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Enhancing the Effectiveness
of Public Spending
in Norway

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Wim Suyker**

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by
Isabelle Joumard and Wim Suyker

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ABSTRACT/RÉSUMÉ**Enhancing the Effectiveness of public spending in Norway**

Public spending is very high in Norway, partly reflecting an extensive coverage of the welfare system and ambitious regional development objectives. Moreover, several institutional features contribute to dampening the cost-effectiveness of many public-spending programmes. Abundant oil revenues have so far mitigated strains on public finance. However, coping with the depletion of oil resources and the fiscal consequences of ageing would require to increase the cost-effectiveness of many public spending programmes, while leaving some room to cut the high tax-to-GDP ratio. This paper identifies the main sources of inefficiencies and suggests policy options. These include: supplementing the existing deficit rule by an expenditure rule; increasing flexibility in public sector wages and job tenure; reforming the funding system of local governments; raising the contestability of public service provision; intensifying the use of price signals and improving incentives to reduce the excessive use of social insurance schemes.

JEL codes: E62, D61, H11, H40, H61.

Keywords: Public expenditure, public sector efficiency, fiscal federalism, budget systems, fiscal policy, Norway, public management.

Améliorer l'efficacité des dépenses publiques en Norvège

Les dépenses publiques sont très élevées en Norvège, reflétant en partie une large couverture du système de protection sociale et d'ambitieux objectifs de développement régional. En outre, certaines dispositions institutionnelles ne favorisent pas l'efficacité-coût de nombreux programmes de dépenses publiques. Les abondantes recettes pétrolières ont limité jusqu'à présent les tensions sur ces dépenses. Cependant, pour faire face à l'épuisement des ressources pétrolières et aux conséquences du vieillissement de la population, il faudrait améliorer l'efficacité-coût de plusieurs programmes de dépenses, tout en laissant une certaine marge de manœuvre à la réduction du taux de prélèvement obligatoire qui est actuellement d'un niveau élevé. Ce document de travail identifie les principales sources d'inefficacité et propose des solutions pour y remédier. Il s'agit en particulier d'introduire une règle budgétaire sur les dépenses publiques pour compléter celle en vigueur sur le déficit budgétaire ; accroître la flexibilité des rémunérations et du statut des employés du secteur public ; réformer le système de financement des collectivités locales; renforcer les mécanismes de marché dans l'offre de service public ; recourir davantage aux signaux de prix ; et améliorer les incitations afin de réduire les recours excessifs aux dispositifs d'assurance sociale.

Classification JEL: E62, D61, H11, H40, H61.

Mots-clé: Dépenses publiques, efficacité du service public, fédéralisme fiscal, système budgétaire, politique fiscale, Norvège, gestion publique.

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ENHANCING THE EFFECTIVENESS OF PUBLIC SPENDING IN NORWAY¹

By Isabelle Joumard and Wim Suyker

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

2. This paper identifies policy options to make government spending more cost-effective. The first section reviews the economic and social context shaping public spending in the recent past, the resulting level and structure of public spending viewed in an international context, and the forces shaping future developments. The second section presents the institutional settings within which public spending decisions are taken at both the central and local government level, and how this affects individual behaviour. More specifically, it assesses the budget process, the principles of public management, the distribution of responsibilities across levels of government and the use of market mechanisms for providing publicly-funded services. The aim is to identify the key challenges which need to be addressed. As far as possible, this paper considers some core public spending programmes to illustrate the issues at stake, in particular education, health, care for the elderly, and social benefits. The final section provides conclusions and policy recommendations.

1. The first author is a member of the Economics Department, the second one was, at the time of writing, working on the Norwegian Desk of the Economics Department and has joined the CPB Netherlands Bureau for Economic Policy Analysis. This paper was originally produced for the OECD Economic Survey of Norway, which was published in September 2002 under the authority of the Economic and Development Review Committee. The authors, who are members of the Economics Department, would like thank the Norwegian authorities for the information and assistance provided; and are indebted to Paul Atkinson, Andrew Dean, Jorgen Elmeskov, Mike Feiner, Carl Gjersem, Philip Hemmings, Peter Hoeller and Val Koromzay for valuable comments and drafting suggestions; to Isabelle Duong and Chantal Nicq for statistical assistance and Nathalie Macle for secretarial skills.

Forces shaping public spending developments

Ambitious regional development objectives...

3. A key objective of the Norwegian authorities has been to maintain a decentralised settlement pattern, raising the cost of providing high quality merit goods to every citizen. To retain households in remote areas and to attract others, the central government imposes on each municipality a relatively demanding set of regulations and standards for the provision of core public services, in particular for primary education, health care and care for the elderly. The quality and coverage of public services in the northern and the smallest municipalities are even above average, despite the higher costs of these services in such areas. This is underpinned by the system of local government funding which offsets differences in income and cost levels across jurisdictions, combined with specific grants for remote areas. Individuals and employers residing in these areas also benefit from several tax reliefs. No comprehensive estimate of the costs of regional policy is currently available but they are likely to amount to several percentage points of GDP.² Public administration, for instance, accounts for almost half of total employment in the northern part of Norway (Finnmark and the northern part of Troms county) compared with 32 per cent in the economy overall. Despite this, net migration outflows from rural regions have persisted.

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

4. Considerable increases in the general coverage and quality of public services have also played an important role. Local governments saw employment growing annually by 2.1 per cent between 1988 and 1998, with demographic developments accounting for less than a quarter of this growth (Table 1, panel B). This was most evident in care for the elderly, health care and non-primary education. Indeed, demographic pressures for increased care for the elderly and health care services have been partly compensated by a smaller number of children in the education system and lower family allowances. Price developments also contributed to the steady rise in public spending, reflecting the high labour intensity in the production of these services and the almost complete indexation of social transfers to wages.

5. While in many European countries slower growth during the 1990s triggered some adjustment in the welfare system to speed up fiscal consolidation, Norway has continued to benefit from the oil windfall. It has even extended its safety net to cushion slowdowns in mainland economic activity. Early retirement schemes were introduced in the late 1980s and gradually expanded thereafter while disability schemes have served as a quasi-permanent exit route from the labour market. This has created an asymmetry in spending behaviour over the cycle. Social security payments have tended to increase during economic slowdowns but have not fully adjusted downwards when the economy has recovered (Figure 1, panel B). As a share of mainland GDP, Norway's public outlays are the highest in the OECD (Figure 1, panel C). Disability, sickness and family cash benefits as a share of GDP are all very high in international comparison (Table 2). As a share of total GDP, including off-shore activity, the public spending to GDP ratio is close to the euro area average, although much higher than in the United States (Box 1).

2. In Finland where regional policy is less ambitious, regional aid amounted to 4¼ per cent of GDP in 2000 (OECD 2002a). In Norway, a technical committee is expected to deliver an estimate of regional aid by the end of 2002.

Table 1. Population projections and impact on the demand for public services

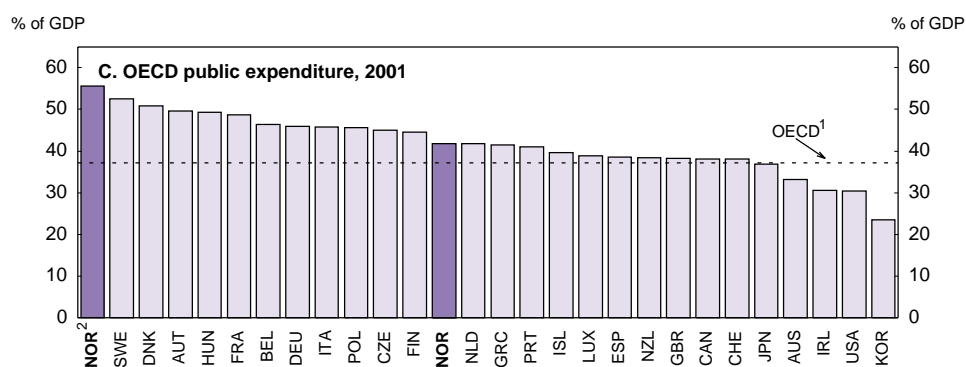
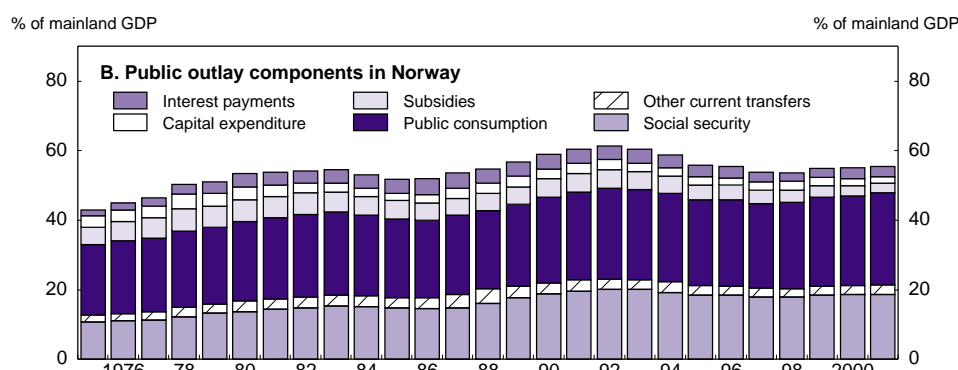
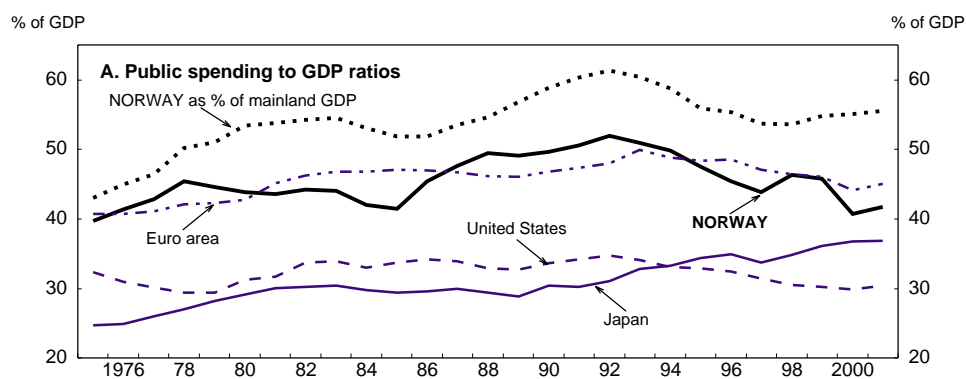
Population projections						
Age	1999 level (thousands)	Changes (annual growth rates)				
		1980-99	1999-2010	2010-20	2020-30	
0-15	947	-0.1	-0.1	-0.3	0.4	
16-19	213	-0.9	1.7	-0.5	-0.4	
20-66	270	0.7	0.7	0.2	0.0	
67 and above	617	0.9	0.0	2.6	1.9	
<i>of which:</i>						
67-79	427	0.3	-0.4	3.7	1.0	
80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

Employment developments in local government ¹ reflecting only demographic changes, <i>i.e.</i> assuming constant coverage and quality of the services provided (annual growth rates)						
	1998 level (million hours worked)	1988-98		1998-2010	2010-20	2020-30
		Observed change	Calculated growth rate			
Primary schools	95.5	0.3	0.5	0.5	-0.6	0.4
Secondary schools	49.4	1.3	-2.2	1.4	-0.5	-0.4
Other education	17.2	4.4	-0.5	0.8	-0.6	0.1
Hospitals	85.0	1.6	0.5	0.5	0.9	0.9
Kindergartens	48.3	7.3	1.6	-0.7	0.2	0.4
Care for elderly people	138.5	3.6	1.3	0.7	0.9	2.4
Mental health care	23.6	1.5	0.5	0.5	0.4	0.4
Other health and social services	39.3	4.4	1.0	0.4	0.8	1.5
Other municipal services	110.2	0.5	0.5	0.5	0.4	1.1
Total	607.0	2.1	0.5	0.5	0.4	1.1

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

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

Figure 1. Public spending in international perspective



1. Weighted average.
 2. Norway as a percentage of mainland GDP.
 Source: OECD (2002b), *OECD Economic Outlook*, No. 71, June 2002, finalised in April 2002.

Table 2. **Major current government outlays: an international comparison**
1999,¹ per cent of GDP

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

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

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

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

Box 1. Measuring the size of the Norwegian public sector

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

- The taxation of social transfers, together with the extent to which countries provide social or economic assistance via tax expenditure, rather than direct government spending, may significantly blur international comparisons (Adema, 2000 and 2001). As with other Nordic countries, Norway's social transfers are taxed, increasing the public sector ratio: 17 per cent of gross social cash benefits were clawed-back through the tax system in 1997, compared with less than 5 per cent in Japan, the United Kingdom and the United States.
- The sizeable Norwegian offshore petroleum sector — almost a quarter of total GDP — creates a specific measurement problem. According to the new fiscal rule, the authorities aim to save the net factor income from the petroleum sector and to spend only the real returns from the Petroleum Fund. In this context, it is more relevant to measure the size of the public sector as a percentage of mainland GDP, which excludes factor income from the petroleum sector.* The additional advantage is that this ratio is less volatile as it is not influenced by the strongly fluctuating oil price. Both indicators are shown in Figure 1 and Table 2 as is the practice of the Norwegian authorities.

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

Pressures on public spending are strengthening

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

7. In the long term, as in most other OECD countries, population ageing will be significant and exert strong upward pressures on public spending. Starting from a rather favourable position in 2000, public pensions are projected to increase by about 13 percentage points of GDP between 2000 and 2050 on the basis of current benefit rules, one of the steepest increases in the OECD. Norway has, however, built up

financial reserves in the Government Petroleum Fund to preserve an equitable share of the present petroleum revenues for future generations.³ Nevertheless, the Fund is not sufficiently large to fund all pension liabilities while the ageing of the population will also result in higher spending, in particular on elderly and health care (Table 1).

Public spending management

The budget process has improved...

8. Fiscal rules anchor the annual budget process and discipline policy makers. The current fiscal rule, proposed in March 2001 by the previous government and approved by Parliament shortly thereafter, sets the central-government non-oil structural deficit equal to the expected real return on the Petroleum Fund and will lead to an expansionary fiscal policy in the coming years given the rise in Petroleum Fund assets. Within the constraints set by the fiscal rule, the annual budget process is highly political. This is so partly because, in most cases, government coalition parties only agree on broad principles when forming a government and political priorities are set during the budget process, which come on top of proposals for new initiatives by the various spending departments.⁴ Moreover, governments in Norway rarely have a parliamentary majority and therefore have to find support from other parties in Parliament for their budget proposal. The ensuing compromises can lead to additional spending.⁵ Indeed, in the past five years spending overruns increased real spending growth by ½ percentage point per year compared with the draft budget.

9. In recent years, the main budgetary reform was the switch in 1997 to a “top-down” approach for the central government budget. As a result, following a proposal by its Finance Committee, Parliament first decides on the income side of the budget and sets ceilings for 22 expenditure groups corresponding to the departmental structure. Those ceilings cannot be changed thereafter but, based on proposals of the relevant parliamentary committee, Parliament can reallocate outlays within the expenditure groups when it decides on the various chapters of the budget. This new procedural rule has improved prioritisation of expenditure and has provided local governments with earlier information about their revenues and duties.⁶ Another commendable change to the budget process concerns the reduction in the number of budget lines, improving the possibility for managers and agencies to reach budget targets in the most effective way. For instance, Parliament no longer separates personnel and other running expenses.

3. In the long-term scenario, public sector net wealth (*i.e.* the sum of assets in the Petroleum Fund and the value of estimated petroleum reserves) is stable at 261 per cent of mainland GDP during the current decade before falling to 226 per cent in 2050.

4. This budget process runs from January to October when the budget proposal is sent to Parliament. In January, the spending departments provide expenditure estimates for the coming year based on unchanged policy and propose new policy initiatives. During their March three-day budget conference, the cabinet agrees on preliminary expenditure ceilings for the departments and endorses a separate frame for new policy initiatives. In the budget conferences of May, the cabinet agrees on final expenditure ceilings, while in the budget conference of August, a decision is taken on the new policy initiatives and on tax changes.

5. See also Persson and Tabellini (2002).

6. In 2001, a committee of Parliamentarians and a representative of the Ministry of Finance evaluated the switch to the top-down approach and came to a positive assessment.

10. In May, the Minister of Local Government and Regional Development sends a proposal on local government financial matters concerning the coming budget year to Parliament, which votes on it shortly thereafter.⁷ Normally, local governments' level of revenue proposed in the national budget of October is the same as that proposed in May. If tax revenues in the current year have changed as a result of unforeseen macroeconomic developments, this is usually offset by an adjustment in the local government share in taxes or in the level of block grants. This approach to some extent avoids the situation in many other countries where the balanced budget rule for local governments leads to pro-cyclical policies.⁸ Concerning local governments, the quality of their budget process is also enhanced by the consultation process between central and local governments.⁹

... but lacks a medium-term perspective

11. The Norwegian budget papers, which are sent to Parliament in early October, contain commendable analysis on some aspects of long-term budgetary developments. Such a long-term perspective is especially needed in the case of Norway with its falling petroleum revenues in the coming decades and sharply rising pension costs. In contrast to most OECD countries, generational accounts have been presented since 1995 (Annex I). The change in the generational balance from the previous year provides an assessment of the impact of measures announced in the budget. Nonetheless, generational accounting is very sensitive to key assumptions and the confidence interval around the results is substantial. Even so, the fiscal authorities consider it as a valuable pedagogic tool with intuitive appeal also to the general public. While informative on the short and long run, the medium-term perspective of the budget papers is underdeveloped. The focus on annual budgeting may lead to short-sighted decisions and does not provide information on the consequences for the tax burden in the medium term.

12. Furthermore, cash accounting may lead to a misleading picture of commitments, since payments can be accelerated or deferred. Moreover, it does not provide sufficient information on the actual repercussions of current policy making. A committee is currently analysing the pros and cons of a switch to accrual accounting and will present its recommendations before the end of 2002. In addition, there is insufficient transparency concerning the cost of regional policy as the regional dimension influences almost all spending programmes, in many cases in an opaque way, and no estimate of the total cost is provided. In other respects, however, the budget papers are relatively transparent. For example, off-budget expenditures are limited and adequate information is provided on loan guarantees.¹⁰ Results achieved in the previous year are reported in the departmental annexes of the annual draft budget, but this information only plays a minor role in the budgetary deliberations of the government and Parliament. Since the 1999 budget, tax expenditures are presented in the budget papers, but parliamentary discussion on tax expenditure has been limited up to now, even though it represents 1¾ per cent of mainland GDP.

7. Many Parliamentarians have a background in local councils and are lobbied by local government representatives at all stages of the budget process.

8. If a local government does not restore a balanced budget within two years, it will come under central government supervision. Supervision is frequent. In 2001, 80 local governments were under supervision while the local government sector has consistently shown a deficit since 1995.

9. Since 2000, there is a consultation process at the political level between key departments of the central government and local government representatives. Four meetings per year are held, which have the primary goal of establishing a mutual understanding of the current situation. However, the central-government representatives do not provide confidential information on the central government budget.

10. The gains of the Norwegian National Lottery that are transferred to sporting, cultural and research bodies is the main off-budget item, but with its allocation controlled by the Cultural Affairs Committee of the Storting. In 2001, the transfer amounted to NOK 2.6 billion (equivalent to ¼ per cent of mainland GDP).

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

13. With a view to improving public spending outcomes, the authorities have gradually increased flexibility in budgeting and management and have heightened the emphasis on user-orientation for some public agencies. Since the mid-1980s, more than 50 public bodies have been given broader managerial autonomy. The “letters of allocation” introduced in 1996 — as part of a formalised dialogue between agencies and the relevant ministry — define their performance targets, the maximum budget appropriation at their disposal, and reporting requirements on actual performance. Giving the managers of these public bodies greater autonomy and flexibility in their day-to-day operations — in particular in choosing the most efficient mix of inputs to produce predetermined outputs — offers scope for efficiency gains. However, the one-year perspective of the budgetary process does not support an outcome focus, in particular as public entities are entitled to carry over only 5 per cent of unused appropriations for operating expenses to the next budgeting year — a much lower share than in a number of other OECD countries.¹¹ This gives an incentive to spend the authorised amount so as to reduce the probability of a cut in resources the following year. The system is, though, much more flexible for investment outlays as they can be carried over for several years.

14. As in many other OECD countries, measuring public sector outcomes remains the Achilles heel of the results-oriented management approach. Most public agencies have elaborated user charters (“service declarations”).¹² However, they vary widely as far as content and design are concerned. In some cases, it can be questioned whether the objectives laid down in the declarations are actually pursued. Benchmarking, in particular for municipal services, has also been developed. A comprehensive database (KOSTRA) provides useful comparisons on the coverage rates, prices and costs of services provided by local governments. This allows the municipalities to identify “best practice”. By contrast, the government has been reluctant to provide quality rankings of schools although this may change in the near future. The government also includes outcome targets in the budget documentation presented to Parliament. Nevertheless, they are not systematically compared against actual outcomes (OECD, 2002c) and auditing is generally based on financial accounting rather than on performance measurement (OECD 1997a). The 2000 crisis in the Norwegian public employment service (PES) — which for a long period provided exaggerated data on the number of job placements — illustrates the lack of control of effective performance of public bodies. For 2002, the PES has fourteen input and output targets which may blur the setting of priorities. In addition, pursuing too many targets makes it difficult to establish a link between its actual performance and budget appropriations.

Financial incentives to reach the performance targets are weak

15. A lack of incentive schemes weakens the performance of management and employees. For most public agencies, there is no link between performance in one year and grants provided through the annual budget process in the following year. On the contrary, if goals are politically important, poor performance in one year often entails higher grants next year. For some public entities, however, public funding has been made conditional upon activity indicators, creating stronger incentives to improve efficiency and satisfy clients’ expectations. In hospitals, a case-mix system was introduced in 1997 so as to create incentives to increase activity and thus reduce waiting lists (Box 2). Since then, the number of patients treated has increased sharply and the average length of stay in hospitals has continued to decline. This has contributed to the sharp reduction

11. Some countries (including Australia, Austria, Denmark, Finland, Germany, New Zealand, and Switzerland) do not impose restrictions on the ability of public entities to carry forward unused appropriations for operating costs (OECD, 2002c). Others impose some restrictions but often less severe than in Norway (e.g. up to 50 per cent of unused appropriations can be carried over in the United States).

12. An example of a user charter (“service declaration”) is that of the tax administration, which is available on Internet at the following address:

<http://www.skatteetaten.no/skatteetaten/serviceerklaering/service/declarations/>.

in waiting lists.¹³ In similar fashion, central government grants to public universities from 2002 on will partly reflect the number of diplomas delivered, which should create incentives for universities to reduce the excessively long duration of studies.

Box 2. The move towards output-oriented management

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

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

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

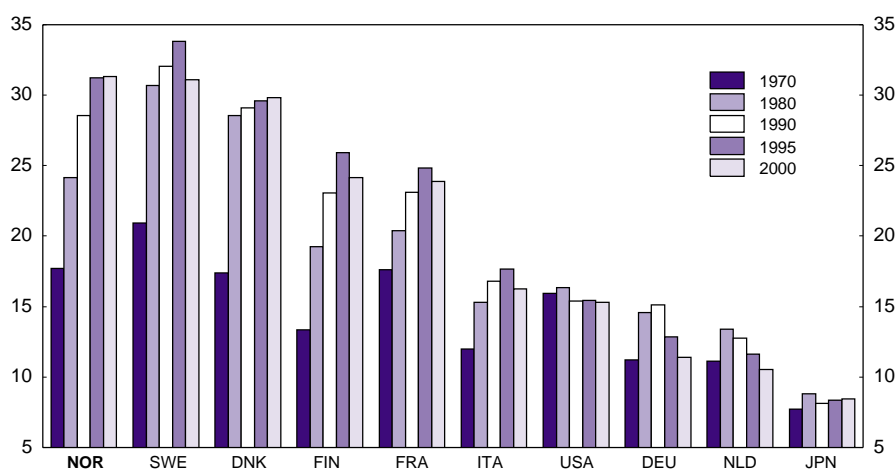
For the **public employment service** (Aetat), performance measures have also been introduced but have no direct influence on the budget. For 2002, there are 14 performance measures, with a mix of input targets (*e.g.* the proportion of disabled and the proportion of people on disability pension participating in a labour market programme) and output/outcome targets (the number of job-seekers registered at the PES and the number of vacancies reported to the PES). Other performance measures place emphasis on customer satisfaction surveys, such as reported by the Aetat's annual satisfaction survey, and the number of hits on its Internet site.

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

13. The law on patients' rights introduced the guarantee of not waiting more than three months for patients whose health conditions are regarded as severe but not acute. The number of patients with unfulfilled waiting-time guarantees fell from 25 000 in 1997 to 5 000 in 1999. This law has been changed in 2001 providing patients with the right of having their health situation assessed within 30 days and a "right to receive necessary health care within individual medical limits".

16. The virtual absence of performance-based compensation schemes, combined with a *de facto* life-long tenure for most public sector employees, reduces public entities' flexibility and fails to provide employees with appropriate incentives to improve their performance. This limits efficiency gains in the public sector. Despite the abolition of seniority-based wage elements, wages are still set in most cases by rigid pay scales. They are also, in general, lower than in the private sector and in many other OECD countries for similar positions, with only a small experience-related wage premium. The teachers' situation provides an example (Table 3).¹⁴ This contributes to problems of recruiting and retaining some types of specialists, including nurses, IT specialists and engineers (OECD, 2001a). However, non-wage compensation for public employees is in several respects more generous than for private employees, in particular pension schemes. Permanent contracts are also predominant and job protection is strong. High severance payments were reconfirmed in September 2001.¹⁵ This situation contrasts with an increased use of fixed-term employment contracts for public employees in several OECD countries (*e.g.* Denmark and New Zealand). In addition to poor incentives, the lack of flexibility in public employment also makes spending behaviour asymmetric. Public employment tends to adjust upwards when a new demand emerges in a specific sector (*e.g.* when the number of pupils rises), but fails to adjust downwards when demand wanes, thus contributing to the steady rise in the number of public employees since the early 1970s (Figure 2).

Figure 2. Trends in general government employment
As a percentage of total employment



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

14. Wage data published by Statistics Norway indicate for instance that clerks employed full-time by the central government receive a wage about 20 per cent lower than their private sector counterparts.
15. In September 2001, the government and the main trade unions agreed on a set of principles that central government sector entities will apply for employees made redundant, forced to change jobs or to move, as a result of a reorganisation of the public sector.

Table 3. Teachers' salaries in selected OECD countries

1999

	Starting salary USD PPP	Ratio of starting salary to average production worker wage	Ratio of salary after 15 years to average production worker wage	Wage premium for experience
	(1)	(2)	(3)	(4) = (3) / (2)
Primary				
Norway¹	22 194	0.80	0.93	1.16
Denmark	28 140	0.88	1.02	1.16
England	19 999	0.73	1.23	1.68
Finland	18 110	0.76	1.04	1.37
Germany	29 697	0.98	1.19	1.21
Ireland	21 940	0.98	1.58	1.62
Sweden	18 581	0.83	1.09	1.31
United States	25 707	0.86	1.16	1.35
Lower secondary				
Norway¹	22 194	0.80	0.93	1.16
Denmark	28 140	0.88	1.02	1.16
England	19 999	0.73	1.23	1.68
Finland	20 394	0.86	1.18	1.38
Germany	33 196	1.10	1.27	1.16
Ireland	23 033	1.02	1.60	1.56
Sweden	18 704	0.83	1.09	1.31
United States	25 155	0.84	1.11	1.33
Upper secondary general education				
Norway¹	22 194	0.80	0.93	1.16
Denmark	29 986	0.94	1.25	1.33
England	19 999	0.73	1.23	1.68
Finland	21 047	0.88	1.24	1.40
Germany	35 546	1.17	1.38	1.17
Ireland	23 033	1.02	1.60	1.56
Sweden	20 549	0.92	1.09	1.28
United States	25 405	0.85	1.21	1.43

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

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

The distribution of spending responsibilities across government layers raises efficiency concerns

17. Local government has significant spending responsibility in Norway. There are two sub-national layers of governments, counties and municipalities, which provide most of the welfare services and merit goods (Box 3). Local government spending amounted to almost 40 per cent of general government expenditure, and was equivalent to 23 per cent of mainland GDP in 2001. The local authorities also employed about one-fourth of the total working population in Norway and accounted for 80 per cent of all employment in the public sector.¹⁶ The requirement to provide high quality services in all jurisdictions, even the smallest and remote ones, entails high costs. The recent transfer of responsibilities for hospital care from the counties to the central government should bring efficiency gains. Since hospital care was the main responsibility of the counties, it also raises the question of their *raison d'être*. At the local level, municipalities vary significantly regarding size, topography and population. More than half have less than 5 000 inhabitants while ten have more than 50 000 inhabitants. To reap scale economies, the government is

16. From January 2002, the responsibility for hospital care was transferred from the counties to the central government, entailing a shift of employment from local to central government.

encouraging the merger of municipalities.¹⁷ It pays 50 per cent of the preparatory work and refunds 40 to 60 per cent of the administrative costs related to the merger process. From 2002, merging municipalities retain the former level of grants for ten years, instead of five years previously, thus reducing the negative incentive to merge embodied in the grant system which contains a fixed component independent of the size of the municipality. However, political constraints working against merging are strong. Overall, while mergers occurred between the late 1950s and the mid-1960s and reduced the number of municipalities by some 40 per cent, there has been only one merger during the past ten years despite a wide recognition at the central government level that municipalities are too small and many of them are losing population.

Box 3. Local government spending responsibilities

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

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

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

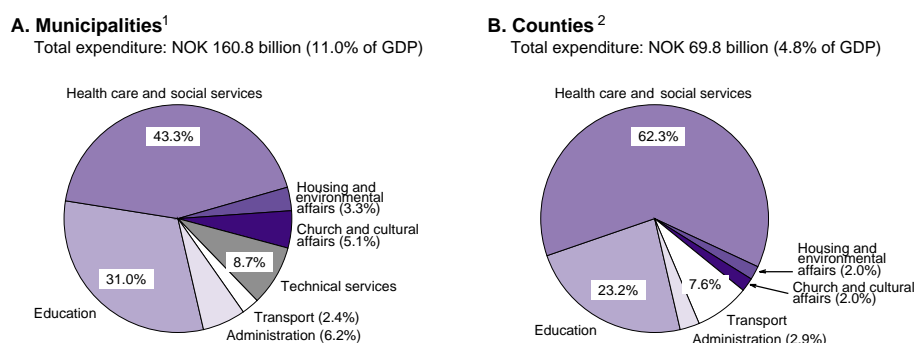
The counties are responsible for upper secondary schools, vocational training, child welfare institutions, institutions for the care of drug and alcohol abusers, county roads, provision of local public transport and museums (Figure 3).

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

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

17. A recent study by Statistics Norway revealed that a 50 per cent reduction in the number of municipalities by merging the smallest ones would result in a permanent saving amounting to about 0.2 per cent of GDP.

Figure 3. Local governments' spending by function
2000



1. Excluding municipal and joint municipal enterprises with separate accounts or municipal joint-stock companies.
2. From 2002 onwards, counties are no longer responsible for hospital care.

Source: Ministry of Local Government and Regional Development.

A lack of co-ordination across municipalities...

18. Co-operation across municipalities is limited, resulting in low cost-efficiency. To reap scale economies, municipalities frequently co-operate in some sectors such as waste disposal, water supply and auditing, and in the energy sector (through the joint ownership of power plants). However, in their core spending domains, co-operation is limited, partly reflecting the absence of appropriate compensation schemes between jurisdictions. Primary and lower secondary education provides an example. Each municipality has the obligation to deliver education to every resident child in the school nearest to his home but has no incentive to accept non-resident pupils since it is not entitled to a corresponding compensation from the central government grant system. Municipalities could enter into bilateral agreements but these have been rare. This hampers an efficient use of existing capacities. Long distances within and between municipalities in some regions limit the scope for scale economies. Still efficiency gains could be exploited by enhanced co-operation. The lack of co-ordination partly explains why the number of pupils per class is well below the maximum level set by the central government. Overall, while expenditure per student at the primary and secondary levels is about 40 per cent higher than in the OECD on average — largely reflecting a very high teacher per pupil ratio — education outcomes as measured by the recent Programme for International Student Assessment (PISA) report (OECD, 2001*b*) are around the OECD average. Norway's mediocre results in the OECD PISA study may be partly due to its inclusive approach to education, which makes the system less selective.

19. The situation is broadly similar for elderly care. A person can in principle benefit from the services offered by another municipality and the providing municipality can receive some financial compensation from the municipality of origin if they have reached a bilateral agreement. But since, in most cases, this compensation does not cover the actual costs of providing the service, co-operation agreements across municipalities remain rare and scale economies largely unexploited. For example in the context of care for the elderly, Norwegian old-age homes are typically small with an average of 21 beds — about half the number of their Swedish counterparts (Szehebely, 1999).

... and across government layers

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

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

Public employment services and social assistance

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

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

22. Local government spending is mainly funded through central government grants and tax-sharing arrangements (Box 4). The move from earmarked to block grants in the 1980s was designed to increase local governments' ability to adapt their expenditure to their citizens' preferences and their incentives to increase cost efficiency. It was also aimed at reducing administrative costs associated with conditional grants. In 2001, conditional grants accounted for 16 per cent of local governments' total financial resources but this share has halved in 2002 partly as a consequence of the hospital reform. However, while *de jure* the share of funds not tied to a specific use is high by international comparison, the proliferation of norms and standards imposed by the central government *de facto* limits the scope for local governments to adjust to local citizens' preferences. For example, the Ministry of Social Affairs is considering introducing minimum quality standards for elderly care and has recently decided to introduce minimum standards for the housing of drug addicts and others living on the fringe of society. In addition, the central government has recently increased its reliance on temporary earmarked grant programmes to facilitate the attainment of national social objectives (*e.g.* the availability and quality of child and elderly care facilities).¹⁸ This has given rise to strategic games between government levels,

18. The amount of money delivered through earmarked grants has risen recently. In 2001, earmarked grants accounted for 19.9 per cent of local governments' resources, up from 15.4 per cent in 1999.

with municipalities waiting before investing in a specific domain to get the central government's support (though the system includes possibilities for "retrospective adjustments").

Box 4. Local government funding

Block grants and tax revenues are the two most important financial resources of both municipalities and counties and account for about 64 per cent of their current revenues (Figure 4, Panel A). Local governments have in principle full discretion over their use. However, the level and composition of these revenues are set by Parliament, which adjusts the total amount of financial resources available to local governments, their share of income taxes and the level of grants to reflect the economic situation. In addition to these unconditional forms of resources, local governments receive earmarked grants and are allowed to charge user fees. Overall, local governments have to comply with a balanced budget rule. In case of slippage, local governments have two years to restore a balanced budget. If they fail, they come under the supervision of the central government, which has to approve their budget and borrowing.

Tax revenues. Proceeds from the personal income tax account for the bulk of local tax revenues. Though local governments are entitled to set the flat local tax rate on net income within a range set by the central government (14.55 to 17.65 per cent in 2000), in practice they all apply the maximum flat rate. Municipalities also levy a net wealth tax on the value of the taxpayer's net assets. The maximum rate and the tax base are decided by the Parliament. Similar to the tax on net income, municipalities all use the maximum rate for the net wealth tax (0.7 per cent, compared to a minimum rate of 0.4 per cent). In addition, municipalities may impose real estate taxes on housing, hydroelectric power plants and commercial buildings located within their jurisdiction. However, some regulations restrict the municipalities' right to impose real estate taxes (most importantly, they only apply to urban areas). There is also a maximum tax rate of 0.7 per cent. Overall, local governments' effective taxing power is rather limited by Nordic and international standards (Table 4). Apart from taxation, local governments are also free to impose user fees for specific goods or services, though they have to be set below production costs.

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

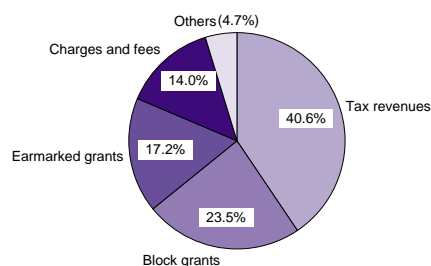
Other grants. Over the last decade, new earmarked grants have been introduced to influence local governments' priorities (*e.g.* to improve the supply of childcare and elderly care services or to renovate school premises). In some cases, these earmarked grants have later been incorporated into the block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

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

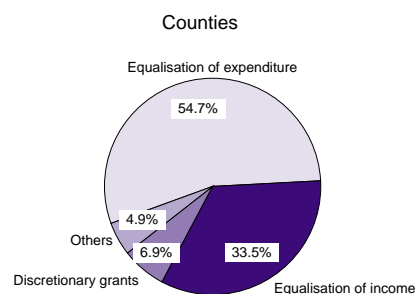
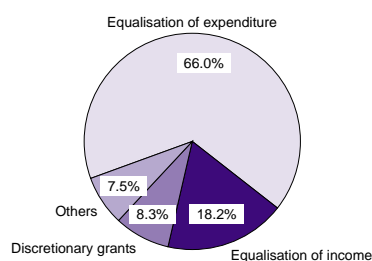
Figure 4. Local governments' financial resources

A. Municipalities and counties: current revenues in 2000

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



B. Composition of grants in 1999



Source: Ministry of Local Government and Regional Development.

Table 4. Local governments' taxing powers in selected OECD countries¹

	1995		Discretion to set taxes ²	Summary indicator of taxing powers ³
	Local government taxes relative to:			
	Total taxes	GDP		
Sweden	32.6	15.5	100.0	15.5
Denmark	31.3	15.5	95.1	14.7
Finland	21.9	9.8	89.0	8.7
Belgium	27.8	12.4	57.9	7.2
Spain	13.3	4.4	66.6	2.9
Germany	29.0	11.1	12.8	1.4
United Kingdom	3.9	1.4	100.0	1.4
Netherlands	2.7	1.1	100.0	1.1
Austria	20.9	8.7	10.0	0.9
Portugal	5.6	1.8	31.5	0.6
Norway	19.7	8.2	3.3	0.3
Mainland Norway	21.3	9.6	3.3	0.3

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

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

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

24. The sharing arrangement for income taxes between the local and central governments has also created incentives for local spending increases. Although central government grants are adjusted in the October Budget to reflect cyclical developments and their impact on tax revenues (see above), the central/local split of income tax revenues is often based on assumptions which have proved to be too conservative (OECD, 2000). These local government tax windfalls are later absorbed through higher spending, although changes in the central/local tax shares help to mitigate this bias in the initial phase of the budget. The abolition of the sharing arrangement for the corporate income tax in 1999 — replaced by a higher local share in personal income taxes which are less volatile — has eased this problem somewhat. Real estate taxes, fees and user charges are less volatile. Since their proceeds fully accrue to the municipality, they are more transparent, contribute to local governments' accountability and create more pressure to contain local public spending. Municipalities' effective power to set the rates and the base is however limited: they have to set rates at or below the ceiling imposed by the central government and strict conditions apply on their right to introduce a property tax (*e.g.* to introduce a property tax, a municipality has to provide street lights). In practice, about 200 of the 434 municipalities impose a property tax. Local governments have more freedom to set fees and user charges for locally-produced public services, though they cannot exceed unit costs.

Price signals to restrain demand pressures are weak

25. User charges have rarely been used in Norway as a device to influence demand. The absence, or low level, of user charges combined with activity-based financing systems for public entities, carries the risk of stimulating excessive demand and supply, driving spending to an unsustainable level. The lack of co-payments in the hospital sector, where an activity-based payment system is in place, may not matter since the price elasticity for inpatient care services is generally low.¹⁹ For pharmaceuticals, co-payments are low — they will even be reduced from October 2002 for some groups — but consumption is also well below the OECD average.²⁰ In some sectors, however, the low level of user charges results in an extensive reliance on expensive services (*e.g.* tertiary education and elderly care). It also reduces demand-side pressures for better outcomes, and thus adversely affects supply-side efficiency. On the other hand, the introduction of, or increase in, user charges may raise equity concerns for some services since they would

19. Several empirical studies have revealed the low price elasticity of inpatient care services. See for instance Manning *et al.* (1987).

20. Pharmaceuticals are divided into three categories. Non-prescription medicines are fully paid by the individual; prescriptions are either covered by the National Insurance system ("blue prescriptions") or paid in full by the patient ("white prescriptions"). There is a co-payment on blue prescriptions, which is limited to 36 per cent of the prescription fee. There is also a ceiling on all co-payments, including those for outpatient care, which was set at NOK 1 350 per year in 2002. Additional fees and charges are fully reimbursed for the year in which the ceiling has been reached. From October 2002, those aged 67 and over as well as disability pensioners will no longer pay for most pharmaceuticals, resulting in an estimated increase in expenditure of NOK 400 million.

affect relatively more lower-income households. User fees may also result in an undesirable sorting of the population and entail cream-skimming if private and public providers do not apply the same fees — the education sector being a case in point.

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

26. To promote waste reduction and recycling, the Pollution Control Act relies on the “polluter pays” principle and on price signals. The Act requires that municipalities charge fees for waste and wastewater treatment that fully cover their expenses. Likewise, toll systems for all inbound vehicles have been established around the city centres of Bergen, Oslo, Stavanger and Trondheim. However, except in Trondheim, toll rings merely serve to raise funds for investment in the local infrastructure while user fees do not really support traffic management objectives: season tickets are available, and toll fees are hardly differentiated across the day.²¹ In Trondheim, the toll system is also used for traffic management, as the toll fee is higher during peak hours (OECD, 1999), and has resulted in an estimated 10 per cent decrease in traffic since its introduction in 1991. The revision to the Road Act in 2001 has further increased the road pricing options to regulate traffic flows, by allowing a greater differentiation in fees between peak and non-peak times and by extending the domains for which the money raised may be earmarked (*e.g.* to cover public transport operating expenses).

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

27. Spending on tertiary education is high by international standards. The absence of university tuition fees, combined with very generous student loans and grants schemes (Box 5), serves to raise incentives to invest in human capital which are low due to the compressed wage structure. However, the low opportunity cost for students may also generate excessive demand for tertiary education and contribute to weakening demand-side pressures for higher quality tertiary education. In fact, enrolment rates are high and the study duration long. Combined with the funding of universities that was largely based on the student admission capacity until 2002 (see above), the low opportunity cost of tertiary education for students has likely resulted in excessive spending.

21. At the national level, about 25 per cent of the total annual budget for road construction accrues from toll fees on road projects.

Box 5. Financial support to students in post-compulsory education

Financial support to university students is extremely generous in Norway compared to most OECD countries. This reflects both the absence of tuition fees in upper-secondary education and public universities, and substantial loans and grants to students (Figure 5). Direct financial support to students accounted for 29 per cent of Norway's public budget for tertiary education, compared to 17 per cent on average in the OECD in 1998.

The State Educational Loan Fund (SELF)

Who qualifies?

All students aged 19 and above are entitled to financial support via the State Educational Loan Fund (SELF), independently of their parents' income. Those living outside their parents' home received a monthly support of NOK 6 950 (*i.e.* about one fourth of after tax average household income) in 2001, 30 per cent in the form of a grant and the rest as a loan that is free of interest payments during the study period. Additional aid is granted to the student if he/she must support a spouse and children. This support will be raised further to NOK 8 000 from the second term of 2002. The grant component will also increase if the student passes the exams (from 30 to 40 per cent of the total as from November 2002). Students completing a degree requiring more than 5 years of study may after completion receive a grant (in the form of debt relief) corresponding to between NOK 23 000 and 54 000. There is a time limit for receiving support from the SELF, but it is quite generous (six years plus one year if the student fails an exam), and there is no upper age limit, reducing incentives to study efficiently.

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

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

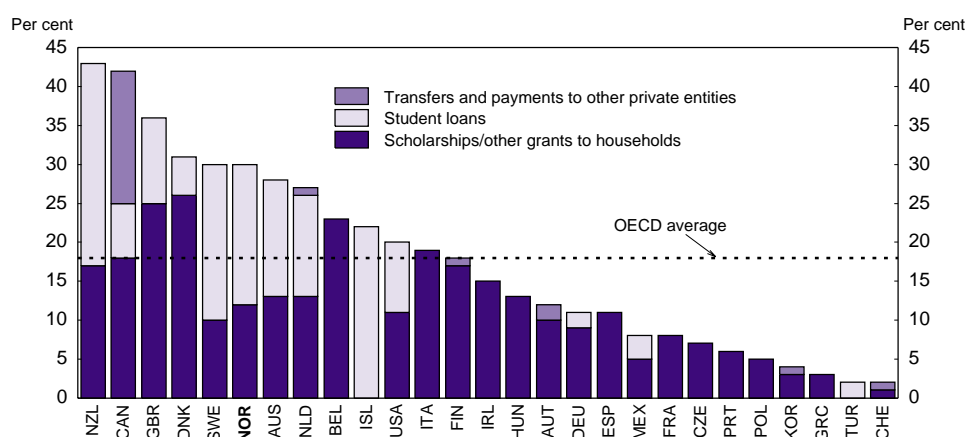
The amount of outstanding loans

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

Does it promote equal opportunity in studying?

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

Figure 5. Public subsidies¹ for tertiary education
1998



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

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

... and very low in the elderly care sector

28. Spending on care for the elderly amounted to almost 3½ per cent of GDP in 1999, the highest ratio in the OECD after Sweden. Demand-side pressures are high, reflecting both the ageing of the population and the low cost of services to the users. For institutional care, users pay a fixed percentage (in general 75 per cent of their income up to NOK 54 000, and 85 per cent of their income above this level) but these payments cover only 16 per cent of the total expenses on average. The percentage of elderly in nursing homes remains high by international standards, though there has been a reduction since the early 1990s. Correspondingly, expenses related to residential care services as a share of GDP declined from 2.7 per cent in 1995 to 1.6 per cent in 1998, partly reflecting increased capacity in generally less expensive home-based services. Nevertheless, they were still the second highest in the OECD after Sweden (Table 5). For home-care services, user charges cover about 3 per cent of the total costs. Home nursing is provided free of charge. For home-help services, about 20 per cent of the municipalities charge only a subscription payment with no additional user fees. Such services are almost free for low-income pensioners. Low user charges, combined with relatively generous eligibility criteria, are reflected in a high share of elderly people receiving formal care at home by international standards.

Table 5. An international comparison of long-term care systems

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

Source: [Jacobzone \(1999\)](#) and OECD, [Social Expenditure Database](#).

Financial incentives to rely on generous social insurance schemes are high

29. For some social insurance programmes, high replacement rates for recipients combined with the relatively low costs for individual employers and loose eligibility criteria have resulted in high spending by international standards. This applies to the sickness benefit, which is characterised by generous provisions for those on sick leave and little incentive for employers to discourage its longer-term use, since they only contribute for the first 16 days. Likewise, the decline in the employment ratio for older workers largely reflects the introduction of an early retirement scheme in 1989 combined with the gradual lowering of the pensionable age and a wider coverage of employees during the 1990s (Antonin and Suyker, 2001). Since individual private employers pay only 20 per cent of pension benefits of early retirees, there are incentives to use this scheme as a means for adjusting the labour force.²²

30. The disability-related insurance benefit is also relatively generous, with a high replacement rate and no means-testing. The almost sole responsibility of treating doctors as gate-keepers in this process — who are often too “close” to the patients (OECD, 2002d) — appears to be another key factor for exceptionally high benefit award rates. In addition, the benefit rejection rate is very low by international standards, while appeals by rejected applicants are more frequently successful than in other countries. As a result, about 9 per cent of the working-age population is registered as disabled, the second highest proportion in the OECD area, after Poland but before the Netherlands. And only around 1 per cent of the disabled leave the benefit scheme each year due to recovery or work resumption. Overall, public spending on disability programmes, at 5.6 per cent of GDP in 1999 is higher in Norway than in any other OECD country (Table 6).

22. The local and central government sectors finance the early retirement scheme directly out of their budgets. In the private sector, 20 per cent of pension benefits are paid directly by the employer concerned; the government pays 40 per cent for those aged 64 to 66 (but nothing for those at age 62 or 63). The employers participating in the early retirement “fund” finance the remaining 40 per cent (80 per cent for those at age 62 or 63).

Table 6. Disability schemes

1999

Country	Spending on disability programmes (percentage of GDP)		Age-specific disability benefit inflow rates (per 1000)						Benefit rejection rates	
	Disability benefits (percentage of GDP) ¹	All disability-related programmes ²	20-34	35-44	45-54	55-59	60-64 ³	20-64	Share of rejections among total application	Share of successful appeals among rejected applicants
Norway	2.4	5.6	3.3	8.5	18.2	36.9	60.0	12.1	17	26
Denmark	2.3	3.8	1.6	3.1	7.0	11.1	11.1	5.7	25	51
Sweden	2.1	4.7	1.9	5.0	9.6	19.8	31.6	7.6	-	-
Austria	1.8	2.9	0.7	2.2	9.5	34.9	5.1	5.8	49	11
France ⁴	0.8	1.7	0.2	0.7	1.9	4.7	0.0	4.8	25	-
Germany	1.0	3.1	0.6	2.3	6.9	18.5	16.6	5.3	38	-
Italy ⁴	1.0	1.8	0.1	0.4	2.8	1.4	1.5	7.1	68	-
Netherlands	2.7	4.6	8.3	11.6	15.6	12.0	12.5	10.4	37	12
United Kingdom	1.3	1.5	9.7	12.4	17.8	22.3	11.8	12.9	48	-
Canada ⁴	0.7	1.3	0.4	1.0	2.4	4.7	4.1	4.3	55	11
United States	0.7	1.4	2.7	4.5	7.8	13.9	12.8	6.0	64	-

1. Include contributory (earnings-related) and non-contributory disability benefits. These data differ slightly from those contained in the OECD Social Expenditure Database, largely because disability benefits reported here exclude those granted to individuals below 20 and above 64 years old.
2. Include disability benefits, sickness cash benefits, work injury benefits and employment-related programmes for disabled people.
3. No inflow for this age group in countries with statutory retirement age below 65 (men and women in France, and women in Austria, Italy and the United Kingdom).
4. Age-specific rates for Canada, France and Italy do not include data for the non-contributory programmes, while the total for the 20-64 age group does.

Source: OECD (2002d).

There is little competition between public and private providers*Funding arrangements for hospitals and schools are unbalanced...*

31. The fact that individual users bear little or none of the costs of providing public services does not in principle preclude a choice among alternative suppliers so as to stimulate demand-side pressures to improve public sector performance. Promoting user choice has in fact become a recent policy *leitmotiv* in Norway. However, provision of services by the private sector is generally low by international standards. As an illustration, for-profit private hospitals provide only 60 beds, *i.e.* 0.5 per cent of current capacity, despite a relatively low number of acute-care hospital beds per capita and long waiting lists to receive hospital treatment.²³ This reflects both tight restrictions on establishing private hospitals and the need for such hospitals to reach an agreement with a regional health body to obtain public funding. In this context, there is no clear provision for ensuring that private hospitals get the same amount of public money for the same treatment as do public hospitals or that they get equal treatment with regard to investment costs. Likewise, in the education sector, only 2 per cent of the pupils are enrolled in private primary schools, which is much below the OECD average. And the funds per student received by private schools cover only 85 per cent of the working expenses per pupil received by public schools and do not cover investment costs.²⁴ The discretionary right of the government to decide on the establishment of private schools has until now further restricted their development. Even if a private school meets all the criteria set in the law to qualify for public money, the final decision is currently still left at the discretion of the authorities.

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

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

33. Imbalances in the funding arrangements between public and private providers of childcare co-exist with differences in parental fees and population covered. Private kindergartens usually apply a flat fee while fees in public kindergartens are in many cases means-tested. For low-income groups, fees in private kindergartens are about five times higher than in public ones in the Oslo and Bergen regions (Table 7). Differences in fee levels, especially for low-income families, may result in undesirable selection of children depending on their family background. Public institutions enrol most of the children with disabilities and other special educational needs, requiring in turn more public funding.²⁵ The average parental contribution to kindergarten costs (37 per cent in 2001) is also high by international standards —

23. These private hospitals specialise in open heart surgery, hip surgery and minor surgical procedures in response to long waiting lists for such care in public hospitals (European Observatory of Health Care Systems, 2000).

24. The government is considering raising its participation in private schools up to 90 per cent of the current expenses by students received by public schools.

25. Currently, there are no centrally defined limits for the level of parental fees. They range from 28 to 45 per cent of actual costs.

the average of twelve OECD countries is around 28 per cent, ranging from 17 per cent in Finland to over 70 per cent in the United States (OECD, 2001c). Combined with relatively high tax wedges on labour income, this may discourage labour participation. The relatively high parental contribution to kindergarten costs may also reduce the population covered by early childhood education, in particular for low-income families, a problem magnified by the late start of normal schooling in international comparison.²⁶ In 2002, a majority of the Parliament has decided to introduce a ceiling on fees charged by all kindergartens (at NOK 2 500 per month from August 2003 and 1 500 from August 2004). This may affect the government's plan to transform the current dual public support (activity-based grants from the central government and discretionary grants from municipalities) into a single and more generous grant per child, paid directly to kindergartens independently of their ownership.²⁷

Table 7. **Private and public kindergartens: market share, population and parental fees**

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

Source : Statistics Norway and Johnsen (2001).

34. The childcare cash benefit has extended parental choice on childcare arrangements, but has raised efficiency and social issues. Introduced in 1998, it has been substantially increased and its coverage broadened. It now covers all families with children between one and three years who do not attend the publicly-funded childcare facilities. The initial purposes were to provide roughly the same state benefits to families, independently of their use of kindergartens, and to relieve congestion in these services. The childcare cash benefit amounts to a maximum NOK 3 000 per month per child in 2002 (*i.e.* about one quarter of an average full-time salary net of taxes), broadly equivalent to the central government subsidy per child paid to kindergartens.²⁸ However, while the provision of publicly-funded childcare supports the development of children and facilitates parents' participation in the labour market, the cash benefit does

26. The normal schooling age has recently been brought down from age 7 to age 6 in Norway. However, it is still higher than in most other OECD countries. Some Nordic countries have also lowered the minimum schooling age. In particular, Sweden will introduce pre-school classes for 4 and 5 year-olds in 2003.

27. The central government has already increased the activity-based grant to kindergartens in July 2001. This has resulted in a 1.9 per cent decline in parental fees from August 2001 to January 2002.

28. For children attending less than full time, the parents receive part of the amount.

not contribute equally to these aims. On the contrary, female labour supply declined by 2.1 hours per week for all mothers in the labour force since the introduction of the scheme in August 1998 and the end of 1999 (Knudsen, 2001). This partly reflected shorter working hours for mothers at work (a decline of about 1.5 hours per week), in particular for mothers with a high education level (Hellevik and Koren, 2000).²⁹ The childcare cash benefit has also created strong incentives for low-income parents to quit their jobs, which may make their return to the labour market difficult, to care for their children at home.³⁰ As a result, children from less educated and immigrant families are more likely to be the last to enter formal childhood educational and care facilities, reducing their development opportunities and their knowledge of the Norwegian language. Furthermore, by creating uncertainties about the demand for childcare services, the introduction of the cash benefit may also have slowed the building of childcare facilities despite long-standing excess demand. Overall, positive results from this expensive measure (NOK 2.6 billion in the 2002 budget, *i.e.* almost ¼ per cent of GDP) appear meagre.

Some efforts have been undertaken to raise competition in public procurement

35. To achieve a more efficient public sector, the authorities have placed greater emphasis on competition in public procurement since the early 1990s. General government purchases amounted to NOK 149 billion in 2000, *i.e.* 25.7 per cent of public spending and 14 per cent of mainland GDP. Steps towards liberalisation include the removal of the obligation for public bodies to buy services from public enterprises. In particular, since 1993, ministries and government agencies are no longer obliged to rent buildings from *Statsbygg*, the state property company and since 1999, public bodies can buy catering services from companies other than the state-owned enterprise. The government is now considering extending tendering for ferry services across the Norwegian fjords. In addition, several measures have been taken to improve the information available on public procurement, to simplify the legislation and to raise competition. Specifically, the new public procurement law introduced in 2001 makes it mandatory to use competitive tendering for all public purchases, by both central and sub-central public authorities, below the thresholds set in the European Economic Area (EEA) agreement (NOK 200 000).³¹ A separate body for settling disputes over public procurement decisions and a new network responsible for providing better and more uniform information have also been introduced.³²

36. Transaction costs, due to the need to design and monitor external contracts, and tax rules still hinder competitive tendering, especially for small municipalities. Municipalities accounted for 37 per cent of general government procurement in 2000. The small size of many of these tends to make information and transaction costs a serious barrier to the wider use of competitive tendering. As an example, only 1 per cent of all municipalities have tendered institutional elderly care services and 3 per cent home services,

29. Though the female employment rate in Norway is the highest in the OECD, adjusted for hours worked, Norway's female employment rate moves below Portugal and Finland. The incidence of female part-time work, at 42.5 per cent of total female employment, is also very high by international standards.

30. Hellevik and Koren (2000) reveal that the parents most likely to take the benefit and remain at home with their children are lone mothers, mothers with several young children, mothers with lower levels of education, and/or low-income, and one salary families.

31. Norway, like other EFTA countries in the EEA, is subject to the same surveillance and enforcement procedures as regards common rules for public procurement as the EU countries. However, Norway has been granted an exemption by the EFTA Surveillance Authority for entities operating in the oil and gas sectors.

32. According to the previous Act on Public Procurement, only suppliers affected by carrying out procurement could submit complaints. Experience showed that few suppliers were interested in bringing charges against potential customers. A complete national database for public procurement in excess of the threshold values is also available on the net (<http://norsk.lysingsblad.no>).

compared with 17 per cent for the largest municipalities.³³ The Competition Authority launched a special initiative directed at the municipal sector in 1999. It met with the administrative and political leadership of selected municipalities, to inform them about their obligations and the merits of more outsourcing and competition. However, the VAT exemption for the services provided by public bodies still leads to a distortion in competition. Since public bodies cannot deduct the VAT paid on inputs bought from the private sector, it may be cheaper to produce their own services than the outsourcing of similar services.³⁴ The Rattsø committee is currently investigating this distortion and is expected to present recommendations to the government by the end of 2002.

An agenda for raising the effectiveness of public expenditure

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

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

This framework has now to be implemented and should be supplemented by a wider public sector reform. A large array of recommendations for increasing the effectiveness of public spending programmes further are highlighted in this section and summarised in Box 6. Priority should be given to: increasing transparency on the costs of regional policy; increasing flexibility in public sector wages and job status; changing local government financing to better match citizens' preferences with outlays as well as tax levels; increasing the role of the private sector in the provision of public services; relying more on user charges to curb excessive demand in particular for tertiary education; improving the incentive structure for sickness and disability schemes.

33. Hagen *et al.* (1999) show that competitive tendering is much higher in municipalities which have experienced low growth in revenues.

34. A public body is exempted from VAT if less than 20 per cent of its turnover is sold to the private sector.

Box 6. A synopsis of recommendations to improve public spending efficiency and effectiveness

Enhance fiscal sustainability

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

Improve transparency

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

Move further towards a management approach geared towards outcomes

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

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

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

Raise the contestability of public service provision

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

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

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

Improve incentives to reduce the excessive use of social insurance schemes

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

Enhance fiscal sustainability

38. Concerning the budget process, measures to curtail spending pressure and improve efficiency should be a priority. A shift towards multi-annual budgeting — currently explored by an official committee due to report before the end of 2002 — is likely to be helpful. In addition, the current deficit rule should be supplemented by an expenditure rule. It would reduce the risk that a non-oil tax windfall is immediately spent, as was the case in the revised 2002 national budget presented to Parliament in May 2002. It would also reduce the risk that the combination of spending pressure and the deficit rule causes a further rise in the tax burden, as for instance, occurred in 2000 and 2001. Concerning multi-year budgeting, it can be a useful pedagogic tool for politicians and the general public and is likely to lead to a better-informed policy debate. Most OECD countries now apply a medium-term framework of 3 to 5 years and many apply an expenditure rule, though recently many countries have shown slippage. Introduction of multi-annual budgeting would underscore that the room for additional spending is limited in the medium term, given rising spending on existing programmes and the aim of reducing the tax burden. This may lead to fewer proposals by spending departments for new programmes, especially those with limited outlay consequences in the short run but substantial ones in the medium term. Information on medium-term developments may also stimulate measures to make existing programmes more effective, notably if backed by external scrutiny. Cost-reducing measures may take time to show their effects and are therefore less interesting for spending departments to implement in the current annual budgeting process.

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

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

Improve transparency

41. Further measures should be taken to improve transparency. *First*, a move from cash to accrual budgeting would give better information on costs, especially for investment, and may therefore promote cost effectiveness. A committee is currently exploring the possibilities and is expected to deliver its recommendation in December 2002. *Second*, based on the proper evaluation of their cost and the persons who benefit from them, tax expenditure should be discussed by Parliament on a regular basis. *Third*, the budget papers should present comprehensive estimates of the cost of regional policy.

Move further towards a management approach geared towards outcomes

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

43. Funding principles for public entities and compensation schemes for public employees should be reformed to provide stronger incentives to improve public spending. The introduction of a case-mix system for hospitals is a step in the right direction and performance-based schemes should be extended to other public entities. However, care should be taken that applying such activity-based funding schemes to sectors characterised by excess demand will not result in a rapid increase in spending. In particular, absorbing the long waiting lists in the hospital sector will create pressures on the budget. For universities, such a scheme could raise spending on tertiary education further from its already high level, unless action is also taken to raise the currently negligible opportunity costs for students. To create the appropriate incentives for public employees, public bodies should be able to use their efficiency gains to reward meriting employees. This would require reconsidering the rather rigid compensation arrangements for public sector employees, by relying more on performance-based wage systems for some sectors and professions (in particular for those where the output can easily be identified). More generally, public employee compensation should better reflect labour market conditions. This could imply upward wage adjustments in some sectors if the quality and coverage of public services were to be maintained. In this context, the favourable non-wage compensation elements should be reduced concomitantly since they entail some segmentation in the labour

market and hinder flexibility (in particular the *de facto* long-life tenure and more generous pension schemes).

Reform the funding system of local governments and their spending responsibilities

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

Raise the contestability of public service provision

Strengthen user choice across jurisdictions...

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

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

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

47. Tight regulations on the establishment of private providers, together with a lower level of public funding per user, restrict competitive pressures. As a result, the market share of private suppliers for some key publicly-funded services is quite low by international standards. In the hospital sector, the very low number of for-profit private sector beds co-exists with long waiting lists, which have recently led the government to offer the possibility of being treated abroad for patients with a prospectively long waiting period.³⁵ In the longer term, an increased reliance on private sector provision would probably be less costly, stimulate more changes in public hospitals, and be more satisfactory for patients who are often reluctant to be hospitalised far away from their family. This would require a level playing field between public and private providers, an easing of the regulations imposed on the establishment of private providers and some guarantee that the framework designed to encourage private provision will be stable in the long term. The same recommendations apply to the education sector where outcomes, as revealed by the recent PISA survey, are close to the OECD average despite significantly higher public resources devoted to education. To improve learning outcomes, the Norwegian authorities should follow the Swedish experience, which shows how enhanced competition can contribute to this objective (Lundsgaard, 2002). Thus, the recent proposal to facilitate the establishment of private schools and improve their funding should be implemented.

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

35. Early in 2002, 250 000 patients were waiting for hospital treatment, and the average period was about 80 days. The central government has appropriated NOK 1 billion to pay for treatment abroad.

Promote competitive tendering

49. Increased recourse to competitive tendering could also bring cost savings and would thus contribute to lower spending as revealed by a number of empirical studies on several countries (Lundsgaard, 2002).³⁶ More contracting out and competitive tendering in Norway would require the elimination of two major obstacles. *First*, a reform of the VAT exemption for public bodies is required since the current system favours own production over outsourcing to the private sector. Among the options for reducing this distortion, making public bodies subject to VAT is the first-best solution. *Second*, transaction costs associated with competitive tendering for the services sub-contracted should be reduced to a minimum. This could involve technical help from the counties, the central government, and/or the Competition Authority to improve the knowledge base for local governments.

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

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

51. Higher co-payments in the hospital care sector may raise serious equity issues and may have little chance of contributing significantly to lower waiting lists. However, instead of charging individuals, municipalities could be made responsible for financing hospital care services. They would buy specialised care services from hospitals and would thus be encouraged to shift their demand away from expensive hospital care towards more prevention and outpatient care for patients who are no longer in need of hospital-based medical treatment. The Swedish experience reveals that the management of hospital resources was significantly improved by the shift in financial responsibilities for elderly care to the municipalities in 1992. However, this approach would be difficult to implement for small municipalities because the pooling of risk may not be sufficient. In this context, several solutions could be envisaged,

36. Empirical studies on the quality and cost saving effects resulting from a shift from in-house production to outsourcing and competitive tendering cover a broad range of countries but typically a limited range of services (in particular waste collection and cleaning). The estimated cost savings vary strongly across studies, with the majority showing positive savings and some concentration in the range of 10 to 30 per cent.

such as excluding the smallest municipalities or the most expensive treatments from this purchaser/provider model.

Improve incentives to reduce the extensive reliance on social insurance schemes

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

BIBLIOGRAPHY

- Adema, W. (2000),
 “Revisiting real social spending across countries: A brief note”, *OECD Economic Studies*, No. 30, 2000/I, Paris.
- Adema, W. (2001),
 “Net social expenditure, second edition”, *Labour Market and Social Policy — Occasional Papers*, No. 52, OECD, Paris, [http://www.oelis.oecd.org/OLIS/2001DOC.NSF/LINKTO/DEELSA-ELSA-D\(2001\)5](http://www.oelis.oecd.org/OLIS/2001DOC.NSF/LINKTO/DEELSA-ELSA-D(2001)5).
- Antonin, P. and W. Suyker (2002),
 “How should Norway respond to ageing?”, *OECD Economics Department Working Papers*, No. 296, <http://www.oecd.org/pdf/M00002000/M00002560.pdf>
- Auerbach, A. J., J. Gokhale, L. J. Kotlikoff and E. Steigum Jr. (1993),
 “Generational accounting in Norway: Is Norway overconsuming its petroleum wealth?”, Report 75/93, SNF (Institute for Research in Economics and Business Administration).
- Auerbach, A. J., L. J. Kotlikoff and W. Leibfritz (1999),
Generational accounting around the World, The University of Chicago Press.
- Backer-Røed, N. and L. Mannsåker (2000),
 “The activation and qualification of social assistance recipient in Oslo”, in *Labour market policies and the public employment service*, OECD Proceedings, Prague Conference, July 2000.
- Bergo, J. (2002),
 “Oil - natural resource and financial asset”, speech at the Norwegian Petroleum Society, Oslo, 25 April 2002, <http://www.norges-bank.no/english/speeches/2002-04-25/speech-2002-04-25.html>
- Blöndal, S., S. Field and N. Girouard (2002),
 “Investment in human capital through post-compulsory education and training: selected efficiency and equity aspects”, *OECD Economics Department Working Papers*, No. 333, [http://appli1.oecd.org/olis2002doc.nsf/linkto/eco-wkp\(2002\)19](http://appli1.oecd.org/olis2002doc.nsf/linkto/eco-wkp(2002)19).
- European Commission (1999),
 “Generational accounting in Europa”, *European Economy Reports and Studies*, No. 6, http://europa.eu.int/comm/economy_finance/publications/european_economy/reportsandstudies0699_en.htm
- European Observatory of Health Care Systems (2000),
 “Healthcare systems in transition: Norway,” <http://odin.dep.no/archive/shdvedlegg/01/01/0HiTf031.pdf>
- Gjersem, C. (2002a),
 “Generational accounting in the Nordic countries”, *Nordic Journal of Political Economy*, Vol. 28 (1), forthcoming.
- Gjersem, C. (2002b),
 “A presentation of generational accounting in Norway”, *Nordic Journal of Political Economy*, Vol. 28 (1), forthcoming.
- Hagen, T.P., J. Rattsø and R.J. Sørensen (1999),
 “Monopoly and competition in government service production: Economic and political determinants of reform”, <http://www.svt.ntnu.no/iso/Jorn.Rattso/Papers/solstrand.pdf>
- Hellevik, T. and C. Koren (2000),
 “Parents between work and care: effects of the new cash benefit scheme”, Skriftserie 7/00, NOVA (Norwegian Social Research).

- Jacobzone, S. (1999),
 “Ageing and care for frail elderly persons: an overview of international perspectives”, *OECD Labour market and social policy*, Occasional paper No.°38,
[http://www.oilis.oecd.org/OLIS/1999DOC.NSF/LINKTO/DEELSA-ELSA-WD\(99\)1](http://www.oilis.oecd.org/OLIS/1999DOC.NSF/LINKTO/DEELSA-ELSA-WD(99)1)
- Johnsen, R. N. (2001),
 “Undersøking om foreldrebetaling i barnehagar” (Survey on parents' payments to kindergartens), *Notater*, Statistics Norway, August, http://www.ssb.no/emner/04/02/10/notat_200162/notat_200162.pdf
- Journard, I. and C. Giorno (2002),
 “Enhancing the effectiveness of public spending in Switzerland”, *OECD Economics Department Working Papers*, No. 332, [http://appli1.oecd.org/olis/2002doc.nsf/linkto/eco-wkp\(2002\)18/\\$FILE/JT00129276.PDF](http://appli1.oecd.org/olis/2002doc.nsf/linkto/eco-wkp(2002)18/$FILE/JT00129276.PDF)
- Kjerstad, E. (2001),
 “Prospective funding of general hospitals in Norway - Incentives for higher production?”, SNF Report 58 — Essays on public policy and private incentives.
- Knudsen, C. (2001),
 “Hvem lot seg påvirke? : kontantstøtten og mødres yrkesaktivitet” (Who changed behaviour? The child-care cash benefit scheme and mothers' labour activity), *Rapport*, NOVA (Norwegian Social Research)
<http://www.nova.no/publis/rapport/2001/11sam.htm>
- Gjersem, C. (2002a),
 “Generational accounting in the Nordic countries”, *Nordic Journal of Political Economy*, Vol. 28 (1), forthcoming.
- Gjersem, C. (2002b),
 “A presentation of generational accounting in Norway”, *Nordic Journal of Political Economy*, Vol. 28 (1), forthcoming.
- Lundsgaard, J. (2002),
 “Competition and efficiency in publicly funded services”, *OECD Economics Department Working Papers*, No. 331.
- Manning W.G., J.P. Newhouse, N. Duan, E.B. Keeler, A. Leibowitz, and M.S. Marquis (1987),
 “Health Insurance and the Demand for Medical Care”, *The American Economic Review*, Vol. 77, No. 3, June.
- Ministry of Finance (2001a),
 “Guidelines for economic policy”, *Report to the Storting*, Summary in English, No. 29 (2000-2001), Oslo,
<http://odin.dep.no/archive/finbilder/01/04/repor063.pdf>
- Ministry of Finance (2001b),
 “The Long-Term Programme 2002-2005”, *Report to the Storting*, Summary in English, No. 30 (2000-2001), Oslo, http://odin.dep.no/fin/engelsk/publ/white_papers/006071-040002/index-dok000-b-n-a.html
- Ministry of Finance (2001c),
 Samarbeidsregjeringens budsjettforslag (Amended national budget 2002 of the co-operation government), St.prp. nr. 1 (2001-2002) Tillegg nr. 4, http://www.statsbudsjettet.dep.no/pdf/stprp1_tillegg4.pdf
- Ministry of Finance (2002),
 “Revidert nasjonalbudsjett 2002”, (Revised national budget 2002), *Stortingsmelding*, No. 2.,
<http://www.statsbudsjettet.dep.no/pdf/2.pdf>
- Moum, K. and I.S. Wold (2001),
 “Can Norway afford the National Insurance Scheme? The challenge to Norway’s social security policy in a European context”, *Economic Survey*, No. 3/2001, Statistics Norway, pp. 21-34,
<http://www.ssb.no/english/subjects/08/05/10/es/200103/moum.pdf>
- OECD (1997a),
Managing across levels of government, <http://www.oecd.org/pdf/M00004000/M00004166.pdf>
- OECD (1997b),
OECD Economic Surveys: Norway, Paris.

- OECD (1999),
OECD Economic Surveys: Norway, Paris.
- OECD (2000),
OECD Economic Surveys: Norway, Paris.
- OECD (2001a),
“Competitive Public Employer”, PUMA/HRM(2001)6.
- OECD (2001b),
Knowledge and Skills for Life: first results from PISA 2000, Paris, <http://www.oecd.org/EN/documents/0,,EN-documents-4-nodirectorate-no-15-no-4,00.html>.
- OECD (2001c),
Starting strong: Early childhood education and care, Paris.
- OECD (2001d),
“Investment in human capital through post-compulsory education and training”, *OECD Economic Outlook*, No. 70, December, <http://www.oecd.org/pdf/M00023000/M00023497.pdf>
- OECD (2001e),
“Fiscal implications of ageing: projections of age-related spending”, *OECD Economic Outlook*, No. 69, <http://www.oecd.org/pdf/M00029000/M00029158.pdf>
- OECD (2002a),
OECD Economic Survey: Finland, Paris.
- OECD (2002b),
OECD Economic Outlook, No. 71, June.
- OECD (2002c),
“Overview of results focused management and budgeting in OECD Member countries”, <http://www.oecd.org/EN/document/0,,EN-document-notheme-9-no-20-26305-0,FF.html>
- OECD (2002d),
“Participative disability policies for the working-age population: towards a coherent policy mix”, forthcoming.
- Persson, T. and G. Tabellini (2002),
“Do constitutions cause large governments? Quasi-experimental evidence”, *European Economic Review*, Vol. 46.
- Steigum, Erling and C. Gjersem (1999),
“Generational accounting and depletable natural resources: The case of Norway”, in Auerbach, A.J., L.J. Kotlikoff and W. Leibfritz (ed.'s), *Generational accounting around the world*, University of Chicago Press.
- Szehebely, M. (1999),
“The impact of moving borders between traditional institutions and home care in Scandinavia”, mimeo, September.
- Van Ewijk, C. (2001),
“Beyond Maastricht”, *De Economist*.

ANNEX I
THE USE OF GENERATIONAL ACCOUNTS IN NORWAY

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

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

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

The calculations presented in the 1995 budget paper showed a large generational deficit, requiring a reduction of government consumption of between 2-4 per cent of GDP for intergenerational balance. The required reduction was smaller in the following budgets and in the 1997 national budget the interval spanned zero. As elsewhere, the early Norwegian experience with generational accounts found the current business cycle situation to have undue influence on generational accounts and a cyclical adjustment has been made since 1998, although the methodology for this correction is still under discussion. In 1998, the interval continued to span zero. However, in the 2000 budget, the accounts again signalled a need for cuts, due to both an extension of the business cycle adjustment to include local government and lower petroleum prices reducing petroleum revenues. The most recent calculation is presented in the 2002 budget papers and indicate a need to tighten the current budget by NOK 0-20 billion (0-1¾ per cent of mainland GDP). As it is based on the proposed 2002 budget, it takes into account the impact of the new fiscal rule in 2002. However, it does not take into account the higher government expenditure and lower tax burden in the coming years due to the fiscal rule (Gjersem, 2002b). As a consequence, the reduction in government consumption required to restore the intertemporal budget balance is underestimated.

Generational accounting requires a heavy data input and results are very sensitive to key assumptions about real wage developments, the discount rate and in the Norwegian case the oil price. Moreover, there are methodological issues, especially concerning the cyclical correction that are still debated. Furthermore for Norway, the current calculations do not take the new fiscal rule into account for the coming years and is therefore underestimating the required reduction in government consumption. The Norwegian authorities provide an interval as the calculation is done for two different real wage trajectories (of $\frac{3}{4}$ and $1\frac{1}{4}$ per cent per year) but given uncertainties on other key assumptions, the confidence interval around the calculation is larger than this interval. Even so, the Norwegian authorities consider it as a valuable pedagogic tool with intuitive appeal also to the general public.

NOTES

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

*ANNEX II***THE NEW MACROECONOMIC POLICY FRAMEWORK**

In reaction to recent large budget surpluses and the ensuing pressures to raise government outlays, the previous government presented new guidelines for fiscal and monetary policy in March 2001 that were approved by Parliament shortly thereafter (Box A1). The new fiscal policy guideline sets the structural non-oil central-government budget deficit equal to the expected real return on the Petroleum Fund.¹ However, as expressed in the government report on the new guidelines, fiscal policy still has a counter-cyclical role to play and deviations from this deficit target are thus allowed in the case of excess demand and supply. Moreover, the guideline foresees that in the event of extraordinary changes in the Petroleum Fund's capital or in the structural deficit, corrective action will be spread over several years. There has been a smooth implementation as the structural deficit in 2001 was broadly in line with the new guideline. With the presumption that tight monetary policy might well be necessary to offset this steady fiscal expansion, the government also set an inflation target of 2½ per cent over time for the central bank. This inflation target implies a demand management role for the monetary authorities. As was the case in the previous macroeconomic framework, the government will place emphasis on incomes policy co-operation, where, in the view of the authorities, the social partners ought to contribute to maintaining a strong internationally-exposed sector and low unemployment through moderate wage settlements.²

The new rate of return rule

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

Box A1. The economic policy guidelines of March 2001

Fiscal policy guideline

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

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

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

Monetary policy regulation

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

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

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

One way to assess the long-term consequences of the new guideline is to look at generational accounts. The most recent estimates, taking into account the impact of the new fiscal rule in 2002, indicate a need to tighten the current budget by NOK 0-20 billion (0-1¾ per cent of mainland GDP) to avoid a stronger burden on future generations (Annex I). Another tool to assess the long-term consequences is provided by the long-term macroeconomic scenario based on the new fiscal rule (Box A2). This scenario is policy-rich, as substantial public sector and pension reforms will be needed to avoid an unsustainable budgetary situation and significant reforms are built into the scenario. On the one hand, this could be seen as an insufficiently conservative budgetary approach as there are immediate outlay increases and tax cuts while the required reforms are not yet implemented. If agreement can be reached — which is not certain given past experience — the pension reform is unlikely to be implemented before 2007 and may fall short of what is needed. Concerning public sector reforms, the government is not much beyond the phase of defining the main principles and the first major reform still has to be implemented. On the other hand, higher future mainland deficits due to the new fiscal rule may break the existing structural reform inertia and may make it easier to implement the urgently needed public sector and pension reforms.

Box A2. A policy-rich long-term economic scenario

Although it published some key variables for 2001-10, the current government has not yet put forward a comprehensive long-term economic scenario consistent with its intended fiscal and structural policies. However, as it adheres to the new fiscal policy guidelines introduced by the previous government in March 2001, the 2000-50 scenarios presented in the *Long-Term Programme 2002-2005* (Ministry of Finance, 2001b) are still relevant, although most recent developments are not taken into account. The “return” scenario — the scenario based on the new fiscal guideline of a structural non-oil deficit equal to the return on the Government Petroleum Fund — shows a gradual increase in the structural non-oil deficit from 0.8 per cent of mainland GDP in 2000 to 5.3 per cent in 2010 (4.4 per cent according to most recent estimates) and 6.7 per cent in 2020, with a broad stabilisation thereafter up to 2050 (Table A1). Government outlays will rise by almost 10 percentage points of mainland GDP in the period 2000-50 while government non-oil tax revenues will rise by 2 percentage points, although they will fall initially by 1½ percentage points up to 2010. This will be accompanied by a fall in government oil revenues by 16 per cent of GDP due to a drop in petroleum production and in oil prices, partly offset by higher investment income.

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

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

Table A1. The long-term budget scenario 2000-2050¹

As a percentage of mainland GDP

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

1. Based on the current fiscal guideline of a structural non-oil central-government deficit equal to the expected 4 per cent real return on the Government Petroleum Fund. The table is consistent with the Long-Term Programme 2002-05 of March 2001 and therefore does not take into account the most recent developments.
2. Oil and natural gas extraction is assumed to rise from 243 million Sm³ o.e. (standard cubic metres oil equivalents) to a peak level of 281 million Sm³ o.e. in 2004 and to fall thereafter gradually to 106 million Sm³ o.e. in 2050. In 2001 prices, the oil price is assumed to fall from USD 25 per barrel in 2001 to USD 15 per barrel in 2010 and to remain constant thereafter.
3. Within brackets the updated number as given in the revised 2002 national budget (Ministry of Finance, 2002). The corresponding forecast for the balance in 2005 is -3.3 per cent of mainland GDP.
4. Sum of assets of the Government Petroleum Fund and the petroleum wealth. As stakes in state-owned companies and the National Insurance Fund (NIS) are not taken into account, public sector wealth is underestimated.
5. The pension burden is the net present value of the increase in expected future NIS pension outlays over and above the growth in the tax base, and measured as a percentage of mainland GDP.
6. Includes net interest income.
7. Excludes gross interest payments.
8. Percentage difference between the projected local government employment (including hospitals) based on the new fiscal guideline and the local government employment assuming unchanged coverage from 1998 onwards and taking into account the projected demographic development. The latter is based on calculations with the MAKKO model. A positive number in the table means an increase of coverage while a negative number means a lower coverage; a negative number also indicates the required increase in public sector productivity if coverage is maintained.
9. As a percentage of total employment.
10. Based on the assumptions of a labour productivity growth between 1.5 and 1.2 per cent per year in mainland Norway and roughly unchanged labour force participation rates and unemployment rates.

Source: Ministry of Finance.

One also can assess the long-term properties of the guidelines on the basis of economic theory. Theory implies that spending the real expected return (permanent income) of the *total* wealth of the non-renewable resource — in the Norwegian case, the sum of petroleum wealth and the financial wealth in the Petroleum Fund — is the optimal strategy. It is optimal under the stringent assumption that the aim is to have a perpetual intergenerational transfer of the total wealth of the non-renewable resource. Such a strategy would mean a much higher current non-oil budget deficit — in 2002, several times larger than the current deficit target — and would therefore create high transition costs in the short term.³ The new fiscal rule is thus substantially more conservative than this alternative rule. However, the alternative rule ignores the severe budgetary consequences of the ageing of the Norwegian population.

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

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

The use of the expected return on the Fund rather than the actual return is commendable as it leads to a more gradual development of the non-oil deficit and avoids pro-cyclicality to the extent that the Norwegian economy and the international financial markets are correlated.⁴ The authorities could have gone further by setting a medium-term time path for the deficit based on the expected medium-term development of the Petroleum Fund instead of calculating it annually on the estimated size of the Fund.⁵ This could have been the core of a medium-term budget framework of the type nowadays applied in most OECD countries. This advantage may, however, come at the cost of making the rule less easy to understand for the general public. Concerning the expectation of a 4 per cent real return, this is in line with the historical average of the Petroleum Fund's portfolio and equal to the discount rate used in the budget documents. Past returns may, however, not be a good guide for setting future rates, even for periods of ten years and longer. The high returns in the 1990s may have been partly due to the reduction in the risk premium on equities and the drop in inflation; both are unlikely to be repeated this decade and the reduction in the risk premium may even be reversed. Moreover, it cannot be excluded that the Norwegian krone will appreciate this decade, causing the rate of return in krone to be less than in foreign currencies. One short-term advantage of the chosen rate, however, is that it made a smooth implementation possible as, at an expected real return of 4 per cent, the estimated structural deficit in 2001 was broadly in line with the new guideline.

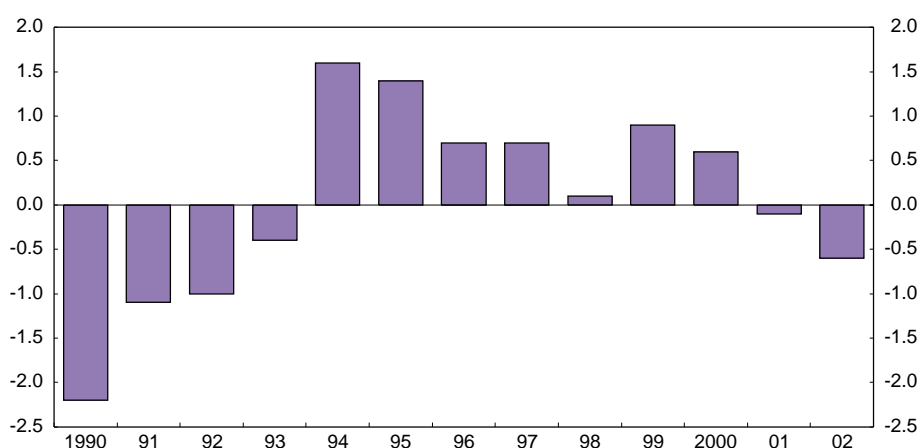
The guideline does not change the policy to invest all assets of the Government Petroleum Fund abroad. This commendable policy substantially relieves the upward pressure on the Norwegian krone caused by the large petroleum revenues and diminishes rent-seeking behaviour to some extent. In contrast to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

developments, the guideline does not change the valuable buffer role of the Petroleum Fund. It continues to prevent short-term fluctuations in the oil price from substantially influencing spending in the budget and therefore the domestic economy.

In the past, when an operational exchange rate target was pursued by the monetary authorities, fiscal policy was the main tool for demand management (Figure A1).⁶ After introducing the new guidelines, the authorities' attitude towards fiscal activism has recently evolved in the direction of giving the principal demand-management role to monetary policy. In recent policy documents, the authorities have stated that the central government budget will not normally have to be used actively to stabilise the economy. This change is welcome for several reasons:

- Discretionary fiscal policy measures are implemented with a substantial lag and can therefore even be pro-cyclical.
- Expansionary fiscal measures are often difficult to reverse and may lead to an upward trend in spending.
- Short-term fiscal activism could distract attention from medium-term issues, most importantly from measures aimed at enhancing productivity in the public and private sector.
- The large size of the public sector is no justification for an active fiscal policy. On the contrary, as the government sector's output is little affected by the cycle, a large public sector already dampens the cycle and therefore reduces the need for cyclical measures. Furthermore, the high tax burden due to the large public sector means sizeable automatic stabilisers that also reduce the need for cyclical measures. A weak and uncertain monetary policy transmission mechanism would be a more appropriate reason for fiscal discretionary measures but there is no evidence that it is weaker or more uncertain than elsewhere.

Figure A1. The fiscal stance¹
As a percentage of trend mainland GDP



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

NOTES

1. A fiscal rule linking the deficit with the return on the Petroleum Fund was first reviewed in the 1983 report of the Petroleum Depletion Committee.
2. The role of incomes policy co-operation was stressed by the previous government in the report on the new economic guidelines (Ministry of Finance, 2001a) and by the current government in its amended 2002 budget paper (Ministry of Finance, 2001c).
3. It will be several times bigger despite that, as in the past, the real return on petroleum reserves is likely to be lower than that on the Petroleum Fund (Bergo, 2002).
4. In the 1990s, however, the Norwegian cycle measured by the output gap was not strongly correlated with the economic cycle in the rest of the OECD.
5. To apply the rate of return rule in the budget paper presented in October, an estimate has to be made of the size of the Petroleum Fund at the end of the year. With the size of the Fund at the end of the second quarter known, this requires estimates of the oil price, rate of return and krone exchange rate in the second half of the year.
6. During the half of the 1990s, with its excess supply and high unemployment, fiscal policy was eased. And during the second half of the 1990s with its tight product and labour market conditions and high cost inflation, policy was tightened, although insufficiently.

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