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II. Policies to boost potential output growth

Prior to the recent slump, the growth performance of the Finnish economy had been among the best in the OECD in recent years. At the same time, the economy has undergone fundamental changes. Partly as a result of its EU membership since 1995, it has become more integrated with the rest of the world, increasing the need to adjust quickly to developments abroad. Liberalisation and privatisation have facilitated adjustment, with market mechanisms now operating to a greater extent. Furthermore, the sectoral composition of output has changed significantly, with a diminished role for the traditional metal and forest industries, while the electronic equipment industry has become the most important export sector. This change in composition made the Finnish economy less capital intensive and more knowledge-based. Finally, economic activity has become more concentrated in the Helsinki region and other growth centres. Helsinki is one of the fastest growing cities in Europe whereas eastern and northern Finland are among the EU regions with the strongest migration outflow.

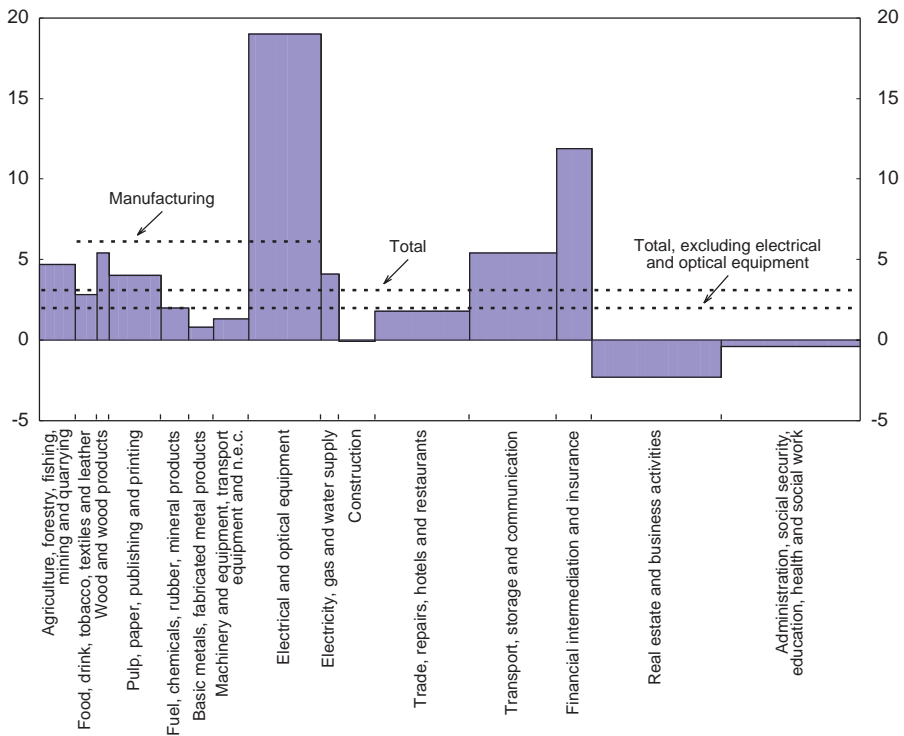
These structural changes were not caused by the deep recession of the early 1990s but were certainly spurred by it.²³ The recession-induced banking crisis, for instance, hastened and deepened the restructuring of the financial sector, with Finnish banks now leading in Internet banking. Although there were fundamental changes in many fields, the Finnish economy has kept three key characteristics: it remains a Nordic welfare state with social transfers and therefore taxes above the already-high European average; collective wage negotiations have continued to be characterised by a high degree of centralisation with little room for enterprise bargaining; and the income difference between the most and least well-off remains relatively small – despite the rise in the 1990s – and the wage structure relatively compressed.

This chapter provides an overview of the key structural issues and of the main policy measures taken over the past 18 months. It starts with an analysis of the recent output and productivity performance; thereafter, it covers structural policy developments in the labour, product and financial markets as well in the public sector.

Strong output and productivity performance

Medium-term growth performance has been the strongest in western Europe after Ireland and Luxembourg (see Figure 10 above). GDP increased by 5 per cent per year between 1995 and 2000, double the rate observed in both the euro area and the OECD. Undoubtedly, this strong performance was partly due to the robust recovery from the deep recession of the early 1990s but it also contained a sizeable non-cyclical component. Trend output growth showed a strong acceleration, with output and multifactor productivity performance clearly boosted by the ICT sector (Figure 13 and Table 10). As Finland became world leader in the production of mobile telephone handsets and systems, the electronic equipment industry

Figure 13. **Labour productivity by sector**¹
Percentage change, annual rate, 1995-2000



1. Value added per hour worked. The width of the bar represents the share of each sector in total value added in 2000. Source: Statistics Finland (2001), *National Accounts 1992-2000* and OECD.

alone added almost 1½ percentage points to annual labour productivity and output growth in 1995-2000.²⁴ This boost to overall productivity by the ICT-producing sector is similar to that seen in other countries where this sector is substantial, such as the United States and Ireland. Use of ICT also lifted output and multifactor productivity growth.²⁵ However, and in contrast with the United States, labour productivity growth has not yet accelerated as higher multifactor productivity growth was due to a strong rise in capital efficiency caused by a better functioning of the capital markets (Table 10; Jalava and Pohjola, 2001; Jalava, 2001).

Government policy has played some role in the very successful development of the electronic equipment industry. It did so by sound macroeconomic management, by the early liberalisation of the telecommunication market, by the liberalisation of the capital market at the end of the 1980s and by providing an engineering-oriented educational system. Also its R&D policy probably had some positive impact.²⁶ However, more important than government policy were strategic decisions made by the management of Nokia, the main ICT company.²⁷

Table 10. **Contributions to output growth in the market sector¹**
Percentage points

	1975-90	1990-95	1995-99 ²
Output growth (%)	3.2	-0.7	6.0
Contributions by input			
ICT capital	0.2	0.3	0.7
Other capital	0.8	-0.7	-0.4
Hours worked	-0.4	-2.9	1.3
Labour quality (education)	0.2	0.2	0.3
Multi-factor productivity	2.2	2.3	4.2
Contributions by industry			
ICT ³ industries	0.3	0.5	2.0
Other industries	2.9	-1.2	4.0
Labour productivity (%)	3.7	3.9	3.5
Contribution of ICT capital ⁴			
United States	0.3	0.3	0.6
Other G7 countries	0.2	0.2	0.3

1. The market sector excludes production by general government and non-profit institutions serving households. Figures may not add up to the totals because of averages and rounding.

2. Preliminary estimate.

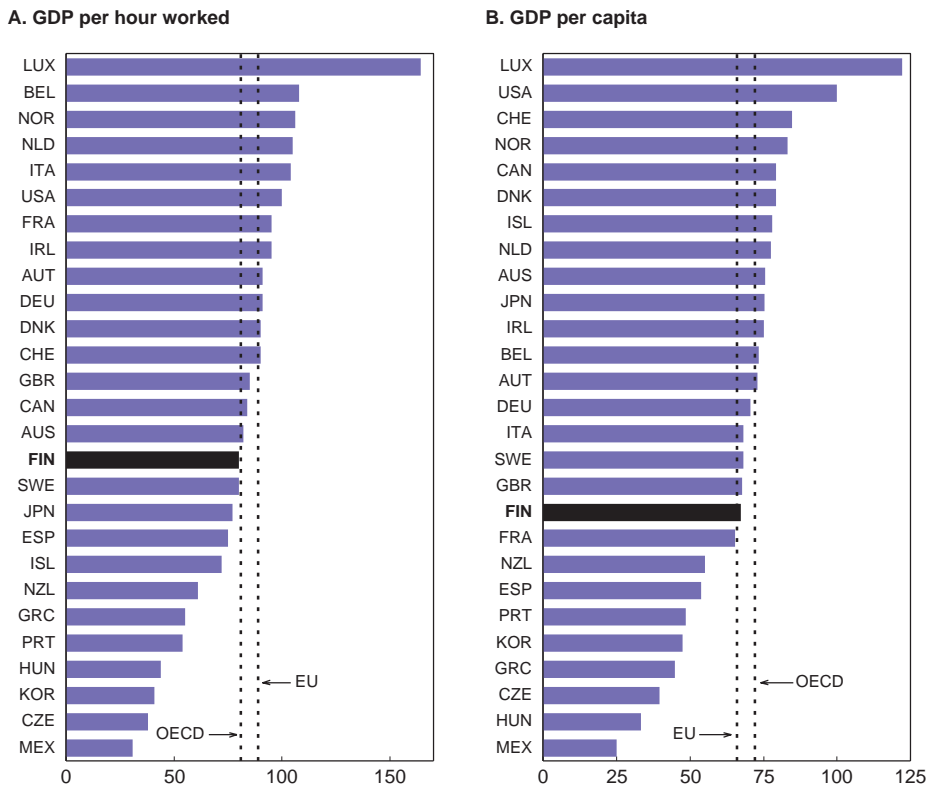
3. ICT industries are defined here as encompassing the manufacture of electrical and optical equipment, telecommunications and computer and related activities.

4. 1980-90 instead of 1975-90.

Source: Jalava J. (2001), "The new economy in Finland", *Bank of Finland Bulletin* 2/2001 and A. Colecchia and P. Schreyer, "ICT Investment and Economic Growth in the 1990s: Is the United States a Unique Case? A Comparative Study of Nine OECD Countries", *STI Working Papers*, No. 2001/7, OECD, [www.oilis.oecd.org/olis/2001/doc.nsf/LinkTo/DSTI-DOC\(2001\)7](http://www.oilis.oecd.org/olis/2001/doc.nsf/LinkTo/DSTI-DOC(2001)7).

Despite the emergence of a substantial and highly productive electronic equipment industry and the positive effects of structural reform measures taken in other parts of the economy, the overall productivity level, measured by GDP per hour worked, is still below the EU average (Figure 14). This is partly caused by lower productivity in the sizeable government sector.²⁸ GDP per head of population is, however, on par with the euro area average due to an above average employment rate and hours worked.²⁹ It is, however, still lower than in the leading OECD countries, indicating that additional structural reform measures are required. The success of such measures, however, should not only be assessed on the basis of productivity developments, as employment of the current large pool of low-skilled unemployed could lead to a continuation of subdued labour productivity growth in coming years.

Figure 14. **Output and productivity**
1999, USA = 100



Source: P. Schreyer and D. Pilat (2001), "Measuring productivity", *OECD Economic Studies*, No. 33, forthcoming.

The recent sharp output drop in the ICT-producing sector, the disappointing reaction so far of consumers to new mobile telephone products and delays in the roll-out of third-generation mobile telephone networks underline the substantial uncertainty concerning the Finnish ICT-producing sector in the medium term. It is unlikely that the contribution of the ICT-producing sector to total output and productivity growth will be as big as in the second half of the 1990s, although it is likely to remain important. Nevertheless, the OECD's estimate of annual potential output growth for the coming years of 3¼ per cent³⁰ indicates confidence that Finland will remain a centre of excellence concerning mobile telephony and that productivity in the ICT-using industries will accelerate. There is already some evidence that multi-factor productivity growth has risen in Finnish industries with intensive use of ICT (Pilat and Lee, 2001; Van Ark, 2001). In this context, it is important that attention be paid to improve productivity in non-ICT areas of industry and services through the creation of a favourable environment for entrepreneurship and growth.

R&D is high due to the highly-developed ICT sector

The high and rising R&D expenditure is partly the cause and partly the result of the strong development of the ICT sector. In 2000, total R&D expenditure was 3.3 per cent of GDP, the second highest in the OECD after Sweden and almost twice as high as the EU average (Statistics Finland, 2001; OECD, 2001d).³¹ The ICT share in total business R&D expenditure is more than 50 per cent.³² Government R&D spending is also high by international standards, about 0.4 per cent of GDP in 2000.³³ Nevertheless, two-thirds of total R&D is financed by the private sector, which is above the OECD average. The number of companies pursuing R&D has increased somewhat since the early 1990s, to 2 500 in 1999. But, at the same time, R&D activities have become more concentrated, with the share of the ten most important R&D companies in total private sector R&D expenditure increasing from one-third in 1991 to over a half in 1999.³⁴ While the strong rise in R&D was mainly based on business sector decisions, government policy probably also played a positive role. Finland was one of the few countries with a rise in government spending on R&D in the 1990s and this may have contributed to the acceleration in productivity growth. Moreover, its lack of interference in specific project choices and its systematic evaluation of R&D support programmes may have made its R&D funding more effective.³⁵ Government R&D expenditure could become even more cost effective by competitive tendering of research projects and by improving the evaluation of R&D expenditure of ministries that are not channelled through research councils of the Academy of Finland or through the technology development centres (TEKES) of the Ministry of Trade and Industry.

Labour markets: long-term unemployment is stubbornly high

With a standardised unemployment rate of 9 per cent and a broad unemployment rate of 18 per cent, Finland still faces a major challenge in getting peo-

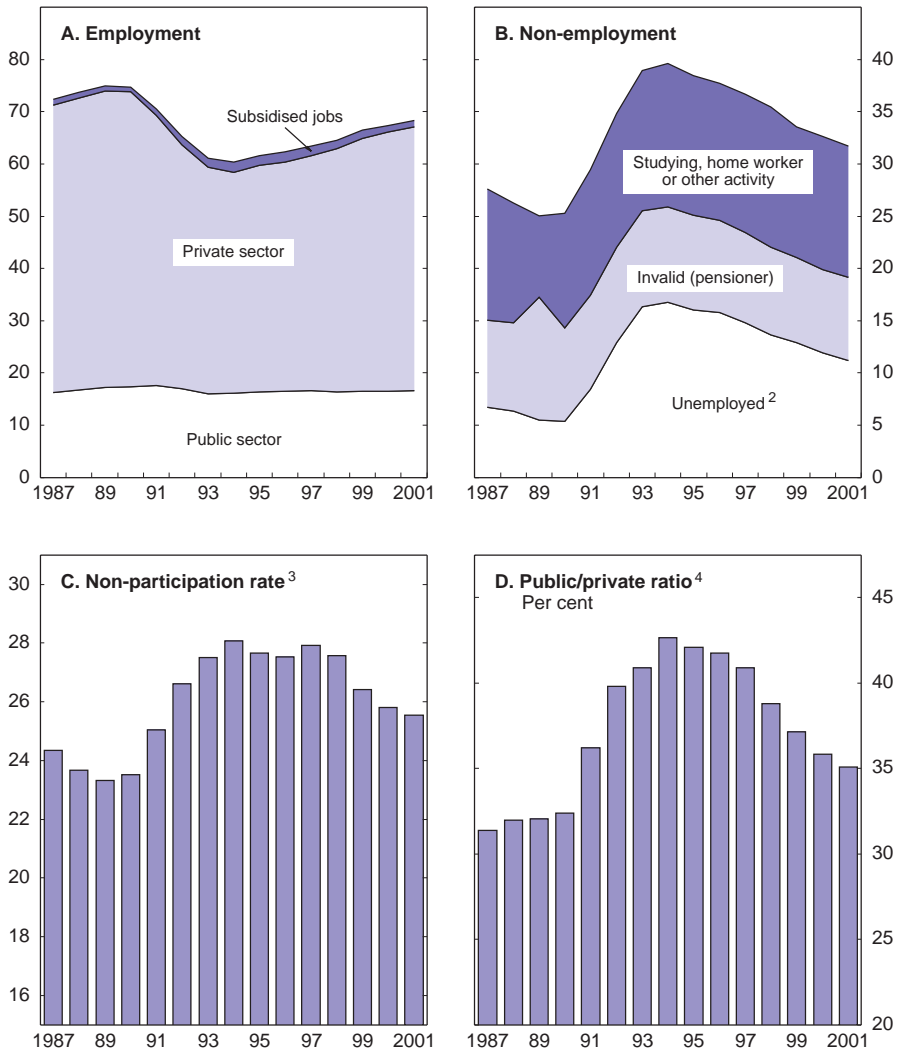
ple back into work despite the impressive labour market performance since the 1990-93 recession (Figure 15).³⁶ Standardised unemployment has halved since the early 1994 peak but has remained well above the rate prevailing before the economic slump and is still more than double the rate of the best performing countries in the European Union. Moreover, regional disparities in unemployment are substantial, with broad unemployment in northern and eastern regions around 30 per cent, three times as high as in the south and west where about 80 per cent of job creation took place in recent years. This regional difference is a matter of concern (Box 5). The still high unemployment reflects not only the extreme depth of the recession of the early 1990s, the late start with labour market reforms and the time it takes before such reforms raise performance, but also the relatively limited scale of labour market reforms and some acquiescence by policy makers. For instance, little policy action has focused on the large pool of older unskilled unemployed, which may have to remain idle until they reach pensionable age.

The labour market is not only characterised by high unemployment but also by an increasing polarisation between those with a low and a high chance of finding work. In 2000, more than half of the unemployed job-seekers registered at the employment offices – those aged above 50 years, immigrants, disabled persons and those with poor educational and vocational qualifications – were facing serious difficulties in finding regular work.³⁷ Long-term unemployment is substantially underestimated by the official statistics as many workers experience unemployment spells disrupted temporarily by participation in ALMPs or by short periods of employment, often in temporary and subsidised jobs. In 2000, one in three unemployed was registered as long-term unemployed (*i.e.* uninterruptedly unemployed for 12 months or more), but almost one in two was unemployed for at least 12 months in the past 16 months (Ministry of Labour, 2001) while around 40 per cent of the broadly defined unemployed had not had a regular job in the past three years (European Commission, 2000). Furthermore, only 13 per cent of the long-term unemployed ending their unemployment spell found a regular job while 40 per cent entered into an ALMP and almost half of those ending their participation in an ALMP became unemployed again.³⁸ The measures taken in 1997, which made re-qualifying for unemployment benefits somewhat more difficult and less attractive, have not broken the vicious circle of long unemployment spells, ALMP interludes and short periods of employment.³⁹

Higher unemployment benefits will increase disincentives to seek a regular job

Low-skilled workers experience little financial incentive to find a regular job and are trapped in the public income support system. In this context, the increase in unemployment benefits in March 2002 (the earnings-related part of the benefit will increase from 42 to 45 per cent of the previous earnings in excess of the basic benefit) will be a step in the wrong direction although it may contribute

Figure 15. **Structure of the working-age population**
Per cent of population aged 15-64¹



1. Estimates for 2001.

2. Unemployed receiving benefits or pensions, job seekers receiving no benefits and those on employment training.

3. Those not in the labour force as a per cent of the working age population (both aged 15-64).

4. Public sector and subsidised employment as a per cent of private sector employment.

Source: Ministry of Labour, Statistics Finland and OECD.

Box 5. Sharp increase in regional economic differences

Economic differences between regions are a matter of concern (Economic Council, 2001). The broad unemployment rate in the northern and eastern regions is around 30 per cent, three times as high as in the south despite massive migration towards this region. In 1998, GDP per capita in the south was 40 per cent above the EU average while it was 25 and 15 per cent below that in the eastern and northern region, respectively. Depressed areas – dominated by traditional industries, agriculture and forestry – have lost a quarter of their jobs over the last decade while around 80 per cent of the new jobs were created in the south and west in recent years. The share of the Helsinki area in total GDP was 32 per cent in 1997, 4 percentage points higher than ten years earlier, and has increased further since then. The economic concentration in the Helsinki region and other growth centres is prompted by structural changes such as the rise in foreign trade, the shift from an industrial economy to a service-based economy and the emergence of the telecommunications equipment industry. This industry requires easy access to research institutes and universities and its rapid development therefore has contributed to geographical concentration. The concentration and its inevitable accompanying migration flows not only make peripheral regions less interesting for business and affect its basic services but are also creating regional problems in the Helsinki area as the housing stock and the infrastructure are insufficient at the moment.¹ Nevertheless, the concentration of activity is projected to continue with economic growth in the four fastest growing regions twice as high as in the other regions in 2001-05 (Rantala, 2001).

Despite the substantial regional discrepancy, national regional aid narrowly defined is rather limited (0.7 per cent of GDP in 2000) and the fifth lowest in the EU.² Most regional programmes are EU programmes based on the EU Structural Funds. Almost half of the Finnish population lives in areas entitled to the EU's regional aid, the largest share after Greece, Portugal and Spain. Public aid from the Structural Funds is estimated at around EUR 0.7 billion per year (½ per cent of GDP) in 2000-06. Recently, an expert working group concluded

1. In 2000, the central government and the municipalities of the Helsinki region agreed to co-operate to build annually 13 000 houses in the area over the period 2000-03.
2. On a broad definition, regional aid amounted to EUR 5.5 billion (4.2 per cent of GDP) in 2000 of which EUR 1 billion was narrowly defined regional support partly co-funded by the EU (Ministry of Finance, 2000b). The broadly defined, purely national regional aid, includes all support, which promotes regional development or has a regional dimension. It includes part of the funding for road construction and maintenance, subsidies to transport in coastal areas and the Finnish archipelago, aid to certain airports, part of public road transport funding, a part of the costs of ALMPs, investment to support employment in certain regions and a fraction of the funding for environmentally sustainable development.

Box 5. Sharp increase in regional economic differences (*cont.*)

that it is not possible, or justified, to use regional policy measures to prevent changes in the regional structure (Economic Council, 2001). Moreover, EU competition rules have made it more difficult than in the past to use subsidies to influence location decisions of companies. Nevertheless, the working group recommended spending some additional resources to promote a more balanced geographical development and to ensure social cohesion. Furthermore, it recommended investigating the possibility of using tax expenditure for regional purposes. The coming EU enlargement could have serious consequences for regional support as under the existing rules Finnish regions would no longer be eligible for the main EU regional subsidy (Objective 1 regions support) due to a GDP per capita level above 75 per cent of the average level in the enlarged EU (Economic Council, 2001*b*).

somewhat to reducing income inequality (Box 6).⁴⁰ In recent years, financial incentives to accept work had been strengthened somewhat, especially by the sharp increases in the earned-income tax allowance and by the abolishment of this allowance for unemployment beneficiaries.⁴¹ Nevertheless, replacement rates (the ratio of out-of-work and in-work net income) have remained among the highest in the OECD (OECD, 1999) while the current system of constant benefits for the first 500 days of unemployment limit job-search activity. In November 2001, a working group proposed to strengthen job-search activity of some workers by increasing unemployment benefits for the first 130 days (see also Annex I). This increase will be for those who have a work history of at least 20 years and will replace the current lump sum rewarded to those who are made redundant for economic reasons. Such a measure would be a step in the right direction but a reform should be considered that would lead for all workers to a decline in benefits with the length of the unemployment spell. This should be supplemented by other measures, such as tax changes (see Chapter III) and by stronger enforcement of existing eligibility criteria, including tighter job-search requirements (see below).⁴²

Further reform of the Public Employment Service in 2002

As long-term unemployment is declining only slowly, the reforms of the Public Employment Service (PES) implemented in 1998-99 are now considered to be inadequate (Ministry of Labour, 2001*b*) and the Finnish authorities have proposed additional reforms, to be implemented in 2002.⁴³ The main aims of the 1998-99 reforms were to reduce long-term unemployment and to enhance labour market performance by stimulating job-search activity of benefit recipients

Box 6. **The income distribution has widened and poverty has increased**

During the 1990s, the Finnish income distribution has become more skewed but remains relatively compressed compared with other OECD countries.¹ The strongest increase in disposable income has occurred at the high end of the earnings scale, because of the strong rise in capital income and the emergence of sizeable stock option revenues. As a consequence, the top decile's share in total disposable income has risen from 18.4 per cent in 1990 to 22.8 per cent in 1999 (Table 11). Income inequality, as measured by the Gini index, rose from 0.20 in 1990 to 0.26 in 1999 and is likely to have increased further in 2000 before falling back in 2001. Social transfers and taxes diminish income dispersion substantially, reducing the Gini index from 0.48 before transfers and taxes to 0.26 afterwards. With income differences widening, relative poverty has increased. Measured by the share of individuals with disposable income below 50 per cent of the national median income, the poverty rate has risen from the nadir of 2.7 per cent in 1994 to 4.1 per cent in 1999 which is probably still among the lowest in the OECD.² Absolute poverty, however, has declined in the second half of the 1990s as real disposable income rose by 0.8 and 1.5 per cent per year for the two lowest deciles, respectively. Moreover, since 1996, the number of households receiving income support – an indicator of difficulties in earning a livelihood – has fallen from around 12 to 9½ per cent in 1999, but has continued to be well above the pre-recession level of about 6 per cent.

As a reaction to the widening income distribution and increase in relative poverty, the government launched a poverty package to raise income transfers for the poorest and to improve public services especially directed at the most vulnerable people, with outlays of EUR 80 million (0.1 per cent of GDP) in 2001, rising to EUR 260 million in 2002. There is the risk that these measures may increase poverty traps. The government's strategy to prevent poverty and social exclusion, however, does not only focus on the transfer system. In its view, ensuring stable output growth by proper macroeconomic management and raising productivity through education and structural reform measures are crucial to reach a higher level of employment and thereby to lowering poverty (Ministry of Social Affairs and Health, 2001).

1. See Statistics Finland (2001*b*), Riihelä *et al.* (2001), Burniaux *et al.* (1998) and Förster (2000). In the mid-1990s, income inequality, as measured by the Gini index, was the lowest of the examined OECD countries after Denmark and Sweden. Arjona *et al.* (2001) reports that it was the lowest in the 1990s after Denmark.
2. In 1993-95, poverty rates for selected OECD countries varied from 4.7 per cent in Denmark to 15.3 per cent in Portugal and 16 per cent in the United States (OECD, 2001*e*). The EU average excluding Austria, Finland and Sweden was 11.7 per cent.

Table 11. **Income distribution and poverty**

	1990	1995	1998	1999
Gini index of income inequality¹				
Wages ²	..	0.21	0.22	0.21
Factor income ³	0.39	0.46	0.47	0.48
Gross income ⁴	0.26	0.27	0.30	0.31
Disposable income	0.20	0.22	0.25	0.26
Households' disposable income share				
1st decile	5.0	5.0	4.5	4.4
2nd decile	6.5	6.5	6.0	5.9
10th decile	18.4	19.7	21.4	22.8
Poverty rates (% of population)				
Based on disposable income ⁵ less than:				
50% of median disposable income	3.3	3.0	4.1	4.1
60% of median disposable income	7.8	7.1	9.5	9.6

1. The index ranges from 0 to 1; a higher coefficient indicates a less equal income distribution.

2. Excluding income from stock options.

3. Including income from stock options.

4. Defined as the sum of factor income and transfers received.

5. Household income is adjusted by taking into account its size and composition; in a household the first adult has a weight of 1, the second 0.5 and children 0.3 each (new OECD equivalence scale).

Source: Statistics Finland (2001), *Income Distribution Statistics 1999*.

and by improving the quality of the job placement services for enterprises (Räisänen, 2001).⁴⁴ Job-search activity is promoted by job-search training of unemployed, entry interviews by PES job-counsellors of persons becoming unemployed, monthly contacts of the unemployed with the PES, half-yearly intensive interviews, compulsory job-search plans and skill mapping.⁴⁵ Finland did not play a pioneering role with these reforms, but caught up with best practices established in other countries earlier on (OECD, 2001f and 2001g). As evaluations made by the Ministry of Labour indicated that only participation in job-search training has a positive effect on job-search activity (Ministry of Labour, 2001), for other measures, such as a monthly PES contact and the half-yearly intensive interviews, selectivity will be increased and frequency lowered as part of the “second wave” of PES reforms.⁴⁶ A main element of the new measures is a limited outsourcing of placement services by the PES.⁴⁷ As in Australia, the remuneration for a placement will depend on the unemployment category, with the highest fees paid for those who are hardest to place. The proposal is, however, less radical than the 1998 reform of the Australian PES that led to a contestable employment placement market with competition between private, public and community service providers.⁴⁸ Furthermore, the role of the job-search plan will be strengthened by modifications in the unemployment benefit systems. If the job-search plan is

insufficiently followed, the PES will be able to apply sanctions such as a cut in the unemployment benefit.⁴⁹ This will improve the possibilities of the PES to test willingness to accept work. At the moment, the only way the PES is doing this in practice is by a direct job offer, but this is only done for one in ten unemployed.

The labour market programmes are not very effective

Not only job-brokerage and job-search assistance services but also active labour market programmes (ALMPs) can be instrumental in reducing unemployment. As in the other Nordic countries, ALMPs play an important role in Finland, at the cost of slightly more than 1 per cent of GDP in 1999 (OECD, 2001f). The Finnish authorities consider the effects of the current ALMPs “not on the whole satisfactory” (Ministry of Labour, 2001b) but have not proposed a major overhaul. For many unemployed, participation in an ALMP is only an interlude between two unemployment spells and does not increase employability significantly (Table 12). In recent years, spending on active measures has fallen steadily, in line with the drop in unemployment, while the authorities have put more emphasis on training and private instead of public sector placement programmes. Recently, to increase the probability of long-term unemployed returning to a regular job, the government proposed to lengthen the period of the “combined subsidy” programme. Under this programme, an employer in the private or public sector who hires a long-term unemployed will receive the person’s labour market support and an additional employment subsidy for two years instead of one from 2002 onwards (the new employee is paid according to the wage settlement of the industry). At the moment, the impact of placement in the “combined subsidy” programme on employability is as disappointing as placement in a temporary job in the public sector (Table 12). Nevertheless, the share in total ALMP placements of these two programmes is substantial, although that of public sector jobs has dropped substantially in recent years.⁵⁰ To reduce structural unemployment, ALMPs that do not show satisfactory results should be re-examined.

Labour market regulation also plays an important role in job creation. In this context, the new *Employment Contracts Act* that came into force in June 2001 is relevant (Hietanen, 2001). It increases the rights of fixed-term and part-time employees, by forbidding in principle the application of worse terms to “atypical” contracts than to full-time permanent contracts and by obliging employers who need more personnel to offer in the first instance extra work to part-time employees. Furthermore, it defines more precisely the system of “general validity” of collective agreements although it is too early to say whether this will make the agreements more or less binding. Finally, it reduces the notice period for short-term contracts and increases it for long-term ones. Overall, it makes the Finnish employment protection legislation slightly more restrictive, but without

Table 12. **Active labour market programmes: composition and impact**
Number of persons on an annual basis, thousands

	1990	1995	1997	1999	2000	2000 % unemployed afterwards ¹
Labour market training	16.8	33.9	46.8	37.7	30.9	43.5
Apprenticeship training for unemployed	0.0	2.5	9.0	8.4	6.2	15.0
Traineeship	0.0	9.9	12.2	11.6	10.5	32.1
Unemployed continuing education	0.0	0.0	0.2	1.8	1.2	..
Pay subsidies (private sector)	4.8	11.7	6.9	4.2	3.4	40.6
Job rotation	0.0	0.0	3.3	4.6	5.3	..
Part-time work	0.0	2.2	6.5	6.0	3.8	38.4
Start-up grants	1.5	3.9	2.7	2.2	1.9	5.2
Job in the public sector	24.3	39.6	36.0	20.1	14.5	61.4
Combined subsidy ²	0.0	0.0	0.0	9.8	12.6	63.9
Vocational rehabilitation ³	0.0	0.0	1.4	1.4	1.6	..
Total	47.3	103.7	125.0	107.7	91.9	44.1

1. Share of the participants unemployed three months after terminating the measure.

2. Under the programme an employer, in the private or public sector, who hires a long-term unemployed receives the person's labour market support and an additional employment subsidy.

3. Vocational training to improve occupational skills of the long-term unemployed.

Source: Ministry of Labour.

changing the overall assessment given in the previous *Survey* that restrictiveness is close to the European average and far above that in some non-European countries.

New proposals to raise the effective retirement age

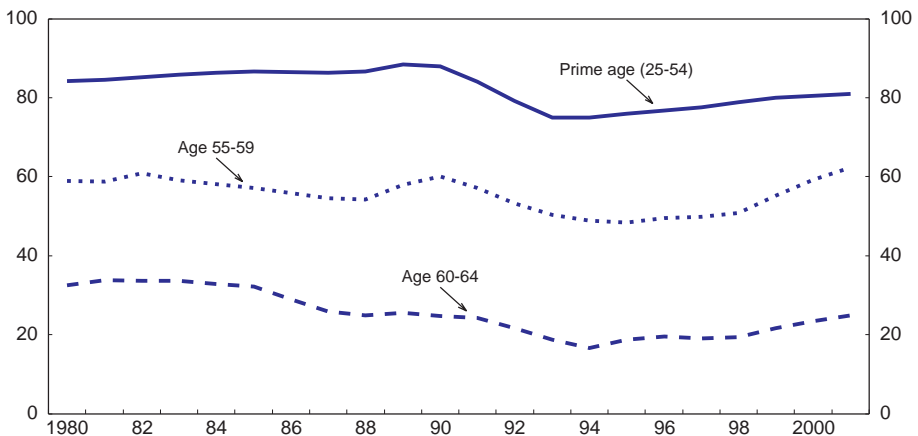
The previous *Survey* contained a special chapter on how ageing of the population will affect Finland.⁵¹ In the coming decades, Finland will face a more rapid ageing of the population than most other OECD countries, which makes policy changes more urgent than elsewhere, while the low effective retirement age – estimated at 59 years in 2001 – makes it an even more daunting task (see also Box 3). On the other hand, the pension system is partly funded, in contrast to many other OECD countries, and the pension reforms of the 1990s have reduced the fiscal implications of ageing to some extent. The major reform recommendations in the previous *Survey* – aimed foremost at increasing the effective retirement age – were to:

- Make early retirement through the disability and unemployment pension schemes less favourable by eliminating old-age pension accruals during the period of early retirement.

- Phase out the “pipeline” to unemployment pensions (currently unemployed older than 55 years are not required to seek work actively), supplemented by removal of disincentives for firms to hire older workers and active labour market programmes aimed at keeping 55 to 59 year-olds at work.
- Grant disability pensions only on purely medical grounds.
- Introduce defined-contribution personal pension accounts and lift the current pension ceiling of 60 per cent of pensionable earnings in order to increase incentives to work longer.
- Increase the funded part of the earnings-related pension schemes.

Helped by the favourable economic climate and possibly supported by the 2000 pension reforms, employment rates for older workers have edged up but are still low (Figure 16).⁵² This was accompanied, however, by a worrying rise in part-time pensions of almost a quarter in 2001. These pensions are extremely generous after tax and should be scaled back. After the 2000 reforms, no additional measures have been implemented but in November 2001 working groups put forward proposals for further reform that are likely to be taken over by government and approved by Parliament in 2002 (Annex I). Implementation of the

Figure 16. **Employment rates of older workers**¹
Employment as a per cent of population in the same age group



1. Estimate for 2001.

Source: OECD, *Labour Force Statistics*, Part II and Eurostat.

proposed flexible retirement age of 63 to 68 years in combination with the proposed strong pension accrual after the age of 63 and the lifting of the 60 per cent pension ceiling will introduce strong incentives to remain longer in work, which is in line with the recommendations of the previous *Survey*. The same holds for the abolishment of the individual early retirement pensions and of the unemployment pension scheme in its current form, and for the scaling back of part-time pensions and the unemployment “pipeline” to pension. However, the scaling back of the pipeline is limited and the abolishment of the individual early retirement pension could be offset by an increase in disability pensions due to the proposed easing of eligibility rules. According to preliminary calculations made by the Finnish Central Pension Security Institute, implementation of the proposals would mean that the government target of increasing the effective retirement age by 2 to 3 years would be met by 2025; without implementation, the effective retirement age will only increase by around 1½ years between 2000 and 2025. The net effect of the proposals on the sustainability of the pension system is, however, currently difficult to assess and is unlikely to improve it by much. The sustainability of the pension system will depend critically on future decisions of the government on various issues that were left open by the working groups. These issues should be resolved in a prudent manner so as to safeguard the sustainability of the system over time. Most importantly, pension benefits should become linked to lifetime earnings –the working groups proposed an option scheme that is likely to lead to an increase in pension expenditure (Annex I) – and the retirement age should become linked to life expectancy.

Product markets: privatisation and competition could be enhanced

As highlighted in previous *Surveys*, the functioning of product markets has improved due to liberalisation measures, privatisation, the drop in state aid and the increased contestability of markets prompted by greater openness to foreign trade. Nevertheless, the productivity level is still below that of the best performing OECD countries and prices of consumer goods and services remain higher than elsewhere in the euro area, indicating the need to continue with product market reforms (Ministry of Finance, 2000c). The recent decision to continue privatisation and implementation of new EU Directives that will liberalise markets further are therefore welcome. Moreover, it is crucial that the Finnish Competition Authority and the sectoral supervisors remain vigilant against uncompetitive behaviour and that, where needed, a strengthening of their position is considered. Finally, special attention should be paid to raise the effectiveness of public service delivery, transforming gradually the government's primary role from that of a producer to that of a purchaser of public services from private companies (Box 7).

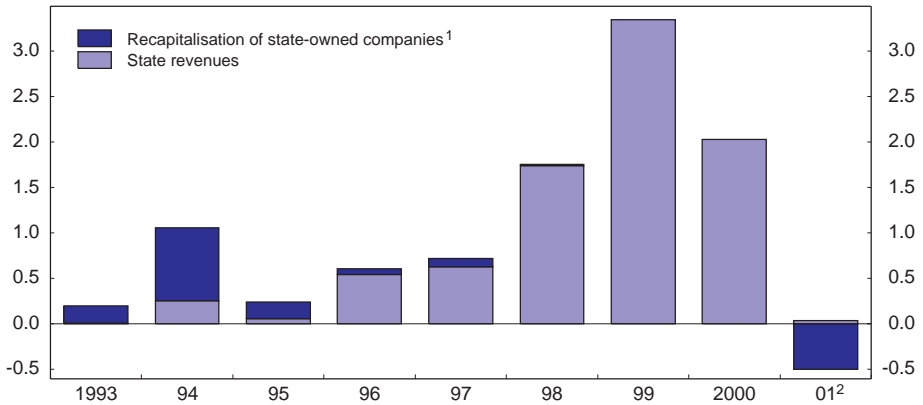
**Box 7. An example of the changing role of the public sector:
the construction and maintenance of roads**

In 2001 and following long deliberations, the Finnish national road administration was split into a government office responsible for road planning and contracting – the Finnish Road Administration (Finnra) – and a separate state-owned enterprise – the Finnish Road Enterprise – engaged in road construction and maintenance. At the same time, tendering was extended to increase the role of private companies in road building and road maintenance in order to reduce costs. As a consequence of the job guarantee for the existing staff at the time of the split, however, some projects are still granted exclusively to the Finnish Road Enterprise during a four-year transitional period. The subsidy involved is estimated at around EUR 17 million in 2001 and the current overstaffing of the Finnish Road Enterprise is estimated to be a quarter of the personnel. Moreover, quality criteria set for many projects favour the Finnish Road Enterprise. In early 2001, 17 of the 23 tenders for regional road maintenance projects for 2001-04 went to the Finnish Road Enterprise. The example shows that, in case of job guarantees for the incumbent, it can take an extended period before the full efficiency gains are realised and that this can lead to frictions between the incumbent and its competitors during the transition period. Moreover, even after the transition period, frictions are likely to persist as long as the Finnish Road Enterprise is not privatised.

Privatisation: minimum state stakes lowered

In 2001, Parliament broadened the privatisation mandates but privatisation proceeds were marginal and widely exceeded by capital injections (Figure 17).^{53, 54} Potential proceeds from the unused privatisation mandates are sizeable, estimated at EUR 8 billion (nearly 6 per cent of GDP).⁵⁵ The broadening is welcome given that private ownership provides usually better incentives for managers to improve a company's performance, and, as a result, private companies generate substantially higher rates of return on average than public enterprises (Megginson and Netter, 2001).⁵⁶ Since the case-by-case privatisation process started in 1992, three-quarters of the net privatisation proceeds have accrued from the partial sale of Sonera, the dominant telecommunications company, while the reduction in government holdings in traditional industries has been limited. The state has relinquished its entire holding in 13 companies, reduced its stake to less than a third in eight, but kept full control in 27 companies and a simple majority of shares in four major companies (Table 13). As a result, state ownership

Figure 17. **Privatisation proceeds**
Billion EUR



1. New share issues to strengthen the capital base of the companies.

2. At end November.

Source: Ministry of Trade and Industry.

continues to be substantial, with fully and partly state-owned and associated companies still employing around 200 000 persons, equivalent to almost 12 per cent of private sector employment (Ministry of Trade and Industry, 2001). The recent lowering of minimum state stakes may change this slow pace in the medium term but in the short term the current stock market climate is likely to hamper privatisations.

The state's shareholdings are managed by the ministry covering the sector in which the company operates. This means, for instance, that the Ministry of Transport and Communications is responsible for the ownership in the telecommunications company Sonera. Nine ministries are currently involved in managing the stakes of the state, with the Ministry of Trade and Industry in a coordinating role. This decentralised approach has recently received more attention. The main advantage of moving to a centralised system with one ministry responsible for all shareholdings would be a reduction in the actual and perceived frictions between the role of the government as regulator and its role as owner.⁵⁷ It would separate the owner's interest in increased revenues from the government's task to increase efficiency of markets. Another advantage would be that in a centralised approach it is easier to deal with ownership issues in a consistent way.⁵⁸

Table 13. **Main state-owned companies**

Company	Sector	Persons employed in 2000 (thousands)	In November 2001 (% share)		Previous minimum	
			Ownership	Minimum	Ownership (% share)	Year of change
Alko	Alcoholic beverages	2.2	100	100	..	..
Altia	Production and wholesale of alcoholic beverages	0.8	100	50.1	66.7	2001
Avena ¹	Grain wholesale trade, handling and storage	0.4	100	100	..	..
Edita	Printing and publishing	1.2	100	100	..	..
Finnair	Airline	11.1	58.4	50.1	66.7	1994
Fortum	Energy	16.2	70.7	50.1	66.7	1998
Inspecta	Technical inspection	0.2	100	0	33.4	2001
Kemijoki	Energy	0.4	67.0	51.0	66.7	1997
Kemira	Chemical industry	9.6	53.4	15.0	33.4	2001
Metso	Machinery	22.0	11.6	0	..	..
Outokumpu	Metal	11.9	40.0	10.0	33.4	2001
Partek	Wood products	11.8	30.2	0	..	..
Patria	Defence	2.2	73.0	50.1	100	1999
Posti	Postal services	24.8	100	100	..	..
Rautaruukki	Metal	13.2	40.1	20.0	33.4	2001
Sampo	Banking and insurance	10.2	40.2	0	20.0	2001
Sonera	Telecommunications	10.3	52.9	0	33.4	2000
StoraEnso	Pulp and paper	41.8	14.8 ²	0	..	..
Vapo	Wood-based fuels and peat	1.3	100	50.1	66.7	2001
Veikkaus	Lottery and football pools	0.3	100	100	..	..
VR Group	Railways	15.4	100	100	..	..
Yleisradio	TV and radio broadcasting	4.6	100	100	..	..

1. In October 2001, the government requested permission to Parliament to give up ownership.

2. Government share in votes is 23.8 per cent.

Source: Ministry of Finance, Ministry of Trade and Industry, and OECD.

Deregulation and competition policy: reducing abuse of market dominance should be the priority

Product markets have been rapidly liberalised during the past decade and the telecommunication and electricity markets are now fully liberalised.⁵⁹ Finland has liberalised its postal sector as well, one of only four countries in the EU to do so, but new firms for delivery of standard letters have not yet entered the market due to the strict universal service obligations.⁶⁰ In 2001, deregulation measures were limited to liberalising Sunday sales of small shops, while competition

in the telecommunications sector was strengthened by amendments to the Telecommunications Market Act that provides customers the possibility to have another provider for Internet services than its local telephone company (local loop unbundling).^{61, 62} A few markets are still heavily regulated – especially railways and retail sales of alcoholic beverages.⁶³ More importantly, the authorities should concentrate on measures against the abuse of a dominant market position by major operators. Preventing abuse and enhancing competition is not only relevant for network industries, but is also imperative for other industries like retail trade, construction and oil refining (Table 14). The government could reduce dominance in network industries by stimulating alternative networks. For example for telecom services, the cable television network could offer competing telecom services, but the ownership of the cable networks by telecommunications companies prevents this at the moment. This may also be the reason why the penetration rate of broadband Internet services has remained low in Finland. Unfortunately, the Ministry of Transport and Communications has not been willing to come up with legislation to dissolve the current ownership structure (FCA, 2001).

Most investigations by the Finnish Competition Authority (FCA) concern the telecommunication sector. In 2001, based on a proposal by the FCA, the Competition Council fined the second-biggest Finnish telecommunications company and two regional telephone operators for barring potential competitors from entering the local call market by charging unreasonable prices for the use of their fixed local telephone network. The companies decided to appeal to the Supreme Administrative Court.⁶⁴ The FCA started to investigate the pricing of local network leases already in 1996 and made proposals to the Competition Council in 1999; the final decision by the Supreme Administrative Court is expected for 2002 at the

Table 14. **Market concentration in network and other industries**

Per cent of total, end 2000

	Companies	Market share
Telecommunications		
Long-distance calls	Sonera, Finnet	94
International calls	Sonera, Finnet	81
Mobile communication services	Sonera, Radiolinja	98
Internet connections	Sonera, Elisa, Jippii	80
Energy		
Electricity	Fortum	40
Petroleum products	Fortum	75
Retail sales		
Daily consumer goods	K-Group, S-Group, E-Group, Spar	88

Source: OECD.

earliest. The effectiveness of competition policy is reduced by such long legal processes, the more so as telecommunication technology is developing extremely rapidly. To speed up the process and enhance the enforcement of the competition law, the Competition Council, staffed mainly by high ranking public officials who have their main professional obligations elsewhere, should be reorganised, for instance, into a special court. This issue is dealt with in a government proposal presently before Parliament.

Without any doubt, the introduction of merger and acquisition (M&A) control by the FCA in 1998 has been a major step for competition enforcement. The FCA can now pose conditions on M&As and can propose the prohibition of an arrangement to the Competition Council. Since the control of concentrations began in October 1998, the FCA has examined more than 300 cases. In 2000, it posed conditions in 14 cases and proposed the prohibition of one acquisition to avoid the creation of a competition-impeding dominant position.⁶⁵ A working group, which will report in 2002, has been set up to explore how competition policy should be developed further, taking into account the competition policy review currently discussed at the EU level. One option that should be pursued is to give the FCA the power to apply the EU rules on cartels and on abuse of a dominant position, which may be seen as stricter than the national legislation.

A rise in agricultural subsidies

While state aid to the manufacturing sector is low – about a half of that in the four EU countries with the highest aid – agricultural subsidies have remained very high.⁶⁶ In contrast to the OECD average, support even increased in 2000, by 14 per cent to 1.2 per cent of GDP (Ministry of Agriculture and Forestry, 2001; OECD, 2001*ii*).⁶⁷ National support rose somewhat, but the bulk of the increase was due to EU aid, whose share in total support increased by 5 percentage points to 41 per cent. In addition to aid based on the Common Agricultural Policy (CAP), the sector benefits from EU environmental aid and the EU least favoured area (LFA) support, while it receives at the same time substantial national support to cushion the fall in farm income caused by EU membership.⁶⁸ With national aid and LFA support aimed at offsetting the negative impact of low productivity due to the harsh climate, agricultural subsidies account for a larger share of farmers' income than in other EU countries. At the time of the EU accession negotiations, national aid was agreed for a five-year transitional period ending in 1999, but in 2000 the Commission approved a prolongation until 2003, with a drop in transitional national aid of 4 per cent per year. This is likely to lead to a further restructuring in the agricultural sector and a big drop in agricultural employment. As highlighted in the special chapter on sustainable development in the 1999 *Survey*, regional and environmental goals of agricultural policy could and should be achieved in a less

costly and distorting way than under the current agricultural aid arrangements (Vourc'h and Jimenez, 2000).

Financial sector: strong consolidation continues

Regulation and supervision of the Finnish financial sector is under pressure to adapt to two fundamental changes: the mergers of banks and insurance companies, and the internationalisation of the financial sector. Currently, there are two separate entities involved in supervising the financial sector, while two ministries are responsible for preparing legislation.⁶⁹ The government is considering the merger of the Insurance Supervision Authority (ISA) with the Financial Supervision Authority (FSA) and the concentration of the preparation of legislation in one ministry.⁷⁰ It has already sent a draft law to Parliament concerning supervision of financial conglomerates, but this law is limited to the clarification of the role of the two existing supervisory authorities. Co-operation between the two supervisors is facilitated by common board members and recent memoranda of understanding, but more far-reaching steps need to be considered in the light of the recent formation of Finnish financial conglomerates. The present trend of convergence between products that traditionally were regarded as either belonging to the banking market or to the insurance market provides an additional argument for such organisational reform. Lately, Ireland and the United Kingdom switched to a single supervisory authority for the financial sector, while Austria will do so in 2002 and the German government has proposed such a switch to Parliament.⁷¹ In the Finnish case, a merger of banking and insurance supervisors may be more complex because of the core role played by Finnish insurance companies in the national pension system.

The Finnish financial sector is unique as the biggest bank, Nordea, has a foreign head office (in Sweden). As a consequence, under the EU principle of home country control, the Swedish supervisory authority is responsible for supervision at the holding level, while the national authorities supervise the subsidiary. In 2000, the supervisory authorities of Denmark, Finland, Norway and Sweden agreed on close co-operation in the supervision of Nordea that provides banking and other financial services in the four Nordic countries.⁷² The co-operation is working adequately for day-to-day business but there may be a need for clarification on rules of the provision of emergency liquidity assistance to pan-Nordic financial conglomerates. In the near future when European companies (*Societas Europaeae*, SE) can be established, the allocation of supervisory responsibilities may change substantially.⁷³ The new statute will simplify the structure of trans-national European companies and will enhance the role of the supervisor of the country where the head office is located. An even more radical reform would be the creation of an EU-wide financial sector supervisory body but the prevailing view is that centralised supervision is neither needed nor feasible because of differences

in financial market practices (EFC, 2000; Suihko, 2001; Halme, 2001). A better flow of information between national supervisors and convergence of supervisory practices are currently the only way to improve supervision of trans-national companies.

In 2000 and 2001, domestic consolidation has continued despite the fact that a more profound restructuring process took place than in many other EU countries over the last decade.⁷⁴ The most important development was the merger between the private insurance company Sampo and the fully state-owned Leonia bank at the beginning of 2001. Finnish companies have also been heavily involved in the concentration process of the financial sector in the Nordic region. In 2000, Nordea became a financial conglomerate with major positions in all four Nordic countries through its merger with the Danish financial conglomerate Unidanmark and its takeover of the Norwegian partly state-owned commercial bank Christiania Bank og Kreditkassen.^{75, 76} As a result of this consolidation process, concentration in the Finnish market is high, especially for banking services where the market share of the three biggest companies is around 90 per cent (Table 15).

Table 15. **Market shares of banks and insurance companies**

	Per cent of total		
	Credits	Deposits	Mutual funds
Banks¹			
Nordea	41.2	41.7	31.8
OKO Group	26.9	29.6	12.1
Sampo	17.4	13.4	10.3
Savings Banks	5.5	7.8	3.1
Subsidiaries of foreign banks	5.5	2.1	..
Other banks	3.5	5.4	18.2
Other financial institutions	..	..	24.5
	Employee pension	Personal life and pension	Non-life
Insurance companies²			
Sampo	39.7	19.8	34.3
Tapiola group	14.5	5.6	14.5
Pohjola group	..	..	22.3
Ilmarinen	31.7	..	..
Nordea	..	36.0	..
Fennia group	9.7	2.1	9.3
Suomi group	..	16.2	..
Aurum	..	10.0	..
Läshivakuutus group	..	..	8.0
Others	4.5	10.3	11.5

1. At 30 June 2001.

2. Average in 2000.

Source: Finnish Banker's Association and Federation of Finnish Insurance Companies.

However, the Finnish Competition Authority has not detected uncompetitive behaviour in the sector, although financial markets are still one of FCA's primary concerns in competition law enforcement.⁷⁷ Despite high concentration, competition is fierce, especially for services that can also be supplied by foreign companies. Technological developments such as Internet banking also stimulate competition as it reduces the importance of a branch network and therefore makes it easier to enter the market (Vesala, 2000).⁷⁸

Finnish financial companies have strong balance sheets prompted by high economic growth and substantial cost reductions due to restructuring and the introduction of new technologies. In 2000, bank profits soared by almost 60 per cent to a record level of EUR 2.2 billion while insurance companies increased profits by 45 per cent to EUR 2.9 billion. In the first half of 2001, bank profits remained strong although the much weaker economy and stock market led to a drop of 17 per cent from a year earlier. The increase in 2000 was mainly due to a rise in dividend income from equities and sales profits on shares, but buoyant lending growth and wider interest rate margins contributed as well. Credit losses declined to a record low of EUR 70 million, in sharp contrast to the annual credit losses of close to EUR 700 million in 1992, the worst year of the banking crisis of the early 1990s. The return on equity reached 24 per cent, about 10 percentage points above the EU average and comparable with that of US banks. The cost-to-income ratio stood just above 50 per cent, down by over 20 percentage points from the mid-1990s level and among the lowest in the European Union (Andersen *et al.*, 2000; Koskenkylä, 2000). The capital ratio of Finnish banks also appears adequate (the tier I capital ratio was 9.6 per cent in June 2001, in line with the EU average). Moreover, the exposure of Finnish banks to the telecommunication sector is limited as the domestic incumbent Sonera, whose financial position is one of the weakest of the major European telecommunications companies, has mainly borrowed abroad.

In 2000, the Helsinki Stock Exchange (HEX) changed from a private limited company to a public limited company with major market parties as shareholders.⁷⁹ The current regulations set a 5 per cent maximum on any single owner's voting rights at the shareholders meeting, while the Financial Supervisory Authority can oppose sales of shares if it considers it a risk to the operations of the exchange. According to analysis by the Board of Directors of the HEX Group, the company is eligible for listing, which would increase the visibility of the stock exchange and would make it easier to raise capital. Recently, Deutsche Börse, the London Stock Exchange and Euronext (the merger of the Paris, Brussels and Amsterdam exchanges) became listed companies to improve their commercial focus. There are no legal impediments for the listing of the Finnish stock exchange but the rules limiting voting rights may hamper a listing in practice. Furthermore, the government will keep regulations preventing a takeover of the stock exchange.

In terms of foreign shareholding and the foreign brokerage market share, the HEX is one of the most international exchanges.⁸⁰ It has been recently successful in increasing the number of remote brokers, which increased liquidity and may have contributed to replacing the New York Stock Exchange as the main marketplace for Nokia shares.⁸¹ Furthermore, in 2001, the HEX Group increased its presence in the Baltic region by acquiring a majority of the shares of the Estonian stock exchange and by the switch of this exchange to the HEX trading system.

Not surprisingly, given the high weight of the ICT sector (80 and close to 70 per cent at the end of 2000 and July 2001, respectively), the relative performance of the share index of the Helsinki Stock Exchange has reflected the ICT hype. After being the strongest performer in western Europe in 1999, it has been among the weakest thereafter. The drop from the May 2000 peak to the end of November 2001 was 55 per cent compared to a drop of around a third for the European average (based on the DJ Euro Stoxx 400 index). The impact of this sharp drop on households' wealth is limited as shares (including participation in mutual funds) represented only a quarter of their financial assets at the end of June 2001, while bank deposits still account for roughly half of households' financial wealth.

Venture capital markets have expanded rapidly

The Finnish venture capital industry has expanded rapidly in the 1990s but may have entered a consolidation phase in 2001. Total capital under management rose from EUR 0.3 billion in 1995 to EUR 2.3 billion (1¼ per cent of GDP) at the end of 2000 (Finnish Venture Capital Association, 2001). In 2000, venture capital funds invested EUR 0.4 billion in 450 projects, a rise of 40 and 7 per cent from the previous year, respectively. As in previous years, funds raised (EUR 0.6 billion) exceeded new investments, despite a drop of 9 per cent from 1999. Private domestic sources, especially insurance companies and pension funds, provided the bulk of the new funds (around 70 per cent), while the government – mainly through Sitra (Finnish National Fund for Research and Development) and TEKES (the Technology Development Centres) – and foreign investors both provided around 15 per cent. The excess funds may indicate a lack of commercially promising projects. It could also indicate that Finnish funds were less influenced by the “new economy hype” than in other OECD countries. Between 1995 and 1999, around a third of investments went to high-technology sectors (information and communication technology, biotechnology, medical and related sectors), well below the 80 per cent share in the United States but somewhat above the 25 per cent share in the European Union (Baygan and Freudenberg, 2000).

Public sector efficiency should be enhanced

The Finnish authorities are well aware of the need to enhance efficiency in the sizeable public sector in order to reduce taxes and to increase productivity.

The programme of the present government stresses the lack of transparency in the pricing of municipal services and inefficiencies in public procurement. In its 2000 "Cardiff Report" on product and capital market reforms, the government underlined the necessity to promote competition in public service production in order to restrain public spending growth (Ministry of Finance, 2000c). In 1999, the Ministry of Trade and Industry set up a working group to examine competition in the provision of municipal services and the cost-awareness of public welfare service provision, while, in 1998, the Finnish Competition Authority (FCA) established its "Government and Markets" project aimed at eliminating restrictive practices and promoting competition in public service provision. The final report on this project was issued in July 2001 and provides municipalities examples of best practices concerning promotion of competition. In its recent strategy paper, the Ministry of Social Affairs and Health emphasises the need to increase competition in the health sector (Ministry of Social Affairs and Health, 2001b). Despite the awareness of the need for reform, public services are still mainly provided by the public sector and the role of the private sector has not increased markedly in recent years. The road construction sector shows that such a transition can be long and difficult (Box 7). Moreover, public procurement tendering by local governments is still among the lowest in the European Union.⁸² As a consequence, general government employment has remained almost a quarter of total employment, one of the highest shares in the OECD (Table 16). The proposed changes to the VAT refund of municipalities in 2002 (see Chapters I and III) are unlikely to stimulate outsourcing of tax-exempt services substantially.

The lack of progress in increasing the role of the private sector in providing public services does not mean, however, that public sector reforms were lacking entirely (Annex II). Since the early 1990s, the system of state grants to municipalities has been substantially improved (see also Chapter III), decision making has been decentralised and a large number of state agencies have been converted into state enterprises, some of which have then been fully or partly

Table 16. **Government employment**
Thousand persons

	1990	1996	1997	1998	1999	2000	2001 ¹
Government activities	575.2	546.5	558.0	553.6	556.6	559.7	561.8
Central government	149.3	141.3	140.1	138.9	140.1	140.9	..
Local government	417.1	396.2	408.9	405.7	407.3	409.3	..
Social security funds	8.8	9.0	9.0	9.0	9.2	9.5	..
As a % of total employment	23.2	26.4	26.1	25.4	24.8	24.5	24.2

1. Estimate.

Source: Statistics Finland, *National Accounts 1992-2000* and OECD.

privatised later on. Furthermore, since 1993, municipalities have been allowed to purchase services from the private sector, although this has up to now had only a limited impact.⁸³

The ageing of its personnel will pose a major challenge for the public sector in the coming years. Up to 2010, 50 000 persons will be needed to replace retiring personnel in the social and health care sector alone (Ministry of Social Affairs and Health, 2001c). On top of this, due to ageing and based on existing practices, 6 000 additional government employees will be required to provide care services for the elderly and 12 000 for other social and health care services. Labour shortages in the health and care sector may therefore arise. Without reform measures to increase efficiency in the public sector – an estimated 40 per cent of the current employees in the local government sector will retire during the current decade – private sector labour demand could be crowded out.

Scope for further action

Unemployment remains high and is currently increasing because of the cyclical downturn. At the same time, and despite the boost from the ICT sector, the productivity level continues to be below that of the leading OECD countries. Both features call for continuing structural reform measures (Table 17). Such measures are also needed in the light of the potential repercussions of the rapid ageing of the Finnish population. Priority should be given to measures that will raise the employability of the current long-term unemployed and their incentives to find work, the more so as this is the best way to reduce hardship and poverty. Lowering unemployment also requires changes to the social transfer system. Such changes would also mitigate the economic consequences of ageing, especially if they focus on reducing the attractiveness of the early retirement schemes. While productivity growth in the private sector may be subdued over the medium term if more of the low-skilled unemployed find a job, this could be offset by measures that will increase productivity in the public sector. Reforms should be comprehensive as this will reinforce the effectiveness of the various measures and thereby improve overall performance.

Table 17. **Recommendations for further structural reform**
Based on previous and current *Surveys* and action taken since early 2000

Previous Survey	Action taken	Current Survey
LABOUR MARKET AND SOCIAL SECURITY SYSTEM		
A. Reduce incentives for early retirement and reform the pension system		
a) Increase further the minimum age for the unemployment pension; shorten “unemployment pipeline to pensions”; reduce incentives to retire early.	The minimum age of the individual early retirement scheme was raised from 58 to 60 years; unemployment pensions were lowered (early 2000). Proposals have been made ¹ which are in line with the recommendation of the previous <i>Survey</i> .	The recent proposals should be implemented and issues left open should be resolved in a prudent manner so as to safeguard the sustainability of the pension system.
b) Reduce impediments for hiring older workers. Reduce, for instance, the contribution of the last employer to disability and unemployment pensions.	Financial disincentives for large employers to use the unemployment pension scheme were increased while those for the disability pension scheme were reduced (early 2000).	Same as in previous <i>Survey</i> .
c) Lift the pension ceiling of 60 per cent of the pensionable earnings in order to make work above the age of 60 attractive.	Lifting of the ceiling has been proposed. ¹	The proposed reform should be implemented.
d) Abolish old-age pension accrual during early retirement.		Same as in previous <i>Survey</i> but implementation of the recent proposals to allow early retirement only from the age of 62 years reduces the distortion significantly. A further welcome step would be to base pension accrual during periods of unemployment on the benefit received instead of the original wage as done in the current system.
e) Smooth the future impact of ageing by increasing funding of the pension system now.		Same as in previous <i>Survey</i> . The need for additional funding depends on how the issues left open are resolved.
f) Introduce a properly funded pension scheme for central government employees.		Same as in previous <i>Survey</i> .
g) Put early retirement schemes on an actuarially sound footing.	The proposed flexible retirement age goes in this direction.	More remains to be done on this, especially concerning the unemployment “pipeline” to pension. A further welcome step would be to base pension accrual during periods of unemployment on the benefit received instead of the original wage as done in the current system.

Table 17. **Recommendations for further structural reform** (cont.)
Based on previous and current *Surveys* and action taken since early 2000

Previous Survey	Action taken	Current Survey
<i>h</i>) Introduce personal pension accounts for older workers.		Same as in previous Survey. Implementation of the proposed lifting of the pension ceiling and the introduction of flexible retirement would have comparable effects.
B. Reform unemployment and related benefits		
<i>a</i>) Shorten maximum unemployment benefit duration to increase job search intensity. Phase down unemployment benefits during the first 500 days of unemployment.	Proposals have been made ¹ to introduce a phasing down for some workers.	Same as in previous Survey as the recent proposals would only lead to some degressivity for a limited group.
<i>b</i>) Make eligibility criteria for social security benefits stricter. Enforce eligibility criteria for unemployment benefits.	Proposals have been made ¹ to soften the eligibility criteria for unemployment benefits.	Implementation of the reform proposal would be a step in the wrong direction.
<i>c</i>) Increase regional mobility of the unemployed. Lift the condition that placement involving relocation is suitable only if the vacancy cannot be filled locally.	The regions were enlarged for which the job seeker has to accept a job offer or an ALMP measure (early 2000).	Same as in previous Survey.
<i>d</i>) Introduce medical re-examination of disability pension beneficiaries.	Proposals have been made ¹ to soften the eligibility criteria for disability pensions and to abolish the individual early retirement scheme.	Implementation of the reform proposal to soften the eligibility criteria for disability pensions would be a step in the wrong direction. On the other hand, the proposed abolishment of the individual early retirement scheme is welcome.
C. Make active labour market programmes more effective		
<i>a</i>) Pursue better job counselling, for instance, reach the target of one contact per month with every unemployed person.	Impact of the 1998-99 reform of the PES was quickly evaluated, leading to proposals for a second wave of reforms in 2002.	Implement proposed changes to PES. Consider going further with the introduction of a general contestable placement market.
<i>b</i>) Reduce the number of subsidised jobs offered by local government.	Development in the right direction.	Continue with the reduction in the number of subsidised jobs offered by local government.
<i>c</i>) Step up ALMPs for older workers. Apply sanctions in case older unemployed refuse training or a suitable job.	In 2001, the Ministry of Social Affairs and Health underspent on the ALMPs for older unemployed due to lack of interest on their behalf.	Same as in previous Survey. Impact of ALMPs for older workers will remain minor without changes in the unemployment pension scheme and in the "pipeline" to unemployment pensions.
<i>d</i>) Evaluate the effectiveness of all active labour market programmes and end those with poor results.	Thorough evaluation was made of the 1998-99 reform of the Public Employment Service.	Given limited effects, an overhaul of some ALMPs is needed.

Table 17. **Recommendations for further structural reform** (*cont.*)
Based on previous and current *Surveys* and action taken since early 2000

Previous Survey	Action taken	Current Survey
e) Expose the Public Employment Service to competition as successfully done in other OECD countries.	Step in the right direction: government has proposed limited outsourcing of placement services by the PES.	Further liberalisation of public employment services would be even better.
D. Increase employment and labour cost flexibility		
a) Reform employment protection and working time legislation to encourage job creation, especially by SMEs.	Slight development in wrong direction as the new Employment Contracts Act makes the legislation slightly more restrictive.	Same as in previous Survey.
b) Support greater wage differentiation in wage agreements, to promote the employability of low-skilled workers, while maintaining moderate average wage rises.	Development in wrong direction: the 2001-02 central wage agreement will lead to stronger wage rises for low paid.	Same as in previous Survey.
E. Improve labour force skills and competencies		
Ensure that education and training meet evolving needs of labour market.		Same as in previous Survey.
PRODUCT MARKETS		
a) Enhance product market competition.		Strengthen competitive forces by reforming the Finnish competition authorities. The Finnish Competition Authority should get the power to apply the EC rules on cartels and abuse of a dominant position.
b) Examine scope for completing privatisation of partially privatised state enterprises to increase efficiency.	Public stake in Sonera was reduced to 55 per cent in early 2000; also reduced in Patria Industries and Vapo. Proposal for reduction in Avena. Parliament broadened privatisation mandates in 2001.	Place full privatisation of most state-owned companies on the agenda and strengthen the impact of competition principles by organisationally separating the government's role as regulator from its role as owner.
c) Promote genuine level playing fields in the energy and telecommunication markets.		Stimulate competition by development of alternative networks such as cable television network for telecom services.
d) Promote genuine level playing field in the postal market.		Review the universal service obligation in the postal market.
e) Reduce agricultural subsidies.		Same as in previous Survey.

Table 17. **Recommendations for further structural reform** (*cont.*)
Based on previous and current *Surveys* and action taken since early 2000

Previous Survey	Action taken	Current Survey
FINANCIAL MARKETS		
Enhance supervision.	An official working group is considering the need to merge the Financial Supervision Authority and the Insurance Supervision Authority.	Same as in previous Survey.
PUBLIC SECTOR		
a) Improve public sector efficiency.	The Finnish national road administration is split into a government office responsible for road planning and contracting, and a separate state-owned enterprise, engaged in road construction.	To improve efficiency, transform the public sector's role from that of a producer to that of a purchaser of public services.
b) Restrain outlays to make sizeable income tax cuts possible.	Development in the wrong direction is likely in 2002, with outlay increases above the target set in the Government Programme.	Outlay cuts may be needed to comply with the medium-term target for the central government surplus.
c) Increase economic efficiency of local government services.		Improve work and management practices in the public sector.
SUSTAINABLE DEVELOPMENT		
a) Systematic economic assessment of sustainable development issues is needed.		Same as in previous Survey.
b) Comply with the Kyoto Protocol target of stabilising greenhouse gas emissions relative to the 1990 outcomes.	To comply with the target, the government launched a National Climate Strategy in early 2001. Parliament is discussing the construction of a fifth nuclear power plant.	Same as in previous Survey.
c) Increase the cost-effectiveness of environmental measures by more use of economic instruments, such as taxes, subsidies and tradable permits.		Same as in previous Survey.
d) Consistency between sectoral and environmental policies should be improved.		Same as in previous Survey.

1. See Annex I for details.

Source: OECD.

Notes

1. In the second quarter, real GDP dropped 1.7 per cent from the previous quarter, the sharpest contraction in the OECD area after Turkey. GDP fell by 0.1 per cent in the first quarter. Based on monthly output statistics, GDP was unchanged in the third quarter.
2. For 2000, there is a major difference in exports of goods on a national accounts basis (a volume growth of 20.6 per cent) and on a customs basis (6.6 per cent). The main reason is the treatment of quality improvements in mobile handsets. In the national accounts, prices are adjusted for quality improvements, leading to a much bigger volume rise.
3. Product cycles are short and innovation is rapid in mobile telephony. In 2001, GPRS (General packet radio service) telephones were introduced, an upgrade of WAP (Wireless application protocol) telephones launched a year earlier. The impact of WAP telephones on sales has been disappointing and GPRS telephones are likely to be only used by a narrow group of business customers in the short term. These innovations are, however, minor compared to the coming leap forward from 2G (second generation) to 3G (third generation) mobile telephony. 3G networks will be much faster, allowing Internet, video and other services to be accessed by mobile telephones. GPRS telephones allow access to a limited extent to the Internet and are therefore often referred to as 2.5G telephones. In October 2001, Japan became the first country to roll-out a 3G system but at a limited scale and without some major services available. The start of the roll-out in European countries is scheduled for the end of 2002 but usage is not likely to reach great scale before 2004. The system to be used in Europe is more complex than the Japanese one as the handset will be able to fall back on the slower second-generation network when the telephone moves out of 3G coverage areas, which will be limited to large cities in the short run.
4. Output of the electronic equipment industry, which is almost completely exported, dropped by 5 and 16 per cent in the first and second quarter of 2001 from the previous quarter, respectively, after increasing by 10 per cent on average in the four preceding quarters. However, production in the third quarter rose 15 per cent from the second quarter.
5. Worldwide sales of mobile handsets are estimated to have dropped by around 5 per cent in 2001, after increasing by almost 50 per cent to 410 million in the previous year. As the retail sector substantially cut its inventory, production dropped even sharper than sales in 2001.
6. However, total exports of goods and services lost market share due to the overexposure to ICT and paper products.
7. With capital gains and income received from stock options included in disposable income, the saving ratio is less volatile, declining from 9.7 per cent of households' disposable income in 1999 to 8.7 per cent in 2000 and to an estimated 8.5 per cent in 2001.

8. The 60 per cent rise is partly a correction to the fall of 40 per cent between 1989 and 1995.
9. In 1999, measured by the rate of return, Finnish profitability, was the highest in the OECD (National Statistics of the United Kingdom, 2000). In its report, the statistical agency stressed problems of international comparability.
10. Government investment already dropped in 2000 as a major infrastructure project was finalised.
11. On a twelve month basis, inflation peaked at 3.4 per cent in October 2000 and came down to 2.4 per cent in October 2001. Measured by the national consumer price index, which unlike the HICP includes the capital costs of owner-occupied housing and is therefore influenced by changes in mortgage rates, inflation was 3.4 per cent in 2000, 0.4 percentage point higher than measured by the HICP. In October 2001, however, inflation based on the national index was 0.5 percentage point lower than measured by the HICP and at 1.9 per cent at the lowest pace in two years.
12. In both years, the oil price hike was partly offset by electricity prices. In 2000, high reservoir levels in Sweden and Norway due to wet weather led to cheap hydro-electricity imports. In 2001, low precipitation led to a steep rise in electricity prices in the Nordic countries.
13. This number refers to wage rises excluding carry-over effects. As it failed to get an additional wage increase for highly-skilled but low-paid public sector employees, the Confederation of Unions for Academic Professionals (AKAVA) did not sign the central wage agreement but many of its unions signed collective agreements in line with the agreement. As a consequence, the *de facto* coverage of the central wage agreement was 95 per cent. For 2001, the general wage rise was 2.1 per cent with a minimum of EUR 0.2 per hour (Social partners, 2000). Moreover, the social partners agreed to an 0.5 per cent rise to be decided at the sectoral level and an overall wage rise of 0.4 per cent to improve the position of women and lower-paid workers. For 2002, a general wage rise of 1.9 per cent was agreed, with a minimum of EUR 0.18 per hour. On top of this, there will be an overall wage rise of 0.3 per cent for sector-level distribution. The settlement contains an indexation clause: consumer price inflation exceeding 3 per cent over the period January-December 2001 will be fully compensated in 2002 unless contract partners decide otherwise. Based on the estimated inflation in 2001, this indexation clause will not be triggered. To facilitate agreement on a central wage settlement, the government decided to cut income taxes by EUR 1 billion and EUR 0.7 billion in 2001 and 2002, respectively. Moreover, it agreed to raise the earnings-related part of unemployment benefits by 3 percentage points in March 2002 and to prolong the "job rotation" sabbatical leave scheme for two years.
14. Volume is calculated by deflating the various outlay items by their individual deflator.
15. Taxes and proceeds from stock options and capital gains paid by households (accrual basis) have risen from EUR 0.6 billion in 1998 to EUR 1.7 billion in 2000 (9 per cent of the total direct taxes paid by households). Taxes on capital gains (EUR 1.1 billion) were more important than on stock options (EUR 0.6 billion). In September 2001, the Ministry of Finance projected a drop to EUR 1.2 billion in 2001 and EUR 1.0 billion in 2002.
16. Property income received by general government increased by EUR 1.7 billion to EUR 4.9 billion. This was partly due to the EUR 0.4 billion extraordinary dividend of the fully state-owned bank Leonia on the eve of its merger with the private insurance company Sampo.

17. The debt target was later strengthened by correcting for privatisation proceeds. Corrected for these revenues, the central government debt fell below 50 per cent of GDP only one year later. Uncorrected, the central government debt is estimated at 44 per cent of GDP in 2001 compared to 57 per cent in 1998 and a peak of 68 per cent in 1996.
18. Central government interest expenditure is estimated to have come down by 12 per cent between 1999 and 2001. As a consequence, total expenditure rose only by $\frac{3}{4}$ per cent despite the increase in non-interest expenditure of 2.8 per cent. Moreover, the government amended the spending target of the Government Programme somewhat in its decision of May 2000 on the use of privatisation proceeds. It increased spending by around EUR 0.2 billion over 2000-03, mostly by increased spending on universities.
19. The OECD's cyclically-adjusted budget balance is falling substantially in 2001 and 2002. Part of this fall is however due to less one-off revenues, and fiscal easing is therefore less than indicated by the OECD's indicator.
20. This projection is the same as the OECD *Economic Outlook* No. 70 projection (December 2001). The cut-off date for information used in the projection was 8 November 2001.
21. The projections are based on the technical assumption of currencies remaining at their level of 2 November, implying an exchange rate of USD 0.90 per euro. For Finland, this means a year-on-year effective nominal appreciation of 0.8 per cent in 2002, following an appreciation of 2.1 per cent in 2001.
22. The OECD's estimates of the size of automatic stabilisers (Van den Noord, 2000) can be used to derive a rule-of-thumb. It is estimated that the government balance improves by 0.6 per cent of GDP for a 1 per cent acceleration in GDP growth. An acceleration of GDP growth from the projected $1\frac{1}{4}$ per cent in 2002 to the OECD's estimate of potential output growth of $3\frac{3}{4}$ per cent is therefore estimated to improve the central government balance from a deficit of $\frac{1}{4}$ per cent of GDP in 2002 to around 1 per cent of GDP when growth is back at potential (assuming that the improvement in the general government balance shows up completely in the central government budget).
23. GDP dropped by 13 per cent between the first quarters of 1990 and 1993, the deepest post-war recession in any OECD country. The slump was caused by over-expansive macroeconomic policy in the second half of the 1980s, excessive capital inflows and rapid credit expansion related to financial market deregulation and the implosion of trade with the Soviet Union (Honkapohja and Koskela, 1999).
24. Around a fifth of multifactor productivity growth was directly due to the ICT-producing sector in the second half of the 1990s (Pilat and Lee, 2001).
25. The contribution of 0.7 percentage point per year in the second half of the 1990s was slightly higher than the G7 average, but on par with the United States. Due to spillover effects, the total impact on productivity is likely to be larger than these direct effects.
26. Recent OECD research (Guelllec and van Pottelsberghe de la Potterie, 2001) reported that a rise of 1 per cent in public R&D increases multifactor productivity by 0.2 per cent on average in 16 OECD countries including Finland, outweighing the cost of public research. The effect is more positive in countries with high business R&D expenditure as this increases the possibility to seize opportunities created by public research. Proper design of public R&D projects is however crucial to reduce crowding out of private R&D. A recent Finnish evaluation also found a positive impact of public R&D outlays on private ones (Prihti *et al.*, 2000).
27. In the early 1990s, Nokia made the strategic decision to concentrate on telecommunication by divesting its other operations (rubber, forest products, cables and television).

Thereafter, it made the important decision to focus not only on engineering handsets but also on user-friendly design, strong branding, services and consumer-oriented marketing.

28. As for private services, there are substantial problems in measuring productivity in the government sector that are likely to lead to an underestimate. On the basis of national accounts data (where public sector output is based on factor inputs), annual labour productivity growth – measured by output per hour worked – in the non-market and the government sector amounted to 0.3 and 0.7 per cent in 1996-99, respectively. Research by Statistics Finland using output indicators (*e.g.* the number of prisoner-days for the prison system) to measure public sector output implies, however, much higher productivity increases in the public sector (Niemi, 2001). For the central government sector, it found annual labour productivity growth of 2.1 per cent in 1996-99. In 2000, productivity in the government sector – based on the national accounts data and measured by GDP per hour worked – was around a quarter lower than in the market sector.
29. Given the economic developments after 1999, GDP per capita is probably slightly above the euro area average at the moment. Living standards, measured by total consumption per capita, nevertheless, remain below average, reflecting strong net exports.
30. It is however a downward revision of around ½ percentage point.
31. Private sector R&D expenditure more than tripled from EUR 1 billion (1.2 per cent of GDP) in 1991 to an estimated EUR 3 billion (2.4 per cent of GDP) in 2000, with two-thirds of the increase coming from the ICT sector. Over the same period, the government's R&D spending increased by a half from just over EUR 0.3 billion to almost EUR 0.5 billion, while universities doubled their outlays from EUR 0.4 billion to around EUR 0.8 billion.
32. The increase in private R&D expenditure has taken place almost exclusively in the ICT sector, with its R&D spending rising about five-fold in real terms between 1991 and 1999, while in the other industries the increase was one-and-a-half times over the same period.
33. The 0.4 per cent of GDP spending figure refers to R&D carried out directly by governmental bodies. In addition, government funds R&D activities performed mainly by universities and businesses. This funding will amount to around 1 per cent of GDP in 2002.
34. Concentration has probably increased further in 2000. Nokia is estimated to have accounted for about 45 per cent of total private R&D expenditure, compared to a third in 1999 (Ali-Yrkkö, 2001).
35. The government influence on the choice of specific projects is limited as its support to companies as well as to universities is channelled mainly through research councils of the Academy of Finland and through the technology development centres (TEKES) of the Ministry of Trade and Industry. The evaluations have occasionally led to major organisational restructuring in government R&D funding and to suspension of support programmes (Oksanen, 2000).
36. Broad unemployment is defined as unemployed persons, people participating in active labour market programmes and people on unemployment pensions (Ministry of Labour, 2001).
37. Based on information received from the Ministry of Labour. See also Ministry of Labour (2000).
38. Of the long-term unemployed ending their unemployment spell, almost 30 per cent left the labour force, of which almost half moved to the unemployment pension system.

Of those ending their participation in an ALMP, less than a quarter was employed three months later and 15 per cent had enrolled in another ALMP (Ministry of Labour, 2001).

39. In 1997, the number of months of work or participation in an ALMP needed to requalify for unemployment insurance benefits was increased from six to ten months while the benefit became related to the average earnings in this ten month period rather than to the pre-unemployment earnings. As participation in an ALMP remained limited to six months, the reform may have had some positive effects as it increased incentives to find a (temporary) job after participating in an ALMP.
40. The rate for the high-income bracket will remain at 20 per cent.
41. Financial incentives were also improved by the increases in the standard deduction for work-related expenses, the lowering of social security contributions, the 1998 reform in housing allowances (introduction of an own contribution of 7 per cent of the housing costs for long-term unemployed), and changes in the unemployment benefit system such as the 1998 increase in waiting days from five to seven days, the 1998 scaling down of the benefit indexation from wages to consumer prices and the 1998 lengthening of the compensation suspension period in case of refusal to accept a suitable job. In 1998, incentives for under 25 year-olds without vocational education to seek work were increased by making their labour market support conditional on participation in labour market training. In 2000, financial incentives were weakened somewhat by the reduction in means testing for spouse income.
42. One reason for supplementary measures is that more than half of the unemployed receive the flat-rate labour market support.
43. The inadequate results occurred despite a rise in PES outlays by almost a quarter. The additional resources were required to intensify employment services and to increase the number of counsellors at the employment offices. After this steep rise, these outlays were, however, still slightly below the average of the Nordic countries (OECD, 2001f).
44. Job-search activity of registered unemployed is low in Finland. In 1999, almost 40 per cent had not contacted an employer in the last six months; two-thirds did not have a contact in the last month while only 15 per cent made one contact and 23 per cent had two contacts or more (Aho *et al.*, 2000).
45. The job-search plan, which is drawn up before a person has been unemployed for five months, is an agreement between the unemployed and the local employment office on the actions to be taken in order to find work. It sets out the sectors, geographical areas and methods the job-seeker's search for work will centre on and it outlines the required training. Skill mapping (the evaluation of the job-seeker's vocational qualifications, educational background, skills and individual problems in returning to work) is carried out jointly by the employment office and the job-seeker soon after the unemployment spell starts.
46. In order to increase efficiency, far-reaching changes in the organisational structure of employment services are also proposed, with the number of independent employment offices to be cut back from the current 175 to around 110 by 2005, while the number of small branch offices, relying largely on an extensive use of the Internet and telecommunications technology by the customers themselves, will be increased to provide an adequate level of services. Moreover, the Public Employment Service will set up joint services outlets with local governments and the Social Insurance Institution of Finland (KELA).

47. The introduction of limited competition in the publicly-financed provision of reintegration services will be a three-year experiment at a cost of around EUR 17 million per year.
48. For details of the Australian reform see Box 5 of OECD (2001*k*) and (2001*l*).
49. The government has proposed to Parliament changes in the Unemployment Security Act and the Act on Labour Market Support that will oblige job-seekers to follow their plan in order to be eligible for an unemployment benefit. The change in legislation is planned to come into force at the beginning of 2002.
50. The drop in public sector ALMPs was, however, smaller than the drop in public sector jobs indicate as 3 500 persons in the public sector were in the "combined subsidy" programme.
51. See also Antolin *et al.* (2001).
52. The main measures were: new pensioners will no longer accrue unemployment pension rights during the years they receive an unemployment pension, lowering the unemployment pensions by 7 per cent; increased disincentives for large employers to use the unemployment pension scheme; the increase of the age limit of the individual early retirement pension from 58 to 60 years in 2003; and the introduction of labour market measures and job-search assistance for those 55 to 59 years-old. Concerning this latter measure, the Ministry of Social Affairs and Health underspent in 2001 on ALMPs for older unemployed due to lack of interest on their behalf.
53. The only privatisation was the sale of slightly more than a quarter of its shares in Patria Industries to EADS (European Aeronautic Defence and Space company). Moreover, the sale of one-third of its shares in Vapo to the Metsäliitto Group (pulp and paper, mechanical wood processing) was envisaged. In August 2001, the state agreed in principle to merge Kemira (chemical industry) with chemical companies owned by the Swedish private equity company Industri Kapital but in December 2001, it withdrew its proposal after resistance in Parliament. In October 2001, the government requested permission from Parliament to give up ownership of Avena Ltd. (grain trade and storage). On the other hand, in November 2001, the government got an approval from Parliament for a capital injection of EUR 0.5 billion in Sonera to fully subscribe to the Sonera rights issue.
54. In 2000, privatisation measures were already limited but proceeds were nevertheless substantial as 3½ per cent of the shares in Sonera were sold at EUR 92 per share, close to the all-time high of EUR 97 of March 2000 and 12 times the initial placement price in 1998. At the end of November 2001, the share price was EUR 5.8, clearly above its trough of EUR 2.75 reached in September.
55. Estimate based on share prices at the end of November. A complete privatisation of all listed public enterprises would generate EUR 11 billion. In early 2000, the total value of non-listed state companies (for instance Alko, Posti and VR Group) was estimated at EUR 8 billion.
56. According to a study conducted in 2000 by the Finnish consulting company Balance Consulting, Finnish state-owned companies have poor profitability. In 1998 and 1999, they had half of the return on equity of all listed Finnish companies and a quarter of that of foreign-owned companies operating in Finland.
57. Some OECD countries have recently increased the distance between the government's role as regulator and owner. For instance, in Norway, the responsibility for managing the state's shareholding in the partially state-owned telecommunications company was

transferred from the Ministry of Transport and Communications to the Ministry of Trade and Industry.

58. In February 2001, the Ministry of Transport and Communications approved a new option scheme for Sonera as existing options had become worthless due to the sharp fall in the share price. This led to a strong public reaction and the government cancelled the new options scheme. Under a centralised approach to state ownership, such a mishap may have been prevented.
59. For a detailed description, see Box 1 of the previous *Survey* (OECD, 2000c). The Finnish electricity market is considered a best practice example in IEA (2001).
60. In June 2000, Suomen Suoramainonta Ltd. was granted a license to provide restricted services in main population centres but did not enter the market as in their view the 20 per cent universal service charge would make the services unprofitable.
61. Shops with less than 400 square metres of floor space are now allowed to be open every Sunday instead of a limited number of Sundays.
62. Previously, it was already possible to get Internet services from another Internet service provider (ISP). The amendment now allows total unbundling including full access to the local loop *i.e.* the provision of voice and other services or “line sharing” which allow an ISP to provide high speed Internet access while the line owner retains the customer for voice.
63. Both the maintenance of the railway network and the traffic are carried out by the state-owned VR Group. In the field of alcoholic beverage sales, the state-owned Alko has a monopoly in retail sales, while wholesales have been opened for competition.
64. Sonera also filed an appeal against the decision by the Finnish Communication Regulatory Authority concerning its mobile interconnection fees.
65. The Competition Council approved the acquisition under conditions. The conditions were, however, such that the acquisition was cancelled.
66. In 1997-99, state aid to the manufacturing sector in Finland was 1.6 per cent of value added of the manufacturing sector (0.3 per cent of GDP), while in the four EU countries with the highest share (Denmark, Germany, Greece and Italy) it ranged from 2.4 to 4.3 per cent of value added (European Commission, 2001 and 2001b).
67. Of the national support, EUR 0.6 billion was purely national transitional aid, while EUR 0.4 billion was the national part of co-funded programmes aimed at the environment and the least favoured areas. Of the EU aid, EUR 0.4 billion came from CAP support and EUR 0.3 billion was due to the contribution of co-funded activities. In addition to an EUR 1.6 billion income subsidy, the agricultural sector receives other forms of financial assistance, most important being investment and export subsidies, which amounted together to EUR 0.2 billion in 2000. The total agricultural budget including administrative expenses reached EUR 2.3 billion in 2000.
68. All farms in Finland are eligible for CAP subsidies, environmental aid and national aid, while the LFA support covers about 85 per cent of all arable land. The CAP support is entirely paid from the EU budget. About one-third of the aid for less favoured areas and a half of environmental aid is financed by the EU, the rest being funded by the member state.
69. The ISA and the FSA are responsible for supervision of the insurance and banking sector, respectively. The Insurance Department of the Ministry of Social Affairs and Health and the Financial Department of the Ministry of Finance prepare legislation and regulation concerning the insurance and banking sectors, respectively. The ISA was created in 1999 to replace direct supervision by the Ministry of Social Affairs and Health.

70. In December 2000, the Ministry of Finance submitted this proposal to the ministerial committee for economic policy. After discussion, the committee asked the state secretaries of the two ministries concerned to discuss the proposal further. In April 2001, the European Commission issued a proposal for an EU directive on financial conglomerates to promote financial stability.
71. There is, however, no unanimity about the desirability of switching to a single supervisory authority. See for instance Duisenberg (2001).
72. Moreover, the Finnish supervisory authorities have a number of bilateral and multilateral co-operation agreements, reflected in Memoranda of Understanding (MoUs). In addition to a multilateral MoU with the other four Nordic countries, the FSA has currently bilateral MoUs with eight countries: Estonia, France, Germany, Latvia, Lithuania, Luxembourg, Netherlands and United Kingdom.
73. In October 2001, the EU's Council of Ministers formally adopted the regulation to establish the European Company Statute due to enter into force in 2004. The regulation gives companies operating in more than one member state the option of being established as a single company under Community law and operating throughout the EU with one set of rules and a unified reporting system. This will avoid setting up a network of subsidiaries and should lead to a significant reduction in administrative and legal costs.
74. In 1995, the two largest commercial banks, Kansallis-Osake-Pankki and Union Bank of Finland, merged to form Merita Bank. In 1997, the state-owned Postipankki acquired Finnish Export Credit (the new group was renamed as Leonia Bank in 1998). In 1997, local cooperative banks created the OKO Banking Group; some cooperative banks, however, broke rank and established a group of local cooperative banks, which currently consists of 43 local co-operative banks with Aktia Savings Bank acting as the group's central financial institution. In 1997, Merita Bank and Nordbanken (one of the biggest Swedish commercial banks) merged to form MeritaNordbanken (later renamed as Nordea). In 1998, the commercial bank Interbank and the investment bank Mandatum merged under the name Mandatum Bank. At the beginning of 2001, the private insurance company Sampo and the fully state-owned Leonia merged and formed the first Finnish financial conglomerate Sampo. In February 2001, the Mandatum Bank became a subsidiary of Sampo. In June 2001, the insurance company Pohjola made a takeover bid for the investment bank Conventum.
75. Nordea is currently the biggest financial conglomerate in the Nordic region. On the banking market, it has a market share of 40 per cent in Finland, 25 per cent in Denmark, 20 per cent in Sweden and 15 per cent in Norway. For life insurance, its market share is 35 per cent in Finland, 10 per cent in Denmark, 9 per cent in Norway and 6 per cent in Sweden. For general insurance, it has a market share of 22 per cent in Denmark and 19 per cent in Norway.
76. In October 2001, after negative financial market developments and strong political opposition in Norway, Sampo withdrew a friendly merger bid for the Norwegian insurance company Storebrand made in May 2001. In November 2001, Sampo decided to integrate its non-life insurance in IF, the largest non-life insurance group in the Nordic countries. As a result, Sampo will hold 50 per cent of the votes in IF.
77. In May 2001, the FSA started to investigate whether Finnish banks have used their payment transaction network to impose insurance and investment services. On the other hand, in 2001, the European Commission ended its investigation into the participation of Nordea in an alleged cartel concerning the fees for exchanging euro area currencies.

78. Finnish payment transaction services already widely use new ICT applications, with almost 90 per cent of all payment transactions done electronically (Finnish Bankers' Association, 2001). The use of bank notes is the lowest in the EU countries and households no longer use cheques. Invoices are increasingly being paid electronically. The use of Internet banking and telebanking services has continued to increase rapidly, with the number of customers reaching 2.5 million in 2000, up by almost a third from the previous year. Virtually all banking services can be used via the Internet without visiting a bank office. With the rapid rise of Internet and telebanking customers, the number of automatic teller machines (ATMs) and giro ATMs has declined in recent years, contrary to the developments in most other European countries. Since the beginning of 1990s, both the number of branches and employment in the banking sector halved, whereas in the EU on average they have remained broadly stable. At the moment, the banking sector employs only five persons per 1 000 inhabitants, the lowest figure in the EU.
79. Shareholders are all main financial sector companies, the Bank of Finland, the state treasury and OM Gruppen (the operator of the Swedish stock exchange).
80. At the end of 2000, over 70 per cent of the shares quoted on the Helsinki Stock Exchange were owned by foreigners. The foreign brokerage companies accounted for approximately one-third of the equity turnover in the first half of 2001.
81. While the HEX has many remote brokers, it has only limited alliances with other stock markets. For derivatives, it co-operates with Eurex (owned by Deutsche Börse and the Swiss Exchange). In September 2001, it signed a cross membership and trading agreement with Euronext. It does, however, not participate in Norex, the alliance of the stock markets of the four other Nordic countries but it is in discussion with other Nordic stock exchanges on the merger of settlement systems.
82. Measured by public procurement tenders published in the Official Journal of the European Communities as a percentage of GDP, it is the fourth lowest in the EU after Germany, Netherlands and Austria (European Commission, 2001).
83. In 1998, the service acquisition of municipalities accounted for less than one-third of local government total operating expenses (Ministry of Finance, 2000c). Outsourcing by local government consists mainly of transport and child day care services as well as auxiliary services such as cleaning, laundry and maintenance tasks.
84. Qualifying foreign specialists and executives may apply for a special 35 per cent flat rate tax on their remuneration from work performed in Finland for a maximum period of 24 months, instead of the ordinary progressive taxation and social security contributions. Above an annual pre-tax income of around EUR 29 000 (Juusela, 2000), tax liabilities for "foreign key persons" are below those for nationals. In 1999, the number of foreign specialists benefiting from this special tax regime stood at only 150 but was growing rapidly (*Helsingin Sanomat*, 14 August 2001, online International edition).
85. Elcoteq, a company specialised in electronic equipment, has moved some of its factories to Estonia and more recently to Hungary. Nokia still has its research activities mainly based in Finland but is considering moving more of them abroad.
86. The share of alcoholic beverages consumed by Finns but not subject to Finnish taxes (either home-made or bought abroad) is already high. Hella and Mankinen (1997) estimated this share at 23 per cent in 1996, of which 60 per cent was due to imports.
87. Current rules on the taxation of services delivered online give a competitive advantage to providers established outside the EU area and, within the EU area, to those countries with a low VAT rate. This results from the fact that, for services delivered online,

the VAT rate which applies is the one in place in the country where the supplier is located. However, a proposal made by the Swedish authorities during their Presidency of the Council of the European Union during the first half of 2001, if implemented, should lessen potential revenue losses for Finland. It would require vendors of online digitised products (B2C) established outside the EU to charge VAT at the rate applicable in the customer's country of residence and to reallocate tax revenues to this country. However, despite broad support of most EU countries, there is currently no agreed approach to tackling VAT on e-commerce while any decision on tax matters at the EU level requires unanimity.

88. Comparisons of tax-to-GDP ratios across countries should be made with great care. In particular, the taxation of social transfers, together with the extent to which countries provide social or economic assistance via tax expenditures, rather than direct government spending, may significantly blur international comparisons (Adema, 2000 and 2001). As an illustration, Adema (2000) estimated that in 1995 taxes and social security contributions on transfers exceeded 5 per cent of GDP in Denmark, Finland, Netherlands, and Sweden. They did not exceed 2 per cent in Belgium, Canada, and Germany; they were even lower in Australia, Ireland, United Kingdom and United States.
89. Carey and Tchilugirian (2000) estimate that the average effective tax rate on labour stood at almost 43 per cent in Finland over 1991-97, compared with 37 per cent for the EU average, and less than 25 per cent for Japan and the United States. They also spell out methodological choices and problems with such comparisons.
90. Cuts in statutory rates have been implemented at the state level. The top earned-income tax rate has been cut by 1.5 percentage point, compared with 2 percentage points for all the other brackets, between 1997 to 2001. In its draft budget, the government proposes to cut all rates by 1 percentage point in 2002.
91. In 2002, it is set to cancel out when an individual's labour income reaches EUR 72 000, up from EUR 13 500 in the early 1990s.
92. An alternative approach would be to consider the EITA as a general tax cut. In this approach, deadweight costs would be considered smaller but the design would be seen as increasing distortions given the impact on marginal tax rates.
93. Tax brackets were frozen in 1992 and 1993. For subsequent years, the adjustment of tax brackets has often exceeded inflation developments, though the 1992-93 freeze has not been fully recouped over the 1990s. Furthermore, the adjustment is not linear across tax brackets, with a privileged treatment often granted to lower brackets. Partly as a result, the number of people falling into the three highest brackets has risen since the early 1990s (from 38.6 per cent of total taxpayers in 1991, to 43.9 per cent in 1999).
94. In addition, stock options are not granted any favourable tax treatment while they are in some other OECD countries (the taxation of stock options in place in OECD countries is discussed in Van den Noord and Heady, 2001). Nevertheless, the use of stock options has become more common in Finland since the mid-1990s. At Nokia, option use expanded from 350 key employees in 1995 to 16 000 workers in 1999 (*i.e.* 30 per cent of the workforce). Direct taxes on stock options were an estimated EUR 0.6 billion in 2000, 3 per cent of total direct taxes paid by households.
95. During the deep recession of the early 1990s, eligibility conditions for social benefits were tightened, by relying more on means-testing. As a side effect, this move may have exacerbated unemployment traps. Holm *et al.* (1999) estimated that about 15 per cent of the unemployed were unable to increase their disposable income by more than 10 per cent through employment in the early 1990s, because household transfers and childcare costs were usually means-tested.

96. The example refers to a couple with two children in the greater Helsinki area who receive the maximum compensation for housing support and when one of the parents is on labour market support.
97. Persons receiving a low pension are entitled to a special deduction to the earned-income tax. In fact, if the income consists of national pension only, no income tax is due. For pensions above this level, the tax allowance is gradually phased out.
98. The EMU (Economic and Monetary Union) buffer funds in the unemployment insurance and the earnings-related pension schemes were introduced in 1999. The aim is to smooth premiums over the business cycle and to prevent pro-cyclical increases during downturns. The statutory authorised maximum size is ½ per cent of GDP for both funds. Social security contribution rates were cut; as a consequence, revenues declined by EUR 0.2 and 0.3 billion in 2000 and 2001, respectively.
99. For an overview of the tax measures implemented in other EU countries, see Joumard (2001) and IMF (2001). For an assessment of the potential impact of such schemes in the Finnish context, see Holm *et al.* (1995) and Honkapohja *et al.* (1999), cited in Kuismanen (2000).
100. The Income Tax Act provides for a maximum tax deduction on domestic work of EUR 850 in 2001.
101. See also OECD (1994).
102. While adopting the VAT, the authorities wanted to avoid a price hike for some commodities and services, and thus introduced VAT rebates. A 17 per cent reduced rate applies on foodstuffs. An 8 per cent reduced VAT rate applies on: books; medicines; passenger transport; use of sporting facilities; admissions to sporting events, cultural and entertainment performances; licence fees of radio and television; and hotel accommodation. A zero rate applies on subscriptions to newspapers and periodicals. In addition, as allowed by the EC VAT Directive, education, health care and social services are exempt from VAT.
103. Taxes are levied on beverage and other packaging containers with different rates according to whether or not the container is recyclable or part of a return system.
104. The CO₂ tax on liquid transport fuels is staggered by petrol and diesel grade, with lower rates applied to low sulphur diesel and reformulated (less polluting) gasoline. There are also tax allowances to the registration car tax granted to cars with catalytic converters so as to promote abatement of nitrogen oxide (NO_x) emissions. In addition, Finland also imposes an oil damage levy for oil transported in vessels with a higher rate for those without a double bottom.
105. Like Denmark and the Netherlands, Finland exempts the following carbon emitting fuels from taxation: energy used in generation and distribution of electricity, aviation fuel, energy used by commercial fishing, as well as coal and coke used in the production of cement (OECD, 2001*m*).
106. In addition, the annual tax on diesel vehicles is much lower for lorries and vans than for passenger cars: it varies from EUR 4.5 to 10.6 per 100 kg for the former, up to EUR 25 per kg for passenger cars. There is also a registration car tax (nearly equal to the market price of the car). However, this may have an adverse impact by slowing down the renewal of the car fleet towards less polluting vehicles.
107. For a more detailed discussion of this issue, see OECD (2001*n*) and O'Brien and Vourc'h (2001).

108. The withholding rate on interest income was raised (in 1994) to the rate which applied to dividends and capital gains, largely reflecting the concern of a possible aggravation of the crisis in the banking sector.
109. The tax exemption for interest on bank deposits was removed in June 2000.
110. Premiums paid for a private pension insurance (own and spouse's) are deductible up to EUR 8 400 from the earned-income tax base. In 1999, households' deduction from the earned-income tax for voluntary pension premiums amounted to EUR 325 million. In 2000, eligibility conditions were tightened to reduce incentives to retire early. Voluntary premiums are now deductible (up to EUR 8 400) if the associated pension is not paid out before the age of 60 and does not lift the total pension above 60 per cent of the pensionable wage.
111. To avoid abrupt price movements on the housing market and balance sheet problems for indebted households, an additional deduction was introduced lasting for a five-year period.
112. The calculations of the tax expenditure associated with the exemption of imputed rent for owner-occupied housing are based on the State Housing Board's dwelling valuations, with a 3 per cent rate of return assumed (VATT, 1999).
113. Real estate tax rates ranged between 2.6 and 4 per cent in Denmark, 0.98 and 2.1 per cent in Germany, 0.4 and 0.7 per cent in Italy, and 0.5 and 1.2 per cent in Sweden.
114. Interest on debt is deductible from the corporate income tax base but is taxed at the individual level.
115. It was originally planned that Finland's imputation credits would be extended to cross-border dividends by bilateral treaties on the basis of reciprocity. In practice, such tax treaty rules have remained rare and have been included only in the treaties with France and Ireland (Helminen, 2001).
116. Shares held by foreign shareholders are sold temporarily to a resident, before dividend distribution, who will profit from the imputation credit. After the distribution, the sale is reversed. For some evidence on such trading for Germany before the replacement of imputation credits by the half-rate system, see McDonald (2000).
117. Norway has introduced relief for this form of double taxation by way of the so-called "opening value adjustment" method. A more simple solution to remove this double taxation would be to abolish the tax on capital gains. No tax applies in several OECD countries (*e.g.* in Austria and Germany after a certain holding period). A serious side effect of this solution is, however, that it gives scope for re-labelling income as capital gains for tax-avoidance purposes.
118. For an in-depth discussion, see Myrman *et al.* (1995).
119. The dividend deduction system was in place up to 1990 to eliminate the double taxation of dividends. Under this system, a company did not pay corporate state tax on dividends distributed to new shares and the distributing company was entitled to deduct 60 per cent of the distributed dividends on old shares from its revenues. At the final investor level, a large part of the dividends received also remained tax free, reflecting the capital income tax allowance. Overall, about 65 per cent of distributed profits were fully tax exempt or subject to low taxation under this system (Myrman *et al.*, 1995).
120. Business expenditure on R&D in Finland as a share of GDP however ranks second in the EU and sixth in the OECD area (see Chapter II).

121. Finnish shipping companies' tax burden was cut in 2000 when the government replaced the normal corporate income tax system by a tax on net tonnage. Other countries, in particular Denmark, the Netherlands and Sweden, have implemented similar tax incentives. In May 2001, the Finnish government extended the tonnage tax to all products and services sold on passenger vessels, such as restaurant, bar and amusement services.
122. The imputed rate of return on net business assets was originally set at 15 per cent, but the rate was raised to 18 per cent in 1997. In Sweden where the split model also applies on the company's net wealth, the imputed rate of return is set equal to the interest rate on 10-year government bonds plus a premium of 1 percentage point (Hagen and Sørensen, 1998).
123. Over 1985-92, municipalities' grants consisted almost totally of earmarked categorical matching grants. After the 1993, 1996 and 1997 reforms of the grant system, grants have been mostly formula based specific grants with no earmarking. Moision (2000) showed that during 1993-99, the causality between local governments' revenues and expenditures was bi-directional, suggesting that taxing and spending decisions were made simultaneously. Under the previous period of matching grants, the causality ran from past expenditure to present revenues.
124. According to some estimates, about 200 municipalities (out of 450) did not receive higher tax revenues in 2000 despite the boom in tax revenues at the national level.
125. In 2000, 192 municipalities (out of 450) ran a fiscal deficit, up from 87 in 1999 (reported in *Helsingin Sanomat*, online International edition, 18 April 2001).
126. Surveys indicate that a majority of persons would be willing to pay higher tax rates if this would guarantee a better quality of public health services.
127. Municipalities can borrow without any legal restriction on domestic and international capital markets. Their loans do not benefit from an explicit state guarantee. Municipalities' borrowing is co-ordinated by the municipalities' organisation and their credit rating is better than that of the state.
128. In spring 2001, the Ministry of Finance created a working group to assess corporate and capital income taxation, while taking into account tax issues related to international competitiveness. In August 2001, the Economic Council – an advisory body comprising government ministers, top civil servants, representatives of social partners and other key organisations – created another working group to assess the need to reform the tax system, with a broader perspective. In particular, it is expected to study the impact of taxes on employment and to assess the financial basis for maintaining the welfare state. Both groups are expected to submit their report by the end of 2002, so that the proposals could be used in the public policy debate at the eve of the Parliamentary elections scheduled for spring 2003.
129. Bassanini *et al.* (1999) simulate the hypothetical introduction of a stylised Earned-Income Tax Credit (EITC) in four countries (Germany, Sweden, the United Kingdom and the United States). The results suggest that the impact on overall hours worked is likely to be positive in countries with a wide earnings distribution. However, the introduction of an EITC would not increase total labour supply in Germany and, especially, in Sweden where there could even be a fall. In fact, an increase in labour supply of low-paid workers will be compensated by a decrease in hours worked amongst those who will finance the EITC.
130. Overall, for the national pension system, the state pays 29 per cent of pension expenditure plus an annual subsidy to cover any deficit, plus a specific allowance. In total,

- in 1999 the state covered about 45 per cent of the costs. For earnings-related pension schemes, in 1999 the state covered 16 per cent of the costs for the self-employed, 74 per cent for farmers and 33 per cent for seamen. The state fully finances the unemployment assistance scheme and, for the earnings-related insurance, pays the cost of basic daily allowances for the first 500 days plus a subsidy for administration expenses.
131. The CO₂ emissions to GDP ratio remained broadly stable between 1990 and 1998 in Finland, while it dropped by more than 10 per cent in the European Union and the United States.
 132. The decision on the set of measures to contain greenhouse gas emissions, and in particular the changes in energy taxation, are likely to be reflected in the budget proposals for 2003.
 133. One example of such compensation schemes is the Swedish NO_x charge imposed on combustion plants since 1992. The charge paid by these plants is reimbursed to the payers in proportion to their share of total energy produced (Roseveare, 2001). While it does not penalise the industry as a whole, it keeps the right incentives to abate emissions since any producer with emissions lower than the industry average will receive net benefits, while those with higher emissions face a net cost. Likewise, in 2000 the French government envisaged extending the general tax on polluting activities to fossil fuels and electricity and to issue tax credits based on a percentage of past emissions (though the bill was subsequently ruled unconstitutional by the Constitutional Court).
 134. Honkatukia (2000) considers the impact across sectors of a hypothetical doubling in current Finnish carbon taxes under the assumption that tax revenues are recycled via a cut in employers' social security contributions. Honkatukia analyses the net impact of higher environmentally related taxation on each sector under two alternative scenarios: one where the supplementary carbon tax is levied only on fuels and one where the supplementary carbon tax is also levied on electricity. The results show that the supplementary tax on fuels raises net taxes for the paper and transport sectors whilst the electrical and electronics industry and the private service sector gain. Under the "supplementary carbon taxes on both fuels and electricity" scenario the paper and heavy metals industries are considerable net tax payers, whilst the impact on the transport sector is lower than under the "fuel only" supplement.
 135. Saving in voluntary pension funds and in home ownership tends to increase as a share of an individual's income along the income ladder. In addition, tax allowances for voluntary pensions, in a progressive system, are worth more to higher-income taxpayers than those with lower incomes.
 136. Private pension insurance premiums paid to a foreign pension insurance institution are not deductible for the insured individual unless the insurance is purchased from a permanent establishment in Finland of a foreign institution.
 137. By international standards, there is a relatively high share of home-ownership in Finland (about two-thirds).
 138. In 2000, collection costs of the property taxes were 2.1 per cent of revenues compared to 0.7 per cent and 0.6 per cent for income tax and VAT, respectively.
 139. The maximum amount of capital income loss (including interest payments) which can be deducted from labour income is equivalent to a cap on mortgage interest relief for individuals with no or very low gross capital income. However, the maximum loss deductible in this manner for a married couple with two children, at EUR 3 400 is high

(EUR 1 350 per taxpayer, plus EUR 350 for one child and EUR 750 for two or more children). In addition, for individuals receiving dividends, capital gains or other forms of capital income, mortgage interest payments also contribute to reduce their tax liability on their capital income component, without any cap.

140. If companies are able to finance their investment on international capital markets, the personal tax treatment of investment income at home may not much affect their financing behaviour (for a discussion of this issue, see OECD 2000d). On the other hand, for small companies with limited access to foreign capital markets, the imputation system is likely to be a first best since they usually depend more on equity (largely reflecting reduced access and less favourable terms on debt financing). However, start-ups and fast growing companies tend to distribute few dividends and rely largely on retained earnings. For them, the double taxation of retained earnings becomes an important issue.
141. The need to split revenues when a company operates in several jurisdictions poses additional problems: it contributes to the delays in redistributing tax revenues to municipalities and reportedly generates some mistrust in the tax administration.

Glossary of acronyms and terms

3G	Third generation
ALMP	Active labour market programme
APW	Average production worker
ATM	Automatic teller machine
CAP	Common agricultural policy
CO₂	Carbon dioxide
DIT	Dual income tax
e-commerce	Electronic commerce
EC	European Commission
ECB	European Central Bank
EITA	Earned-income tax allowance
EMU	Economic and Monetary Union
EU	European Union
EUR	Euro
FCA	Finnish Competition Authority
FSA	Financial Supervision Authority
G7	Major seven countries (Canada, France, Germany, Italy, Japan, United Kingdom and United States)
GDP	Gross domestic product
GPRS	General packet radio services
HEX	Helsinki stock exchange
HICP	Harmonised index of consumer prices
ICT	Information and communication technology
ISA	Insurance Supervision Authority
ISP	Internet service provider
kg	Kilogram
LFA	Least favoured area
M&A	Merger and acquisition
METR	Marginal effective tax rates
MoU	Memoranda of understanding
NAIRU	Non-accelerating inflation rate of unemployment
NO_x	Nitrogen oxide
PES	Public Employment Service
PPP	Purchasing power parity
R&D	Research and development
SA	Seasonally adjusted
TEKES	Technology development centres of the Ministry of Trade and Industry
VAT	Value added tax
USD	United States dollar
WAP	Wireless application protocol

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BASIC STATISTICS OF FINLAND (2000)

THE LAND

Area (1 000 km ² , 1995):	338.1	Major cities (thousand inhabitants, end 2000):	
<i>of which:</i>		Helsinki	555.5
Cultivated land	27.5	Espoo	213.3
Forests	230.0	Tampere	195.5
Lakes	33.6	Vantaa	178.5

THE PEOPLE

Population (thousands, end 2000)	5 181	Labour force (thousands)	2 588
Number of inhabitants per km ²	15.3	Employment (thousands)	2 336
Net natural increase (thousands)	7.4	Employment (% of total):	
Net migration (thousands)	2.6	Agriculture, forestry and fishing	6.1
		Industry and construction	21.1
		Services	72.8

PARLIAMENT AND GOVERNMENT

Composition of Parliament (number of seats):		Government, number of ministers from:	
Social Democratic Party	51	Social Democratic Party	6
Centre Party	48	National Coalition Party (Conservatives)	6
National Coalition Party		Left Alliance	
(conservatives)	46		2
Left Alliance	20	Green League	2
Green League	11	Swedish People's Party	1
Swedish People's Party	11	Independent	1
Christian League	10	Total	<u>18</u>
Other	3		
Total	<u>200</u>	Last general elections: 21 March 1999	

PRODUCTION AND PUBLIC SECTOR

Gross domestic product (billion EUR)	131.7	Public consumption (% of GDP)	20.7
GDP per head (EUR)	25 439	General government (% of GDP):	
Gross fixed capital investment:		Current and capital expenditure	43.9
% of GDP	19.3	Current revenue	50.8
Per head (EUR)	4 915		

FOREIGN TRADE

Exports of goods and services (% of GDP)	42.7	Imports of goods and services (% of GDP)	33.3
Main exports (% of total):		Main imports (% of total):	
Wood, pulp and paper	27.1	Intermediate goods	40.8
Electrical and optical equipment	31.0	Capital goods	24.0
Metals, machinery and transport equipment	24.7	Consumer goods	22.9
Other goods	17.1	Energy	12.3

THE CURRENCY

Monetary unit: Markka/euro		Currency units per USD, average of daily figures:	
Fixed conversion rate to euro:		Year 2000	6.45
EUR 1 = FIM 5.94573		October 2001	6.56

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

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•

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