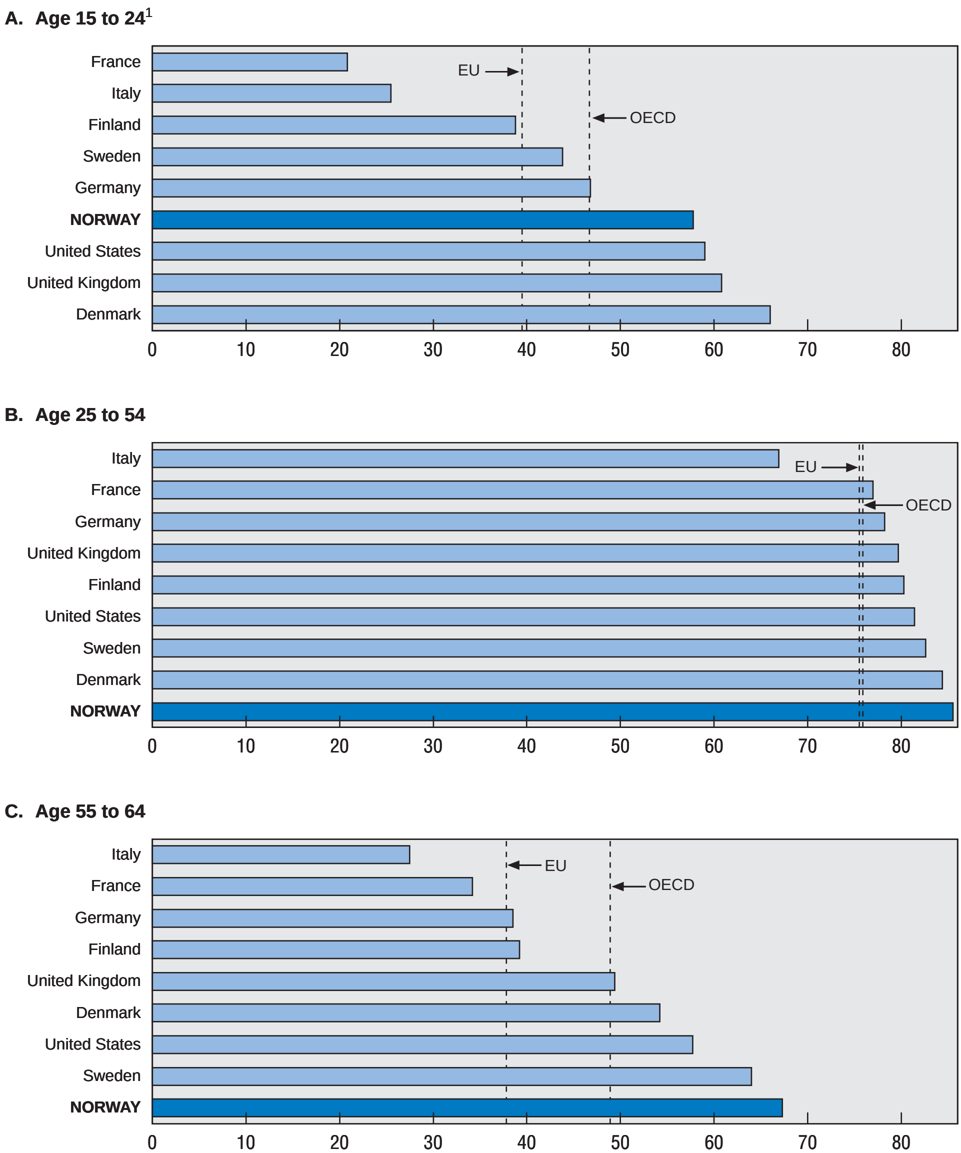
Figure 23. **Old-age[1] dependency ratios**
Per cent



1. Persons aged 65 and above.
2. Average of the rates of individual countries (excluding Mexico and Turkey).
3. For the projections the employment/population ratio is kept constant at its 1995 level.

Source: Statistics Norway, Eurostat, United Nations and OECD Secretariat.

Figure 24. **Employment rates in selected OECD countries**
1999, per cent

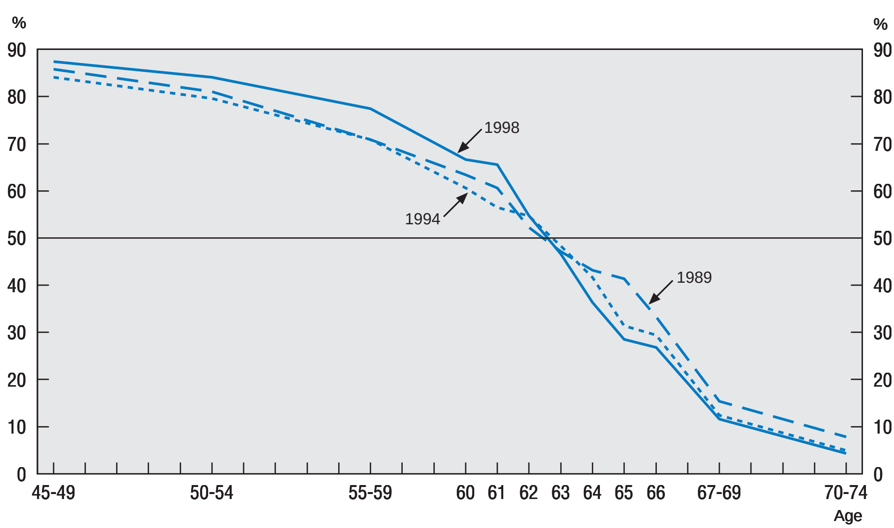


1. Age group 16 to 24 for Norway, Sweden, the United Kingdom and the United States.
Source: OECD (2000), *Employment Outlook*.

Despite high employment ratios, old-age workers' employment has fallen during the 1990s

Although Norway has the highest employment ratio for older workers (aged 55 to 64) in the OECD (Figure 24),[107] employment rates fall sharply with age, particularly from age 62. Only a third of people aged 64 are employed, even though the official age of retirement is 67 (Figure 25). In the 1990s, employment ratios increased on average but fell for those aged 62 and older.[108] This reflects the introduction of the early retirement scheme (AFP) in 1989 and the gradual lowering of the pensionable age in this scheme during the 1990s. It also reflects the rise in the number of disability pensioners. Under the assumption of constant age-specific employment rates, the long-term pressure of ageing is much less severe in Norway than on average in the OECD (Figure 23, Panel B). However, given recent trends, the age-specific employment rates are likely to develop more favourably in the OECD than in Norway. The relatively better performance may, therefore, turn around.

Figure 25. **Employment rates for older workers in Norway**
Persons aged 45 and over



Source: Statistics Norway.

Support for the elderly and incentives to retire

The main features of the pension system

The backbone of the Norwegian welfare system providing among others old age, disability, and survivors' pensions is the *National Insurance Scheme* (NIS).[109] It is fully integrated in the central government budget and is not as in other OECD countries a separate social insurance scheme with contribution rates linked to outlays. The old-age NIS pension system consists of a basic pension and a supplementary pension. People with low or no supplementary pension rights receive a special supplement, which together with the basic pension adds up to a minimum pension. It is more than a safety-net provision but less than a scheme that provides all employees a pension that is relatively close to their previous wage. All individuals resident or working in Norway are compulsory members of the NIS. Employers, employees and pensioners pay contributions to the NIS but the contribution rates are not in any way related to the outlays of the scheme. Total expenses of the NIS were around 13 per cent of GDP in 1999, with old-age, disability and survivors pensions representing 5.2, 2.6 and 0.4 per cent of GDP respectively.[110] Contributions were not sufficient to cover these outlays and, as a consequence, the state transfer to the NIS amounted to 3.5 per cent of GDP in 1999. Benefits are determined in relation to a "basic amount", which is generally referred to by the letter "G". At present, G is about a sixth of the average full-time wage. Parliament adjusts this amount once a year, broadly in line with changes in nominal income. With the entire system tied to the G, the pension system is *de facto* closely linked to wages.[111] NIS old-age benefits are topped up by occupational pension arrangements. Currently, roughly 50 per cent of the workforce is covered by an occupational pension scheme. The importance of personal defined contribution private accounts is currently negligible.

Age-related benefits in the NIS: *the minimum pension is about a third of the average full-time wage*

Age-related benefits in the NIS consist of a minimum pension and an earnings-related pension (supplementary pension), the main features of which are described in Annex II. The minimum pension is equivalent to 1.8 G for single pensioners, 2.3 G for a married pensioner with a dependent spouse aged less than 60 years, and 3.1 G (53 per cent of the average wage) if the spouse is over 60 years of age.[112] When both spouses receive the minimum old-age pension, the amount is 1.54 G for each spouse. All individuals with at least three years of residence between the age of 16 and 66 are entitled to a reduced minimum pension. A full minimum pension is granted with 40 years of residence.

A person is entitled to a supplementary (earnings-related) pension if his/her annual income exceeded one G (a sixth of the average wage) for three years after 1966. The amount of the supplementary pension depends on three parameters: the number of pension-earning years, the supplementary pension percentage and the computed pension points. The system is regressive as pension points are less than proportional to wages above the average wage and as there are no additional pension points for wages above twice the average wage. Only the average pension points of the person's best twenty income years are considered when calculating pension benefits. Since the system has not yet fully matured, supplementary pensions are so small for about a quarter of the pensioners that the supplementary pension does not give a pension above the minimum pension level.[113] The average supplementary pension is currently just above one basic amount. As new cohorts retire over the next 50 years the average supplementary pension will continue to increase, to just above two basic amounts, partly due to the sharp increase in female labour market participation in the 1970s and 1980s. The rise in average pensions is one of the two main reasons for the more than doubling of the pension outlays as a percentage of GDP in the coming decades.

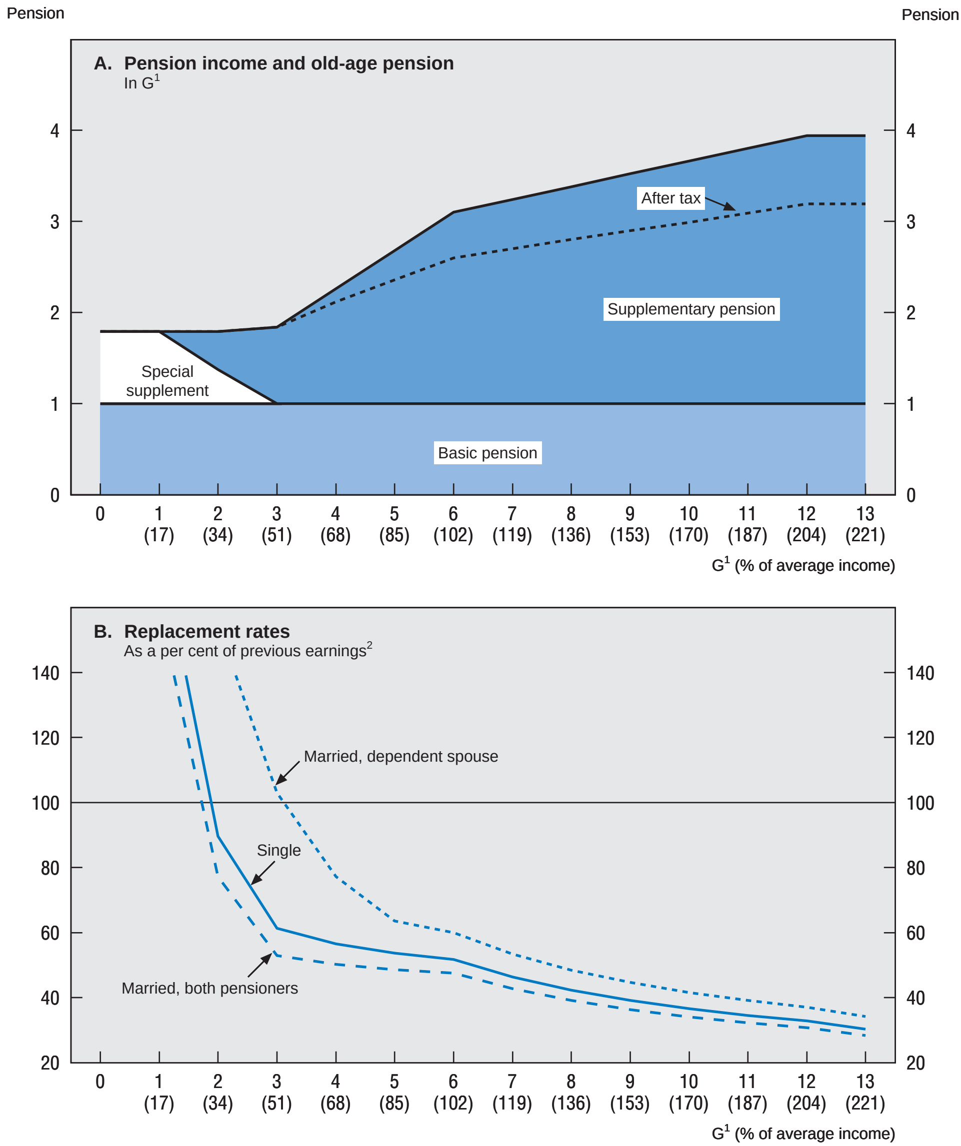
Old-age pension benefits are granted only when reaching the official age of retirement at 67. With minimum old-age pensions providing a floor and upper limits on pension points providing a ceiling, old-age pension replacement rates fall the higher the previous income was and range from above 100 per cent for workers with previous incomes below 2 to 3 G to less than a third for high-income workers (Figure 26). As a consequence, occupational pension schemes are essential for high-income workers to have a pension close to their previous wage.

Contributions to the NIS *are complex and have anomalies*

Contributions to the National Insurance Scheme by employers, employees, self-employed persons and pensioners are collected as taxes and are thus not assigned to the NIS while the central government budget grants the NIS the amount needed to cover all expenses. The employer's contribution is a percentage of wages that varies according to the region where the employee resides.[114] The standard rate is 14.1 per cent but the rate for remote regions is zero. An additional employer's contribution of 12.5 per cent is levied on wages exceeding 16 G despite the regressive benefits.

There are four income-related rates of National Insurance contribution rates for individuals – 0, 3, 7.8 and 10.7 per cent.[115] Contributions are levied on wage income, income from self-employment, and pensions. Pensioners who have no other income than the minimum pension do not pay contributions.[116] A 3 per cent rate is levied on pensions and income of individuals under 17 and over 69 years. The rate on income from employment and self-employment above 12 G is 7.8 per cent, while the self-employed contribute a 10.7 per cent rate on income up to 12 G. In 1999, NIS contributions of employers and individual insured

Figure 26. **Pensionable income in the NIS**
In 2000



1. G is the "basic amount" considered for social insurance and income tax purposes. In May 2000, 1 G = NOK 49 092. Average income before tax is almost 6 G.
2. Before tax.

Source: Ministry of Finance and OECD Secretariat.

persons covered around 40 and 30 per cent of total NIS expenses, respectively. The remainder, around 30 per cent, was covered by a state transfer to the NIS.

No major reforms to the NIS scheme during the 1990s

Unlike in several OECD countries, there were no major reforms to the Norwegian pension system in the 1990s as there has not been the same kind of anticipated financial pressure to implement far-reaching reforms. According to calculations by the National Insurance Administration, the two reforms implemented in 1992 have reduced pension payments by only 1 per cent in 2000 and are expected to reduce them by 10 per cent in 2050.[117] This is relatively limited compared with reforms in many other OECD countries.[118, 119]

Occupational pension arrangements have an unequal coverage

There are additional non-NIS pension arrangements in the form of occupational pensions. All central and local government employees are covered by an occupational pension scheme, while around a third of the employees in the private sector are covered by such a scheme.[120] In the private sector, occupational pensions are firm specific, voluntary and enjoy tax advantages.[121] They are portable within the public and the private sectors but not across them. Yet individuals never lose the earned pension capital and associated pension after completing the vesting period.[122] Occupational pensions in the private sector are of a defined benefit nature, fully funded and based on an average employer contribution of around 8 per cent of the wage bill, while employees usually do not contribute.[123] Like private sector schemes, local government schemes are fully funded but central government occupational pension payments are not funded at all and paid directly out of the budget.

Occupational pension schemes aim at supplementing the NIS benefits and determine overall pension replacement rates. Public sector occupational pensions guarantee a total pension, including the NIS, of two thirds of the previous salary. Private sector occupational pensions supplement the NIS benefits and aim to provide a total replacement ratio, including the NIS pension, somewhere between 60 and 70 per cent.[124] Private sector funds are regulated by the new Corporate Pension Act and life insurance companies have set up pension funds for employers. The investment policy of these funds is governed by the standard rules for life insurance companies. Large private pension funds hold 61 per cent of their assets in bonds and 22 per cent in shares, while small funds invest in a more risk averse manner, with 40 per cent in cash and bank deposits, 22 per cent in shares and 30 per cent in bonds.

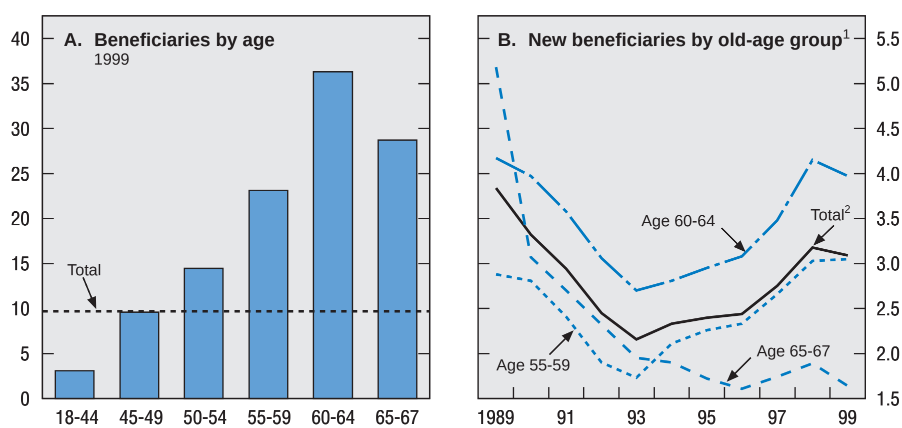
Apart from tax advantages, employers have an incentive to provide these private occupational pension schemes to recruit high-income workers. With the NIS pension benefit rules entailing falling pension replacement rates as income increases, high-income workers find occupational pension schemes that guarantee a much higher replacement rate very attractive. Thus, occupational pensions tend to be concentrated in sectors of the economy with many high-income workers – *e.g.* banking, finance and business service sectors (Hippe and Pedersen, 1992 and Pedersen, 2000).

Disability pensions

Disability pensions broadly follow the same benefit rules as old-age pensions. Benefits are calculated by assessing pension years and pension points as if retiring at 67.[125] Therefore, an individual on a full disability pension will get the same pension as a person retiring at 67. As in other countries, the likelihood of being disabled increases with age (Figure 27, Panel A). Disability in Norway is high compared with a range of OECD countries (Table 14). However, this could be partly explained by the limited provision of other means to retire early.

The introduction of the early retirement scheme in the 1990s (see below) was followed by a reduced flow into disability of those aged 65 to 67 (Figure 27, Panel B). Revealingly, the share of disabled individuals in the 60-64 age group, which is not fully covered by the early retirement scheme, is higher (Figure 27, Panel A). Medical criteria have been strengthened by the 1991 reform but the

Figure 27. **Disability pensions**
Per cent of population in same age group



1. Age 65-66 instead of 65-67 for 1989.
2. Age 55-67.
Source: Ministry of Health and Social Affairs; Statistics Norway and OECD Secretariat.

Table 14. **Disability pensioners in selected OECD countries**
1997, per cent of respective age group

	Men and women			Men			Women		
	Total	Age 60-64	Age 50-59	Total	Age 60-64	Age 50-59	Total	Age 60-64	Age 50-59
Denmark	4.3	13.6	8.4	..	..	..	..	..	..
Finland	8.8	43.9	16.8	..	..	..	..	..	..
Germany	4.2	..	..	5.2	29.1	13.2	3.3	13.3	9.2
Iceland	5.6	17.2	9.7	..	..	..	..	..	..
Italy	1.8	..	..	1.5	8.3	4.7	2.0	9.6	6.0
Netherlands[1]	8.1	..	..	9.9	31.5	..	6.3	14.1	..
Norway	7.6	33.8	16.3	6.4	31.0	17.5	8.8	36.7	25.0
Sweden	7.7	33.5	14.2	6.7	21.3	16.3	8.6	34.3	32.8
Switzerland	3.7	..	..	4.2	16.3	9.3	3.2	9.4	7.3

1. Age 55-64 instead of 60-64.
Source: NOSOSCO (1999), *Social Protection in the Nordic Countries*, 1997 and C. Prinz (1999), *Invalidenversicherung: Europäische Entwicklungstendenzen zur Invalidität im Erwerbsalter*, Forschungsbericht Nr. 7/99, Bundesamt für Sozialversicherung (BSV), Bern.

implementation of the rules has been more liberal since 1995 and rules differentiating medical conditions have been abolished.[126]

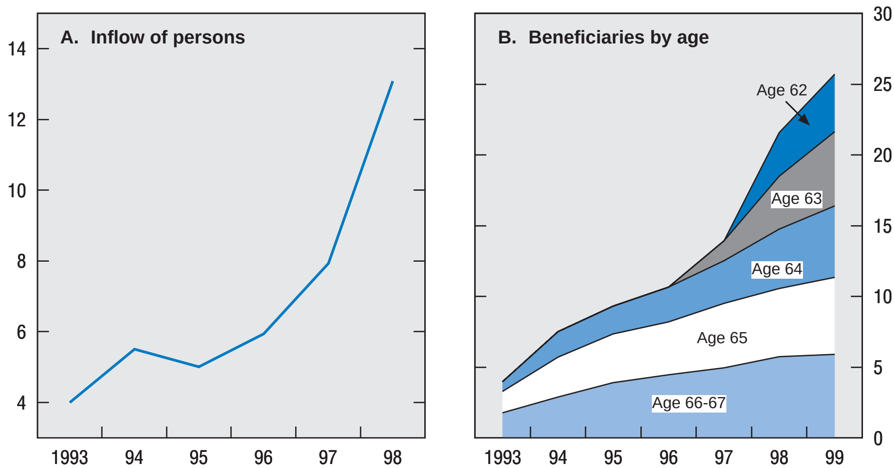
The door to early retirement has been opened during the 1990s

Prior to the 1990s, some occupational groups had access to early retirement. Public sector employees can retire three years earlier than the age limit – which goes from 60 to 70 depending on occupation – if the sum of their age and the number of contribution years to the occupational scheme exceeds 85 years.[127] The 85-year clause is also relevant for certain groups of public employees such as policemen, army officers and firemen who have a lower age limit.

In 1989, employers and unions negotiated an early retirement scheme, AFP (*Avtalefestet pensjonsordning*), allowing people to retire earlier than age 67. Currently, the scheme covers the entire public sector – around one third of all employees – and about 43 per cent of private sector employees. The self-employed are not included. The proportion of employees covered increased over the 1990s (Figure 28), both as a result of wider coverage and a gradual reduction in the minimum early retirement age from 66 in 1989 to 62 in 1998.[128] Entitlement rules are as follows:

- Employment in the firm in the three previous years or in a firm covered by the AFP-scheme for the last five years.
- Labour earnings at least corresponding to the basic amount in both the year AFP is taken up and the previous year.

Figure 28. **Number of persons on early retirement pensions**
AFP pensions, thousands



Source: Ministry of Health and Social Affairs.

– An earnings history such that the average earnings in the 10 "best" years since 1967 are at least twice the basic amount.

– Earnings at least equal to the basic amount during 10 years since the age of 50.

Pension benefits are calculated as if the person had retired at age 67, assessing pension points during early retirement on income at the time of taking early retirement. When reaching the age 67, an AFP pension is replaced by an old-age pension calculated as if retiring at 67. The local and central government finance the AFP scheme in the public sector directly out of their budget. 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 taking AFP at age 62 or 63.[129] The participating employers finance the remaining 40 (80) per cent via a PAYG (pay-as-you-go) "fund".[130]

There are strong incentives to retire as soon as this is an option

To the extent that the retirement decision is based on the degree of income replacement, low-income individuals have an incentive to stop working at age 67 when they become entitled to an old-age pension from the NIS. High-

Table 15. **Replacement rates, pension wealth accrual rates and implicit tax of working an extra year**[1]

Per cent

Family status	Income (G)	Replacement rates		NIS		AFP[2]				Hypothetical case[2, 3]			
		Before tax	After tax	Accrual rates	Implicit tax	Accrual rates		Implicit tax rate		Accrual rates		Implicit tax rate	
				Age 67	Age 67	Age 62	Age 65	Age 62	Age 65	Age 62	Age 65	Age 62	Age 65
Single	2	90	111	–7.7	90	–5.6	–6.7	90	90	–5.6	–6.7	90	90
	6	54	64	–6.1	41	–5.6	–6.7	52	52	–4.0	–5.1	37	39
	12	34	46	–6.0	25	–5.6	–6.7	33	33	–3.8	–4.9	22	24
Married with dependent spouse	2	154	73	–7.7	154	–5.6	–6.7	154	154	–5.6	–6.7	154	154
	6	62	79	–6.3	50	–5.6	–6.7	60	60	–4.2	–5.3	45	48
	12	35	50	–6.2	30	–5.6	–6.7	37	37	–4.0	–5.1	27	28
Married, both receiving a pension	2	77	95	–7.7	77	–5.6	–6.7	77	77	–5.6	–6.7	77	77
	6	49	58	–6.0	37	–5.6	–6.7	48	48	–3.8	–4.9	33	35
	12	32	43	–5.9	23	–5.6	–6.7	31	31	–3.5	–4.6	19	21

1. Calculations are based on an individual having 40 years of contributions and a life expectancy of 80 years. It does not consider the occupational pension guarantee of two-thirds of wages. No time discount is used in the calculations. The average income is equal to 6 G.
2. Of working an extra year at ages 62 or 65.
3. Pension years and pension points are evaluated at the time of retirement and not at 67 as under the AFP rules.

Source: OECD Secretariat and Ministry of Finance.

income individuals, on the contrary, have more of an incentive to continue working, given their low pension replacement rates, unless they have other assets or are covered by an occupational pension scheme. These schemes reduce this incentive because they in effect set an overall replacement rate of 66 per cent for public sector employees and normally between 60 and 70 per cent for private sector employees.

The NIS is not "actuarially neutral" with respect to the year of retirement, providing negative incentives to work beyond age 67. For all income levels and household types, the value of the pension wealth of an individual (*i.e.* the discounted sum of pension benefits received during retirement) decreases with working an extra year (Table 15).[131] A complementary indicator of the disincentives to continue working is the change in pension wealth relative to earnings that a person would earn if retiring later – *i.e.* the implicit tax on the additional year of earnings from the loss in pension wealth.[132] The results from these calculations show that the implicit tax is high, in particular for low-income earners. High-income earners face a smaller implicit tax, but working an extra year nevertheless reduces their pension wealth.[133]

More important than the disincentives in the old-age pension scheme to continue working after the age of 67 are the strong incentives to retire early due to the AFP schemes (Table 15). Indeed, only 26 per cent of those aged 65-66 are in the labour force (Table 16).[134] The implicit tax is positive for all income groups but is significantly higher for low-income earners, suggesting that the incentives to retire early are particularly strong for this group.[135] Furthermore, the pension guarantee of two thirds of wages from occupational pensions applies to public sector employees retiring between age 64 and 67, enhancing the incentives to retire early, in particular for public sector employees with high incomes.[136] In the 2000 budget paper, the previous government suggested to reduce the incentives to retire earlier by ending the building-up of pension rights during early retirement. This would indeed reduce the negative incentive of working an extra year but they would, nevertheless, remain, in particular for low-income earners (Table 15,

Table 16. **Labour market status of people aged 60 to 66**
1999, as a percentage of the respective population

	Total population (thousand)	Employed	Unemployed	Pensioners		
				AFP	Disability	Other[1]
Age 60-64	183	54	1	8	35	2
Age 65-66	67	25	1	17	30	26

1. Includes home-workers.
Source: Statistics Norway.

hypothetical case). New rules for combining part-time work and receiving an AFP pension were introduced in August 2000. This is in line with recent proposals for coping with ageing populations (OECD, 1998*b* and 2000*l*) recommending flexible retirement, where both receipt of pensions and part-time work are available simultaneously.

Pension tax rules also make continuing work unattractive

Pension income is taxed favourably in Norway (Box 7). The contribution to the NIS is 3 per cent compared with the standard rate of 7.8 per cent for employees (and those receiving a minimum pension pay no contribution at all).[137] In addition, pensioners get a higher basic deduction and under certain circumstances they can benefit from special limitations on tax. These favourable tax rules make retirement "cheaper", thus strengthening the incentives to retire early.[138]

Box 7. **Taxation of pension benefits**

The 2000 *Survey* on Norway examined the tax system (see also Van den Noord, 2000). Income in Norway is taxed in three instalments. There is a contribution to the NIS, an ordinary income tax (28 per cent of income, excluding a basic relief and the standard allowance) and a surtax (13.5 per cent of income above the surtax threshold). In principle, pension income is taxed as other income. However, the NIS contribution of pensioners is 3 per cent instead of the standard 7.8 per cent (and those receiving a minimum pension pay no contribution at all). Moreover, pensioners are allowed an extra basic deduction from the ordinary income tax base of NOK 17 640, which is doubled for married couples where both spouses are disabled pensioners or an old-age couple where both are formerly disabled pensioners.

Furthermore, pensioners with low income do not pay taxes or are subject to a special tax limitation rule (*skattebegrensningsregelen*) (Table 17). Under this rule, old-age and disability pensioners pay 55 per cent of their income after deducting 22 per cent for basic relief and a further NOK 73 800 for singles or NOK 120 600 for married couples.* If at least one of the spouses can be assessed according to the limitation rule, the couple must be *jointly* assessed by this rule if that entails lower taxation than under the ordinary rules. According to the Ministry of Finance, about 10 per cent of pensioners did not pay tax because of low income and/or low net wealth in 2000; nearly 40 per cent paid tax according to the limitation rule; and roughly half of the pensioners paid tax according to the ordinary, favourable tax rules for pensioners.

* Two per cent of net wealth exceeding NOK 200 000 is added to the income.

Table 17. **Income brackets for pensioners**[1]
In 2000, in G[2]

	Single person	Married couple[3]
No tax liability if the pension income is below	1.93	3.15
Paying tax according to the limitation rule if the pension income is in the interval	1.93-3.15	3.15-5.17
Paying tax according to the ordinary scheme for pensioners if the pension income exceeds	3.15	5.17

1. The following assumptions are made: the pensioners do not have other income than pension, they are not formerly disabled pensioners, their net wealth does not exceed NOK 200 000 and they receive standard allowances only. An additional assumption for a married couple is that the spouses have an equal amount of pension income.
2. G is the "basic amount" considered for social insurance and income tax purposes. In May 2000 1 G = NOK 49 092.
3. Total pension income.

Source: Ministry of Finance.

Income levels of older pensioners are currently relatively low, but gradually improving

Around one in nine elderly Norwegians has net income below the poverty threshold – defined as 50 per cent of the median net income – which is almost double the rate of the Norwegian population as a whole (Table 18). Elderly people suffer higher levels of poverty because many older pensioners only receive the minimum pension. However, poverty among old-age individuals has fallen substantially from 1986 to 1998 while overall poverty rates remained stable. The large increase in the minimum pension in 1998 explains the large fall in poverty rates among the elderly, in particular among women as they are the majority of those receiving a minimum pension. As the pension system matures, poverty rates among the elderly should continue to fall further.

Poverty rates are highest among the single elderly and very old women (Table 18). One in four single elderly have income below the poverty threshold, and 22 per cent of women aged 75 or older are below the poverty threshold. In contrast, elderly couples experience much less poverty than the population as a whole. This appears to reflect that many very old pensioners were not entitled to supplementary pensions, and if entitled they are low. Moreover, the minimum pension is below the relative poverty threshold (Epland, 2000). Nevertheless, this problem will dwindle as the pension system matures.

Poverty rates are very sensitive to the equivalence scale elasticity (the weight given to family members to calculate individual income within the family).[139] This is especially so for older persons who usually live in relatively small households. For example, using an equivalent scale elasticity of 0.7 instead of 0.5 reduces the poverty among the elderly considerably as it lowers the median

Table 18. **Poverty rates in Norway**

Persons with income below half of the median household disposable income,[1] per cent of same population group

		1986	1996	1998
Total population		6.4	7.5	6.3
Age 65 and older	Total	19.5	16.2	11.0
	Single	39.5	35.3	25.1
	Couple	5.2	1.9	0.9
Elderly persons				
Total	Age 65-74	10.0	7.8	4.8
	Age 75 and over	31.7	24.0	17.1
Men	Age 65-74	5.7	4.2	3.0
	Age 75 and over	17.1	13.0	6.9
Women[2]	Age 65-74	13.4	10.8	6.2
	Age 75 and over	40.2	31.0	23.6

1. Equivalence scale = 0.5.
2. In 1996 women as a per cent of the total population were: 4.5 per cent for age 65-74 and 4.8 per cent for age 75 and over. The same age groups as a per cent of the population in the same group are 54.1 per cent and 63.4 per cent respectively.

Source: Statistics Norway.

income per individual more than the individual income of the elderly. In this case, the poverty rate of the elderly falls to around 1 per cent, much below the 4.5 per cent for the total population.

Care and services for the elderly

The institutional framework

Care for the elderly is largely publicly financed and provided (Box 8). The Norwegian health care system, which was reviewed in detail in the 1998 *Survey* (OECD, 1998), is organised at three levels: the central government, the counties and the municipalities. The central government is responsible for framework policies governing the scope and standards of care provided, and for regulatory oversight on the achievement of goals. The central government establishes broad guidelines and supplies information on financing, operating costs and investment policy, and monitors compliance of the national health care policy. Counties have the responsibility for managing and running hospitals, while municipalities are responsible for ambulatory care. While there are distinct advantages to having responsibility for some welfare services at different government levels, the present arrangements encourage municipalities and counties to shift part of the burden onto each other by restricting supply.[140] Based on national legislation, the

Box 8. Financing of the health and social care system for the elderly

The Norwegian health and social care system provides high quality services with universal coverage. Total health care spending amounted to around 8 per cent of GDP, which is broadly in line with the OECD average. By contrast, outlays for the elderly represented around 3 per cent of GDP in 1997, the highest share in the OECD after Sweden (Table 19). These services are financed through a combination of block grants from the central government, which are calculated on the basis of a set of criteria, including per capita income, population density and demographic structure of the municipality, the revenue from local taxes and out-of-pocket payments by the patients. The central government also provides earmarked grants and subsidies for major reforms and investment projects. Concerning primary health care and hospital care about 83 per cent was financed by the public sector in 1998 (including NIS and government subsidies), while out-of pocket payments by patients covered the remainder.* The public sector covers approximately 85 per cent of the care service expenses of elderly people, while the remainder is financed mainly by user charges and reimbursements from the National Insurance Scheme for medical treatment, physical therapy and medicines. For other care services for the elderly, user charges are based on user's income. Concerning home care, user charges cover about 3 per cent of the total costs: home nursing, respite services and support services (help to eat, help to get out of and into bed, help with personal hygiene) are provided free of charge; practical services (home help) are also almost free for the low-income pensioners; and for institutional care, user fees cover currently approximately 16 per cent of the total expenses (pensioners pay 75 per cent of their basic amount above the threshold of 12 per cent of the basic amount, and 85 per cent of the supplementary pension for long-term institutional care). Services are not asset tested.

* There is a ceiling on the amount individuals are required to pay in this way each year.

municipalities provide a wide range of services for the elderly ranging from home help and home nursing to service housing and long-term institutional care.[141] In recent years, local authorities have attempted to reduce segmentation and to rationalise and streamline services by bringing them under the same administrative service within the municipality.

The demand for services

Most people of retirement age are independent. Almost 94 per cent of those above the age of 65 live in private accommodation and only one-fifth of this group receives regular home services. In 1995, about 6 per cent of those over 65

Table 19. **Health care for the elderly[1] in OECD countries**

Public expenditure as a per cent of GDP, 1997

	Health care for total population	Services for the elderly and disabled people
Norway	**6.7**	**3.1**
Australia	5.9	0.7
Austria	5.8	0.5
Belgium	7.8	0.4
Canada	6.3	..
Czech Republic	6.6	0.5
Denmark	6.7	3.1
Finland	5.7	1.6
France	7.4	0.7
Germany	8.1	0.8
Greece	5.0	0.3
Iceland	6.7	2.0
Ireland	5.3	0.4
Italy	5.7	0.2
Japan	5.7	0.3
Korea	2.7	0.2
Luxembourg	5.9	0.5
Mexico	1.6	0.0
Netherlands	6.2	0.5
New Zealand	6.3	0.0
Poland	4.8	0.3
Portugal	5.3	0.2
Spain	5.7	0.3
Sweden	7.2	3.9
Switzerland	7.3	0.3
Turkey	2.4	0.1
United Kingdom	5.7	0.6
United States	6.5	0.0
EU average[2]	6.7	0.7
OECD average[2]	6.1	0.3

1. Persons aged 65 and above.
2. Weighted averages. The OECD total excludes Hungary for both series and Canada for health care.

Source: OECD, Social expenditure database and OECD Secretariat.

and a quarter of those over 80 were in long-term institutional care and less than ½ per cent of those over 65 were in service housing. The share of over 65-year-olds in institutional care declined during the 1980s and 1990s, accompanied by the increase in home services, and this has contributed to reduce the operating costs of the system. Notwithstanding the trend, Norway still has more resources concentrated on institutional care, especially nursing homes, compared with other Scandinavian countries. In addition, the elderly are heavy users of hospital services. Those over 65 – 16 per cent of the population – use half of the hospital capacity; even though, over the last couple of decades, hospitals have managed to reduce substantially the average length of stay of the older patients and to shift responsibility for rehabilitation of the elderly to the municipalities. Thus, although the nursing homes are mainly used for long-term stays, the pressures on hospitals have led some to provide short-term institutional care as well. Yet, most nursing homes also provide short-term institutional care for cases of acute illness and for respite services. This raises issues regarding their appropriate role and functioning within the overall health care system, that the Ministry of Health and Social Affairs is currently examining.

Recent policy changes concerning care for the elderly

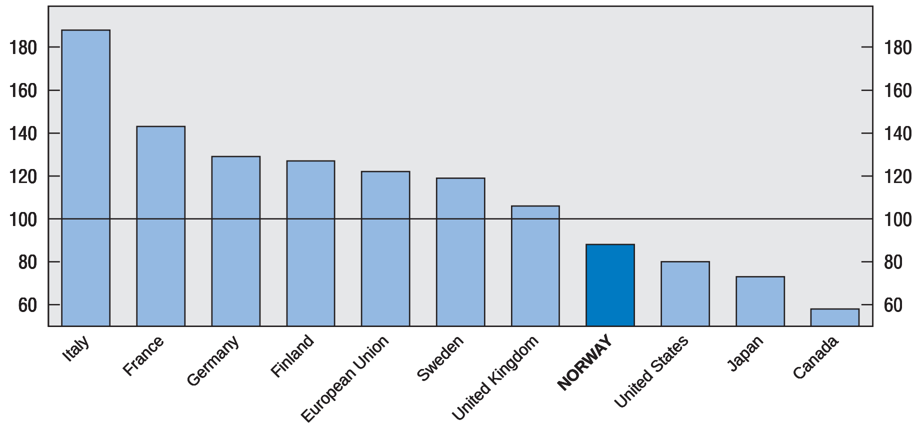
In 1997, Parliament adopted a four-year action plan, covering the years 1998-2001. The main aim was to ensure that the capacity of the local social and health care services keeps up with the increasing number of elderly people and ensure improving quality (the quality of care as measured by housing and institutions' standards and the number of qualified personnel – was not considered satisfactory). Goals include promoting the independence of individuals as long as possible, encouraging user participation in assessing needs and establishing uniform standards. Minimising costs of long-term care by enhancing co-operation between hospitals, primary health care and care services for the elderly has not been a focal point in the action plan. However, it is considered an important aim by the Ministry of Health and Social Affairs.

In the light of current use patterns and the low cost of services to the user, the financial burden of the care system could rise rapidly. There is an extensive use of some high cost services which require a better assessment of the best solutions for individuals. Furthermore, preventive measures described above will permit the elderly to live independently as long as possible and reduce these costs. While there are distinct advantages to having responsibility for some welfare services at different government levels, as this permits local circumstances to be taken into account, it encourages municipalities and counties to shift part of the burden onto each other by restricting supply. Finally, the low level of charges is likely to have boosted demand for public services.

Pension expenditure will more than double as a share of GDP

Norway starts from a better situation than most other OECD countries, with a below average share of public pension expenditure in GDP and substantial government assets (Figure 29).[142] However, NIS pension outlays as a share in GDP are projected to increase more than two-fold in the next 50 years, from a current level of 7.3 per cent to 17 per cent by 2050.[143] The total expenditure will actually

Figure 29. **Pension expenditure as a share of GDP in selected OECD countries**[1]
1997, OECD = 100



1. Differences in the tax treatment of pensions across countries are not taken into account. The OECD total excludes Hungary. Both the EU and the OECD are unweighted averages.

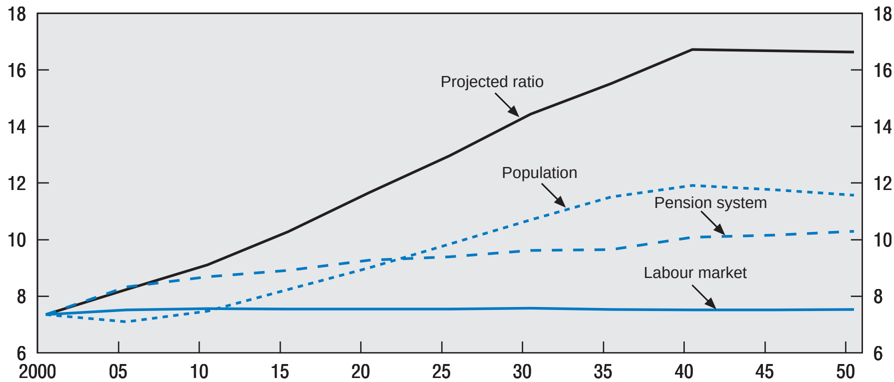
Source: OECD Social Expenditure database, 2000.

be higher, because the official calculations do not take into account the occupational pension guarantee of two thirds of previous earnings for public sector employees or the transfers for the early retirement scheme. Including them could increase pension outlays to just below 20 per cent of GDP by 2050.[144] When health care expenditure for the elderly are included, public expenditure for supporting the elderly, as a share of GDP, will be much higher in Norway than in most OECD countries. Calculations of the tax necessary to finance NIS pension expenditures and the early retirement scheme, suggest that the implicit tax rate will have to rise from a current 19 to 34 per cent of wages by 2050 if taxation of pension income is not taken into account. When it is (at approximately half the tax on wage income), the increase is from 17 to 29 per cent (Fredriksen, 1998).[145]

The projected increase in pension spending can be decomposed into three factors: population ageing, changes in the labour market and the pension system's parameters. Figure 30 shows the increase in pension expenditure as a share in GDP that would result if only one of these factors is allowed to change according to the assumptions underlying the projections.[146] Pension expenditure would increase to 11.6 per cent of GDP if the only influence were demographic. It would remain almost constant if only changes in employment rates implicit in the projections are taken into account. If population and labour market parameters

Figure 30. **Projected pension expenditure and its components**[1]

Per cent of GDP



1. The figure shows the projected time profile of pension expenditure as a share of GDP (projected ratio) and how this share would evolve if only population ageing occurs (population), employment and participation rates change (labour market) or average pensions with respect to productivity change (pension system), according to the assumptions implicit in the projections.

Source: Ministry of Finance and OECD Secretariat.

were kept constant, pension expenditures would increase to 10.3 per cent of GDP. Thus, it is the ageing of the population and the parameters of the public pension system itself, including the maturing of the system, that are the main factors behind the increase in pension expenditure. They represent, respectively, 54 and 43 per cent of the total increase.

The average old-age supplementary pension is projected to increase by almost 55 per cent because the supplementary (earnings-related) component of the NIS still has to mature and the cohort effect of low pensions will dwindle. The average supplementary pension is currently just above one basic amount. As new cohorts will retire over the next 50 years, the average supplementary pension will continue to increase, converging to just above two basic amounts. Moreover, the pensionable income, pension points and pension benefits are all indexed to the basic amount that is closely linked to wages.

These projections are subject to various uncertainties. Higher life expectancy (two to three more years) or a reduction of the fertility rate to the OECD average would increase the implicit tax rate by 1 and 2 percentage points respectively. Furthermore, the oil price assumption, which is crucial in the Norwegian case, is rather conservative, with an oil price slightly below US$20 per barrel (in 2000 prices) for 2003-50. The sensitivity for the productivity assumption may be relatively limited as pension benefits are closely linked to wages and hence productivity (a relatively low productivity growth rate of 1.3 per cent on average per year is assumed while the consensus estimate suggests 1.5 per cent). Phasing out early retirement through the AFP, not allowing people to take disability pensions instead and raising the official age of retirement to 70 would reduce the implicit tax burden by 7 percentage points, from 29 to 22 per cent. A reduction in the growth of the basic amount by 0.75 percentage point annually, relative to wage growth, would reduce the projected implicit tax increase by roughly the same magnitude. Increases in old-age care costs may be somewhat tamed by an increase in the self-help functionality of the elderly (Jacobzone *et al.*, 2000; Botten *et al.*, 2000).

Options for reform

Norway needs to implement reforms to meet the challenges of the ageing of the population in the coming decades. Without them, Norway will experience one of the sharpest increases in public expenses as a share of GDP resulting from ageing in the OECD. First of all, measures are urgently needed to prevent a further fall in the effective retirement age. Secondly, reforms within the current pension and care system should be envisaged. Finally, a more radical reform agenda could take advantage of the oil wealth and move towards funding of the pension system. Box 9 outlines the major reform options.

Reduce incentives for early retirement

To prevent a further fall in the effective retirement age, and eventually raise it, reforms of the disability pension scheme and the early retirement scheme are needed. The recent proposals of the Sandman Committee (described in Chapter II) should be implemented without delay to curb the rise in disability pensioners. Furthermore, the early retirement arrangements should be overhauled. While the official retirement age under the NIS has remained high in international comparison at 67, the AFP scheme provides strong incentives to retire early. The system should be put on an actuarially sound footing; this would imply an end to the AFP as it now stands. If it is considered desirable to allow for greater flexibility in the timing of retirement, then the current old-age pension arrangements could be extended to allow retirement before 67 but with retirement benefits for earlier retirement fully actuarially adjusted. The government should stop paying part of the early retirement benefits in the private sector and should ensure equal early-retirement schemes for the public and private sector. The "85-year-clause" in the public sector should also be reconsidered as there are no reasons for a more favourable pension scheme in the public sector. Furthermore, the tax system, which treats retirement income more favourably, reinforces the incentives to retire early, and should therefore be reformed. While reforms to

Box 9. Synopsis of options to reduce the fiscal impact of ageing

Remove incentives for early retirement

- Abolish pension accrual during early retirement for both the early retirement scheme (AFP) and old-age pensions. Put the early retirement scheme on an actuarially sound footing.
- Use the whole working career earnings to calculate the pensionable wage and average pension points instead of the best 20 years.
- Implement the proposals of the Sandman Committee concerning sickness benefits and disability pensions.
- Abolish incentives in the tax system to retire early.

Rein in pension benefits and introduce actuarial fairness in the pension system

- Index pension benefits to a combination of prices and wages rather than to wages alone. Effects on minimum pensions should be carefully considered.
- Index pension rights to the growth of the economy.
- Increase the number of years required to be entitled to a full pension.
- Adjust the supplementary pension percentage downwards.

Restructure the overall pension system

- Separate the minimum pension from the earnings-related part.
- Move to a system of only one earnings-related pension scheme. This system should have no ceiling on pension benefits.
- Consider the use of part of the Petroleum Fund to finance the pension system.
- Consider the introduction of a "virtual" defined-contribution arrangement, as in Sweden and Italy in the earning-related schemes.
- Consider the introduction of personal pension accounts.

Enhance the efficiency of the health care and non-health care system for the elderly

- Provide more information on current practices to reduce the wide quality and cost variation between municipalities.
- Review the current system of user charges in order to avoid situations where ceilings lead to a shift to more costly facilities.
- Improve the co-ordination of care provision within and between municipalities and reduce incentives for municipalities and counties to shift costs onto each other.
- Consider higher user charges on a broad basis and complement income-testing by charges on the estate.

Pursue structural reforms of labour and product markets and the public sector that would lift labour productivity

reduce early retirement will reduce pension expenditures and will have positive effects on labour supply and, therefore, on the tax base, they will only contain part of the rise in pension outlays as a share of GDP.

Reform options within the current framework

Reforms to be considered within the current NIS old-age pension system concern, first, the indexation of pension benefits. During the 1990s, many OECD countries removed wage indexing of pension benefits when overhauling their pension systems, resulting in lower future pension outlays. Pension benefits have, for instance, been indexed to prices (*e.g.* Italy, France and the United Kingdom), a combination of prices and wages (*e.g.* Finland) or to after-tax wages (*e.g.* Germany). Measures that would improve the actuarial fairness of the pension system should also be considered. This would include calculating average pension points on the entire work history of individuals instead of the best 20 years and the indexing of pension rights – as opposed to pension benefits – to the growth of the economy by indexing the G to mainland GDP (as in Italy).[147] The pension system is currently anchored to 40 contribution years for entitlement to a full pension. While it rewards later retirement than the official retirement age of 67, the actuarial adjustment is not complete. De-coupling the system from 40 years and introducing actuarial adjustment would reduce the disincentives to work beyond 67 years embedded in the pension system. Alternatively, increasing the number of years necessary for entitlement to a full pension from 40 to 42, while keeping the statutory age of retirement at 67, would also encourage later retirement. The supplementary pension percentage, currently at 42 per cent, could be adjusted downwards further.

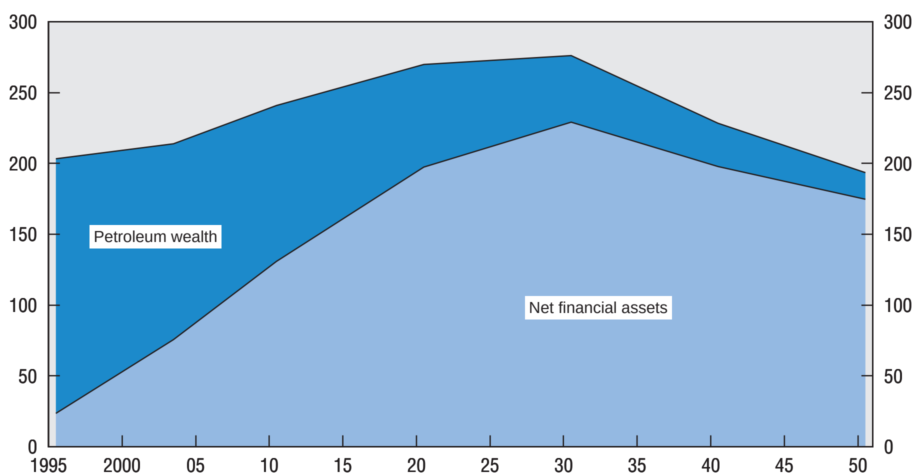
Furthermore, the current pension system provides unequal coverage. Occupational pension schemes cover only 50 per cent of the workforce and the public sector pension scheme, by guaranteeing a total pension of two thirds of the previous salary, is on average more generous than the schemes in the private sector. New legislation on private sector occupational schemes, which has come into force in 2001, will increase the coverage. However, this raises the question of the economic advantages of having two income-dependent pension schemes (the supplementary pension scheme within the NIS and the occupational schemes).

Although it is difficult to make judgements in the absence of information on wealth, many old-age households (mainly single people and older women) may live below the poverty threshold, although this will change as the current system matures. The income support and distributive role of the public pension system via the minimum pension could be separated from the earnings-related component to help address the problems of the poorer groups. In this manner, the pension system would become more transparent with two tiers: a redistributive tier in the form of minimum pensions and an earnings-related tier. The latter could be funded (see below). Finally, a third tier consisting of private personal pension accounts of a defined contribution nature could be introduced to top-up pension income on a voluntary basis. There are no strong reasons for the state to step in and encourage these private personal accounts (for example, by providing a tax shelter) and give away tax revenues when the pension system already guarantees a reasonable replacement rate.

The oil wealth could be used to switch to a funded pension system

As noted above, current pension arrangements will lead to substantial increases in spending. Without the possibility to use the assets of the Petroleum Fund, large increases in tax rates would have been required to maintain fiscal stability. But this possibility places Norway in a unique and enviable situation. Currently, the public sector has a large and rising net asset position once the Fund is taken into account (Figure 31). According to the 2001 draft budget paper, generational accounts suggest that the budget is in generational equilibrium and that no changes in current government outlays are needed to prevent a higher tax rate for coming generations. Due to the current double-digit budget surplus and the substantial assets in the Petroleum Fund there is, however, considerable political pressure to increase current spending. Earmarking part of the Government

Figure 31. **Public sector net wealth**
Per cent of GDP



Source: Ministry of Finance.

Petroleum Fund for future pension expenditures might help to contain these pressures. On the other hand, earmarking would also pre-empt alternative uses of the assets accumulated in the Fund and risk locking in social security entitlements.

More radical options for pension reform should also be considered. A first option is to move to a "virtual" defined-contribution arrangement, as in Sweden and Italy. Under this system, individuals accumulate "contributions" in fictive accounts over their working lives with the individual receiving an "annuity" based on the cumulated contributions on retirement. The Petroleum Fund could then be used to prefund this system. The Fund is, however, not sufficiently large to fund all pension liabilities. A second option is a mandatory defined-contribution system outside the public sector. Individuals would, in this case, hold individual accounts and be obliged to save a minimum amount of their income. In this case, the Petroleum Fund could be allocated to individual accounts on the basis of previous lifetime earnings. Such a funded pension system will be better guarded against unexpected demographic shocks. The transition to a funded system implies in general the need to "tax a generation twice", but the petroleum wealth puts Norway in a favourable position to implement such reforms. Saving through individual accounts would replace taxation for the pay-as-you-go system, which could well strengthen incentives to work, save and invest.

Options for improving care for the elderly

Population projections point to a sharp increase in the ratio of the very old (older than 80 years) to the total population and relative to the working age population (Figure 22). The ratio is expected to rise from 4.2 per cent of the total population (7.2 of the working-age population) to 7.8 (14.2) per cent in 2050. In the light of current use patterns and the low cost of services to the user, the financial burden of the care system could rise rapidly. There are several policy areas where the authorities could consider limiting cost increases:

- First, preventive measures that would permit the elderly to live independently as long as possible may need to be strengthened further.
- Second, there may be a need for a better assessment of the best solutions for individuals within the context of current extensive use of some high cost services. Some countries have set up geriatric assessment units (bringing together the elderly, their families, the family doctor and social workers) to better assess the needs of the elderly and the mix of services needed to keep them independent for as long as possible. Such measures are even more necessary where the elderly pay only a small share of the overall costs.
- Third, there should be a better consolidation of supply across municipalities. There are distinct advantages to having responsibility for some welfare services at different government levels as this permits local cir-

cumstances to be taken into account. However, where it encourages municipalities and counties to shift part of the burden onto each other by restricting supply, a better integration would reduce costs. At the same time, there may be economies of scale and scope, which can be obtained if nearby municipalities combine services for the elderly.

– Finally, consideration should be given to increased user charges on a broad basis for care and health services for the elderly. As it stands, only 3 per cent of the cost of home care services and 16 per cent of the cost of long-term institutional care are covered by user charges. Where higher user charges for long-term institutional care 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 egregious effects of pure asset testing such as the forced sale of dwellings.[148] While it is clearly the care needs of the elderly which should remain the key factor determining the timing of entry into long-term care, such measures could also encourage greater family support for the elderly to the degree they could eventually benefit from a larger inheritance. With prices for long-term care closer to their costs, there would also be increased scope for charging higher prices for home care. However, 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. For example, higher charges for home care for individuals on low incomes (and few assets) could quickly raise the overall cost of living independently to levels above the cost of entering long-term care. Thus increased charges may need to be resource tested, thus limiting them to higher income groups.

The recommendations of the 1995 Survey

Ageing and public finance in the long run were earlier analysed in detail in the 1995 *Survey*. Saving a growing portion of oil and gas revenues was seen as the best option to cope with ageing in the coming decades. The authorities indeed managed to save a considerable part of the petroleum revenues in the Government Petroleum Fund. On the other hand, the authorities failed to halt the downward trend in the effective retirement age through a rise in disability pensions and a broadening of early retirement schemes. In the case of early retirement, it even contributed to this trend by its partial financing of the scheme and by allowing a favourable tax treatment. The 1995 *Survey* also recommended reducing the cost of the system by creating incentives for deferred retirement and by reducing the favourable tax treatment of pension benefits. No progress was, however, made. On the contrary, the relatively strong rise in the minimum pension even increased pension spending. Finally, the 1995 *Survey* recommended considering to rely to a greater extent on occupational pension schemes (while the current *Survey* recommends a move to a system of only one earnings-related pension scheme). The authorities have continued to stress the crucial role of the National Insurance Scheme and its analysis of long-term developments has remained focussed on this public scheme. Nevertheless, recent changes to the occupational pension schemes are likely to lead to a greater role of the occupational schemes in the future.

Notes

1. The acceleration was substantially moderated by a strong drop in the exports of ships and oil platforms which fell 62 per cent in the first three quarters of 2000 compared to a year earlier, reducing overall export growth by 1.9 percentage points over the same period.
2. In March 1999, the Norwegian government decided to double the cut in oil production from April onwards, to 200 000 barrels per day compared to the baseline production projection, as a contribution to the efforts of oil producing countries to raise the oil price which had fallen below US$10 per barrel in December 1998. With the oil price picking up strongly, the restriction was lowered to 100 000 barrels per day in April 2000 and was completely lifted three months later. Given the technical problems at new and existing fields, the production cap may not have been fully binding.
3. The observed time lag between changes in the oil price and in petroleum investments has been two to three years since the mid-1980s (Statistics Norway, 2000).
4. In the first three quarters of 2000, exports of manufactured goods (which exclude ships and oil platforms) were 3.4 per cent higher than a year earlier compared with a rise of 2.1 per cent in 1999 based on trade statistics.
5. The competitiveness indicator based on unit labour costs deteriorated by 0.6 per cent in 2000, after a deterioration of 2.6 per cent per year in the five previous years (indicator based on the *Economic Outlook* No. 68, December 2000).
6. Recorded foreign-tourist nights in Norwegian hotels were down 5 per cent in the first eleven months of 2000 compared with a year earlier.
7. Based on trade statistics. The rise was stronger on a national accounts basis as refined petroleum products are included.
8. The negative impact of declining oil investment on import volume growth is estimated at 1.2 percentage points.
9. Electricity production increased by 19 per cent in the first ten months of 2000 compared with a year earlier. As a consequence, imports of electricity dropped by 84 per cent while exports rose by 138 per cent and net exports reached a record surplus.
10. Consumption dropped 0.2 per cent in the third quarter compared with the previous quarter; in October-November, consumption of commodities was 1.3 per cent below the average level in the third quarter.
11. Other possible explanations for the stability of the saving ratio are demographic developments that currently push up savings and the low short run liquidity of the rise in financial assets as they mainly consist of capital gains on shares and interest income on insurance claims.

12. There is a Ricardian effect if household saving decisions are influenced by the development of government net lending and net assets. For instance, a rise in government assets may lead households to anticipate lower taxes in the future, leading to a drop in the current saving ratio. Empirically, there is little support for Ricardian effects in Norway.
13. The number is corrected for imports. The import content of oil investment is around a third. If not corrected for imports, the impact on GDP growth was 1.3 percentage points.
14. However, Statistics Norway revised downwards the first half of 2000 in the meantime.
15. The labour force participation rate is defined as the total labour force as a percentage of the population aged 16 to 64 years.
16. In 1999, those outside the labour force were 26.7 per cent of the working-age population (defined as aged 16 to 74 years), 2 percentage points less than in 1987. Disabled, retired and early retired persons were 15.6 per cent of the working-age population (up 3.7 percentage points), students were 6.8 per cent (up 0.1 percentage point) and others outside the labour force were only 4.4 per cent (down 5.7 percentage points).
17. On average in 2000, 18 400 vacancies were registered compared to 17 800 and 18 600 in 1999 and 1998, respectively. Influenced by registration changes, new vacancies rose to 49 200 from 42 200 in 1999 and 39 300 in 1998. But at the same time, temporary lay-offs have risen in the shipbuilding industry due to the drop in investment in the petroleum sector.
18. To shorten waiting lists without increasing labour market bottlenecks, Parliament allocated NOK 1 billion for sending patients abroad for operations.
19. Based on the compensation rate in the private sector on a national account basis. Based on the definitions and calculations of the *Technical Reporting Committee on Income Settlements*, the wage growth was down ¾ percentage point from 1999 and around 2 percentage points from 1998.

    In April, the social partners reached an agreement on a three-year wage contract but the trade union members voted this down. Renegotiations led to a two-year wage contract and stronger labour cost rises.

    The wage agreement in the manufacturing sector will reduce wage dispersion as not only the general wage increase is in kroner and not as a per cent of the existing wage, but also because of an additional wage increase for low-paid employees. Wages of all employees were raised by NOK 1.5 per hour in May 2000 while those between 87 and 92 per cent of the average wage rate and those with a wage level less than 87 per cent received an additional wage increase of NOK 1.5 and NOK 2 per hour, respectively. They will receive the same increment in 2001 above the general wage rise of NOK 1 per hour.
20. There will be local negotiations in 2001 but only issues specific to the enterprise can be discussed while trade unions do not have the right to strike if an agreement cannot be reached.
21. Underlying inflation, which excludes changes in indirect taxes and electricity prices and which is the key inflation indicator used by Norges Bank, increased by ¾ percentage point to 3 per cent.
22. The price rise occurred despite the drop in the prices of clothing, communication services and audio-visual equipment.
23. Indirect tax increases pushed up consumer price inflation by ¼ percentage point.

24. Another committee, the *Stabel Committee*, is working on a more technical review of the present negotiation system and may propose changes to the institutional set-up in early 2001.
25. Already in 1999, steps in this direction were taken as labour market organisations 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. The LO is the trade union confederation mainly representing blue-collar workers in the manufacturing sector and the public sector; the NHO is the employers' federation which is characterised by an over-representation of the manufacturing sector.
26. In the view of Norges Bank, a deflationary recession may undermine confidence in the krone and monetary policy must therefore not contribute to such a development.
27. The interest rate of ten year Norwegian government bonds was 6.2 per cent on average in 2000, 0.7 percentage point higher than in 1999. The interest rate differential with the euro area was 0.9 percentage point, unchanged from 1999.
28. Total credit, which includes credit provided by foreign sources, showed an acceleration from 7.4 per cent in December 1999 to 10.7 per cent in September 2000.
29. This implies a difference between the highest and lowest rate of 6 per cent. This difference is smaller than the rate difference of the US dollar (26 per cent), the pound sterling (12 per cent) and the Swedish krone (10 per cent) against the euro.
30. Akram found, however, evidence that the currency impact is stronger when the oil price is falling.
31. Real central government consumption growth is, however, estimated at 3 per cent, 1 percentage point stronger than in the draft budget, while a smaller drop in central government investment is currently estimated, at 1.6 instead of 3.7 per cent.
32. The strong rise in subsidies, estimated at 17.4 per cent (national accounts basis), is temporary and due to the debt relief for the Gardermoen Railroad company.
33. Revenues from petroleum activities rose by NOK 109 billion to NOK 184 billion while outlays on petroleum activities dropped by NOK 7 billion to NOK 23 billion. These central government account numbers are on a cash basis. On a national accounts basis (accrual basis), revenues rose by around NOK 40 billion more.
34. Ireland had the second-highest surplus at 5.6 per cent of GDP.
35. The estimated deficit (NOK 10.4 billion) is much bigger than expected in October 1999 (NOK 3.2 billion). This is mainly due to the revision of the 1999 deficit, to NOK 9.3 billion from NOK 3.4 billion.
36. Consumption is estimated to have increased by 2.6 per cent in volume terms, 1.4 percentage points more than projected in October 1999; investment by 4 per cent, an upward revision of 4 per cent; employment by 1.5 per cent, an upward revision of 0.8 per cent.
37. It includes the capital in the Government Petroleum Fund, the foreign reserves held by the central bank and direct investment in petroleum activities and other state enterprises.
38. It is an underestimate as the asset assessment of state enterprises and the SDFI is based on the value at the time of the investment and not on market value. For

instance, the SDFI, which consists of the Norwegian state's stake in oil fields, was valued at around 30 per cent of GDP already before the recent oil price rise.

39. The relatively strong rise in the government expenditure deflator explains that, despite a relatively moderate real increase in expenditure, a relatively large increase in taxes is needed to secure a neutral fiscal stance. The deflator of underlying government spending is projected to rise by 4.3 per cent, 0.7 percentage point stronger than the mainland GDP deflator. Furthermore, special expenditure items excluded from the underlying expenditure indicator are expected to be stronger in 2001.

40. Underlying expenditures are non-oil primary central government outlays excluding unemployment benefits and special factors to be taken into account to get a proper indicator of the impact of the budget on demand and output. Main special factors taken into account for the underlying growth in 2001 are the subsidies stemming from the debt relief for the Gardermoen Railroad company in 2000, the reduction in transfers to local government offset by increased local tax rates and the replacement of the child tax credit by higher child benefits in 2001.

41. The main reason for the smaller increase is the drop in subsidies from the temporarily high level in 1999 and the drop in transfers to local government (offset by a higher share in income tax revenues).

42. Measures to reduce the loopholes in the split model of the dual income tax system also aim at reducing income differences.

43. In 2000, four licenses for third-generation mobile telephone networks (UMTS networks) were provided. They were not auctioned but given on the basis of competitive tendering ("beauty contest"). Revenues for these UMTS licenses are therefore limited in comparison with countries that held auctions. On the other hand, the "beauty contest", the licence obligations and the low charges may have positive effects on the roll-out speed and the geographical coverage. An operator of a network has to pay NOK 100 million for a license and NOK 20 million as annual frequency charge. Total UMTS revenues will be NOK 480 million in 2001 (0.04 per cent of mainland GDP).

44. Moreover, there are the effects of the lagged adjustment of gas prices to oil prices and of the increase in petroleum production.

45. On an administrative basis, the government surplus increases by 2 percentage points to 12¾ per cent of GDP. The main reason for the difference between the two surplus indicators is that the former is on a cash basis and the latter on an accrual basis in combination with the lagged payment of oil taxes and the volatile oil price development. On an administrative basis, the central government surplus is projected to increase substantially further to NOK 192 billion.

46. Local government consumption is projected to increase by 2.7 per cent, employment by 1.8 per cent while investment is projected to remain unchanged.

47. These OECD Secretariat projections are the same as those published in the OECD *Economic Outlook* No. 68 (December 2000). Currencies are assumed to remain at the level of their rates on 30 October 2000, implying an exchange of NOK 7.9 per euro.

48. Such calculations are of course also very sensitive to the other underlying assumptions while there can be a substantial base year dependency.

49. International comparisons of income per capita are hampered by various measurement problems: activity, especially services, may not be measured consistently across countries; the income levels in any specific year will be influenced by the business

cycle; and results are sensitive to the choice of the benchmark year for computing purchasing power parities (Scarpetta *et al.*, 2000).

50. It was 14 per cent higher than in the euro area.
51. A disadvantage of the use of consumption per head as an indicator is its static nature. Low consumption due to high investments has a positive impact on the capital stock and should therefore lead to higher consumption in the future.
52. However, the hours worked per person of working-age were 13 per cent higher than in the euro area. In 1998, it was 21 hours, 24 per cent less than in the United States. Hours worked in Norway are not only higher than in the euro area due to the higher participation rate but also due to the lower unemployment rate. Similarly to income per capita, international comparisons of hours worked are hampered by measurement problems.
53. The Norwegian trend output growth per capita was 2.9 per cent per year for total GDP.
54. The other major labour market problem concerns unemployment of immigrants. In August 2000, registered unemployment of first-generation immigrants was 8.1 per cent, almost three times as high as for the entire population but relatively low compared with many other European countries. One of the main objectives of the Public Employment Service (PES) is to bring unemployment of immigrants down. It primarily focuses on placement assistance and encouragement of job-seeking activities. One out of five temporary job placements by the PES concerned an immigrant in 2000. Furthermore, it has developed special courses and training for immigrants, while literacy programmes for female immigrants have been stepped up. However, the reliability of these data is doubtful; in October 2000, it became known that the PES had inflated total placement numbers by around 25 per cent in the past (Nergaard and Lismoen, 2000).
55. According to the Sandman Committee, the rise in sick leave is not caused by the entrance of marginal groups into the labour market in reaction to the improving labour market situation.
56. Sick self-employed get a sickness benefit of 65 per cent of pensionable income from the 15th day of sickness onwards for a maximum period of 250 working days. By voluntarily paying a higher NIS contribution rate, they can receive a benefit of 65 per cent from the first day of sickness onwards or 100 per cent from the 15th day of sickness onwards. This option probably leads to adverse selection.
57. In the EU, eleven of the fifteen member countries have a waiting period, typically of three days, before a sickness benefit is paid, while all except Germany and Luxembourg have statutory benefit rates of less than 100 per cent (European Commission, 2000*b*). In the 1990s, major cuts in sickness benefit schemes were made in Sweden and the Netherlands. In Sweden, the benefit rate was reduced from 100 to 80 per cent and one waiting day was introduced. In the Netherlands, the sick-leave insurance scheme was almost fully privatised while the sickness benefit rate was brought down to 70 per cent, but a top-up option exists. On the other hand, in Germany, a benefit rate of 100 per cent was restored in 1999, reversing the 1996 decision to cut the rate to 80 per cent.
58. It also proposed to increase the possibility of employers and the NIS to purchase health services in order to promote a more rapid treatment of employees. Furthermore, it was proposed to extend self-certification by sick employees and to increase subsidies to firms for sickness prevention.
59. The committee proposed shielding rules: employees suffering from conditions that increase their absence probability would keep full pay for absence beyond 12 days per calendar year while employers would be exempted for additional sickness pay

obligations for this group. Moreover, it was proposed to extend the special insurance scheme for small businesses.

60. For employers, the increase in costs due to the payment of 20 per cent of the sickness payment in the NIS period is broadly offset by the drop in costs due to the reduction in sickness payments during the employer's period.

61. After the submission of a report of a government-appointed committee, the report is circulated for comment which normally takes three to six months. Thereafter, the government will reflect on the matter and may come up with proposals. The number of committees has increased recently. The previous government appointed 51 committees in a two-year period, twice as many as the two preceding governments in a five-year period.

62. Moreover, caring at home instead of using publicly funded childcare means a substantial saving on fees. Fees for publicly funded childcare range from 6 to 11 per cent of gross income (Statistics Norway, 2000*b*).

63. Employees who have worked at least three years, of which two years for the current employer, have the right to a three-year full or part-time unpaid study leave to participate in work-related education and training leading to a certified qualification. Employees cannot claim study leave if it disrupts production plans and personnel planning.

64. This excludes support through the State Educational Loan Fund and additional educational outlays of local government compensated by grants from the central government.

65. Furthermore, it raises the question to what extent a less restrictive immigration policy could reduce tensions in the labour market. The government relaxed the immigration policy concerning non-EEA countries somewhat in May 2000. (There were already no restrictions for immigration from other EEA countries.) Seasonal work is now allowed throughout the year (seasonal permits were previously limited to the period May to October) and the minimum education requirement for work permits was lowered.

66. The private agencies are, however, not allowed to charge employees for their services.

67. The regulation concerning hiring-out of personnel from enterprises not established to hire out (manufacturing enterprises) was also liberalised. Such hiring-out needs prior consultation of employee representatives and is, without an agreement with the trade unions, only allowed for up to 10 per cent of the workforce of the hiring-in firm for a maximum period of one year.

68. Private agencies already have a competitive disadvantage due to the VAT on services while fee-based services of the PES are VAT-exempt.

69. Recent research indicates that the EEA Agreement, the agreement resulting from the Uruguay Round and the EFTA agreement that limits subsidies to fisheries have increased welfare in Norway, measured by the increase in consumption and leisure, by 0.8 per cent (Fæhn and Holmøy, 2000).

70. The overall responsibility for structural policy lies with the Ministry of Finance while policy formulation in different sectors is the responsibility of the relevant ministries (Støstad, 2000).

71. The OECD regulation rankings describe the situation in 1998. Measures taken since then have reduced the regulation indicator somewhat for Norway, as for many other OECD countries. Furthermore, the country rankings should be interpreted with cau-

tion, especially when absolute differences are small, since many of the underlying indicators lack precision.

72. The SDFI (oil production) was valued at NOK 325 billion, followed by Telenor (telecommunication) at NOK 120 billion, Statoil (oil production) at NOK 118 billion, stakes in listed enterprises at NOK 98 billion, local government electricity enterprises at NOK 92 billion and Statkraft (electricity) at NOK 72 billion.

73. For Finland, where there are also regional policy concerns although less pronounced than in Norway, narrowly defined regional aid amounted to ¾ per cent of GDP, while broadly defined regional support totalled 4¼ per cent of GDP in 1999 (OECD, 2000*m*).

74. The Producer Support Estimate (PSE), the indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers rose 2 percentage points in 1999 to 69 per cent of gross farm receipts after a rise of 3 percentage points in 1998. Due to this rise, the PSE was 3 percentage points above the rate in 1986-88.

75. For instance, the animal headage payment rates decrease with the number of animals up to a certain size limit, beyond which no payment is made. This capping may, however, keep the farm size below the most cost-effective one.

76. Support to the agricultural sector is normally based on the yearly Agricultural Agreement between farmers' unions and the government. In 2000, however, no agreement was reached and, based on the government's initial offer, Parliament decided to cut budgetary support by NOK 400 million (3.5 per cent), to reduce target prices by NOK 900 million (5 per cent), partly offset by sector-specific tax cuts.

77. The OECD's Directorate for Food, Agriculture and Fisheries is currently analysing the various aspects of multifunctionality.

78. Moreover, for this licensing round, drilling commitments were relaxed for part of the blocks offered.

79. In September 2000, the European Commission started formal infringement procedures against France, Portugal and Luxembourg for not yet implementing the Gas Directive.

80. At the end of 1999, the proposed merger of Telenor and the fully state-owned telecommunications company Telia collapsed.

81. Private investors got a discount of two kroner per share and one bonus share for every ten, provided they held them for a year and bought fewer than 25 000 shares. The beneficial effect of the discount could be a broader group investing in shares but, on the other hand, it could lead to pressure on the authorities to treat Telenor favourably *vis-à-vis* other telecommunication enterprises.

82. The local loop ("the last mile") is the physical circuit – mostly copper wires but increasingly fibre optic cables – which links the home or office to the local switch or to an equivalent facility of the telecommunications operator.

83. In July 2000, to detect any abuses of a dominant position, the EFTA (European Free Trade Association) Surveillance Authority sent a request for information on access to the local loop to the incumbent telecommunication operator in Norway and other EFTA countries. The inquiry is being conducted in close co-operation with the European Commission. Unbundled access to the local loop means allowing other operators to use the incumbents' local loop and thus enabling them to install new technologies such as broadband multimedia and high-speed Internet services.

84. Production of hydropower is subject to time-limited concessions granted by the Ministry of Petroleum and Energy. Private companies are granted concessions of no longer

than 60 years, although they may renew the concession for another 50 years at a price negotiated with the authorities. Publicly-owned companies, however, are granted indefinite concessions.

85. In 2000, the government provided a major equity injection into the company of NOK 3.85 billion. Nevertheless, the company has applied for a further major equity injection.

86. It is already active in fish farming in Chile and Canada.

87. Furthermore, in October 2000, the ESA started to enquire about the current licensing of fish farms, which may not be in line with EEA rules as it may discriminate against firms from other EEA countries.

88. To prevent vertical integration, pharmacies can, however, not be owned by those prescribing or producing pharmaceuticals.

89. Nordea (previously the Nordic Baltic Holding) is the holding of the Swedish/Finnish MeritaNordbanken and the Danish bank Unidanmark. The Swedish state has a stake of 18 per cent and intends to divest.

90. The original takeover bid of MeritaNordbanken was NOK 42 per share while Kreditkassen was taken over for NOK 49 per share.

91. Apart from this takeover, M&A activity was subdued in 2000 compared with 1999. In June 2000, the savings banks alliance Sparebanken 1-gruppen got approval to take over the financial group Vår Gruppen. In August 2000, Finansbanken got approval to buy the Danish bank Den Københavnske Bank AS.

92. The draft 2001 budget includes a reduction of the state stake to a third in 2001 but this does not necessarily mean that the state stake will be reduced in 2001. The 1998, 1999 and 2000 budgets already included this reduction with the government deciding later in the budget year to defer it to the following year.

93. In the 2002 national wage negotiations, trade union representatives are likely to demand that all employees have an occupational pension scheme. At the moment, only a third of the private sector employees are covered (see Chapter III).

94. A zero rate will be introduced for civil aviation.

95. Technically, the tax credit previously received to compensate for the 28 per cent corporate tax paid has been reduced by about 40 per cent. Up to this point, Norway was the only country in the OECD that had adopted a pure form of universal dual income taxation. The government intends to replace the dividend tax in 2002 by a new system of corporate taxation. The aim is to introduce a new tax system with: *i*) a more equitable distribution, *ii*) a more equal tax treatment of different investments, financial structure and businesses, *iii*) a more efficient capital taxation and *iv*) a less progressive tax structure to abolish the split model. Designing such a system without negative effects on foreign capital flows will not be an easy task.

96. The incentives to retain profit may be even stronger than before the 1992 tax reform due to the RISK method which avoids double taxation on retained profits.

97. The after-tax income distribution has widened somewhat during the 1990s but has remained narrow by international comparison (OECD, 2000*n*). The recorded widening is at least partly a statistical artefact (Fjærli and Aaberge, 1999).

98. The risk-premium was lowered from 5 to 4 per cent while new assets will be valued at tax value (previously there was the choice between tax value and accounting value).

99. Due to the high level of part-time work among women in the public sector, the share in hours worked is, at 25 per cent, clearly lower.

100. Due to the drop in military personnel of 20 per cent, total central government employment increased less, by 4 per cent in the period 1989-99.

101. In the early 1990s, based on rather tentative estimates, a government-appointed committee indicated that an overall efficiency gain of around a quarter could be realised in the public sector (NOU, 1991).

102. Moreover, some state enterprises were fully or partly privatised.

103. Apart from improving the performance of the public sector, the scheme was introduced to make the central government more competitive on the labour market and to increase manager mobility between the government and private sector. In 1990, top managers were already removed from the state pay scale and individual contracts were introduced.

104. In March 2000, the European Commission proposed to start a limited emission trading scheme by 2005 within the EU to enable "learning-by-doing" prior to the implementation of the Kyoto Protocol's emission trading scheme from 2008 onwards.

105. The previous government stepped down after this parliamentary decision.

106. These projections are from Statistics Norway (Statistics Norway, 1999). Higher fertility rates than in many other OECD countries explain the less rapid ageing. These projections present a more optimistic development regarding the old-age dependency ratio than the UN projections (UN, 1999), which assume much lower net migration flows and a larger increase in longevity – 2.4 and 1 year more for women and men, respectively, by 2050. Given the fact that the literature suggests an increase of one year per decade, there is some risk that longevity is underestimated in the projections of Statistics Norway.

107. With the exception of Iceland and Switzerland, and Sweden in the case of women.

108. Calculations of the expected age of retirement of a worker aged 50 or 60, show an important drop from 64 to 62.7 years and from 65.8 to 64.7 years, respectively during the decade. Blöndal and Scarpetta (1998) calculated the effective age of retirement to be 63.8 in 1995 for men, down from 66.5 in 1970 and 64.6 in 1990; for women it was 62 in 1995, down from 66.2 in 1970 and 63 in 1990. For both genders, the average age at retirement is nevertheless significantly above the OECD and European average.

109. Moreover, it provides rehabilitation benefits, occupational injury benefits, benefits to single parents, cash benefits in case of sickness, maternity, adoption, unemployment, medical benefits in case of sickness and maternity, and funeral grants (Ministry of Health and Social Affairs, 2000).

110. The remainder corresponds to health care and sickness benefits. There are also central and local government health outlays which are not part of the NIS health expenses.

111. Recently, G has risen approximately in line with wages, while earlier it rose by less.

112. In May 2000 the basic amount was set at NOK 49 092 – *i.e.* around 17 per cent of the average production worker wage or full-time employee's annual earnings.

113. The earnings-related pension is not on top of the minimum pension but on top of the basic amount (1 G). Pensioners receive a supplement if the basic amount plus the earnings related pension is less than the minimum pension. About 87 per cent of all

pensioners receive a supplementary pension but only 60 per cent receive one that gives a pension above the minimum pension.

114. There are five regional zones according to geographical situation and the level of economic development with the following associated contribution rates: 14.1, 10.6, 6.4, 5.1 and 0 per cent. Enterprises with branches in various zones are liable to pay the employer's contribution at the highest rate irrespective of where the employee resides.

115. Moreover, contributions cannot exceed 25 per cent of income above 45 per cent of the basic amount.

116. The same holds for persons with a very low income (less than 45 per cent of G).

117. The two changes were: *i)* only income up to 6 G instead of up to 8 is credited at full rate as pensionable income in the supplementary pension scheme, with one third of income between 6 G and 12 G (instead of 8 to 12 G); and *ii)* the coefficient to calculate the supplementary pension was reduced from 45 to 42 per cent. This was accompanied by a measure that has increased spending. Three pension points were introduced in the supplementary pension scheme for persons who are taking unpaid care of children below 7 years of age and of disabled, sick and elderly persons at home.

118. In 1998, the full basic amount was reduced from one basic amount to 75 per cent of the basic amount if the pensioner's spouse has a yearly income exceeding 2 G.

119. However, an official committee – the *Moland Committee* – reported on radical changes to the pension system (NOU, 1998). It described four possible models: *i)* to continue the present policy entailing that pensions are financed on a pay-as-you-go basis, while government financial savings are accumulated in a general purpose state fund, the State Petroleum Fund; *ii)* to establish a state pension fund; *iii)* to set up a contribution-based private pension fund; *iv)* to set up private pension funds with free individual investment choice. It concluded that the pension commitments should be funded partly or completely instead of continuing the current system of pay-as-you-go financing, but the Committee did not indicate its preference for one of the three alternative options presented. There has not been a government follow-up to the report. The same holds for the report of the *Olsen Committee* (NOU, 1998*b*) which recommended to make the existing early-retirement scheme less generous or to integrate the early-retirement scheme into the old-age pension scheme with somewhat lower pensions in the case of early retirement.

120. While occupational pensions are not compulsory for local government employees, collective agreements between the social partners have made them so in practice. They are compulsory for central government employees.

121. Deductibility of the contribution for employers, no wealth taxation on assets, no taxation of fund income, and pension payments taxed as pension income.

122. The vesting period is reduced from a maximum of 3 years to 1 year since January 2001, with a transition period of 2 years for the various schemes to adopt to the change. In the private sector pension rights are transferred into a separate individual contract upon leaving the firm before the age of retirement. Profits on the pension capital exceeding the guaranteed rate are allocated to them. If the individual later joins a firm with an occupational pension plan, the firm may take such prior rights into account. The capital must then be transferred to the firm. A person who quits working in the public sector and takes a job in the private sector, will retain the earned part of the pension from the public occupational pension system. This pension will be indexed to G. If he joins a private firm with an occupational scheme, he will start earning a new

pension (with the possibility of ending up with a total consisting of a full private and a reduced public pension).

123. New legislation to extend tax advantages to include defined contribution schemes was recently approved by the Parliament.

124. New legislation has established a ceiling of 70 per cent for income exceeding 6 G. However, existing schemes are below this ceiling.

125. Partial disability entails a proportional reduction in disability benefits.

126. Conditions such as back pain or depression were governed by different criteria for a period.

127. For example, for a 29 year old person starting to work as a public employee (*e.g.* a policeman) and continuing until 57, the sum of age and contribution years (57 + 28) is 85 and he can retire at 57.

128. The AFP minimum age was set at 66 from January 1989. However, it was gradually reduced in the 1990s to 65 in January 1990, to 64 in October 1994, to 63 in October 1997 and to 62 from March 1998 onwards.

129. Moreover, the AFP leads to lower social security receipts for the government.

130. Employers participating in the AFP programme pay contributions according to the number of employees in the company. The contributions are calculated as fixed rates according to weekly work hours – NOK 75 per month for 4 to 19 hours, NOK 110 for 20 to 29 hours and NOK 150 for 30 or more hours. The Fund works in a pay-as-you-go manner and its only obligation is to ensure that everyone who has been already granted a pension receives it until reaching 67. AFP "funds" represent less than 0.1 per cent of GDP and are mainly deposited in bank accounts and invested in state/municipality guaranteed obligations. The Norwegian Public Service Pension Fund does not have any funds to cover expenses. They are covered by government subsidies. The current system, by de-linking early retirement in individual firms from the cost to the firms creates a "moral hazard" problem, encouraging firms to retire workers who have low productivity relative to their wages.

131. The accrual rates measure the proportion of the gain/loss in pension wealth of working an extra year over the pension wealth of retiring immediately.

132. Both pension wealth and tax are corrected for the discounted value of contributions.

133. Norway is by no means exceptional in this respect. See Blöndal and Scarpetta (1998) for a review on how pension wealth varies with age in selected OECD countries.

134. In most other European countries very few people are in the labour force after the age of 65.

135. As benefits are calculated by assessing pension years and pension points as if retiring at 67, the pension wealth loss of working an extra year is equal to an annual pension benefit and thus the implicit tax is equal to the replacement rate.

136. In the private sector an occupational pension cannot be taken out before the age of 67.

137. In the Norwegian situation, with social security outlays fully integrated in the government budget a low contribution rate of old-age pensioners cannot be justified on insurance principles. In a pure social security insurance system, low and even zero contributions of pensioners to the old-age pension scheme are justified on insurance principles but, at the same time, there are grounds for a higher contribution to the sickness cost insurance scheme by the elderly.

138. Several studies have shown that the tax system introduces strong incentives to retire early (Hernaes *et al.*, 2000).

139. The existence of family economies of scale makes the equivalence scale lower than one.

140. The Norwegian government has recently decided to propose to Parliament the transfer of responsibility for specialised health care – including hospitals – from the county to the state level in 2002.

141. There are a number of forms of care. As most of the municipalities are small, with half of the 435 municipalities having less than 5 000 inhabitants, many of them have organised so called "combined institutions" including both residential and nursing home units. Residential and nursing homes are used mainly for long-term stay, but nursing homes are also used for short-term accommodation for rehabilitation and respite care. In recent years, service housing, offering independent living combined with certain care services available on site, and as such considered as an intermediate solution between institutional care and ordinary retirement flats, has progressively substituted for the traditional residential homes and to some extent also nursing homes. Residential and nursing homes have still remained the dominant service. Home help and home nursing help are the most important home based community services, but most municipalities also provide other services like meals-on-wheels, counseling, handy man, alarm and respite services. In addition, there are approximately 300 service centres, which are open to all retirees in a particular municipality. These centres function partly as a service institution and partly as a meeting and activity place. Support for informal care (*e.g.* families or neighbours) was introduced in 1986, but only a few individuals have so far been included in the programme, and most often they are home carers for disabled children.

142. Only Australia, Canada, Iceland, Ireland, Japan, New Zealand, Portugal and the United States have lower ratios.

143. Projections from the National Insurance administration and the Ministry of Finance.

144. The cost of the occupational pension will probably increase as the number of people receiving an occupational pension will increase, although more people will become entitled to a full supplementary pension. Furthermore, costs of the early retirement scheme will continue to increase as more people will retire earlier.

145. Statistics Norway provides these projections, which include the cost of early retirement but not the cost of the occupational pensions' guarantee. It uses a more complex model (MOSART) to calculate the implicit contribution rate as the ratio of pension expenditure over the tax base.

146. The other two factors are kept constant at their value in 2000.

147. Pension benefits are benefits received once the individual has retired. Pension rights are the build-up of rights to future benefits while in active life.

148. While asset testing is highly contentious in many countries, many very old people do have assets, which are often left to their children because their consumption needs are limited and their assets remain largely untouched in their last years of life. Because of this, part of the transfers/subsidies which the elderly receive in the form of long-term care, benefit their children. Simple administrative arrangements allowing the state to recoup part of the cost of care at the time of inheritance would avoid some of the difficult political aspects. Nonetheless, attention needs to be paid to the possible effects of such measures on savings behaviour over the longer term.

Glossary

AFP	*Avtale Festet Pensjonsordning* (early retirement scheme)
ALMP	Active Labour Market Programme
CO_2	Carbon dioxide
DnB	Den norske Bank
ECB	European Central Bank
ECU	European Currency Unit
EEA	European Economic Area
EFTA	European Free Trade Association
ESA	EFTA Surveillance Authority
EU	European Union
G	"Basic amount" for social insurance and income tax purposes
GBIF	Government Bank Investment Fund
GDP	Gross Domestic Product
GFU	Gas negotiation committee
ICT	Information and Communication Technology
LO	Norwegian Confederation of Trade Unions
M&A	Merger and Acquisition
NCA	Norwegian Competition Authority
NHO	Confederation of Norwegian Business and Industry (employers organisation)
NIS	National Insurance Scheme
NOK	Norwegian krone
NTC	Non-Trade Concerns
NVE	Norwegian Water Resources and Energy Directorate
PC	Personal Computer
PES	Public Employment Service
PSE	Producer Support Estimate
SDFI	State Direct Financial Interest (the direct participation of the state in oil and gas fields)
TFP	Total Factor Productivity
UMTS	Universal Mobile Telephone Systems (third generation mobile telephone systems)
VAT	Value Added Tax

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Annex I

Norwegian regulatory reform in the 1980s and 1990s

Telecommunications

Deregulation of the telecommunications sector started in 1988 with the liberalisation of the market for telecommunications terminal equipment. In 1993, the mobile phone market was liberalised and two operators, among which the incumbent, entered the market. Also in 1993, the market for fixed-line telephone services was liberalised somewhat. In 1994, the public telecommunication enterprise was transformed into the fully state-owned stock company *Telenor*. The Norwegian Post and Telecommunication Authority (PT), established in 1987, was strengthened to regulate the incumbent and to decide on the terms of third-party access to its infrastructure. It regulates the voice telephone pricing of the incumbent by a price cap model. For 1998-2000, price rises were set to be 3 per cent per year less than total consumer price inflation. In 1998, the remaining exclusive rights of Telenor were removed and additional providers were authorised to offer telephone services. In 1999, competition between the incumbent and other providers was stepped up by the introduction of carrier preselection (transmission of calls without having to dial the selected provider prefix) and operator portability (allowing telephone users to keep their old phone number if they switch to a new provider). However, in 1998 and 1999 Parliament voted down a proposal to create a separate corporation for Telenor's infrastructure. In 2000, a tender was held for four UMTS mobile phone networks, with the decision based on comparative tendering ("beauty contest"). The operators only pay NOK 100 million per license plus an annual frequency charge of NOK 20 million. The latest reform step was the partial privatisation of Telenor in December 2000. In anticipation of the privatisation, responsibility for managing the Norwegian state's shareholding in Telenor was transferred from the Ministry of Transport and Communications to the Ministry of Trade and Industry to eliminate potential frictions between the role of the government as supervisor and owner.

Electricity

Norway has the highest electricity consumption per capita in the world reflecting the large hydropower resource endowments – it is the largest hydropower producer in Europe – substantial energy-intensive industries (aluminium, ferro-alloys, pulp and paper) and the cold climate. Its electricity market is among the most market-driven in Europe although public involvement is still strong through substantial public ownership, regulation of the non-competitive segments of the industry and regulation of the construction of hydropower plants. In 1991, following England and Wales in 1990, Norway deregulated its electricity sector. The move was motivated by concerns about over-investment in the sector leading to substantial efficiency losses, estimated at 2.5 to 3 per cent of GDP in 1991 (Bye and Halvorsen, 1999). In contrast to liberalisation elsewhere in Europe, deregulation was done in one step.

Production and electricity prices became fully determined by market mechanisms, customers at all levels were allowed to choose their supplier, enterprises owning the national grid or distribution grids had to allow third-party access, with transmission tariffs regulated by the Norwegian Water Resources and Energy Directorate (NVE). The state electricity authority was split into a production company (Statkraft) and a network company for the high-voltage national grid (Statnett). Local government companies were also required to unbundle generation and distribution. Even though this only concerned the separation of accounts, municipal utilities are increasingly turned into joint-stock companies with separate subsidiaries for different business segments. Originally, consumers had to pay a hefty fee to switch supplier (NOK 4 000) but this fee was abolished in 1998 while switching by small consumers became possible due to the introduction of load profiling (use of average consumption pattern to determine individual consumption in between metered measurements). Currently, consumers receive an invoice, which specifies the electricity charge, the transmission charge and taxes, each making up around a third. For most consumers, electricity charges are based on average spot-market prices. An electricity market for physical and financial contracts was created and later merged with the Swedish, Finnish and Danish markets in Nord Pool. In 1999, more than a fifth of total consumption of electric power in the Nordic countries was sold in Nord Pool's physical market (Statnett, 2000). In the financial market, Nord Pool has a market share of around a quarter for standardised contracts while it has other-party positions of about 80 per cent of the standardised financial trade in the Nordic countries. Originally, the transmission tariffs set by NVE were based on coverage of operating costs plus a moderate rate of return but this did not produce the desired cost efficiency improvement in distribution utilities. The NVE moved therefore to price caps in 1997, with tariffs 2 to 3 per cent per year below consumer price inflation in 1997-2001. However, to prevent excessive profits, a maximum return is set at 15 per cent while a minimum rate of return of 2 per cent is guaranteed.

Post

Deregulation of the postal sector started relatively recently in Norway and is less far-reaching than, for instance, in neighbouring Sweden. In 1996, Norway Post's legal status was changed from a government department to a fully state-owned limited liability company and its reserved services were limited to closed, addressed domestic letters weighing up to 350 grams and an upper price limit of five times the basic tax for a domestic letter of 20 grams, around 50 per cent of its business. In addition to profits from ordinary business activities and from its monopoly, Norway Post receives a remuneration from the state to maintain certain unprofitable services throughout the country. Prices for domestic priority letters that are part of the reserved services are to be approved by the Ministry of Transport and Communication. The introduction of competition in 1997 was accompanied by making the Norwegian Post and Telecommunication Authority (PT) the sectoral regulator. Norway Post is subject to an extensive set of regulations laid down in its licence, for instance on the quality of its universal services. Furthermore, it is required to hold separate accounts for its competitive and monopoly services, while cross-subsidisation of competitive services is explicitly prohibited. In 2000, the European Commission proposed to open up the market further in 2003 by reducing the reserved area for the incumbent to letters up to 50 grams with a postage up to 2.5 times that of a standard letter (European Commission, 2000*c*). In the Union, this would increase the contestable share of the market from 3 per cent to 23 per cent.

The deregulation has led to some entry by private firms in the letter delivery market but Norway Post remains by far the dominant firm. Transport couriers have become tough competitors on parcels while courier companies take a considerable part of the market for value-added services in the major cities. The opening up of the market to competition has strengthened the need for Norway Post to cut costs. It plans to reduce the number of post offices by 60 per cent over the next three years while a substantial number of post office counters will be set up in supermarkets and petrol stations.

Transport

In 1987, the road transport of goods was liberalised and, as a result, there are no longer entry barriers. There are many operators – the number of transport licenses is not limited – and competition is strong. Liberalisation was much weaker for regular bus transport services. The number of bus licenses is limited by county or district, based on evaluated transport need and the expected consequences for existing public transport. In 1994, competitive tendering became possible to grant bus licenses but has not been widely used up to now; in the few cases where it was used, it has contributed to a reduction in subsidies and an improvement in efficiency. The number of taxi licenses is also limited by area. Since May 2000, the NCA no longer sets maximum taxi prices in cities with two or more taxi centrals. This has led to some increase in prices.

In 1990, to improve economic management of the railway sector, separate accounting within the fully state-owned railway company NSB was introduced for rolling stock, track and other infrastructure. In 1996, this was followed by the transfer of most tracks from NSB to the state-owned Norwegian National Rail Administration (*Jernbaneverket*), with NSB paying for the track use. In contrast with neighbouring Sweden, NSB has in principal kept its legal monopoly to supply national rail transportation services. However, the government intends to open up central parts of the national network for international freight.

In 1994, domestic air traffic was liberalised for domestic companies and companies from other EEA countries. There is no price regulation on competitive routes. The Ministry of Transport and Communication holds competitive tenders for domestic routes that are not profitable for airlines without a subsidy. The airline that offers to fly the route at the lowest level of subsidisation on price and quantity terms specified by the ministry is given sole access to the route for a three-year period. The opening of a new main airport in Oslo in 1998 increased the availability of slots and led to new services by existing airlines. It also led to the entry of a new low-price airline which, however, went bankrupt within a year. With only two main domestic airlines, competition on domestic routes is limited and the NCA is therefore following the market carefully.

Annex II

Pension benefits provided by the National Insurance Scheme

A *basic amount* is paid to all residents with at least three years' contributions between the age of 16 and 66. A full basic amount requires a minimum residence (insurance) period of 40 years; shorter periods reduce the basic amount proportionally. A full basic amount is one G for a single person. However, it is only 75 per cent of the basic amount if the pensioner's spouse receives a pension or has a yearly income above 2 G.

People with earnings exceeding the basic amount for any three years during their working life, receive an earnings-related pension (the supplementary pension). Those pensioners who have no or only a small supplementary pension are entitled to a *special supplement* from the National Insurance Scheme (NIS). The basic amount and the maximum special supplement together form the *minimum pension*. A full special supplement is paid, if the insurance period is at least 40 years and it is reduced proportionally for shorter periods. Supplementary pensions received are deducted from the maximum special supplement.

The special supplement is 79.3 per cent of the basic amount (*i.e.* about 13.5 per cent of average wages) for single pensioners or married pensioners with a spouse entitled to a NIS pension as well. This amount is doubled for a pensioner with a dependent spouse 60 years or older. The special supplement is 74 per cent of the basic amount for pensioners whose spouse is entitled to a supplementary pension, higher than the special supplement. Yet, the sum of the total supplementary pension and the special supplement of both spouses shall not be lower than twice the special supplement, *i.e.* 158.7 per cent of the G.

The *supplementary pension* scheme was introduced in 1967 aimed at complementing the basic amount, mitigating the sharp fall in retirement income due to the low basic amount, by linking pension benefits to previous wages. About 87 per cent of all pensioners receive a supplementary pension but only 60 per cent are above the minimum pension. A person is entitled to a supplementary pension if his/her annual income exceeded the average basic amount or G for any three years after 1966. The amount of the supplementary pension depends on the number of pension earning years and the yearly pension points. Pension points are computed for each calendar year based on pensionable wage multiples of G minus one. The pensionable wage is the sum of all income up to 6 G plus one third of income between 6 and 12 G. Income exceeding 12 G is disregarded. The maximum pensionable wage is 8 G but the maximum pension points, which can be credited for any single year is thus 7 G.[1] The average pension points of the person's best twenty income years multiplied by the supplementary pension percentage, 42 per cent, and the proportion of pension-earning years under or over 40 years, provides the supplementary pension in terms of basic amounts.[2, 3]

Those born before 1937 can receive a full supplementary pension, as if based on 40 years of contributions, if they have contributed to the NIS for a long enough period.[4] But these transitional provisions only apply to annual income up to 5 G. Persons who are taking unpaid care of children under 7 years of age and of disabled, sick and elderly persons at home are credited under the supplementary pension scheme up to 3 pension points, equivalent to someone earning 4 G.

Spouse supplement: a pensioner supporting a spouse who is not a pensioner is entitled to an income-tested supplement up to 50 per cent of the basic amount. Incomes above the minimum pension for couples plus 25 per cent of the basic amount are withdrawn at a rate of 50 per cent.

Child supplement: a pensioner is entitled to a supplement of up to 30 per cent of G for each dependent child younger than 18 years. This supplement is income tested at the same rate as the spouse supplement, but the threshold before the supplement is reduced is the minimum pension for couples plus 25 per cent of the basic amount for each child.

Survivors' benefits: a surviving spouse is entitled to a pension that amounts to 1 G plus 55 per cent of the supplementary pension of the deceased. When reaching 67, survivors transfer to their own old-age pension, and receive their personally acquired supplementary pension or 55 per cent of the aggregated supplementary pension of the survivor and the deceased person's supplementary pension, if this is more favourable. Survivors' pension benefits are means tested with a withdrawal rate of 40 per cent for income above 1 G. However, the minimum pension is always granted.

There is no specific housing allowance within the NIS old-age pension scheme but there are housing benefits which can be granted via the local social assistance offices in each municipality.

Notes

1. The maximum pension points before 1992 were 8.33 because income up to 8 G was credited at full rate and income between 8 and 12 G at one third until then.
2. If the person concerned has earned pension points for less than twenty years, the average of all pension point figures credited is used.
3. The supplementary pension percentage is 45 per cent for pension points earned on income prior to 1992. Thus, a person who retires at the end of 2000 with 40 pension earning years and 7 average pension points, will get a supplementary pension calculated as: 7 x G x (42% x (9/40) + 45% (31/40)). Thirty one is the number of years before 1992.
4. People born from 1898 to 1917 are entitled to a full supplementary pension if they have contributed to the NIS for at least 20 years. People born from 1918 to 1936 need to have contributed to the NIS each year from 1967 to the year of their 69th birthday.

Annex III

Calendar of main economic events

2000

January

Enskilda Securities, the investment banking arm of the Swedish SEB bank and Norway's Orkla Finans, a subsidiary of the Norwegian holding company Orkla ASA, agree to merge to create the region's largest investment bank.

Norway's cargo terminals, border crossings and seaports are blocked by lorries to protest against the rise in the diesel tax.

February

DnB – the largest Norwegian bank and 60 per cent owned by the state – acquires a 10 per cent stake in Kreditkassen (Christiania Bank) in which the state has a 35 per cent stake.

On the eve of the wage negotiations, Prime Minister Kjell Magne Bondevik decides not to put forward reform proposals concerning the early-retirement scheme given the strong opposition of the main trade union confederation.

March

The minority government of the three centre parties steps down after Parliament repeals its decision to allow only the construction of gas-fired power stations that have very low emissions of CO_2.

Jens Stoltenberg (Labour Party) becomes Prime Minister of a new minority government.

Norges Bank switches its policy bias from neutral to tightening.

April

After lowering its key interest rates by 2.5 percentage points between January and September 1999, Norges Bank raises its rates by 0.25 percentage point. The overnight deposit and lending rates stand after the increase at 5.75 and 7.75 per cent, respectively.

Norske Skog buys the pulp and paper division of New Zealand's Fletcher Challenge. At NOK 21 billion, the takeover is the biggest Norwegian acquisition abroad ever.

According to Statistics Norway, the childcare cash benefits scheme has reduced labour supply by around 4 000 man-years.

Norway's postal service announces a 60 per cent reduction in the number of post offices over the next three years while 1 100 post office counters will be set up in supermarkets, petrol stations and public offices.

Almost two-thirds of the members of the Norwegian Confederation of Trade Unions (LO) vote against the wage settlement for 2000-02 agreed by the LO and the Confederation of Norwegian Business and Industry (NHO). The LO starts strikes.

The government presents the results of the 16th licensing round for the Norwegian Continental Shelf; 13 oil companies receive a licence offer while the State Direct Financial Interest (SDFI) receives a stake of 15 per cent, compared to 27 per cent in the previous round.

May

The LO and the NHO reach a new two-year wage agreement, with a stronger wage increase and a more rapid introduction of the fifth week of holidays. The adjusted wage deal is approved by LO members.

June

According to the Norwegian authorities, the average retirement age for municipal employees has declined to 56 years, which is 11 years earlier than the normal age of retirement. The reason for this is a rapid increase in the number of people receiving a disability pension.

The Holden Committee – including representatives from the social partners and government – presents its report which considers it desirable to continue with the current three-pillar macroeconomic policy framework, the so-called Solidarity Alternative. Incomes policy co-operation and centralised wage negotiations are considered the best way to safeguard high employment levels and a stable economic development.

Telia, Sweden's largest telecommunication company acquires Norway's second-largest mobile phone operator NetCom for NOK 22.6 billion.

July

The Norwegian government decides to lift the restriction on oil production. Already in April 2000, the restraint was lowered from 200 000 to 100 000 barrels per day compared with the baseline production projection.

September

Norges Bank raises its key interest rates by 0.25 percentage point. After four interest rate hikes between April and September 2000, the overnight deposit and lending rates stand at 7 and 9 per cent, respectively. The monetary policy bias moves from tightening to neutral.

A government-appointed committee, the Sandman Committee, proposes to introduce economic incentives into the sickness benefit scheme to reduce sick leave. In addition, the committee proposes changes to the disability pension scheme; the main one being the introduction of temporary disability pensions, which would be automatically reviewed after three to four years.

October

One year after their first bid, MeritaNordbanken, Scandinavia's largest bank, acquires Christiania Bank for NOK 27 billion in a closed bidding round.

The government releases the 2001 draft budget. The stance of fiscal policy in 2001 is projected to be neutral with spending increases offset by tax hikes.

November

The government party and the centre parties reach an agreement on the 2001 Budget. The VAT rate will be increased by 1 percentage point and the VAT rate on food will be halved, while the supplementary payroll tax, proposed in the draft budget, will not be implemented. The agreed budget has a neutral stance.

Marine researchers propose to reduce catch quotas for Norwegian Arctic cod by a third in the Barents Sea and along the Norwegian coast as far south as Stadt.

The Office of the Auditor General publishes a report showing that 17 out of 32 government-approved petroleum investment projects carried out in the North Sea during the 1990s had budget overruns of more than 20 per cent. The total budget overruns for the 32 projects amount to NOK 58 billion.

December

In an initial public offering (IPO), the fully state-owned telecommunications operator Telenor sells shares corresponding to 21 per cent of its capital to private investors. The issue price is NOK 42, clearly below the price range of NOK 50 to 68 announced in November. On the first day of trading, the share price drops 8½ per cent to NOK 38.5, valuing the company at NOK 69.5 billion.

The government proposes to float 10 to 25 per cent of Statoil on the stock market in 2001.

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