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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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

– *to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.*

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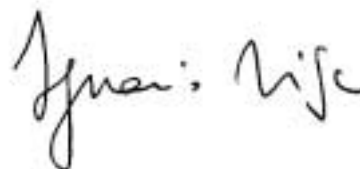

FOREWORD

This edition of the *OECD Economic Outlook* analyses prospective economic developments in OECD countries over the next two years and provides an assessment of the economic policies needed to ensure sustained economic growth in the face of the sharp slowdown of the US economy, a substantial loss of dynamism in Japan and a possibly contained growth reduction in Europe. In addition, risks are examined, in particular those associated with the functioning of financial markets in the current environment and the associated balance sheet stresses on financial institutions, households and businesses. Alternative scenarios are also presented, which examine the global impact of a more pronounced slowdown in the United States as well as the effects of a greater global weakness of demand and activity.

The detailed country notes provide an assessment of the economic situation and the outlook for each Member country and certain non-member economies. The projections on which policy assessments presented in this edition are based were finalised on 19 April and published in a preliminary edition on 3 May.

Aside from these issues, a number of other themes are dealt with in more depth in four special chapters:

– *Fiscal implications of ageing: projections of age-related spending.* This chapter provides new projections on the fiscal impact of age-related spending for OECD countries over the next half century. These results are based on national models using an agreed upon set of assumptions about macroeconomic and demographic developments for all countries. Recent reforms to pension systems have partly offset the impact on spending of an increasingly elderly population, and there has been a major improvement in the underlying fiscal situation in the 1990s. However, further age-related spending (including old age pensions, health and spending associated with children) is still projected to increase on average around 6 per cent of GDP over the projection period. This calls for maintaining the reform effort over the medium to long run and intensifying it in several countries, if fiscal sustainability is to be maintained over the long run.

– *Challenges for tax policy in OECD countries.* In the past two years, the OECD has reviewed the tax systems of a number of Member countries in its *Economic Surveys*. The policy recommendations emerging from these reviews provide some useful lessons for all OECD countries, and these are pulled together in this chapter. Taxation is inevitable in modern economies to finance public spending, as it is aimed at meeting fundamental economic and social objectives. However, efficiency losses associated with taxation need to be taken into account when the cost and benefits of public expenditure to be funded are being assessed. The public perception of the fairness of tax systems, the practical issues of enforceability and the cost arising from compliance are other important considerations.

– *Encouraging environmentally sustainable growth: experience in OECD countries.* This chapter considers policy approaches to environmental and natural resource issues in OECD countries and their relation to economic activity and policies. Mostly characterised by a reliance on "command and control" regulations, environmental policies have achieved much over the last three decades, but not always in a cost-effective way. Greater use of incentive-based mechanisms, such as taxes and permit trading systems, would increase cost-effectiveness. In addition, more systematic use of cost-benefit analysis and environmental impact assessments would also improve overall efficiency. Steps should also be taken to eliminate unjustified special treatment, such as that in transport, agriculture or sectors that use energy intensively.

– *Productivity and firm dynamics: evidence from microdata.* This chapter presents evidence on productivity growth and firm dynamics for ten OECD countries over the past decade. Firm-level data for each country are harmonised to the extent possible to ensure cross-country comparability of results. The analysis suggests that aggregate labour productivity growth is due mostly to within-firm performance, although the exit

of low-productivity units, especially in mature industries, and the entry of firms in ICT-related industries is also key in fostering productivity growth. Many firms enter and exit most markets every year. The competition process that removes the least efficient is most vigorous among young firms, especially if they are small.

Ignazio Visco

Head of the Economics Department

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Conventional signs

$	US dollar	.	Decimal point
¥	Japanese yen	I, II	Calendar half-years
£	Pound sterling	Q1, Q4	Calendar quarters
€	Euro	Billion	Thousand million
mbd	Millions barrels per day	Trillion	Thousand billion
. .	Data not available	s.a.a.r.	Seasonally adjusted at annual rates
0	Nil or negligible	n.s.a.	Not seasonally adjusted
–	Irrelevant		

Summary of projections[a]

Seasonally adjusted at annual rates

	2000	2001	2002	2000 I	2000 II	2001 I	2001 II	2002 I	2002 II
				Percentage changes from previous period					
Real total domestic demand									
United States	5.7	1.9	3.1	6.5	3.5	1.3	1.7	3.4	3.9
Japan	1.3	1.2	0.7	2.7	0.2	2.5	–0.4	0.8	1.5
Euro area[b]	2.8	2.5	2.6	3.3	2.1	2.7	2.7	2.6	2.7
European Union	3.0	2.6	2.7	3.3	2.3	2.7	2.7	2.6	2.7
Total OECD	4.2	1.9	2.7	5.1	2.3	1.9	1.7	2.9	3.3
Real GDP									
United States	5.0	1.7	3.1	5.9	2.7	1.2	1.9	3.3	3.7
Japan	1.7	1.0	1.1	3.6	–0.2	2.2	0.0	1.2	2.1
Euro area[b]	3.4	2.6	2.7	3.8	2.7	2.6	2.6	2.8	2.8
European Union	3.3	2.6	2.7	3.6	2.7	2.6	2.5	2.7	2.8
Total OECD	4.1	2.0	2.8	5.0	2.4	1.9	1.9	3.0	3.4
				Per cent					
Inflation[c]									
United States	2.0	2.3	1.9	2.6	1.9	2.8	1.8	2.0	1.8
Japan	–1.7	–1.2	–0.4	–1.1	–2.4	–0.9	–0.6	–0.4	–0.4
Euro area[b]	1.2	2.2	2.1	1.4	1.4	2.6	2.2	2.1	2.0
European Union	1.4	2.2	2.1	1.4	1.6	2.4	2.2	2.1	2.1
Total OECD *less* Turkey	1.7	2.1	1.9	2.0	1.6	2.4	1.9	1.9	1.8
Total OECD	2.5	3.0	2.6	2.8	2.2	3.5	2.7	2.6	2.4
				Per cent of labour force					
Unemployment									
United States	4.0	4.6	5.0	4.0	4.0	4.3	4.8	5.0	5.0
Japan	4.7	4.9	4.8	4.7	4.7	4.9	4.9	4.8	4.8
Euro area[b]	9.0	8.3	7.8	9.2	8.7	8.5	8.2	8.0	7.7
European Union	8.2	7.7	7.3	8.4	8.0	7.8	7.6	7.4	7.2
Total OECD	6.3	6.3	6.3	6.3	6.2	6.3	6.4	6.3	6.3
				Per cent of GDP					
Current account balances									
United States	–4.4	–4.2	–4.0	–4.2	–4.5	–4.3	–4.0	–4.0	–3.9
Japan	2.5	2.2	2.7	2.7	2.3	2.1	2.3	2.6	2.9
Euro area[b]	–0.1	–0.2	–0.1	0.2	–0.5	–0.2	–0.2	–0.1	0.0
European Union	–0.3	–0.4	–0.4	–0.1	–0.6	–0.4	–0.4	–0.4	–0.3
Total OECD	–1.3	–1.3	–1.2	–1.1	–1.4	–1.4	–1.2	–1.1	–1.1
				Per cent					
Short-term interest rates[d]									
United States	6.5	4.6	4.4	6.3	6.6	4.9	4.3	4.3	4.5
Japan	0.2	0.3	0.2	0.1	0.4	0.3	0.2	0.2	0.2
Euro area[b]	4.4	4.4	4.3	3.9	4.9	4.5	4.3	4.3	4.3
				Percentage changes from previous period					
World trade[e]	13.1	7.2	8.0	14.2	11.3	5.6	6.5	8.3	9.1

a) Assumptions underlying the projections include:
  – no change in actual and announced fiscal policies;
  – unchanged exchange rates from 12 April 2001; in particular 1$ = 123.27 yen and 1.121 euros;
  – the cut-off date for other information used in the compilation of the projections was 19 April 2001.
b) Greece entered the euro area on the 1 January 2001. In order to ensure comparability of the euro area data over time, Greece has been included in the calculation of the euro area throughout.
c) GDP deflator, percentage changes from previous period.
d) United States: 3-month eurodollars; Japan: 3 month CDs; euro area: 3-month interbank rates. See box on Policy and other assumptions underlying the projections.
e) Growth rate of the arithmetic average of world merchandise import and export volumes.
Source: OECD.

EDITORIAL

Economic growth in the OECD area has been weakening since the autumn of 2000, but the forces damping growth are projected to dissipate during the current half-year. Growth in the OECD area is now projected to drop more than had been expected to 2 per cent in 2001, half the rate achieved last year, before recovering somewhat next year to 2½ to 3 per cent. At the same time, the long-running reduction in area-wide unemployment is projected to come to an end. Slower growth across the OECD area should also, in combination with a fall in the assumed price of oil, help to keep inflation low.

The outlook for growth has weakened more than expected…

The projected recovery of growth is based on a number of factors. The interest rate reductions that have taken place, some shifts toward fiscal ease and lower oil prices should help to spur aggregate demand in the coming months. In addition, the sustained pace of productivity growth in the United States, which was so remarkable in the last half of the 1990s, suggests that these efficiency gains may have some measure of durability, increasing the chances that such gains can be extended elsewhere. Finally, inflation pressures show no sign of increasing in much of the region, leaving monetary policy in most countries with scope to support activity further in the period ahead, if needed.

… but a recovery is likely in the coming months

The central projection is relatively optimistic, but the risks to the outlook are clearly on the downside. A significant stock market correction, concentrated mainly on technology stocks and not limited to the United States, has already taken place, bringing equity prices closer to likely fundamental values. If, however, these prices were to decline substantially further, either capitalising a more severe decline in expected earnings than currently foreseen or simply overshooting on the downside, aggregate demand would be hit harder. Such a development might in the first place seem more of a risk in the United States, where the high-technology sector is more important and stock prices matter more, but it could spill over to other regions through share price declines or, more generally, through a deterioration of confidence.

However, the risks are skewed to the downside...

A related risk is that the need for balance sheet adjustment in some countries could lead to a more protracted and severe decline in global activity. In the United States, rising household indebtedness and debt servicing obligations may prompt consumer retrenchment. The Japanese economy is burdened with serious indebtedness problems that take their roots from well before the current cyclical episode, as the banking sector in Japan continues to carry an abundance of bad loans. More generally, business investment could be weaker to the extent that the recent investment boom has created excess capacity or that debt levels have become high.

If these risks were to materialise, the slowdown in the OECD region would naturally be more severe, and monetary policy might have to become substantially more accommodative than envisaged here. The precise requirements facing individual central banks would depend also on the degree to which exchange rates changed. Furthermore, to the extent that the risks emanate from the high technology sector and from the United States, the added burden for Asian countries, both in and outside the OECD area, would be relatively high, owing to their product specialisation and the

… and, if they materialise, could significantly magnify the global slowdown

location of their export markets. On the other hand, a world-wide reduction in interest rates would be beneficial for the highly indebted developing economies, especially those in Latin America.

Significant further monetary policy action in the United States will depend on the persistence of the factors driving the downturn,…

A weakening of the US economy over the second half of 2000, evident at the end of the year, had been widely anticipated and, given capacity pressures, welcome. However, the pace at which it occurred has exceeded most expectations. As investment and output growth dropped sharply in the fourth quarter, consumer confidence plummeted, and equity prices moved down significantly further. Against this background, the Federal Reserve has lowered its key policy rate 200 basis points since the beginning of this year to 4½ per cent. The projection for the US economy is based on a modest further easing, which together with the earlier cuts, is expected to provide support for a rebound in activity later this year. If, however, downward momentum in the economy persists, larger reductions in interest rates may be required to restore activity.

… while fiscal policy is projected to ease

Under the assumption that Congressional legislation resulting from the Administration's tax proposals yields reductions that would begin to materialise later this year, US fiscal policy is projected to ease starting in the second semester. However, the shift will not be large enough to offset completely the effects of the fiscal momentum still in place, and the policy stance will remain restrictive on balance this year. Next year (and beyond), however, the effect of the policy easing is projected to show through. Upward revisions to potential growth in the United States appear to provide scope for such an easing, but the soundness of the Administration's longer-term fiscal strategy is crucially dependent on only modest increases in public spending. It remains to be seen whether such increases, which appear to be well below the projected growth rate of GDP and historical rates of growth for discretionary spending, will be maintained as fiscal surpluses continue.

Macro policy in Japan has little scope to offer further economic stimulus,…

The Japanese economy is faltering and at risk of entering a downward spiral. Last year's weak pick-up in activity has faded, with the achievement of self-sustaining growth forestalled by the inadequate pace of corporate restructuring and the renewed build-up of financial sector problems. Weakening external demand is now exacerbating the situation. At the same time, the scope for traditional macroeconomic policies to provide additional stimulus is now rather limited: the scale of government debt precludes significant further fiscal expansion and policy-determined interest rates were already low even before the recent shift to a policy based on inflation objectives and liquidity targets. A minimum requirement is that monetary policy needs to remain easy until the economy has permanently exited from deflation. The current degree of fiscal stimulus should be maintained this year, but the start of consolidation cannot be delayed much longer. In the OECD's projection, consolidation commences in 2002; ultimately it may amount to 10 per cent of GDP or more by 2010, just to stabilise public debt (at a very high level). The establishment of a coherent medium-term consolidation plan would assist private-sector planning for these inevitable adjustments.

… but the Japanese economy is in urgent need of restructuring

In light of these constraints, policy efforts should concentrate on tackling the underlying structural problems. The authorities need to take urgent action to deal with balance sheet problems in the financial system. This might impose further costs in the near term, although it is possible that improvements in confidence could partly offset these negative effects. Steps toward financial system restructuring might include: a detailed appraisal of the quality of banks' loan portfolios; a realistic assessment of bank capital; debt forgiveness or repossession of collateral; and a will-

ingness to liquidate insolvent banks, replace failed management, and use public funds to cover losses of depositors (but not shareholders). In addition, regulatory reforms are needed, particularly in areas where regulatory change would lead to new business opportunities. Such reforms might facilitate the needed adjustments prompted by the debt cleanup.

Growth in the euro area also slowed in the second half of 2000 but is expected to remain satisfactory, provided the global economy does not turn out to be weaker than projected. This view incorporates some easing of monetary policy in the coming months. The firming of the foreign exchange value of the euro since November and the drop in oil prices, coupled with a less buoyant external environment, should reduce inflation pressures in the near term. Furthermore, even though the output gap is expected to disappear over the projection period, domestically generated price pressures may turn out to be low if past structural reforms and the development of new technologies succeed in raising the productive capacity of the economy. With inflation pressures low, monetary policy could be eased more aggressively if the slowdown were to intensify.

In the euro area, some easing of monetary policy is envisaged…

With respect to fiscal policy, underlying positions continue to diverge markedly across countries. In the three largest countries, discretionary measures have been taken to reduce taxes or increase spending. To some extent, unexpected revenue increases and fiscal drag have offset the impact of these measures on structural positions. However, with structural budget deficits of more than 1 per cent of GDP or with large quantities outstanding of government debt, more ambitious fiscal consolidation might be warranted to bring budgets close to balance or surplus, as agreed in the context of the Stability and Growth Pact. In contrast, in some of the smaller euro-area countries, high inflation seems to be driven by excess demand rather than an on-going catch-up process, and the question arises as to whether fiscal policies can do more in these cases. However, with structural surpluses already exceeding 2 per cent of GDP, a considerable part of the necessary adjustment to absorb excess demand is likely to be left to market forces. These would work over time to shift economic activity within the country from the tradeables sector to the non-tradeables sector.

… fiscal consolidation could in some cases be more ambitious…

Reforms to enhance the flexibility of labour markets would aid the smooth functioning of this process. Moreover, in the euro area as a whole, labour market reforms need to continue, along with measures to enhance product market competition and remove financial market segmentation. Continuing initiatives to make work more financially attractive, working arrangements more flexible, and lower-skilled workers more productive will help extend the employment gains achieved in recent years and ease the future burden of population ageing on pension finance.

… and product, labour and financial market reforms need to continue

27 April 2001

I. GENERAL ASSESSMENT OF THE MACROECONOMIC SITUATION

Overview of the current situation and prospects

Global growth prospects have deteriorated

Global economic activity has been weakening since the autumn of 2000. Led by steep slowdowns in the auto and information and communications technology sectors, growth stalled in the United States late last year with significant spill-over effects in neighbouring Canada and Mexico. Other important trading partners, notably in Asia, have also been adversely affected. In particular, this loss of dynamism has reinforced the weakness that has become evident in the Japanese economy, further affecting the global picture negatively. The expansion in Europe also slowed in the second half of 2000, and continued signs of weakness have been apparent in the current year. Overall, the world economy has been expanding at a much slower pace in early 2001 than expected just six months ago, leading to a marked downward adjustment of near term growth expectations among private forecasters (Figure I.1) as well as the OECD.

The world economy is cooling down

The forces putting downward pressure on growth are projected to dissipate during the current half-year and, except in Japan, a moderate recovery to take hold later this year. In this scenario, the US slowdown, though sharp, is relatively short-lived. In the European Union (EU) growth is seen as less affected, stabilising marginally above its potential rate. Japan, however, may be facing a more protracted period of weakness. This projection, which is subject to clear downside risks, would imply OECD area-wide growth of just 2 per cent in 2001 (half the growth rate achieved last year), climbing to 2¾ per cent growth of GDP in 2002 (Table I.1).

Figure I.1. **Downgraded growth expectations for 2001**[1]
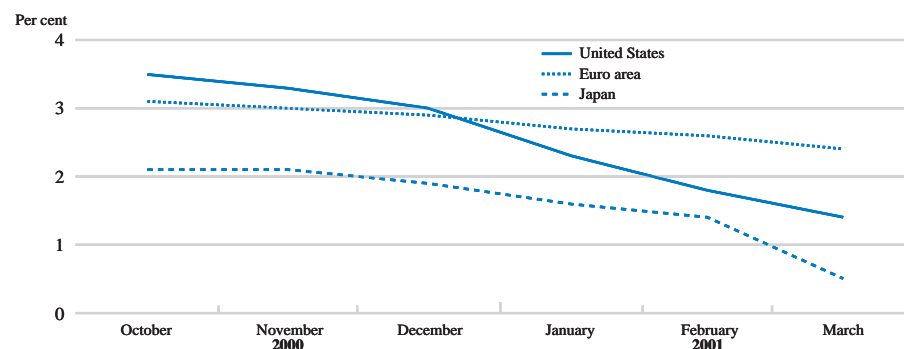
1. Survey of private bank forecasts.
Source: The Economist, various issues.

Table I.1. **Output growth**

Percentage increase in real GDP over previous period

	1999	**2000**	**2001**	**2002**
United States	4.2	5.0	1.7	3.1
Japan	0.8	1.7	1.0	1.1
Euro area[a]	2.6	3.4	2.6	2.7
European Union	2.6	3.3	2.6	2.7
Total OECD	3.2	4.1	2.0	2.8

a) Greece entered the euro area on 1 January 2001. In order to ensure comparability of the euro area data over time, Greece has been included in the calculation of the euro area throughout.
Source: OECD.

Weakness in high technology sectors has been widespread and adversely affected world trade

The slowdown in the United States was widely expected but its intensity has been a surprise. Unusually cold weather late in 2000 appears to have played a role in the abrupt weakening of activity around November but more fundamental forces have been at work. Declines in equity markets have reinforced the restraining effect of higher energy prices on consumer demand, with purchases of autos falling particularly strongly. At the same time, the long boom in information technology and communications (ITC) investment[1] appears to have resulted in overspending by many businesses. The latter, in turn, has led to downgrading of profit expectations, lower share prices, retrenchment and lay-offs. To some degree, most of the manufacturing sector has suffered. Some of these forces at work, especially in the high-technology sectors, have been operating elsewhere in the OECD area, particularly in the European telecommunications sector where balance sheets have deteriorated. As spending in the information and communications technology sectors slows, countries both within and outside the OECD area that are highly specialised in the production of such equipment may in turn be adversely affected, given extensive intra-sectoral trade linkages. Indeed, with the pull from US import demand fading, world trade has slowed significantly (Table I.2), most markedly in the NAFTA countries, Japan and the emerging market countries in Asia.[2]

Confidence has weakened substantially in the United States but the deterioration elsewhere has so far been less

Business and consumer confidence in the United States have deteriorated significantly since late 2000 (Figure I.2). This may partly reflect the steep falls in equity prices, concentrated mainly in the medium and high-technology sectors where price-earnings ratios had become clearly excessive. These declines have played a role in changing "animal spirits", since a substantial part of household wealth is now held as equities and equity financing has been an important source of funds in high-technology sectors. But highly publicised lay-off announcements are likely to have played a significant role too. Elsewhere the mood has so far held up reasonably well, although indicators have been mixed. In Japan, consumer confidence stabilised during the

1. An important element behind this has been the parallel, un-interrupted, bull market in equities, which provided ample capital for such a build-up of capacity. Another contributing factor appears to have been concerns about the Y2K problem, which led to considerable computer-related investment in 1999. Expenditure on information and communications technology has been by far the fastest growing component of investment spending in the United States over the past two to three years and accounted for more than a third of all business investment in 1999 and 2000.

2. Disaggregated trade figures show a sharp reversal of the fast growth of US computer and semi-conductor exports in the fourth quarter of 2000. Similarly, in Japan disaggregated trade data suggest that the value of semi-conductor exports fell by 7 per cent in the fourth quarter of 2000 after increasing by an average rate of 29 per cent in the first three-quarters. The slowdown in Europe has been more gradual and modest.

Figure I.2. **Confidence and leading indicators**

A. Confidence indicators

Business confidence

Consumer confidence

B. Leading indicators

─── OECD composite leading indicator[2]   ······ Industrial production[2]

United States

Japan

Euro area

Total OECD
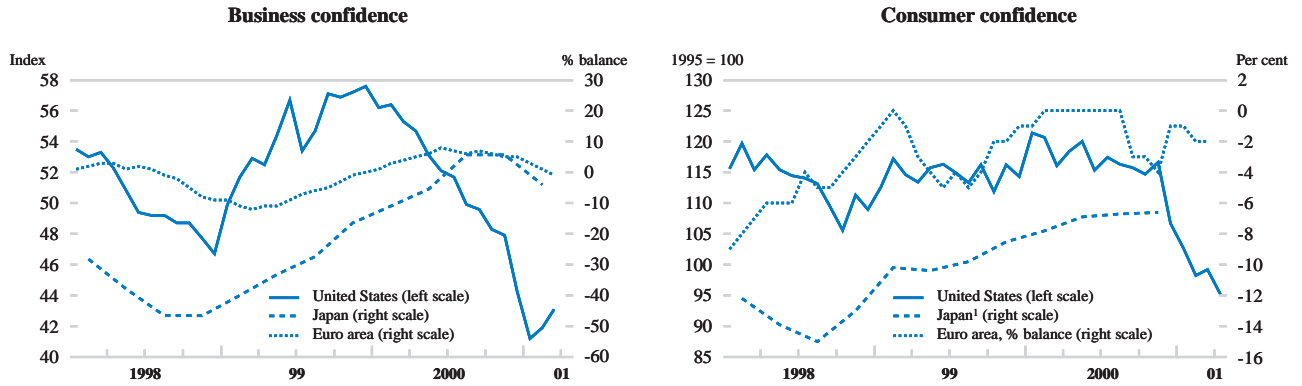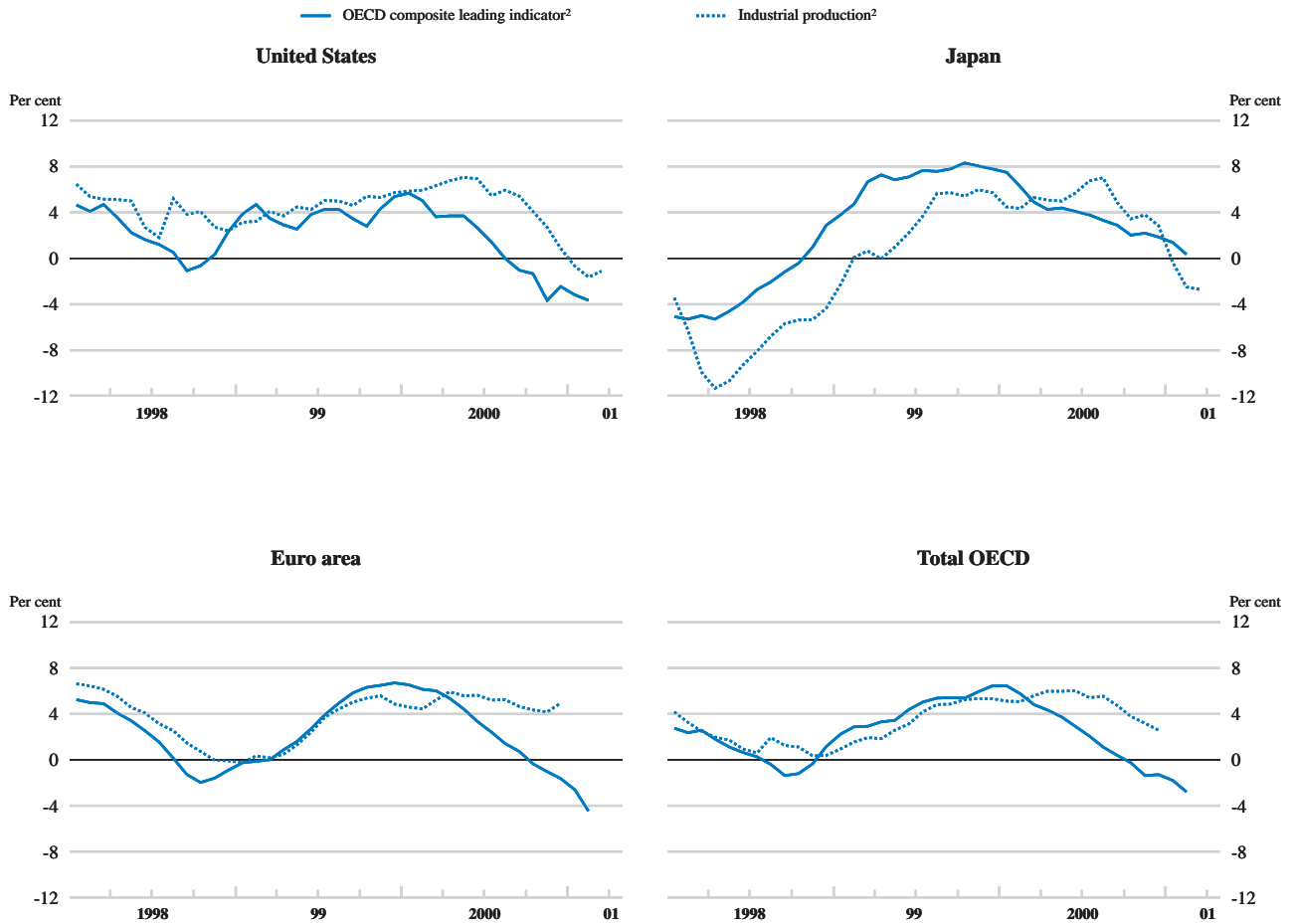
1. 50 percentage points less than actual result.
2. Smoothed curve, 6-month rate of change (annual rate).
Source: OECD, *Main Economic Indicators.*

Table I.2. **World trade summary**

Percentage changes form previous period

	1999	2000	2001	2002
Merchandise trade volume				
World trade[a]	6.2	13.1	7.2	8.0
of which: Manufactures	7.1	14.2	7.3	8.3
OECD exports	5.4	12.0	6.5	7.9
OECD imports	8.8	12.7	6.7	7.4
Non-OECD exports	6.7	15.1	8.0	8.8
Non-OECD imports	0.1	15.8	9.8	9.6
Memorandum items				
Intra-OECD trade[b]	7.8	11.6	6.0	7.3
OECD exports to non-OECD	1.8	16.0	9.5	9.3
OECD imports from non-OECD	7.5	14.3	7.7	8.5
Trade prices				
OECD exports[c]	–2.5	–3.7	–1.2	0.8
OECD imports[c]	–2.8	–1.4	–0.8	0.5
OECD terms-of-trade with rest of the world[d]	–0.9	–6.9	0.2	0.9

Note: Regional aggregates include intra-regional trade.
a) Growth rates of the arithmetic average of world import volumes and world export volumes.
b) Arithmetic average of the intra-OECD import and export volumes implied by the total OECD trade volumes and the estimated trade flows between the OECD and the non-OECD areas based on the 1995 structure of trade values.
c) Average unit values in local currency.
d) The OECD terms of trade are calculated as the ratio of OECD export to OECD import prices, excluding intra-OECD trade.
Source: OECD.

second half of 2000 after rising for the previous two years and, more recently, business confidence has weakened. In Europe, household confidence is holding up at historically high levels, as employment prospects remain good in many countries. But firms in several countries, notably Germany and to a lesser extent France, have been revising down their production expectations.

A number of forces at work are supportive

Easier monetary conditions, low long-term interest rates…

Two "counter-shocks" may operate to limit the global slowdown of economic activity. First, monetary policy has been substantially eased in the United States and more modestly so in a number of other member countries, including Australia, Canada, Japan and the United Kingdom. A limited further monetary easing is built into the OECD projections (Box I.1). The easing of monetary policy that has taken place reinforced the downward trend in long-term interest rates in the United States that started around the middle of last year, although this has recently begun to reverse (Figure I.3). Ten-year government bond yields are now back just above the 5 per cent level observed two years ago and they may edge upward further as the economy recovers. Long-term rates also declined in the euro area over the past year, but more modestly, and since late March yields have risen again. However, over the projection period long rates are on average expected to remain broadly stable. In Japan, long-term bond yields started falling late last year as the weakness of the economy became evident, until they approached their all-time low near 1 per cent. Since late March they have rebounded to around 1½ per cent, where they are projected to remain, partly in response to concerns that substantial increases in government funding might be necessary (see below).

Figure I.3. **Two factors supporting economic activity**

Long-term government bond yields

OECD oil import prices
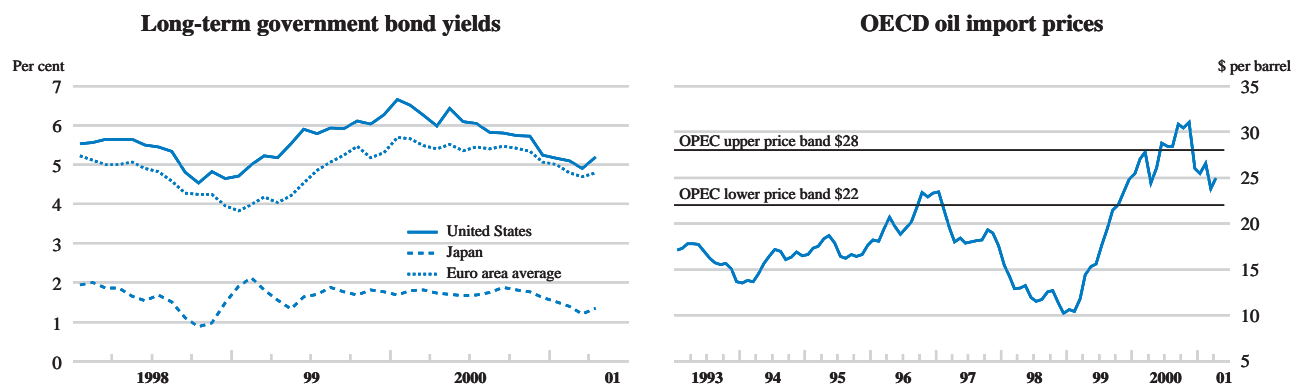
Note: April data are OECD estimates.
Source: OECD, *Main Economic Indicators.*

A second, though more modest, force supporting activity is the decline in oil prices that has recently occurred. Indeed, Brent crude spot oil prices have come down by $10 per barrel from last year's peak to around $25½ in late April 2001. Given that lower economic growth is likely to reduce world oil demand, production cutbacks by members of the Organisation of Petroleum Exporting Countries (OPEC) (amounting to 2½ million barrels per day or about 10 per cent of OPEC production in March 2001) are assumed not to derail the oil market; indeed there should be room for some re-building of very low stocks at prices not far from current price levels. From an estimated average of $26 in the first half of 2001, the OECD import price (cif) is assumed to soften slightly to just below $25 per barrel by end-2002.[3] Compared to the average $30 per barrel prevailing in late 2000, the assumed $5 decline in the OECD import price should add roughly about ¼ per cent to household disposable incomes across the OECD area.

… and weaker oil prices will support demand and activity

Fiscal policy for the OECD area as a whole, measured in terms of the structural balance, is expected to be broadly neutral over the period 2001-02 (Table I.3). This will end nearly a decade of steady fiscal consolidation. During 2001 the fiscal stance in the United States is assumed to tighten slightly notwithstanding the tax cuts incorporated in the projections (see below). Fiscal policy in the European Union is foreseen to be broadly neutral. In Japan, abstracting from the revenues arising from the redemption of postal savings deposits,[4] fiscal policy will be neutral in 2001. Next year the tax cuts will add a noticeable stimulus to demand in the United States but this will be partially compensated at the global level by, assuming no further supplementary budgets, the beginning of some fiscal consolidation in Japan. Fiscal policy is set to remain broadly neutral in Europe in 2002.

Fiscal policy has become largely neutral…

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3. OPEC has pledged to keep the price of its oil basket within a $22-28 range, but recent policy statements have focussed on a target price of $25 per barrel. The recent cuts in the production ceiling in February (1½ million barrels per day) and in April (1 million barrels per day) were prompted by expectations of a sharp seasonal price fall at unchanged production levels in the second quarter when winter heating demand falls off.

4. Substantial investments in ten-year postal saving deposits have been maturing during 2000 and 2001. Taxes on the income earned on these deposits are being paid on a cash basis as they mature, resulting in exceptional receipts of 0.8 per cent of GDP in 2000 and 0.9 per cent of GDP this year.

Box I.1. Policy and other assumptions underlying the projections

Fiscal policy assumptions are based on measures taken and stated policy intentions, where these are embodied in well-defined programmes.[1] For the OECD area as a whole, the outlook is for fiscal stances, as measured by changes in structural budget balances, to be broadly neutral over the projection period as the restrictive stance in place over the past several years comes to an end. This, however, masks divergent trends across the area: notwithstanding some front loading of tax cuts, there is a tightening of fiscal policy in the United States in 2001, which will be reversed in 2002 as the full impact of the tax cuts will be felt; a broadly neutral stance in Japan in 2001 and, once account is taken of one-off revenue increases related to taxation of interest income on postal deposits and on the assumption of no additional supplementary budget, a modest tightening in 2002; and in the European Union several countries, notably Germany, are implementing tax cuts but the fiscal stance overall will nevertheless be broadly neutral during the projection period.

Policy-controlled interest rates are set in line with the stated objectives of the relevant monetary authorities with respect to inflation and, in some cases, to supporting activity or exchange rates. In the case of the United States, the federal funds rate, which was lowered in four steps by 200 basis points in early 2001, is expected to be reduced by a further 25 basis points during the summer. By the end of the projection period this last decrease is assumed to be reversed as recovery gathers pace. Maintenance of price stability over the medium term is the primary objective of monetary policy in the euro area.[2] Although headline inflation is running ahead of the target, the OECD estimate of core inflation remains below 2 per cent, and the European Central Bank is assumed to lower its key policy rate by a ½ percentage point before mid-2001, allowing three-month money market rates to stabilise at around 4½ per cent and stay there through 2002. In Japan, as deflation has persisted policy rates were reduced in late February, and in mid-March a new quantitative framework for monetary policy was announced which is expected to result in short-term interest rates remaining close to zero during 2001 and 2002.

The projections assume unchanged exchange rates from those prevailing on 12 April 2001; in particular, one US dollar equals ¥ 123.3 and 1.121 euro. The fixed exchange rate assumption is modified for Hungary to allow for continuous depreciation, reflecting the OECD interpretation of "official" exchange rate policies. For Turkey, the exchange rate is assumed to depreciate continuously but at less than the projected rate of inflation, such that roughly half of the recent devaluation is offset in real terms.

Oil prices have fallen significantly below levels built into the projections finalised just six months ago, averaging $25½ per barrel for Brent crude in the four months to mid-April 2001. While world energy demand should ease with the global economic slowdown, the two cuts in OPEC production ceiling earlier this year (amounting cumulatively to 2½ million barrels per day) are assumed to prevent oil prices from dropping much below the $25 per barrel level by the end of 2002. Non-oil commodity prices, after increasing in the first half of 2000, are now weakening again on average and with lower growth in global economic activity prices should at best stabilise during second half of 2001. In 2002 they are assumed to move in line with prices of OECD manufactured exports.

The cut-off date for information used in the projections was 19 April 2001.

Oil and non-oil commodity prices

	1998	1999	2000	2001	2002
	Percentage changes				
OECD import oil price (cif)	−34.2	37.3	62.1	−8.0	−3.8
Non-oil commodity prices*a*	−13.7	−7.1	3.0	−3.4	1.3
Memorandum item:					
OECD import oil price (cif, $barrel)*b*	12.5	17.3	28.0	25.8	24.8

a) Total Hamburg commodity price index, excluding energy. OECD projections for 2001 and 2002.
b) The historical data for the OECD crude oil import prices are average cif unit prices as calculated by the International Energy Agency; that is, they include cost, insurance and freight but exclude import duties. OECD projections for 2001 and 2002.
Source: Hamburg Institute for Economic Research (HWWA), International Energy Agency and OECD.

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1. Details of assumptions for individual countries are provided in the corresponding country notes in Chapter II, "Developments in Individual OECD Countries".
2. Price stability is defined by the European Central Bank as an annual increase of the harmonised index of consumer prices below 2 per cent.

Table I.3. **General government financial balances**[a]

Per cent of GDP/Potential GDP

	1999	2000	2001	2002
United States				
Actual balance	1.0	2.2	2.1	1.4
Structural balance	0.7	1.7	2.1	1.5
Primary structural balance	3.5	4.3	4.4	3.5
Japan				
Actual balance	–7.0	–6.3[b]	–6.3[b]	–6.9
Structural balance	–6.2	–5.5[b]	–5.4[b]	–5.9
Primary structural balance	–4.9	–4.3[b]	–4.2[b]	–4.6
Euro area				
Actual balance	–1.3	0.3	–0.6	–0.4
Structural balance	–0.6	–0.6	–0.7	–0.5
Primary structural balance	3.3	3.1	2.8	3.0
European Union				
Actual balance	–0.7	0.6	–0.2	–0.1
Structural balance	–0.3	–0.1	–0.3	–0.2
Primary structural balance	3.4	3.4	3.0	3.0
OECD[c]				
Actual balance	–0.8	0.4	0.0	–0.3
Structural balance	–0.7	–0.2	0.0	–0.3
Primary structural balance	2.2	2.6	2.5	2.1

a) Actual balances are as a per cent of nominal GDP. Structural balances are as a per cent of potential GDP. The structural balance excludes one-off revenues from the sale of mobile telephone licences. The primary structural balance is the structural balance less net debt interest payments.
b) Includes deferred tax payments on postal saving accounts amounting to 0.8 and 0.9 per cent of GDP in 2000 and 2001 respectively.
c) Total OECD figures for the actual balance exclude Mexico, Switzerland and Turkey and those for the structural balance further exclude the Czech Republic, Hungary, Korea, Luxembourg and Poland.
Source: OECD.

Exchange rate movements since *OECD Economic Outlook 68* was finalised in late October have resulted in a significant weakening of the yen and strengthening of the euro. In effective terms, the assumed yen exchange rate over the projection period is 11 per cent lower than in October 2000, while the euro is more than 8 per cent stronger. The effective dollar exchange rate has over the same period appreciated by just under 2 per cent. The weaker yen may help to limit the slowdown in exports in Japan and thus support aggregate demand at a time when domestic demand remains sluggish. The recovery of the euro has restrained one of the few sources of inflation pressures in the euro area, hence providing more room for manoeuvre for the European Central Bank should activity weaken. Although modest, the effective appreciation of the dollar may limit the desired shift in aggregate demand from domestic to foreign sources.

… and the yen has weakened, especially against the euro

The global downturn of economic activity may be relatively short-lived

At this stage, the gloom suggested by confidence indicators and falling equity prices in the United States may be greater than warranted by hard economic data. The sharp cutback in business spending plans appears to reflect a rapid adjustment, facilitated by the widespread diffusion of information technology in recent years, to evidence that capacity in many sectors was expanding too rapidly. Efforts to correct an unintended run-up in inventories have also been playing an important role. So far, many important economic indicators, such as employment and consumer spending,

The US economy may recover relatively soon…

have continued to increase, even if they have slowed. Furthermore, the support provided by monetary easing could be increased if needed since labour market and inflation pressures have been receding. Given these forces, economic activity appears likely to recover, if slowly, during the second half of the year, as the stock-adjustment processes now restraining business spending run their course. Overall, real output is projected to rise by 1¾ per cent in 2001 and 3 per cent next year.

... while growth in Japan may remain sluggish

With rising exports traditionally being the initial driver behind economic upturns in Japan, the abrupt slowdown in the United States has occurred at an inopportune moment. This is especially so since private consumption is unlikely to provide any significant stimulus to domestic demand given worsening labour market developments. At the same time, the weakness of industrial production and orders suggest that corporate investment may not fully compensate for weaker net exports. The poor health of the financial sector – largely related to the persistently high stock of "bad" loans, and the poor performance of the stock market – is an additional source of weakness. In this environment, the outlook is for growth to remain slow, averaging only 1 per cent over the projection period.

The European Union, however, has been less affected by the US slowdown

While the European Union may not avoid some impact from the US downturn, economic activity going forward should remain healthy. In the euro area, net exports are projected to provide considerably less stimulus to overall economic activity in 2001 and 2002 than they did last year as US import growth fades and world trade slows. This loss of growth momentum may be partially offset by tax cuts in some countries, though fiscal policy remains fairly neutral overall, and lower oil prices will work to sustain private consumption. Furthermore, business investment, having grown rapidly in recent years, may slow only slightly as efforts to ease capacity constraints continue in much of the area. Wide growth disparities within the area are expected to diminish, with most countries growing in the 2 to 3 per cent range. But they will not disappear as growth in Finland, Greece, Ireland and Luxembourg should remain somewhat stronger. For the euro area as a whole growth may be around 2½ per cent this year and 2¾ per cent next year, eliminating spare capacity by 2002. In the EU countries outside the euro area (Denmark, Sweden and the United Kingdom), growth is generally expected to slow in line with the euro area trends after its relatively buoyant pace last year.

Growth prospects elsewhere in the OECD area are mixed

The outlook elsewhere in the OECD area is mixed. Most directly affected by the US slowdown are Canada and Mexico, the other members of the North American Free Trade Agreement (NAFTA), and Korea, which has a large ICT sector. However, these countries should also benefit as US activity recovers. In Turkey, domestic demand will contract following the sharp, crisis-induced rise in real interest rates, though net exports should benefit from the devaluation of the exchange rate and so help to limit the fall in output. Activity will also moderate after relatively strong performance in 2000 in Switzerland and, especially, Iceland, where restrictive policies to deal with overheating remain in force. On the other hand, activity in the transition economies of the Czech Republic, Hungary, Poland and the Slovak Republic is set to remain relatively buoyant, and growth in Australia and New Zealand is projected to strengthen next year as the modest slowdown now underway runs its course.

Slower economic growth should ease labour market pressures in much of the OECD area…

As the OECD economy slows, the reduction in area-wide unemployment that has taken place over the past eight years is coming to an end (Table I.4). This mainly reflects the outlook for the United States, where the sharp rise in initial unemployment claims since the middle of last year has provided clear evidence of a weaker labour market. Unemployment there has already risen from its low point and is expected to increase by about 1½ million persons over the projection period, bringing the rate of unemployment back to around 5 per cent, which appears to be roughly

Table I.4.   **Unemployment, output gaps and inflation**

	1999	2000	2001	2002
	Per cent			
Employment growth				
United States	1.5	1.3	0.4	0.4
Japan	–0.8	–0.2	–0.1	0.2
Euro area[a]	1.8	2.2	1.5	1.3
European Union	1.7	2.0	1.3	1.2
Total OECD	1.1	1.2	0.6	0.9
	Percentage of labour force			
Unemployment rate				
United States	4.2	4.0	4.6	5.0
Japan	4.7	4.7	4.9	4.8
Euro area[a]	9.9	9.0	8.3	7.8
European Union	9.1	8.2	7.7	7.3
Total OECD	6.7	6.3	6.3	6.3
	Millions			
Unemployment levels				
United States	5.9	5.7	6.5	7.1
Japan	3.2	3.2	3.3	3.3
Euro area[a]	13.6	12.4	11.6	11.0
European Union	15.7	14.3	13.5	13.0
Total OECD	34.1	32.0	32.5	32.6
	Per cent			
Output gaps[b]				
United States	1.3	2.2	0.0	–0.4
Japan	–3.1	–3.0	–3.4	–3.8
Euro area[a]	–1.3	–0.3	–0.1	0.1
European Union	–1.0	–0.2	0.0	0.1
Total OECD	–0.4	0.4	–0.6	–0.7
Inflation[c]				
United States	1.5	2.0	2.3	1.9
Japan	–1.4	–1.7	–1.2	–0.4
Euro area[a]	1.2	1.2	2.2	2.1
European Union	1.4	1.4	2.2	2.1
Total OECD *less* Turkey	1.5	1.7	2.1	1.9
Total OECD	2.4	2.5	3.0	2.6

a) Greece entered the euro area on 1 January 2001. In order to ensure comparability of the euro area data over time, Greece has been included in the calculation of the euro area throughout.
b) Per cent of potential GDP.
c) Percentage change in the GDP deflator from previous period.
Source: OECD.

its structural level. Unemployment may also start to rise in several other countries such as Australia, Mexico, Poland and Turkey. In Japan, unemployment should remain high by past standards given the continued sluggishness in economic activity. Unemployment is projected to resume its falling tendency in the European Union and joblessness is also expected to be reduced in the Czech Republic, Hungary and the Slovak Republic. As area-wide labour supply growth slows pro-cyclically, the overall unemployment rate in the OECD area may not, however, change much from the 6¼ per cent attained last year.

Slower growth across the OECD area should, in combination with the assumed fall in oil prices, help to sustain continued low inflation. Indeed, a surprising feature of the business cycle of the past couple of years has been how insensitive underlying

… and allow area-wide inflation to remain tame

inflation has proven to be to the run up in energy prices. This owes much to well-functioning wage-price mechanisms across most OECD countries. Excluding Turkey, where very high inflation persists, price increases in the OECD area should average around 2 per cent during the projection period.

Current account imbalances remain large, however

The large current account deficit in the United States is projected to persist, although it will decline moderately from 4½ per cent of GDP in 2000 to 4 per cent by next year (Table I.5). The stubbornly high deficit despite a marked slowdown of US growth reflects a number of factors: the slowing of export market growth and in particular the temporary downturn in global demand for high-technology products which account for a significant part of US exports; and comparatively poor export performance due to the impact of a persistently firm exchange rate on relative competitiveness. As has been the case for the past three years, the counterpart surpluses to the US deficit cannot be fully identified and no major changes in the global pattern of external imbalances are projected. Japan, the major oil producers in Africa, the Middle East and the Former Soviet Union and the Dynamic Asian economies continue to enjoy surpluses amounting to around $230 billion, a little more than half the US deficit. But the European Union, China and other non-OECD Asia and Latin America are expected to incur small deficits. As a result, the "global discrepancy" appears set to rise from $180 billion in 2000 to around $250 billion this year, and to remain there in 2002.

Projections are relatively optimistic but there are important downside risks

The overall outlook presented here may be regarded as relatively optimistic. The major forces operating are assumed to be specific and limited to the correction taking place in much of the world in the information technology and communications sectors, and, in the United States, the auto sector as well. A major risk to this picture is that

Table I.5. **Current account balances**

	1999	2000	2001	2002
	Per cent of GDP			
United States	–3.6	–4.4	–4.2	–4.0
Japan	2.4	2.5	2.2	2.7
Euro area[a]	0.4	–0.1	–0.2	–0.1
European Union	0.3	–0.3	–0.4	–0.4
OECD	–0.8	–1.3	–1.3	–1.2
	Billion of dollars			
United States	–331.5	–435.4	–431.8	–430.8
Japan	106.9	117.2	91.3	114.0
Euro area[a]	29.7	–8.8	–13.3	–5.4
European Union	25.1	–25.5	–34.4	–30.3
OECD	–201.7	–329.4	–343.3	–313.0
Memorandum items:				
Dynamic Asia[b]	75.0	52.1	33.8	26.4
China and other non-OECD Asia	7.5	–1.8	–7.7	–12.9
Latin America	–35.6	–25.1	–33.9	–38.6
Africa, Middle East	–9.6	95.2	78.9	69.0
Former Soviet Union, Central and Eastern Europe	16.5	28.5	24.6	21.0
World	–148.0	–180.5	–247.5	–248.1

a) Greece entered the euro area on 1 January 2001. In order to ensure comparability of the euro area data over time, Greece has been included in the calculation of the euro area throughout.
b) Chinese Taipei; Hong Kong, China; Indonesia; Malaysia; the Philippines; Singapore and Thailand.
Source: OECD.

more fundamental imbalances are present, either in the United States or elsewhere, which will require more severe and protracted adjustment or that could be seriously aggravated by what might otherwise be a mild slowdown. Most of the potential imbalances that could fall into this category relate to financial variables, either market prices or balance sheet items. A second major risk is that the effects of a slowdown in the United States would be less confined to that country than envisaged in the projections. This could be the case if the slowdown were to be deeper or more prolonged, or if its international transmission were to be stronger than suggested by the projections. The following two sections explore these risks. The final section turns to policy requirements in the major OECD regions given the outlook and risks to it.

Financial risks in a weaker world economy

Episodes of buoyant growth have often led to financial excesses or imbalances that have ultimately required protracted periods of difficult adjustment. The risks that could arise if equity prices built in excessive optimism have been widely recognised during the boom of recent years and discussed in previous issues of *OECD Economic Outlook*. Now, as the global economy has slowed and equity prices have been correcting, concerns have increasingly been cited about a number of other developments that could cause serious financial strains. If the emergence of such strains necessitated widespread retrenchment in order to restore healthy balance sheets, the slowdown would probably be more severe and prolonged than projected here. Overall, the picture is relatively reassuring, but the risks are serious enough to warrant guarding against complacency, and a few serious problems exist. In particular, banking sector problems in Japan and a number of emerging market countries need to be addressed. This section surveys the main questions and concerns surrounding this issue.

Financial market excesses may require protracted adjustment

Will equity markets fall further as the economy weakens?

Substantial correction has taken place in global equity markets since they peaked around March last year (Figure I.4). A fundamental shift in investors' sentiments towards companies in the high-technology sector has pushed their stock prices down by more than a half in the United States and close to half in Europe. However, with stock prices in other sectors remaining firm until the broad sell-off in March 2001, the decline in the overall stock market indices in these markets was limited to around a quarter by end-March before global equity markets firmed somewhat in April. The Japanese stock market also fell sharply in the year to end-March, with the impact of the bursting of the high-technology bubble being reinforced by sales related to the unwinding of cross-shareholding and flagging confidence. Outside the principal markets, there have been particularly sharp falls in equity prices over the past six months in Korea and Turkey.

A significant stock market correction has taken place…

The correction in global stock markets should ease concerns about an apparent overvaluation of equity prices. Since earnings of high-technology corporations have held up reasonably during this period of stock market correction, the price-earnings (P/E) ratio in the sector has fallen by around a half in both the United States and Japan,[5] and thus significantly reduced the ratio for the market as a whole in both countries.

… and equity prices have been brought closer to fundamental values

---

5. In the United States, the P/E ratio for the high-technology composite index of the Standard and Poors 500 companies fell from 68 to 34 in March 2000 to late April 2001; in Japan, over the same period, the P/E ratio for the technology-heavy JASDAQ fell from well over 100 to around 40.

Figure I.4. **Equity market developments**

United States

December 1991 = 100

- S&P 500 (log scale)
- High technology (log scale)

1 300
800
500
300
200
100

1992   93   94   95   96   97   98   99   2000   01

United States: Price earnings ratio

Per cent

- S&P 500
- High technology

70
60
50
40
30
20
10

1992   93   94   95   96   97   98   99   2000   01

Europe

December 1991 = 100

- DJ Euro Stoxx (log scale)
- High technology (log scale)

1 300
800
500
300
200
100

1992   93   94   95   96   97   98   99   2000   01

Japan

December 1991 = 100

- Topix (log scale)
- JASDAQ (log scale)

1 300
800
500
300
200
100
50

1992   93   94   95   96   97   98   99   2000   01

Source: Bloomberg.

Although there is great uncertainty about what an appropriate or sustainable valuation should be, it is clear that the extent of any overvaluation has been substantially reduced.

Nonetheless, corporations remain more generously valued relative to their earnings than they were during the pre-1995 period. In the United States, the increase in P/E ratios reflects a likely rise in the growth of corporate earnings associated with a higher economy-wide potential growth rate. European equity prices look richly valued by historical norms judged by comparatively high P/E ratios in major European markets, perhaps similarly reflecting expectations of some improvements in potential growth. In Japan, the P/E ratio of 200 for the Topix in late April remains very high, notwithstanding the sharp decline in equity prices during the past decade. The interpretation of this ratio, however, is complicated by extensive cross-shareholdings.

If slower growth impinges on profits beyond what consensus forecasts suggest, share prices could fall further with adverse wealth and confidence effects for consumption not reflected in the OECD's projections. Profit margins in the United States (measured as pre-tax profits relative to sales) were close to a 20-year high in the competition-exposed manufacturing sector at the start of the downturn and were still reasonably comfortable despite falling in the fourth quarter, whereas in Japan they have been exceeded only during the late 1980's bubble (Figure I.5). This could indicate scope for reducing margins to maintain sales as competitive pressures mount, which could disappoint any market expectations based on extrapolation of recent

Further corrections could take place if the downturn proved to have strong effects on profits

Figure I.5. **Profits in the United States and Japan as a percentage of total sales**

United States, manufacturing
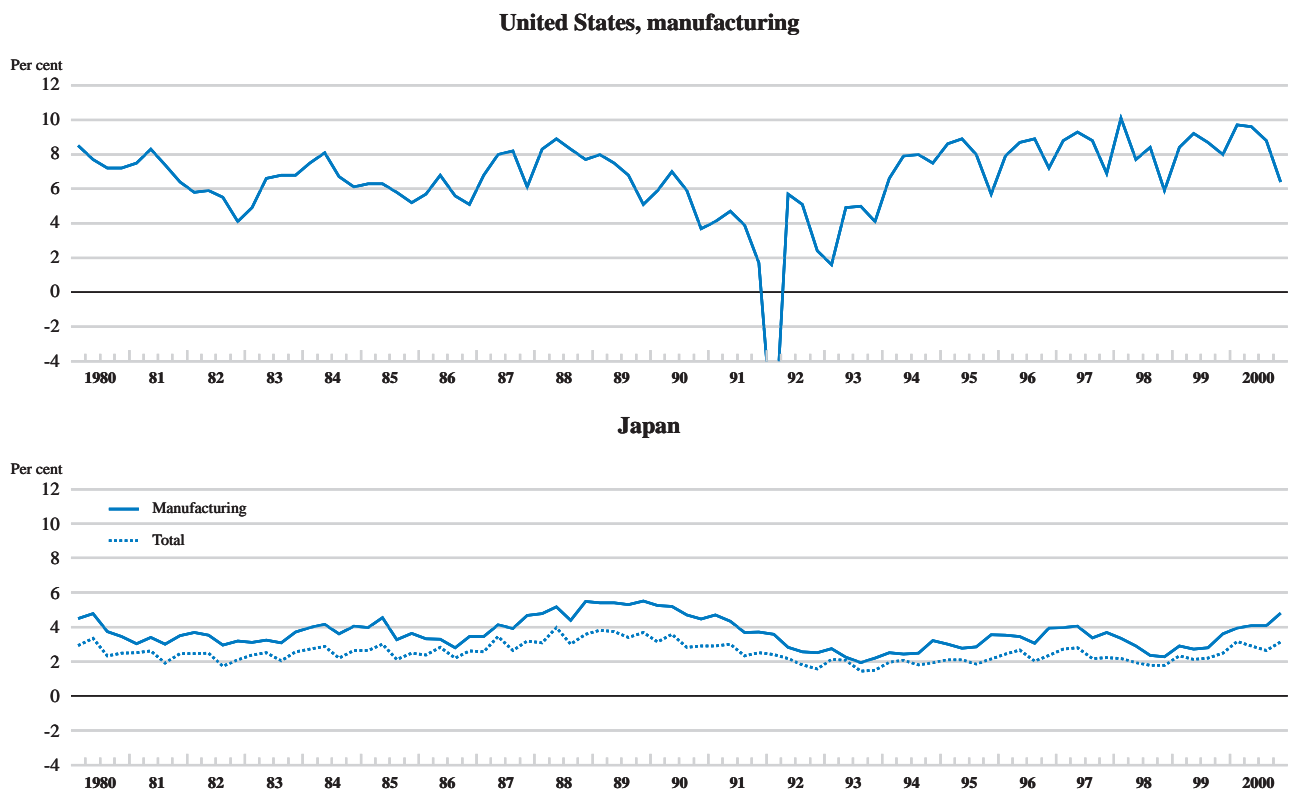
Japan

Sources: United States: Census Bureau, *Quarterly Financial Statistics;* Japan: Ministry of Finance, *Financial Statement Statistics.*

improving trends. Similar forces could operate in Europe, where the single market and the introduction of the euro have worked to intensify competitive pressures.

How restricted is access to capital markets?

The sharp contraction in issuance activity in the United States in the latter part of 2000…

The downturn in the second half of 2000 in the United States was accompanied by a contraction in new equity and bond issuance activity in the more speculative part of the capital market, though total issuance in the bond market remained strong (Table I.6). The easy access to capital markets had been a hallmark of the economic expansion in the latter part of the 1990s in the United States and also in Europe. However, the issuance of junk bonds in the United States appears to have been falling for some time. While Initial Public Offerings (IPOs) of equities in the more speculative segment of the market remained strong in both the United States and Europe into 2000, the market virtually dried up in the second half of the year.

… reflected heightened risk awareness of investors…

The drop in issuance activity went hand in hand with greater risk aversion of investors. This was reflected in a sharp widening of risk spreads in the US corporate bond market up to end-2000, both for investment-grade and high-yield borrowers (Figure I.6). Similar increases in spreads occurred in Europe. The reasons behind the widening of the spreads in the investment-grade sector appear to include actual and greater probability of future downgrades, notably of telecommunications companies that have increased their debt levels significantly. In the speculative segment of the market, the widening from an already high level appears to reflect increasing concern that default rates would continue rising, especially if the economy were to falter. In this environment of investor apprehension, companies chose to postpone new issuance.

Table I.6. **Gross security issuance**

	United States (bn $)		Euro area (bn euro)
	Bonds issued by non-financial corporations	Equity public offerings	Long-term securities issued by non-financial corporations
1995	156.8	73.2	
1996	167.9	122.0	
1997	222.6	117.9	
1998	307.9	126.8	
1999	294.0	131.6	62.0
2000	244.1	134.9	65.2
1st quarter	69.3	50.7	9.6
2nd quarter	58.3	33.6	21.0
3rd quarter	58.3	27.3	16.3
4th quarter	56.6	23.3	18.3
January	14.6	11.5	0.6
February	26.6	22.3	4.4
March	28.1	16.9	4.6
April	8.1	21.0	8.0
May	20.8	4.7	4.5
June	29.4	7.9	8.5
July	15.9	8.0	8.7
August	17.9	12.9	4.0
September	24.5	6.4	3.6
October	12.5	9.1	5.7
November	25.8	11.5	8.1
December	18.2	2.7	4.5

Source: US Federal Reserve, European Central Bank.

Figure I.6. **Risk spreads in corporate bond markets**

BBB – AAA

Percentage points

High-yield – AAA

Percentage points

Source: Bloomberg.

… but issuance has rebounded strongly in the first months of 2001
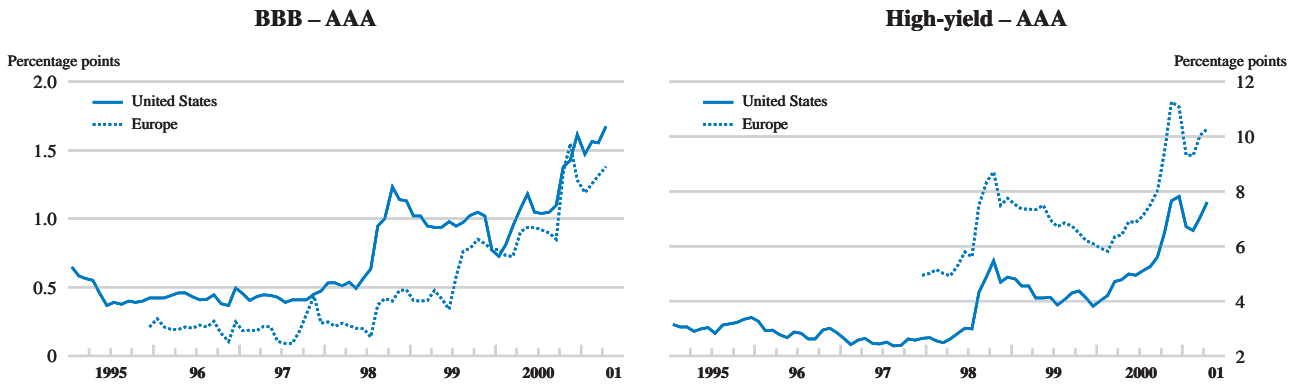
This tightness in capital markets has contributed to the current weakness of high-technology spending as high-risk companies, most obviously in the Internet sector, have been unable to raise external finance. But the worst may have passed. In the first months of 2001 corporate junk bond issuance in the US capital markets rebounded strongly as risk spreads eased. In Europe, issuance in the high-yield market also jumped to record levels in early 2001. Thus, corporations do not seem to face serious restrictions in accessing capital markets, although they still have to pay a relatively high price to compensate for higher risk.

Is private sector indebtedness excessive?

Private sector financial balances have weakened in the United States and Europe…

The expansions in the United States and Europe have been accompanied by a deterioration in the financial balances of the private sector (Figure I.7). In the United States, the private sector moved from a sizeable financial surplus in the early 1990s to a huge financial deficit by 2000. In the euro area the shift was less dramatic, but

Figure I.7. **Private sector financial balances**

Per cent of GDP
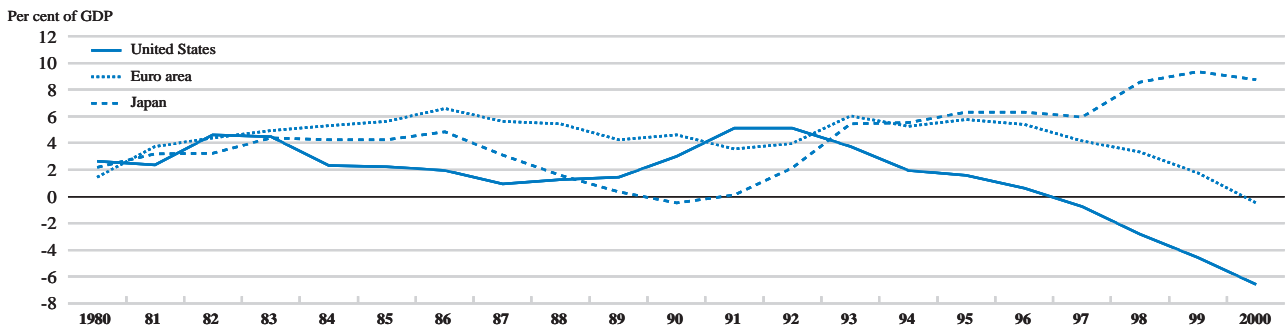
Note: Private sector financial balances are derived as counterparts to current account balances and net lending of government.
Source: OECD.

Figure I.8. **Debt indicators for the United States**

The debt burden

Per cent

750 | 110

—— Non-financial corporate debt in per cent of cash flow (left scale)

········· Household debt in per cent of disposable income (right scale)

700 | 105
650 | 100
600 | 95
550 | 90
500 | 85
450 | 80
400 | 75
350 | 70
300 | 65

1980 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 2000

The debt servicing burden

50 | 15

—— Non-financial corporate net interest payment in per cent of cash flow (left scale)

········· Household interest payments in per cent of disposable income (right scale)

– – – Household debt service payments
in per cent of diposable income
(right scale)

45 | 14
40 | 13
35 | 12
30 | 11
25 | 10
20 |
15 | 9

1980 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 2000

Debt/Equity

110 | 22

—— Non-financial corporate debt in per cent of equity at market value (left scale)

········· Household liabilities in per cent of net wealth (right scale)

100 | 21
90 | 20
80 | 19
70 | 18
60 | 17
50 | 16
40 | 15
30 | 14
20 | 13

1980 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 2000

Note: Household refers to household sector and non-profit institutions serving households.
Cash flow is defined as corporate earnings with inventory valuation and capital consumption adjustments, plus consumption of fixed capital (NIPA definition).
Sources: Federal Reserve Board, *Flow of Funds;* Bureau of Economic Analysis, *National Accounts.*

the drop of approximately 6 percentage points of GDP in the latter part of the 1990s eliminated the traditionally large surplus. The worsening of the financial balance in both areas was mirrored in strong credit growth to the private sector, which accelerated to around double-digit figures in 1999 and 2000. This strong debt accumulation has given rise to concerns about excessive indebtedness in the non-financial corporate and household sectors that could have particularly deleterious effects in a weakening economy.

The strong increase in debt in the United States has not been accompanied by signs of serious problems with excessive indebtedness in the non-financial corporate sector as a whole, although households' balance sheets have become more stretched (Figure I.8):

... but there is only limited evidence of excessive indebtedness in these regions

– In the non-financial corporate sector, gross debt has fallen markedly relative to equities at market value, suggesting that debt is low compared with the implied earnings outlook for the sector. While this earnings outlook could still be optimistic, interest payments are claiming a smaller share of corporate cash flow than at any time since the mid-1970s, indicating that the debt-carrying capacity of the sector has increased.

– In the household sector, the rising trend in gross debt relative to disposable income has persisted in recent years. However, at the end of 2000 this debt was still lower relative to net worth than in 1995, notwithstanding the correction that took place in the equity market last year, but net worth has deteriorated since then, and if this were to continue it could imply a risk of some distress. The overall debt servicing burden at the end of 2000 had also risen to levels not seen since the mid-1980s, even though mortgage refinancing at times when borrowing costs have fallen has helped to contain the rise in debt interest payments.

Aggregate balance sheet data may hide weaknesses in some small highly-indebted segments of the private sector. However, even if such sectors get into difficulties as the economy weakens, it is unlikely to have major effects on the economy as a whole.

There are few signs of excessive indebtedness in the private sector in the major European countries for which data are available. Debt levels have risen relative to cash flow or disposable income in both non-financial corporate and household sectors. However, as in the United States, debt-equity ratios and debt-net worth ratios have come down as asset prices have surged in recent years, and interest payments have generally fallen relative to cash flow and disposable income. The debt accumulation of telecommunication companies has raised some concern, but it remains to be seen to what extent the macroeconomy will be affected as this sector adjusts to higher debt levels.

In contrast to the situation in the United States and the major European countries, the business sector in Japan is still suffering from serious balance sheet problems inherited from the 1980s boom (Figure I.9). There has been little or no progress in dealing with excessive corporate debt since the bursting of the bubble in the early 1990s. Thus, the ratio of debt to sales still shows little sign of trending down from the high level it reached in the early 1990s, and the stock of debt is still very high relative to equity valued at market prices. Persistent heavy corporate indebtedness has been made sustainable until now by very low interest rates, government debt guarantees and the ability of borrowers to roll over their maturing debt, but the recent increases in corporate bankruptcies suggest that debtors are facing increasing financial pressures. Household debt has also remained unchanged at a historically

Serious indebtedness problems remain in Japan

Figure I.9. **Debt indicators for Japan**
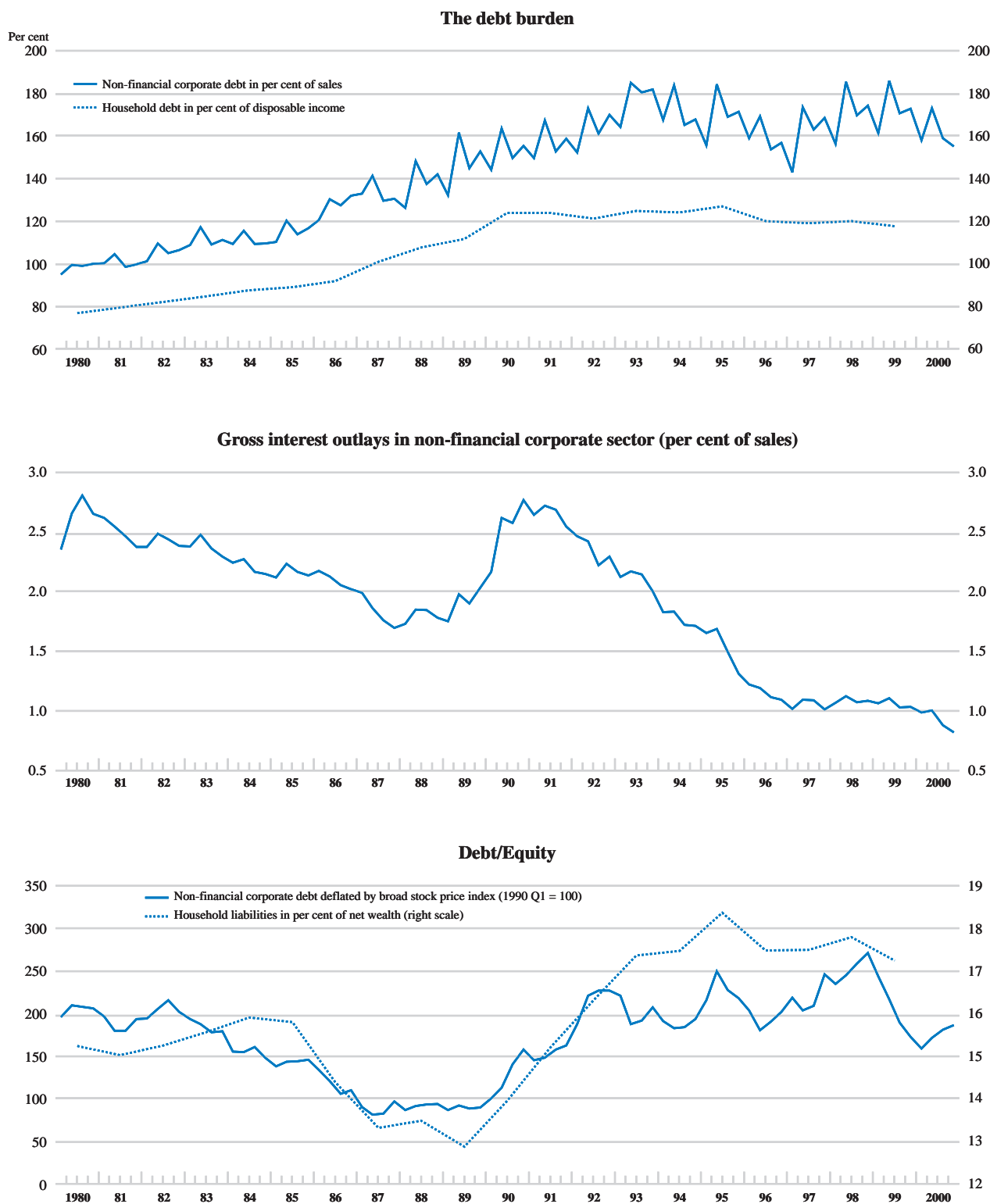
The debt burden

Per cent

— Non-financial corporate debt in per cent of sales
······ Household debt in per cent of disposable income

Gross interest outlays in non-financial corporate sector (per cent of sales)

Debt/Equity

— Non-financial corporate debt deflated by broad stock price index (1990 Q1 = 100)
······ Household liabilities in per cent of net wealth (right scale)

Note: Household refers to household sector and non-profit institutions serving households.
Sources: Ministry of Finance, *Financial Statement Statistics;* OECD.

high level relative to disposable income over the 1990s, and Japanese households' debt-carrying capacity has been reduced by the sharp drop in land prices since 1990 and the consequent fall in the ratio of net wealth to disposable income.

Are there weaknesses in the banking sector?

As the balance sheets of its debtors seem to be in a reasonably good shape, the banking system in the United States appears well placed to weather an economic downturn. Banks' capacity to meet adverse conditions has also been strengthened in the course of the 1990s (Table I.7), as capital-adequacy ratios have increased to well beyond the minimum of 8 per cent. Moreover, there is little evidence that banks' lending policy has been relaxed in the course of the 1990s' expansion to the extent that it has affected the soundness of their balance sheets. Thus, banks and saving institutions in the United States entered the downturn in 2000 with an exceptionally low non-performing loan ratio (Figure I.10), and with loan-loss reserves that exceeded non-performing loans by a significant margin.[6] While the downturn in the United States has been accompanied by an increase in non-performing loans and a reduced reserve-coverage ratio,[7] the tightening of banks' lending standards during

The banking systems in the United States and the major European countries seem to be well prepared to meet a downturn…

Table I.7. **Capital adequacy ratios in banking systems of selected OECD countries**

Capital as per cent of risk-weighted assets

	1991	1995	1999
United States			
Commercial banks	10.4	12.9	12.2[b]
Saving institutions	10.6	15.7	15.1[c]
Japan			
Commercial banks	n.a.	9.3	12.5
Italy			
All banks	12.0[a]	12.8	14.1
United Kingdom			
Commercial banks	n.a.	12.0	14.1
Belgium			
All banks	n.a.	16.1	20.1
Netherlands			
All banks	11.7	12.0	11.0
Sweden			
Commercial banks	13.8	19.6	18.9
Saving institutions	10.4	23.7	22.2
Switzerland			
All banks	n.a.	12.0	13.1

a) 1992.
b) 2000.
c) 1998.
Source: OECD, *Bank Profitability 2000*, Paris.

6. In the second quarter of 2000, loan-loss reserves in commercial banks insured by the Federal Deposit Insurance Corporation (FDIC) amounted to around 170 per cent of non-current loans and leases. See the *FDIC Quarterly Banking Profile*, Third quarter, 2000.

7. As a percentage of total loans and leases, non-current loans and leases in commercial banks rose from 1.0 per cent in the second quarter to 1.1 per cent in the fourth quarter. Over the same period reserves for losses fell from 169 to 149 per cent of non-current loans and leases. See *FDIC Quarterly Banking Profile*, Third and Fourth quarter, 2000.

Figure I.10. **Gross bad loans in United States banking system**

Non-current loans and leases in FDIC-insured banks and saving institutions

Per cent of total loans
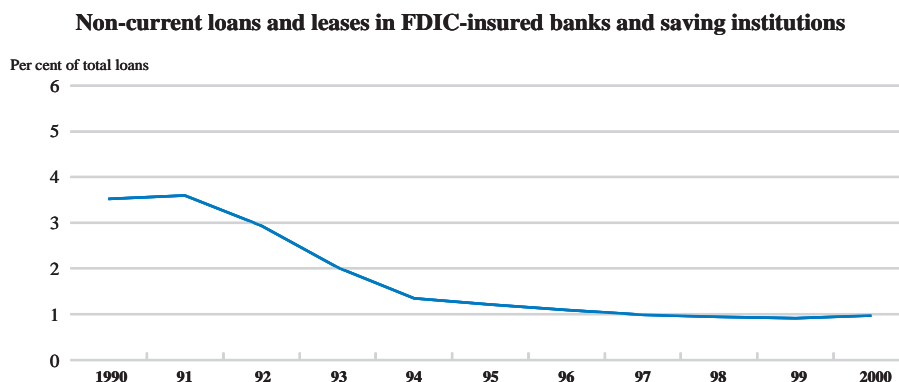
Source: Federal Deposit Insurance Corporation.

this period[8] should act to limit the deterioration in the quality of loan portfolios. Though this may operate to restrain the recovery of activity somewhat in the short term, it reduces the likelihood of a more protracted period of adjustment due to balance sheet problems in the banking sector.

European banks also seem to be well prepared to meet an economy-wide downturn, should this occur, but their financial strength differs somewhat from country to country within the area. By using parts of their strong earnings gains in recent years to increase their capital, banks' capital-adequacy ratios have risen in all the EU countries for which such data are readily available at the aggregate level.[9]

… but the problem of bad loans in Japanese banks may become more serious

In a number of other countries there are serious problems that could aggravate an economic slowdown. In Japan, the amount of non-performing loans in the banking system as a whole has remained at a high level. The extent of the bad loan problem is probably greater than official figures on risk management loans would suggest, with banks' own assessments of loans against which provisions are required being twice as high as risk management loans (see Table I.13 below). Large-scale write-offs were agreed in the context of public capital injection into the banking system some years ago but large inflows of loans into the risk management category have kept this stock high, more than 6 per cent of GDP at end-September 2000. In the past, banks have realised gains on their security portfolios to augment their income, allowing them to write down loans somewhat further while maintaining accounting profits and protecting their capital bases. However, with lower share prices, banks may now find this more difficult and the amount of problem loans could increase, especially if inflows were to remain high in a weakening economy. If banks are obliged to continue to remove bad loans from their books without increased operating profits or offsetting gains on their securities portfolio, their recorded capital base would be undermined. Furthermore, as banks adopt mark-to-market valuation from FY 2001, losses on equity portfolios will have to be booked

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8. See Board of Governors of the Federal Reserve System, *The January 2001 Senior Loan Officer Opinion Survey on Bank Lending Practices*.
9. According to national definitions, non-performing loans have declined substantially from high levels in the early or mid-1990s in a number of countries, notably France, Italy and Sweden.

which will also work to erode banks' capital base. These forces could lower banks' recorded capital adequacy ratios and thus reduce banks' capacity to extend credit.

Some emerging market OECD countries are also faced with serious problems in their banking systems, which might become more acute in a global downturn. In Turkey, the crises in November 2000 and again in February 2001 took place against the background of mounting concerns over the health of the banking system. Banking problems have been greatly exacerbated by the combined interest-exchange rate shock and the ensuing economic weakness. In Korea, government-owned banks with large exposure to the *chaebol* are still saddled with huge amounts of non-performing loans, despite the authorities' efforts to remove such loans from the books of the banks. Given the weak balance-sheet position of many *chaebol*, a downturn in the world economy could weaken these banks still further. In Mexico, the health of the banking system has improved following the 1998-99 financial reforms, but the share of non-performing loans is still high. Finally, with more than a quarter of its loans estimated to be non-performing, the banking system in the Czech Republic faces serious difficulties, and growing budget deficits severely limit the scope for the authorities to tackle the problems.

Banking problems are also serious in some emerging market Member countries

The global implications of a weaker US economy

After having supported aggregate demand in the rest of the world for most of the past decade, the US economy is set to reduce economic dynamism throughout the world in the near term. The extent to which countries' economic performance will be affected by a weaker US economy depends importantly on the geographical and commodity composition of their exports. Direct trade effects might be amplified if foreign asset markets were to soften further in response to an additional correction in US equity markets. The rest of the world is also likely to be influenced by induced terms-of-trade changes (including those due to exchange-rate movements) and the potential direct gains for foreign countries of lower US interest rates.

The slowdown in the United States will tend to pull down growth in the rest of the world…

Aggregate trade linkages suggest that economic slowdown in the United States will have the strongest effects in the neighbouring NAFTA countries and in the Asian economies (Figure I.11). With four-fifths of their total exports destined for the US market, Canada and Mexico are particularly strongly exposed, though the high import content of their exports may limit the impact on GDP. Exporters in the Asian Member countries are also heavily dependent on the US market. In Korea, the impact effects on GDP (*i.e.* excluding subsequent induced responses) of the projected deceleration of US imports in 2001 by around 9 percentage points on GDP growth could be as high as ¾ percentage point (given the share of US-destined exports in GDP). In Japan, the impact effects could be limited to around ¼ percentage point due to the comparatively small share of exports in GDP. Notwithstanding the high degree of openness of individual national economies in Europe, the impact effect of the projected weakening US import demand in 2001 on GDP growth is likely to be limited to approximately ¼ percentage point, reflecting the relatively small share of their exports going to the United States. But the overall effects, including induced responses, would be significantly stronger. Outside the OECD area, exports of the Dynamic Asian economies and China are heavily weighted towards the United States.

… and the regional composition of exports suggests that neighbouring and Asian countries will be hardest hit

Figure I.11. **Exports to the United States 1999**

Panel A. Per cent of total exports

Per cent

Panel B. Per cent of GDP

Per cent
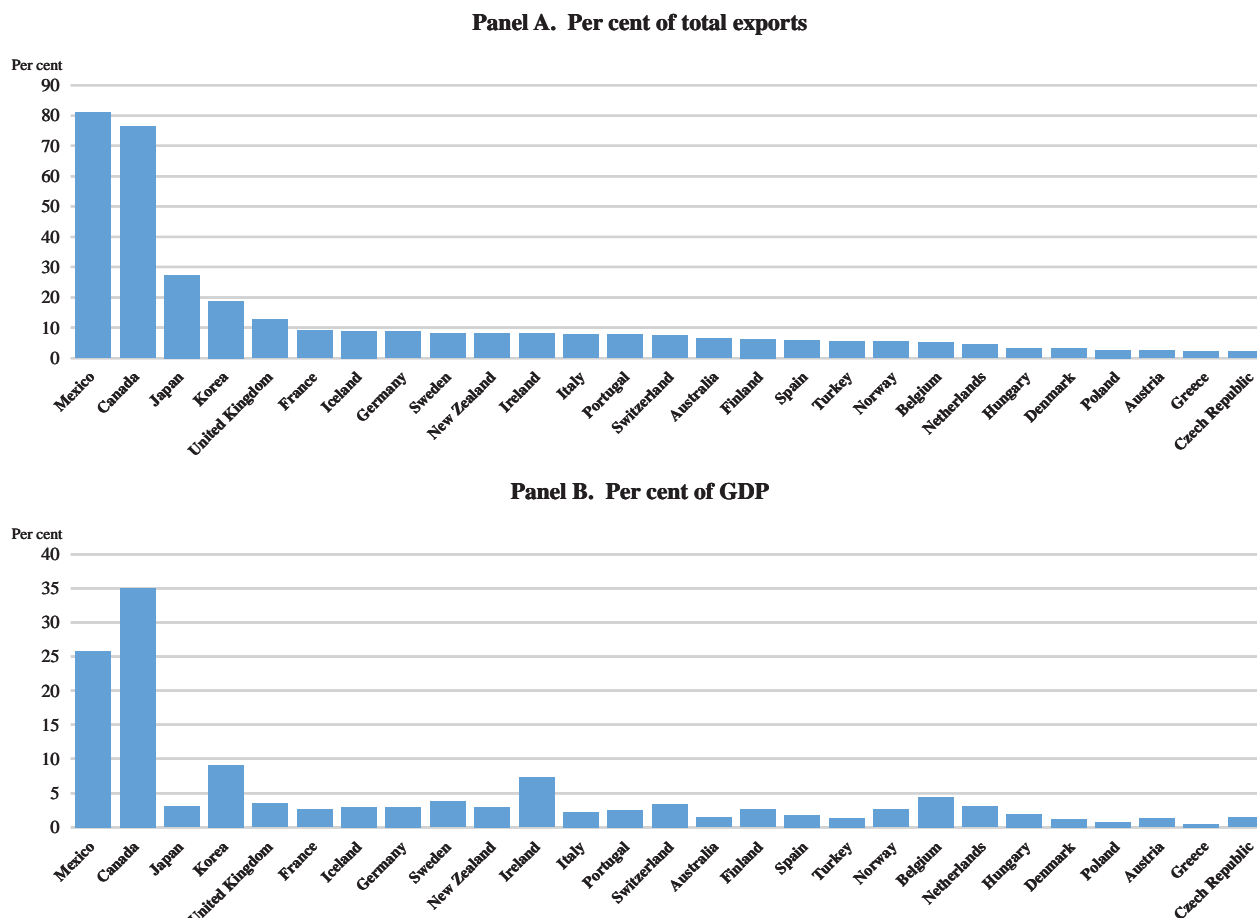
Source: OECD.

The hit for the Asian countries will be compounded by their specialisation in computers and related products

With the slowdown in the United States being significantly related to cuts in spending on high-technology products, countries specialising in computers and related items will be strongly affected. In the OECD area, Japan and Korea stand out as information technology export-oriented countries (Figure I.12), whereas computers and semi-conductors play a relatively small role in European exports, except for Ireland, Hungary and the Netherlands (which are likely to direct their exports mostly to other European countries). The Dynamic Asian economies and China are also strikingly dependent on exports of office machines and telecommunications equipment, with the shares in total merchandise exports exceeding 40 per cent in Malaysia, the Philippines and Singapore (Table I.8).

Apart from compounding the export reduction related to the weakening of the US economy, this specialisation of the Asian economies is also having adverse terms-of-trade effects for them. With over-capacity and excess inventories of products that become quickly obsolete, producers may decide on aggressive price cuts to gain market share in a falling market. This is what happened when Asian producers were confronted with over-capacity after the outbreak of the crisis in 1997-98, and a repeat of this response would strengthen the negative impact on national income well beyond any volume effect.

Figure I.12. **Exports of computers in 1999 (per cent of total merchandise exports)**

Per cent
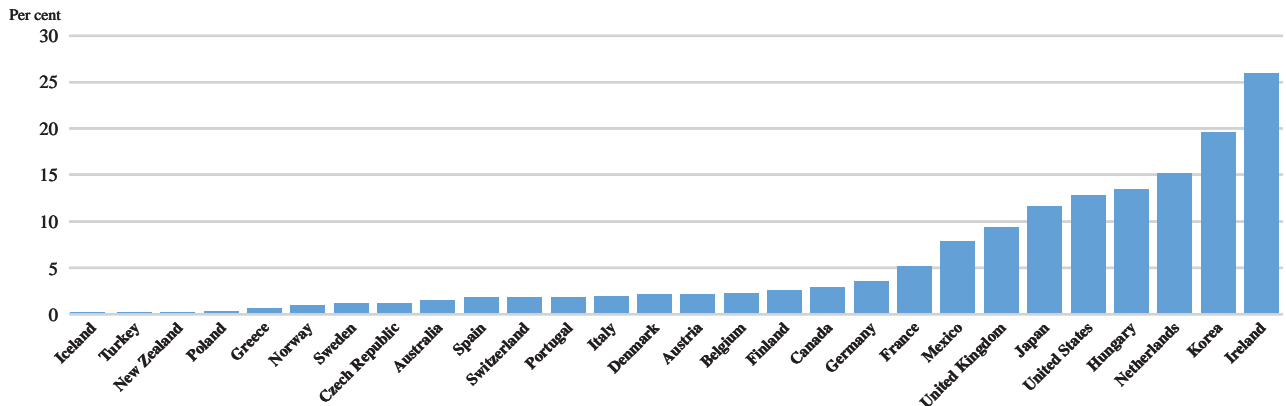
Note: Computers are defined as automatic data-processing machines and units thereof, parts and accessories for automatic data-processing machines, and electronic integrated circuits and microassemblies.
Source: OECD.

Commodity producing countries could also experience adverse terms-of-trade movements as a result of a weaker US economy. The United States is a major user of the global supply of raw materials (Table I.9), and any significant reduction in US demand would tend to depress prices if global supply is not withdrawn. Commodity prices have fallen significantly since the weakness in the US economy became apparent, though in the oil market, cold weather in some regions, combined with low stocks and the OPEC's decision to curtail its production have provided some offsetting support to prices. While most OECD countries are largely commodity importers, and would benefit if commodity prices were to soften further, several would be adversely affected. The OECD countries most exposed would be Canada, Mexico, European oil producing countries and Australia. Of course, the principal losers would be the commodity-rich countries outside the OECD area, while commodity importers outside the OECD area (which include most of the emerging market economies in Asia) would gain.

Commodity prices may also come under pressure

Table I.8. **Non-member Asian exports of office machines and telecommunications equipments**

Per cent of total merchandise trade

China	15.4[a]
Hong Kong, China	22.0[b]
Indonesia	6.1
Malaysia	52.4[a]
Philippines	63.0[a]
Singapore	52.8[b]
Chinese Tapei	37.1
Thailand	26.1

a) Includes significant exports from processing zones.
b) Domestic exports and re-exports.
Source: World Trade Organisation.

Table I.9. **US consumption of primary commodities**

Per cent of global supply

Crude oil (1999)	26.1
Coal (1998)	23.2
Iron ore (1998)	25.4
Refined aluminium (1996)	26.4
Refined copper (1996)	21.7
Refined nickel (1996)	16.5

Source: OECD*;* International Energy Agency; World Bureau of Metal Statistics, *World Metal Statistics Yearbook 1997.*

Falling US interest rates will provide support to some heavily indebted countries

While the non-OECD area may be adversely affected by both weaker demand for its products and lower export prices, some countries will benefit directly from lower US interest rates. The principal beneficiaries will be heavily indebted countries (Table I.10) whose debt is short-term and largely denominated in US dollars. Comprehensive data on the currency and maturity composition of debt of non-OECD countries are not available. However, if by way of illustration it is assumed that the bulk of all Brazilian and Argentine external debt is denominated in US dollars, the reduced interest payments on short-term debt could compensate to a significant extent for real income losses associated with lower exports to the United States. Moreover, since part of longer-term debt carries variable interest rates, there would be additional savings on debt servicing in the two countries. The gains would be much less in other major emerging economies where net indebtedness is smaller.

If a recession were to take place in the United States in the near term…

A deeper and more prolonged downturn in the United States would have serious consequences for the world economy. To assess the implications for the rest of the world, the OECD has prepared various scenarios around its short-term projections and the accompanying medium-term reference scenario (see Appendix) using the INTERLINK model. In the first instance, an assumed fall in equity prices and a cut in business investment in the United States generates a fall in real GDP in the second and third quarters of the current year, with the year-on-year growth for the year as a whole close to zero in the absence of a policy response (Figure I.13, Panel A). The impact of such a scenario in the United States on the rest of the world depends on whether it is transmitted only through normal trade linkages or whether it has

Table I.10. **External debt in selected emerging market economies**

End-1999

	Total external debt % of export revenues[a]	External debt due within one year % of total external debt
Brazil	301.6	23.9
Argentina	420.7	30.7
China	59.8	17.7
Indonesia	198.5	18.8
Malaysia	36.6	25.3
Thailand	99.0	23.0
Russian Federation	120.7	11.6

a) Revenues from exports of goods and services, and factor incomes from abroad.
Source: OECD, and IMF, *International Financial Statistics.*

additional effects via induced weaker confidence that impinges on asset prices and business investment. And the propagation will also be strongly influenced by corrective policy measures and the reaction of exchange rates.

In the absence of a monetary policy response, a recession in the United States in the course of the current year[10] could reduce annual growth in Japan and the European Union by around ½ percentage point through normal trade linkages. Imports into the United States would stagnate in real terms as the economy faltered, and, together with third-country effects, this would be reflected in Japanese export growth coming to a halt and reduced buoyancy of exports from the European Union. However, as the US economy recovers from the recession, high import growth rates would give a strong boost to the rest of the world.

... normal trade linkages would transmit the shock throughout the world economy…

Induced movements in exchange rates and corrective actions by the monetary authorities could significantly moderate the US downturn. Two assumptions are considered: *i)* that the Federal Reserve would further lower interest rates by an additional 75 basis points, on top of the slight easing incorporated in the projections, in the remainder of the current year; and *ii)* that flagging confidence of international investors in the US economy would result in a 10 per cent drop in the exchange rate. On these assumptions, a recession in the United States would be avoided in the current year, even if overall GDP growth in 2001 would not exceed 1 per cent. Moreover, a significant part of the negative growth effect in 2002 would be offset by the counter-cyclical response; with output growth above reference scenario rates, monetary stimulus could be gradually withdrawn from 2003 onwards. The constellation of lower US interest rates and a lower dollar would not shield the rest of the world from the US downturn, and monetary authorities outside the United States would have to ease policy to offset the external shock. Monetary authorities in the European Union would have to reduce interest rates significantly to counter the impact of a weaker US economy and worsening competitiveness. However, with virtually no scope for reducing interest rates in Japan from their current low level, the Bank of Japan would be powerless to react to the downward forces, with the only possibility being strong "unconventional" measures, such as significant purchases of government bonds. For the OECD area as a whole, if interest and exchange rates react, output growth in 2001 would be just below 1¼ per cent but by 2002 it would be almost back to the rate embodied in the short-term projection.

… but corrective policy measures could mitigate the impact in most areas

The global consequences of US weakness would be more serious if it were to depress confidence in the rest of the world. In fact, such additional negative spill-over effects are probably unavoidable in the increasingly integrated global economy (Table I.11). Thus, a sharp fall in US equity prices would most likely be transmitted internationally, though the accompanying adverse wealth effects should be weaker than in the United States in line with the lesser importance of stock-market wealth in the rest of the world. Moreover, weaker confidence could be expected to show up in businesses being more cautious in their capital spending. This might be particularly relevant in the case of Japan, where the ratio of business investment to GDP is still comparatively high, especially taking into account the low rate of output growth, and where business confidence is already fragile. On the other hand, given still relatively robust confidence in Europe, the negative spill-over into business investment decisions there might be more muted.

The global consequences of a weaker US economy would however be amplified if it were to depress confidence across the world

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10. A recession would imply two successive quarters of negative output growth.

Figure I.13. **Scenario with a US recession in 2001**

——— Reference scenario   ·········· Dollar depreciation and lower interest rates   - - - - Unchanged nominal interest rates

Panel A: Effects of a greater US weakness on growth of ouptut

United States

Japan

European Union

OECD
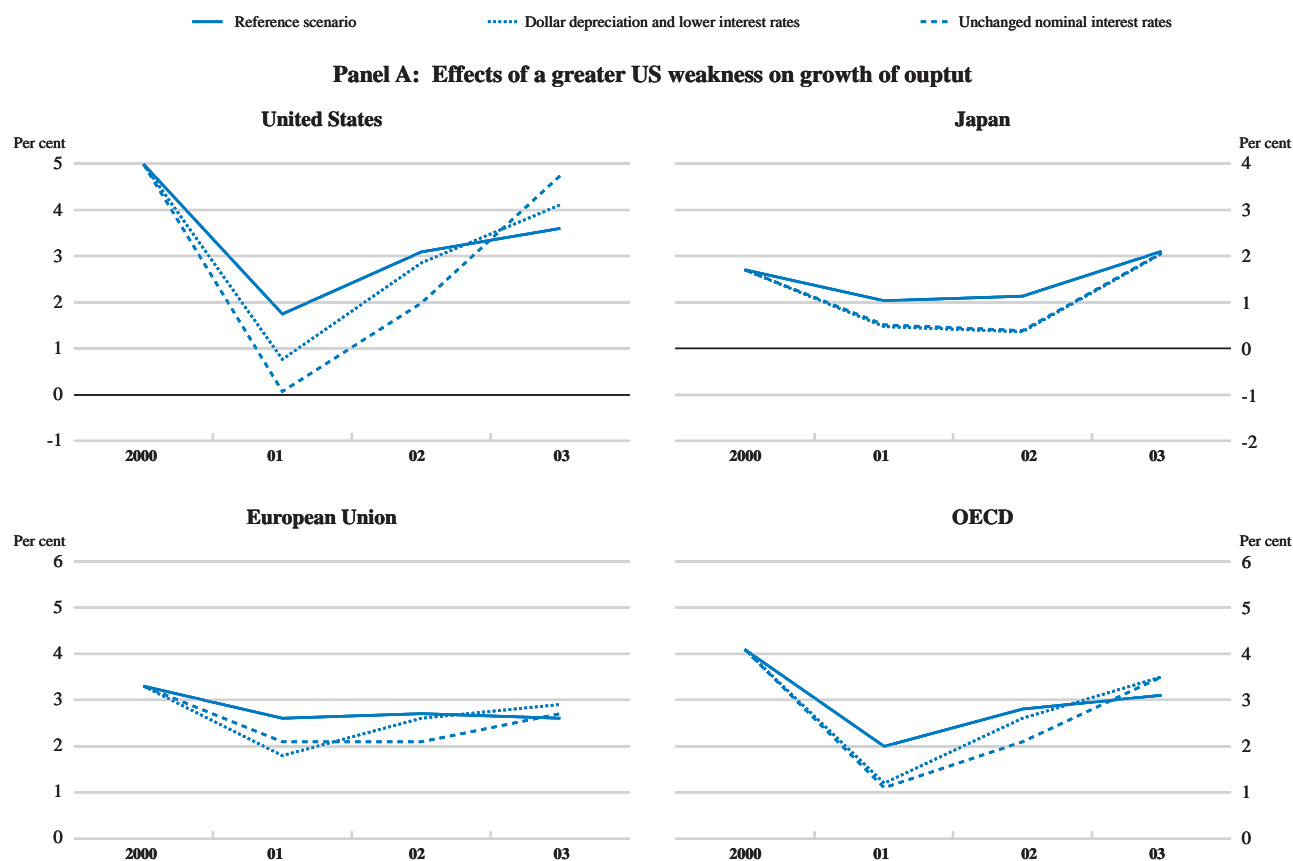
Note: The slowdown of both scenarios is assumed to originate in the United States where business investment is reduced by 10 per cent and share prices by 20 per cent in 2001 compared with the reference scenario projection. The scenario of an isolated slowdown in the United States (Panel A) is shown in two variants: one where there is no response of exchange rates and nominal interest rates and one where US interest rates are lowered by $3/4$ percentage point by 2002 and the US dollar depreciates by around 10 per cent in effective nominal terms. US interest rates start to increase again from 2003. Interest rates elsewhere (except Japan) are lowered by 2 percentage points to mitigate the effect from the US slowdown and dollar depreciation.
Source: OECD.

A scenario incorporating such global negative spill-over effects suggests that they could depress the GDP growth rate in the OECD area as a whole by an additional ¾ percentage point in 2001, with the growth rate falling to ½ per cent before stabilising measures became effective (Figure I.13, Panel B). Nevertheless, while the US and European economies would weaken noticeably in 2001, an early and a decisive policy response could offset a large part of the additional growth-restraining effects in 2002. Moreover, to the extent lower interest rates were to strengthen confidence and share prices, thus offsetting some of the root causes of the slowdown, recovery could be faster still. The Japanese economy would, however, be pushed into a recession in the current year and would only resume growth in 2003. Although domestic interest rates could not be cut to stimulate the Japanese economy, the decline in output in 2002 would be contained by the reaction of the monetary authorities in the rest of the world. A recession in Japan could, however, amplify negative confidence effects in the Asia emerging economies well beyond what is assumed in the scenario.

Figure I.13. **Scenario with a US recession in 2001** *(cont.)*

—— Reference scenario   ·········· Lower interest rates   – – – Unchanged nominal interest rates

Panel B: Effects of a greater global weakness on growth of output
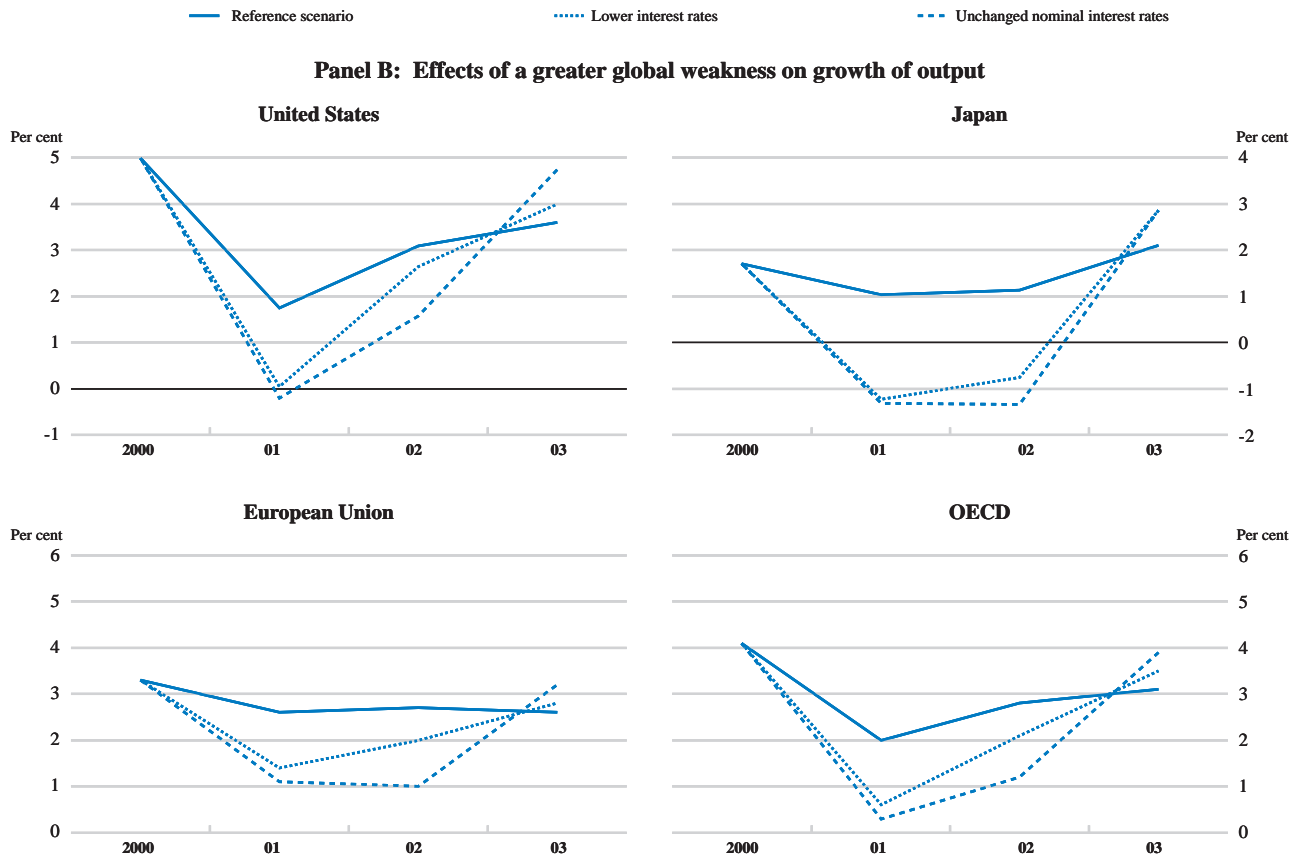
Note: The global shock scenario (Panel B) incorporates a further transmission of the slowdown in the United States to other regions through confidence effects which result in falling share prices and reduced investment, thereby depressing domestic demand in other regions directly. The shock to share prices and investment is of a similar magnitude to the US shock, except for Europe, where investment only by 5 per cent. This scenario is also shown in two variants: one with unchanged nominal interest rates and one where interest rates are lowered. In the latter case, interest rates are lowered substantially in most countries (except for Japan, where they remain unchanged), reaching a total cut of around $2^{1}/_{2}$ percentage points in most countries by 2002. Nominal exchange rates are assumed unchanged in both variants of this scenario.
Source: OECD.

Table I.11. **Indicators for assessing international economic linkages**

	United States	Japan	European Union
Share of exports of goods and services destined to the United States in 1999			
Per cent of total exports	–	27.3	20.0
Per cent of GDP	–	2.7	3.4
US foreign direct investment in 2000			
Outflows by destination, per cent of total	–	5.5	41.6
Outflows by destination, per cent of GDP in recipient areas	–	0.2	0.7
Inflows by origin, per cent of total	–	4.1	70.7
Stock markets			
Level in end-March 2001[a] (January 1995 = 100)	247.0	87.0	280.0
Capitalisation in end-2000 (per cent of GDP)	172.0	73.0	99.0[b]
Business sector investment in 2000			
Constant prices (1995 = 100)	173.0	115.0	133.0
Per cent of GDP	13.7	14.9	13.0[c]

a) United States: S&P 500, Japan: Topix, Europe: DJ Euro STOXX.
b) Weighted averages for the EU countries (excluding Ireland, Luxembourg and Portugal) for 1997 scaled up with the increase in the DJ Euro STOXX index and GDP.
c) Weighted averages for the EU countries excluding Luxembourg and Portugal.
Source: OECD, US Federal Reserve, and Bureau of Economic Analysis, Bank of Japan, Bloomberg.

Policy requirements in OECD countries

United States

Monetary policy will have to be eased further if downward momentum in the economy continues

The cumulative reduction in the federal funds rate of 200 basis points since the beginning of the year should support activity in a number of ways. It may help to contain adverse wealth effects in the near term. Moreover, it should stimulate demand, especially in the auto industry that has been one of the major sources of weakness, through standard transmission channels such as lower borrowing costs and returns from holding financial assets. However, reduced interest rates are less likely to have much effect on the demand weakness in the electronics sector that has also been one of the major driving forces of the downturn. At this stage, there is evidence that some of the stock adjustment processes now at work are running their course, notably in autos. Furthermore, provided recent improvements in underlying productivity trends are largely sustained, emerging profit opportunities should encourage a recovery of business investment. In this environment, care must be taken to guard against excessive easing while the labour market is still taut. However, given the continuing downward momentum in the economy, the OECD projection is based on the assumption that an additional cut in the federal funds rate of 25 basis points will be necessary. As the economy recovers monetary stimulus will gradually need to be withdrawn.

The Administration proposes to take advantage of the scope for fiscal easing by cutting taxes…

Thanks to the improvements in public finances in recent years and the strong underlying dynamism of the economy, the fiscal outlook in the absence of new budgetary decisions has been for large and rising surpluses. Indeed, on the basis of upgraded estimates of potential growth rates, long-term budget forecasts now show that the total surplus in the absence of tax cuts or new legislation affecting spending might average around 4 per cent of GDP over the 2002-11 period[11] (Box I.2). This suggests that scope exists for fiscal easing affecting the medium-term budget outlook, and the new Administration has made tax cuts the centrepiece of its longer-term fiscal plans.

The President's ten-year $1.6 trillion tax-reduction proposal (Table I.12) is now in the process of going through Congress: the House of Representatives has approved the plan, while the Senate has passed a non-binding resolution of limiting overall tax cuts to $1.2 trillion and increasing spending by $0.4 trillion. In their original form the Administration's plans did not embody any significant stimulus to the economy in either 2001 or 2002, but the Senate's resolution calls for an additional one-off tax refund for the current year which could amount to ½ to ¾ per cent of GDP. The OECD projection incorporates a front-loaded $60 billion tax refund in addition to the Administration's budget proposal. Even so, the overall fiscal stance is likely to be somewhat restrictive in the current calendar year, before turning expansionary in 2002.

… but this would depend on only modest increases in public spending

Any plan for permanent tax cuts must be seen in the light of the constraints it would imply for future spending as its implementation would affect baseline projections and hence the political debate surrounding budgetary decisions. The Administration's original proposal envisages reductions in revenues which would amount to just over 1 per cent of

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11. See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2002-2011*, January 2001.

Table I.12.   **The United States: The President's Tax Reduction Plan**

$ billion

	2002	2006	2011	Total 2002-2006	Total 2002-2011
Reduction in individual income tax rates	11.8	57.3	70.0	165.9	500.7
Creation of a new 10 per cent bracket	5.7	37.4	40.6	108.7	310.6
Phase out of estate taxes	6.0	16.8	57.9	60.2	266.6
Increase child tax credit	1.2	21.0	28.6	57.5	192.7
Tax credit for secondary workers	1.4	12.5	16.0	36.7	111.8
Other	4.5	24.9	37.2	70.2	237.7
Total tax reduction	30.6	169.9	250.3	499.2	1 620.1

Source: Office of Management and Budget, *A Blueprint for New Beginnings*, February 2001.

GDP over the whole period, and net federal debt would still be eliminated by 2011.[12] This, however, depends on modest growth in public spending, with discretionary spending slated to grow at an annual rate of only 1 per cent in real terms.[13] Holding the expansion of discretionary spending to this rate might be difficult: it is well below the projected growth in real GDP, and less than a quarter of the growth rate of such spending in the past three years since a budget surplus emerged. With the Administration planning spending increases in priority areas, such as basic education and defence, its long-term budget plan implies very little growth, if any, in other areas of discretionary spending. It remains to be seen if such flexibility in budget allocation will be politically feasible in an environment which is still projected to include large surplus revenues despite the tax cuts. Some spending overruns can be accommodated by drawing on contingency reserves in the ten-year fiscal plan amounting to $0.8 trillion, but continued fast increases in discretionary spending[14] would compromise current tax-reduction and/or debt-repayment plans. The Senate's non-binding resolution limiting the extent of tax cuts in favour of higher spending is one sign of the pressure.

The emerging consensus in favour of tax reductions provides an opportunity for tax reform that could do much both to enhance fairness and to boost economic efficiency. The proposed reduction in marginal tax rates in the personal income tax system (Figure I.14) would reduce work disincentives, especially for higher-paid individuals who may have greater freedom to vary their labour supply than lower-paid individu-

The tax cut programme could do more both to enhance efficiency and to improve equity

12. The roughly $1 trillion gross debt (around 6½ per cent of GDP) held by the public in 2011 would correspond to debt that is considered to be "non-retireable" or "non-redeemable", and would be offset by government gross claims on the private sector. See Table S-16 in Office of Management and Budget, *A Blueprint for New Beginnings*, February 2001. An updated analysis and status report on the Treasury's debt management strategy, reflecting comments by the Treasury and the Congressional Budget Office is provided by the General Accounting Office in "Debt Management Actions and Future Challenges", sent on 28 February 2001 to the Chairmen of the Committee on Ways and Means of the House of Representatives, the Social Security Subcommittee of this Committee, and the Committee on the Budget of the United States Senate.

13. Over the 2002-2011, the Administration assumes that nominal discretionary spending grows at an annual rate of just over 3 per cent and that the GDP price index grows at just over 2 per cent. The implied 1 per cent growth in real discretionary spending compares with an assumed average of 3.2 per cent for the growth of real GDP. See Tables S-3 and S-14 in Office of Management and Budget, *A Blueprint for New Beginnings*, February 2001.

14. For example, if discretionary spending were to continue to rise at an annual rate of 6 per cent in nominal terms instead of the 3 per cent currently planned, the additional cost to the budget is estimated to amount to $1.4 trillion over the 2002-2011 period. See Office of Management and Budget, *A Blueprint for New Beginnings*, February 2001, page 24.

The US Administration has proposed a new ten-year budget plan starting in fiscal year (FY) 2002,[1] beginning in October. It aims to reduce payments of income tax substantially and to abolish the gift and estate taxes (Table I.12). In 2002 these cuts would reduce tax revenues by 0.3 per cent of GDP. However, as the tax cuts were phased in, the annual cost of the package would increase until it eventually amounted to 1.4 per cent of GDP. In addition, a number of new spending programmes would be introduced. Allowing for the addi-

tional interest payments caused by a slower fall in debt, the full package would reduce projected federal budget surpluses by about 2 per cent of GDP by 2011. Nonetheless, the path of the budget surplus in the latter part of the coming decade on the basis of the Administration's proposal is projected to be very similar to expectations of the surplus formulated as recently as January 1999 (Figure). Moreover, the federal government would still become a net creditor in FY 2011, quicker than envisaged two years ago.

The evolution of federal budget surplus projections since 1999

Per cent of GDP

Administration proposed, including tax cuts
Current CBO baseline (January 2001)
CBO baseline as of January 1999
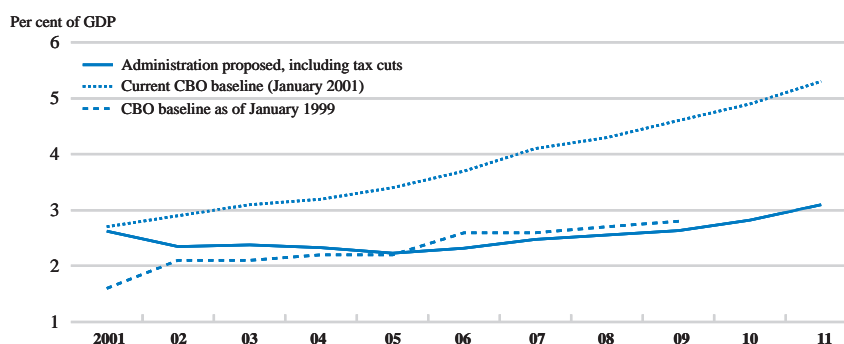
Sources: Congressional Budget Office (CBO) and Office of Management and Budget.

The proposed tax cuts would effectively eliminate the unforeseen long-run improvement in the fiscal position of the federal government that has occurred in the past two years. This improvement pushed the projected budget surplus for 2011 to 5.3 per cent of GDP, up from an estimate of 2.8 per cent of GDP two years ago. This jump was caused by two factors. First, potential economic growth is now assumed to be 3.3 per cent during the coming decade – about 0.5 percentage points per year faster than assumed two years ago. This accounts for an increase of $260 billion (1.6 per cent of GDP) in the estimated fiscal surplus for 2011. Second, an improvement of around 1 per cent of GDP in the estimate for the sur-

plus in the current fiscal year (FY 2001) has occurred even though increased federal spending, stemming from legislative changes, has offset the normal impact of faster economic growth on tax yields. The reasons for this surprise increase in tax revenues cannot be quantified until the tax return data become available in 2003. However, experience in the four years ending in 1998 suggests that three factors will prove to have influenced the residual growth in revenues:

– Taxable incomes growing faster than GDP;

– Capital gains growing faster than taxable incomes;

– Faster growth in the incomes of high-tax earners.

als with standard work arrangements. The introduction of a tax credit for secondary workers would lower the high marginal tax rate on their earnings if the primary worker is already facing top marginal tax rates, but the decline will be comparatively modest. The proposed abolition of the estate tax could enhance personal saving but the direction and size of the effect is subject to a great deal of uncertainty.[15] How-

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15. This aspect of the Administration's proposals raises other issues that are not considered here, notably relating to fairness and to the financing of non-profit institutions and charities which currently benefit from estate tax planning efforts.

Box I.2.   **The Administration's budgetary proposals: 2002 to 2011** *(cont.)*

The very long-run outlook for the federal budget can be judged in terms of the evolution of the "fiscal gap" (the immediate tax increase or spending decrease necessary to ensure that debt remains below current levels for the next 75 years). CBO projections of this gap have also been on an improving trend, moving from 0.5 per cent of GDP in 1999 to -0.6 per cent by the end of 2000, on the basis of an unchanged assumption about the future growth of Medicare spending. Since then, the assessment of the fiscal situation has improved once again. Although the CBO has not published revised estimates that incorporate the Administration's budget proposals, OECD estimates suggest that it would push the gap back to around 0.4 per cent of GDP. This suggests that the programme would not greatly undermine the long-run fiscal position of the federal government but indicates that reform of Social Security and Medicare should still be on the agenda.

Some important uncertainties surround this outlook. First, the increase in productivity and potential growth which has occurred in recent years may not be sustained. The calculation cited above, that an upward revision of 0.5 percentage point to potential growth adds 1.6 per cent of GDP to revenues after ten years is indicative of the sensitivity of the projections in this regard.

Second, the projections may assume an unduly rapid growth in revenues. In particular, a growing number of people (27 million by 2011) will be subject to the Alternative Minimum Tax that will prevent them from making deductions from their tax bill to which they would otherwise be entitled. Indeed, the costing of the tax plan reflects these limitations on deductions. It is uncertain whether such a limitation on deductions will be politically sustainable over the longer term.

Third, concerns exist that some of the factors that have driven the increase in tax revenues in recent years, notably those related to the buoyant stock market, might be reversed. However, a fall in capital gains receipts is already built into the projections. Moreover, if income from stock options – that appear to have been a significant source of tax revenue in recent years – were to fall this might not greatly affect overall tax receipts. The yield from personal income tax would fall but options could no longer be deducted from company profits and so corporate tax payments would be boosted.

Fourth, over the very long-term, the likely development of public medical expenditures is one of the most uncertain elements. Until this year, official estimates have assumed that, after 2025, the growth of medical outlays per beneficiary would be same as that of per capita GDP. However, the most recent report of the Medicare Trustees[2] assumes that the per capita expenditures will grow one percentage point faster than this. If indeed spending were to increase in this way, then there would be a severe deterioration in the long-run fiscal position of the federal government that would add 1.4 percentage points to the fiscal gap.

Finally, notwithstanding these risks, there are some reasons to think that the cost of the tax package might not be as high as conventionally estimated. Recent estimates[3] suggest that there will be a significant offset to the initial cost of tax cuts, especially for people at the higher income levels. Most of this gain is brought about by the cut in tax rates increasing the cost of activities (such as borrowing and charitable contributions) that are tax-deductible. Another part of the gain will reflect increased economic activity especially for those tax cuts that are aimed at reducing the disincentives to work facing a married couple.

1. See Office of Management and Budget, *A Blueprint for New Beginnings*, February 2001. This proposal, amounting to $1.6 trillion over a ten-year period, is progressing through Congress as described in the text. OECD projections are based on these proposals but additionally incorporate some front loading of tax cuts.
2. Board of Trustees of the Fedral Hospital Insurance Trust Fund (2001), "The 2001 Annual Report".
3. Gruber, J. and E. Saez (2000), "The Elasticity of taxable income: evidence and implications", *NBER Working Paper Series*, Working Paper 7512. See also Feldstein, M., "The President's tax cut proposal", testimony to the Committee on Ways and Means of the US House of Representatives, 13 February 2001.

ever, the Administration's tax proposal does not address other important distortions and anomalies in the tax system, nor would it reduce its complexity.[16] For example, the structure of marginal tax rates embedded in the personal tax and social security systems combined will still imply high marginal tax rates at low levels of earnings. Nor does

16. An overview of the main features of the tax code, the complexity of their interactions and the issues they raise is contained in "Present Law and Analysis Relating to Individual Effective Marginal Tax Rates", prepared by the staff of the Joint Committee on Taxation for a public hearing by the House Committee on Ways and Means on 4 February 1998.

Figure I.14. **Effective marginal tax rates in current and proposed tax systems**

Effective marginal tax rates for couples with 2 children[1]

Effective marginal tax rates on secondary workers[2]
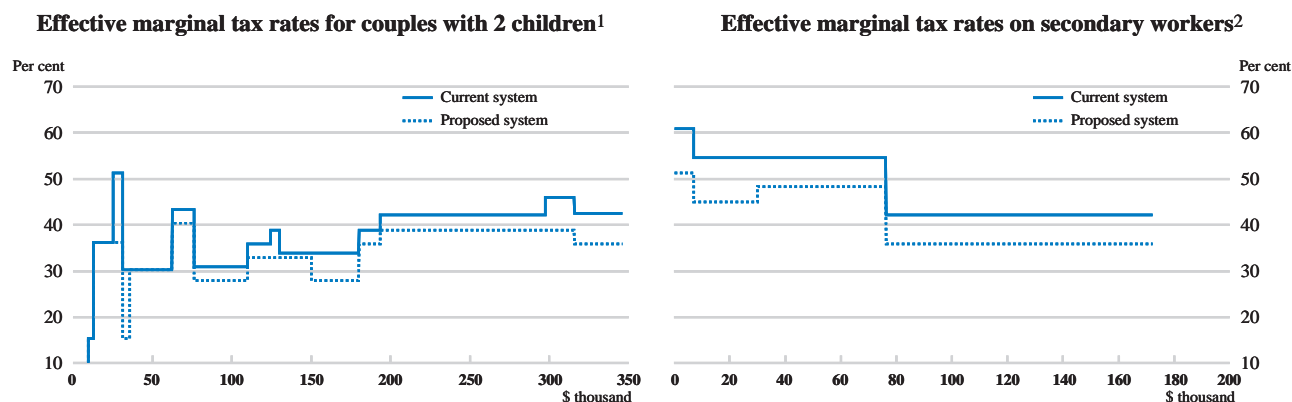
1. The schedules refer to couples filing jointly and eligible for child tax relief for both children. The marginal tax rates include federal personal income tax rates, the earned income tax credit, the child tax credit, and employer and employee social security contributions. At very low levels of income the marginal tax rate is negative due to the earned income tax credit.
2. Assuming that the primary worker is already in the top bracket and having exhausted exemptions for tax proposes.
Source: OECD.

the proposal reduce fiscal drag due to the lack of indexation in parts of the tax system.[17] Overall, it would appear that there is significant scope to simplify the tax system and to reduce its disincentive effects further. Taking advantage of such scope that exists for reducing taxes to implement a comprehensive well-designed tax reform could yield substantial benefits in terms of both efficiency and fairness.

Japan

The Japanese economy is faltering

The faltering Japanese economy is dashing hopes that the weak pick-up in growth last year would mature into a self-sustained recovery. The prospect of the economy continuing to operate well below potential in coming years raises the risk of the slack inflicting lasting damage to production capacity, such as increasing structural unemployment. It also threatens to aggravate already serious problems in the financial system, which might ultimately lead to additional downward pressure on domestic demand. At the same time, the scope for traditional macroeconomic policies to provide an additional stimulus to the economy is very limited: the public debt spiral precludes renewed fiscal expansion and policy-determined interest rates were already low even before the recent shift in policy to quantitative targeting. Taking these constraints as given, policy efforts in the near term will have to concentrate on tackling the underlying structural problems facing the economy.

Non-performing loans in the banking system need to be tackled with urgency

First and foremost, the authorities need to take urgent action to deal with balance sheet problems in the financial system as well as in the corporate sector, even if this may involve weakening the economy in the short term. Banks require the most immediate attention but problems with the insurance industry also have to be addressed (Box I.3). As discussed above, new bad loans have accumulated as fast as old bad loans have been written off (Table I.13), and banks remain highly exposed to stock market fluctuations.

17. In particular, the threshold of the alternative minimum tax is not indexed, which reduces the fiscal cost of the proposed tax reductions.

Table I.13. **Japanese banking system: risk management loans and loan-loss allowance**

	1998 September	1999 March	2000 March	2000 September
	Per cent of total loans			
Risk management loans	5.5	5.8	6.1	6.4
of which:				
Loans of borrowers in legal bankruptcy	1.3	0.9	0.6	0.8
Loans in arrears of 6 months or more	2.1	3.1	3.7	3.7
Loans in arrears of more than 3 months and less than 6 months	0.5	0.3	0.2	0.2
Restructured loans	1.5	1.6	1.6	1.8
Loan-loss allowance	3.1	2.9	2.5	2.5
of which:				
Specific allowance	2.7	2.2	1.7	1.6
General allowance	0.4	0.7	0.8	0.9
Memorandum items:				
Loans against which provisions are required				
	Per cent of total credit exposure			
(*i.e.* Category II, III and IV loans)	12.2	11.6	12.1	12.0
	Per cent of risk management loans			
Direct write-offs during financial year	n.a.	15.9	12.7	n.a.

Source: Financial Services Agency.

In response to persistent concerns about the financial health of the banking system, the authorities announced an Emergency Economic Package in early April which addresses urgent issues of structural reform, including broad principles to deal with non-performing loans and the disposal of banks' equity holdings.[18] The authorities have established a target for dealing with current seriously impaired loans (so-called Category III and IV loans) over a two-year period, and declared that any new loans in these categories should be written off within a three-year period. However, the net impact of meeting these targets is uncertain since banks would in any case have written off a substantial amount of bad loans. The details of the measures to deal with the disposal of equity holdings of banks have yet to be decided on, and it therefore remains to be seen what impact they will have on banks' balance sheets.

In pushing forward with the loan clean-up, the authorities should reiterate their commitment to ensuring the stability of the financial system by protecting depositors, but not shareholders, from losses. An orderly repair could proceed as follows:

– *Identification of the scope and nature of the problem*. Normal banking practice would call for loans being classified as non-performing if the debtor is

18. The Emergency Economic Package addresses a broad range of structural reform issues, of which the drastic removal of non-performing loans from banks' balance sheets is only one. The basic objectives are financial and industrial revitalisation, structural reform of the securities market, revitalisation of urban areas and increasing the liquidity of land assets. In addition to measures aimed directly at these objectives the package envisages efforts to create jobs and to enhance the social safety net. These involve regulatory reforms affecting the information technology sector, medical systems, pre-school education and elderly care sectors, waste recycling systems, prioritised investments and sytemic reforms for stimulating innovation, smooth implementation of the revised Employment Insurance Law and enhanced training for older white-collar workers.

Box I.3.　**The Japanese life insurance industry**

The failure of some life insurance companies in 2000 raised concerns about the financial health of the industry as a whole. Life insurance companies play a key role as large equity holders in banks and as the principal investors in government bonds. Failures of large insurance companies might thus have serious adverse effects in financial markets. Furthermore, because of the role of the life insurance sector in providing additional retirement income and because insurance policies are not fully protected, doubts about the sector's solvency have added to uncertainty for Japanese citizens and may have contributed to weak household spending.

The difficulties in the life-insurance sector are due to the rate of return on its assets falling well below the promised returns on existing policies. Losses due to this negative spread amounted to around 1.6 trillion yen in the financial year end-

ing in March 2000. These losses were, nevertheless, more than covered by "mortality profits" (resulting from an underestimation of mortality rates) and by capital gains on the sale of existing assets, and the operating surplus of the industry rose somewhat temporarily in the same period (Table). However, the use of capital gains has eroded the latent reserves that life insurance companies hold in the form of the difference between market and acquisition value of their assets. The current law does not allow any change in promised returns on existing policies except in the event of failure because such change is likely to violate constitutional property rights, and it appears to be difficult to amend the law to allow a change in promised returns without policy holders' agreement. At the same time, the latent reserves cannot be used indefinitely to cover negative spreads and the recent softening of asset markets may already have exhausted the scope for such practices.

Balance sheet for the Japanese life insurance industry

Billion yen

	March 1997	March 1998	March 1999	March 2000
Total assets	188 659	190 111	191 768	190 033
of which:				
Public bonds	32 005	31 213	33 183	36 765
Stocks	31 896	29 913	28 543	28 435
Foreign bonds	17 660	18 870	22 107	22 033
Loans	65 295	63 517	59 923	54 761
Total liabilities	186 138	187 362	187 923	185 610
Net wealth	2 521	2 749	3 845	4 422
Memorandum item:				
Operating surplus	1 910	816	1 186	1 807

Note:　All the figures refer to member companies of the Life Insurance Association of Japan.
Source:　Life Insurance Association of Japan.

Given the huge amount of losses from existing policies and the decline in latent capital gains in their assets, insurance companies are trying to improve the profitability of new policies and to reinforce their capital base by issuing subordinated debentures. So far all the existing companies have a solvency margin ratio in excess of the government-stipulated minimum. However, this ratio, as it has been calculated until currently, has not been adequate as it failed to predict all of the past failures of insurers, primarily because it did not reflect the market value of some assets. From April 2001, the government has adopted a revised version of this ratio so as to reflect the market value of their assets fully and take into account the risks associated with the fluctuations in market prices of the assets.

The creation in 1998 of an industry-funded, but government-mandated, safety net for policyholders of failed life insurance companies has arguably helped to avoid a "run" on weak institutions. The *Protection Corporation* has already provided 537.5 billion yen of its funds to protect policies in the

failed companies, and would be called upon to fund additional rescues of individual companies in the future. However, in the event of serious problems in several big institutions at the same time it would be inevitable for the authorities to get involved, although recent failures have not required financial support from the Protection Corporation. At present, public funds totalling only 400 billion yen are available for reinforcing the Protection Corporation, but insurers have been reluctant to make use of this facility due to restrictive conditions.

A new law was introduced in June 2000 to expedite the liquidation and reorganisation of failed insurance companies. The law makes it easier for financially troubled life insurers to start restructuring before liabilities exceed assets. It also promotes demutualisation of insurance companies so that the companies can raise funds from the market to strengthen their capital base and adopt a holding company scheme more easily. However, only a few insurers have been incorporated so far because demutualisation still involves substantial cost and time under the current scheme.

unlikely to have the earnings capacity to honour his debt obligations. However, there are lingering doubts about the loan classification practices of Japanese banks, even if the supervisory authorities have emphasised the importance of candid disclosure. In particular, there are concerns that banks may have hidden the extent of non-performing loans by rolling over loans of clients who are unlikely ever to be in a position to pay them back. To get an accurate picture of the state of loan books, it might be necessary for the authorities to strengthen the role of detailed external audits. The shift to mark-to-market accounting as from FY 2001 should generally improve transparency.

– *Dealing with non-performing debtors*. To recover the maximum amount of their loans from non-performing debtors, banks may in some cases agree to some debt-forgiveness arrangements in exchange for restructuring plans. In other cases, banks need to take over collateral, and sell the repossessed assets to recover some of their losses. The risk of prices collapsing in a fire-sale of collateral assets might warrant selling them off gradually, but banks should in this case be required to value them in their accounts at low but reasonable liquidation values.

– *Marking down of bank capital*. Once it is possible to re-value bank assets at realistic prices, the corresponding adjustment will have to be made to the capital base. If the extent of the write-off would have to be significantly higher than foreseen by the authorities at present, this might involve reducing some banks' capital to below 8 per cent of risk-weighted assets. In some cases, it might even wipe out the capital altogether, requiring banks to reduce the scale of their operations, to raise capital in the market or to seek public financial support.

– *Consequences for public finances*. To the extent that new private capital injections are not forthcoming, the public sector may have to cover losses and provide capital so the affected banks can either be sold or operate on a viable basis. Any public capital injection would have to be accompanied by the state exercising its shareholder responsibility, notably in enforcing management changes as appropriate. And care should be taken that any public money does not bail out existing shareholders.

Managing the loan clean-up will be a huge task for the authorities, in particular as flagging confidence may dictate that it will have to be carried out in a short period of time. Moreover, it will inevitably be accompanied by an increase in bankruptcies and unemployment, and all available structural and macroeconomic levers need to be employed to provide support to the economy during this adjustment period. However, countries that have confronted similar problems comprehensively along these lines, notably the United States in the context of the Saving and Loan crisis after 1989 and several Nordic countries in the early-1990s, have generally found the costs ultimately to be lower than they anticipated.

Apart from strengthening the growth potential of the economy in the longer run, structural reforms may facilitate the needed adjustments prompted by the debt cleanup. By reducing restrictions on activities that produce goods and services in high demand, some structural reforms may contribute to higher output and employment growth even in the short term. Thus, the strong expansion in some ICT activities in the past two years would not have materialised if the easing of entry

Structural reforms are needed to facilitate the restructuring of the economy

restrictions (*e.g.* in telecommunications) had not taken place. However, statutory entry barriers and/or restrictive pricing arrangements still act to slow down the spread of new products and activities. For example, internationally high charges for accessing the land-based telecommunications network appear to have delayed the use of some telecommunication services compared to other major countries. Regulatory reforms in new- and old-economy activities along the lines recommended by the *OECD Regulatory Review of Japan* could help to ease problems related to the restructuring of the corporate sector that is now underway.

Monetary policy must provide maximum support to activity in the foreseeable future

Monetary policy must be oriented towards providing the maximum support to activity in the foreseeable future. In response to reduced external demand and deteriorating economic prospects, the Bank of Japan reduced its overnight interest rate by 10 basis points at end-February. On 19 March, the monetary authorities made an important shift in their strategy, abandoning interest rate targeting in favour of directly targeting banks' current-account deposits at the central bank at the high level observed during the operation of the zero interest rate policy. This re-orientation of monetary policy has delivered near-zero interest rates, and will remain in force as long as consumer prices (excluding perishables) are not rising. In the pursuit of their quantity target, the Bank of Japan has stated its willingness to buy government bonds to provide funds smoothly to meet its objective.[19] If the policy change fails to provide a sufficiently large stimulus to the economy, the monetary authorities have the option of stepping up outright purchases of government bonds in the secondary market with a view to lowering yields still further and increasing liquidity. An alternative option would be to intervene in foreign exchange markets and attempt to push down the exchange rate of the yen, although the recent fall in its value may have diminished the attractiveness of this option which risks harmful conflicts with trading-partner countries.

Fiscal consolidation cannot be delayed for much longer

The current weakness of the economy suggests that the existing degree of fiscal stimulus will have to be maintained in the current year. However, the start of consolidation cannot be delayed much further. The OECD projections are based on the assumptions that it will commence in 2002 with some firming of growth in the latter part of the year, even though the economy will still be characterised by a large margin of slack. In order to stabilise the ratio of public debt to GDP, albeit at a very high level by 2010, the required discretionary tightening of fiscal policy may amount to 10 per cent of GDP or more.[20] This reflects both the large structural deficit at present and the increase in ageing-related spending in coming years. Much of the necessary consolidation should be achieved by reducing public works expenditure, which has not been used efficiently in the 1990s, but it is likely that tax increases will also be required in due course. In order for the private sector to prepare for the inevitable fiscal adjustments in an orderly way, it is important to establish a coherent medium-term consolidation plan that sets out clearly how the deficit reduction is to be attained while leaving some flexibility regarding its timing.

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19. However, the Bank of Japan has stated that "it still has no intention to increase the amount of outright purchase of long-term government bonds for the purpose of supporting bond prices or government financing". See Bank of Japan, "New Procedures for Money Market Operations and Monetary Easing", Short Note 2, released 19 March 2001.
20. *OECD Economic Surveys*, Japan, 1999, Paris.

The European Union

The outlook for the euro area as a whole (Table I.14) over the coming 18 months remains good, provided the global economy does not turn out to be weaker than expected. The European Central Bank has kept its policy rate unchanged since early October. This reflects the internal growth momentum in the euro area economy that has so far cushioned the impact of the weakness in the United States as well as the persistence of headline inflation significantly above 2 per cent. But the modest firming of the euro exchange rate and the fall in oil prices have reduced the risk that external price developments could complicate the task of the monetary authorities in maintaining price stability. Even if spare capacity may have largely disappeared and core inflation has drifted up (although still below 2 per cent), the forces operating on the economy appear likely to imply downward pressure on inflation during the coming 18 months. Indeed, inflationary pressures could be even weaker than anticipated if past structural reforms and the development of the "new economy" have raised the productive potential of the euro economies more than currently recognised. This, relatively benign, environment and the downside risks associated with the international economy are expected to allow the European Central Bank to reduce its refinancing rate by 50 basis points in the near future and hold them constant thereafter. If growth, and thereby inflation, were to show sign of unexpected weakness, the monetary authorities would have scope to take corrective actions.

Some downward adjustment in interest rates will be needed in the euro area in the short term

Table I.14.   **Euro area : Summary of projections**

	1999 current prices		1999	2000	2001	2002
	Billion euro	**Per cent of GDP**	**Percentage changes, volume**			
Private consumption	3 572.5	57.1	2.9	2.6	2.6	2.7
Government consumption	1 247.6	19.9	1.7	1.8	1.3	1.2
Gross fixed capital formation	1 305.5	20.9	5.4	4.8	3.5	3.7
Residential	359.6	5.8	3.4	1.5	0.9	1.8
Business	790.3	12.6	6.5	6.8	4.9	4.7
Government	155.6	2.5	4.5	1.9	2.4	2.4
Final domestic demand	6 125.7	97.9	3.2	2.9	2.5	2.6
Stockbuilding[a]	31.2	0.5	0.0	0.0	0.0	0.0
Total domestic demand	6 156.8	98.4	3.1	2.8	2.5	2.6
Net exports[a]	97.3	1.6	–0.5	0.6	0.2	0.2
GDP at constant prices			2.6	3.4	2.6	2.7
GDP at current prices	6 254.1	100.0	3.8	4.7	4.9	4.9
Memorandum items						
Private consumption deflator			1.1	2.2	2.2	1.9
Total employment			1.8	2.2	1.5	1.3
Unemployment rate			9.9	9.0	8.3	7.8
General government financial balance[b]			–1.3	0.3	–0.6	–0.4
Current account balance[b]			0.4	–0.1	–0.2	–0.1
Household saving ratio[c]			9.6	9.3	9.5	9.3
Output gap[d]			–1.3	–0.3	–0.1	0.1

Note: Greece entered euro area on 1 January 2001. In order to ensure comparability of the euro area data over time, Greece has been included in the calculation of the euro area throughout.
a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of GDP.
c) As a percentage of disposable income.
d) As a percentage of potential GDP.
Source: OECD.

With regard to other countries in the European Union, activity has slowed somewhat in the United Kingdom and inflation remains subdued. With the global risks mainly on the downside, a further modest easing of monetary policy would be justified. In Sweden, inflation has picked up somewhat from a low rate and growth is projected to remain brisk, calling for policy interest rates to remain at current levels. Denmark, which participates in the Exchange Rate Mechanism, will be constrained to follow the ECB.

More ambitious fiscal consolidation might be warranted in the three biggest countries of the euro area

Within the European Union underlying fiscal positions continue to diverge markedly. A number of countries enjoy surpluses, including the United Kingdom, but Germany and France are still characterised by structural budget deficits in excess of 1 per cent of GDP while in Italy government debt remains very high. In all of these countries discretionary policy measures have been taken to reduce taxes and/or increase spending, though their impact on structural budget balances has been partially or fully offset by the operation of normal fiscal drag and unexpected revenue increases. However,

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Box I.4. Meat crisis in the European Union

With bovine spongiform encephalopathy (BSE) identified in cattle in several EU member states for the first time in 2000, cases of the variant Creutzfeldt-Jacob Disease in humans reported outside the United Kingdom, and the spread of foot-and-mouth disease (FMD) both within the United Kingdom and to other EU countries, the European Union has had to confront a crisis of consumer confidence towards the safety of meat products. Indeed, between mid-October 2000 and end-January 2001, EU beef consumption is estimated to have fallen by 27 per cent (and by 50 per cent or more in some member states) and a ban on imports of meat and/or cattle from the European Union has been put in place in several countries, including, among OECD countries, Australia, Canada, Korea, New Zealand, Norway and the United States. Bans encompassing other animal products have also been implemented by a number of EU trading partners in relation to the FMD outbreak. The European Union had already responded by introducing labelling and traceability requirements and has established new regulations governing ingredients in animal feed. It has also withdrawn specified risk material from the market and will pay compensation for the destruction of animals related to both the BSE and FMD problems to stabilise the beef market. Despite the budgetary strains implied by the meat crisis, the European Commission has expressed its firm intention to finance the extra spending by reallocating cash within the existing agricultural budget.

The direct budgetary implications of the BSE crisis look relatively modest at present. For 2001, the European Commission's estimate for the EU-wide cost of the BSE destruction scheme, public intervention, and storage amounts to about 3 billion euros.[1] If the cost of BSE tests and the expenses related to the destruction of meat and bone meal are added, the cost could increase to around 6½ billion euros, *i.e.* the equivalent of 0.1 per cent of EU GDP. The EU budget will co-fund the expenditure related to the destruction scheme only at a flat rate of 70 per cent

and national budgets are expected to bear the remaining 30 per cent.

Although there is uncertainty about how the situation as regards FMD will evolve, it has already wreaked havoc in the market for meat and meat products in the EU area and will be expensive for public budgets. Large scale culling of herds has been taking place mainly in the United Kingdom, but to a lesser extent in Ireland, France and the Netherlands, and several continental countries have taken drastic preventive measures. At present, the United Kingdom has authorised the slaughter of 1¾ million animals of which over one million animals have been destroyed. The England and Wales National Farmers' Union estimates that the cost of eradicating the disease could reach £750 million for three months or the equivalent of 0.1 per cent of UK annual GDP. The FMD crisis could take on another dimension all together if the disease was to spread significantly to dairy cattle, affecting milk supply and dairy product prices.

Beef prices in the European Union have fallen in response to lower demand. Between mid-October 2000 and end-January 2001, wholesale market prices for beef meat (young bull R3-grade) dropped by 27 per cent notwithstanding supporting measures by the European Union. Consumer aversion to beef products has led to increased demand for substitutes, putting upward pressure on the price of pork, poultry, lamb and fish. In March 2001, the consumer price of meat in the EU area was up 7 per cent and the consumer price of fish and seafood rose 5½ per cent from the year before. These increases accounted for about 0.4 percentage point of the increase in the harmonised index of consumer prices area-wide.

The direct impact of the meat crisis on aggregate output at the EU level is likely to be small in macroeconomic terms, given that meat production accounts for just over ½ per cent of GDP in the area. However, the meat sector is significantly larger in some member countries of the European Union, notably Denmark, Ireland and the Netherlands. In these countries meat exports

these measures seem to limit improvements in underlying positions of public finances at a time when the budgets in some of these countries have not yet been brought to balance or in surplus as agreed in the context of the Stability and Growth Pact. In view of the budgetary pressures that will emerge over the longer term as populations age, a more ambitious improvement in fiscal positions might be warranted in these countries.

The stance of fiscal policy has come under particular scrutiny in some of the smaller countries that have exhausted their spare capacity and risk overheating. Some of these countries are running structural budget surpluses in excess of 2 per cent of GDP. In view of the strength of public finances, Finland, Ireland, the Netherlands and Sweden have taken discretionary measures to reduce taxes and/or increase spending. While these measures have often been directed at improving the supply side of the economy, their immediate effect is to add fuel to already over-heated economies. At least for some euro area countries, this has raised questions about the role of fiscal pol-

Fiscal policy is not playing a stabilising role in some of the over-heated smaller countries…

Box I.4. Meat crisis in the European Union *(cont.)*

account for a notable fraction of merchandise exports and GDP, and a strict and lengthy embargo on such exports would have significant effects on economy-wide GDP growth. At present it is highly uncertain to what extent the FMD outbreak will affect aggregate output in the European Union as a whole. The impact could be much larger than suggested by the size of the meat industry itself if the disease were to have important effects on the tourism industry. Under this worst case scenario, several private estimates[2] for the United Kingdom report that the overall cost to the economy could amount to around £3 billion, *i.e.* the equiva-

lent of 0.3 per cent of GDP. In Ireland, where tourism receipts represent a larger share of GDP than in the United Kingdom, the disease could reduce growth by about 1 percentage point this year, according to the Central Bank provisional estimates.[3] In the Netherlands, the government has estimated that the cost could amount to 0.1 per cent of GDP but that it could reach ¾ per cent of GDP if the disease were to spread as it has in the United Kingdom.[4] In France, the *Institut national de la recherche agronomique* has estimated the losses to the economy between 3 and 7 billions francs, less than 0.1 per cent of GDP.[5]

Exports of meat in selected EU countries in 1999[a]

	As a per cent of merchandise exports[b]	As a per cent of GDP
European Union	1.1	0.3
Denmark	6.2	1.7
Ireland	2.8	2.1
Netherlands	2.7	1.2
France	1.6	0.3
Spain	1.2	0.2
Belgium	1.2	0.9
Austria	0.8	0.2
United Kingdom	0.5	0.1
Germany	0.5	0.1
Italy	0.4	0.0

a) Meat is defined according to the harmonised system (Revision 2) as the sum of the component HSO1 (live animals) and HSO2 (meat and edible meat offal).
b) Includes intra-European trade. European Union exports of meat excluding intra-European trade amounted to 0.6 per cent of merchandise exports and 0.1 per cent of European Union GDP.
Source: OECD, *Annual Foreign Trade Statistics.*

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1. See http://www.europa.eu.int/
2. See estimates reported by a Reuters survey (http://www.reuters.co.uk/news.jhtml) and by BBC News Europe (http://www.news.bbc.co.uk).
3. As reported at the Central Bank press briefing of Wednesday 28 March 2001.
4. As reported by a press release from the Central Planning Bureau on 27 March 2001.
5. O. Mahul and P. Rainelli (2000), "Évaluation des conséquences économiques d'une épizootie de fièvre aphteuse", Institut national de la recherche agronomique, *Économie et sociologie rurale de Rennes.*

icy. As emphasised in the debate leading up to monetary union, in the absence of national monetary policy the only macroeconomic policy instrument available to contribute to stabilisation is fiscal policy. However, in the case of some of the smaller overheating euro area economies, budgetary restrictions to slow demand would require adding to already high budget surpluses. In addition to the difficulty of justifying such measures politically, this might entail potential costs in terms of delayed supply-side improvements, and possibly also financial market disturbance from rapid repayment of public debt or government accumulation of private assets.

... which implies that stabilisation is left to market forces

If fiscal policy does not play a stabilising role, the unwinding of excess demand is by default left to market forces. Ireland, the Netherlands and Spain are already experiencing much faster growth in unit labour costs in the total economy than other members of the monetary union, and this loss in competitiveness *vis-à-vis* their euro partners is likely to persist in the coming years. The eventual gradual weakening of the net external balance will act to reduce the extent of the overheating, though this might take a relatively long time. While this "gold standard" type adjustment mechanism will ultimately prove effective, it will inevitably result in important structural changes in the economies affected, notably the reallocation of resources away from their traded goods sectors. This will require the institutional structure in the smaller countries to be efficient in reallocating resources from declining to growing sectors. Reliance on market forces to deal with overheating thus calls for reforms in product and labour markets to increase the capacity of the economy to adjust smoothly to changed circumstances. Furthermore, there is a possibility that real interest rates shaped by area-wide nominal rates and high domestic inflation will result in excessive credit expansion, leading to unsustainable increases in property values and in investment and capital stocks. This points to a risk of balance sheet problems in the wake of over-heating. Supervisory policies need to ensure that financial systems maintain diversified portfolios and strong capital bases so as to be resilient as overheating ends.

Policy needs to encourage continued mobilisation of labour resources

Apart from drawing lessons from the unfolding food crises (Box I.4), in the area of structural policy an important task ahead is to build on recent successes in mobilising labour resources. The sharp increase in employment and decline in unemployment have been the outstanding achievements of the European expansion since 1997. Nonetheless, unless continuing initiatives are taken, unemployment is set to remain substantially higher in the euro area than in the United States and Japan. And the proportion of the population of working age that is participating in the labour force is comparatively small in the euro area. The weak attachment to the labour force is to some extent related to disincentives that have been built into social security systems. This is notably the case for older individuals, who are often not rewarded for continued work with higher eventual pensions and who are often enticed out of work with easy access to other generous public benefit systems. The cost of such disincentives is likely to increase with the ageing of the population in the coming decades. The removal of this "implicit tax" in the context of reforms of pension and other social security systems could make a significant contribution to increase the labour-force participation of older people, and hence reduce the future "ageing" burden.

Despite the increased integration of national product and financial markets in the European Union over the past decade, there is still scope for reducing area-wide market segmentation.[21] Wide dispersion of pre-tax prices on certain products across national borders suggests that market discipline may not be sufficiently strong in

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21. See *OECD Economic Surveys*, Euro Area, 2001, Paris.

some countries, requiring measures to stimulate competition. The fragmentation along national lines of certain segments of the EU financial market, notably for longer-term finance, shows that there is unfinished business in harmonising rules and standards. Greater integration of both product and financial markets would contribute to raise economic speed limits and increase living standards in Europe.

Appendix: The medium-term reference scenario

The medium-term reference scenario extends the current short-term projections to the end of 2006 (see Tables I.15, I.16 and Box I.5). Since most OECD countries are projected to be in a position of approximate balance in 2002 – with output gaps being close to zero – there are only few major growth imbalances to unwind in the following years. This implies a steady medium-term growth path for most countries as well as for the OECD area as a whole, with Japan being the most notable exception. OECD-wide real GDP is projected to grow at around 3 per cent per annum over the 2003-06 period. Inflation remains below 2 per cent and the area-wide rate of unemployment drops slightly to 6 per cent. Fiscal balances are assumed to improve moderately in most countries, resulting in falling government debt ratios in most OECD countries, Japan again being the most notable exception.[22] World trade is projected to grow steadily at around 8 per cent *per annum*.

The medium-term reference scenario shows area-wide growth of around 3 per cent per annum and low and stable inflation

The main features of the medium-term reference scenario for the United States is a pick-up in growth rates beyond 2002 with inflation remaining stable well below 2 per cent. The fiscal balance recovers to surpluses of around 2 per cent of GDP

Growth picks up in the United States beyond 2002…

Box I.5. Assumptions underlying the medium-term reference scenario

The medium-term reference scenario is conditional on the following assumptions for the period beyond the short-term projection horizon:

– Gaps between actual and potential output are eliminated by 2006 in all OECD countries.

– Unemployment returns to its structural rate (the NAIRU) in all OECD countries by 2006.[1] Commodity prices and most exchange rates remain broadly unchanged in real terms.

– Monetary policies are directed at keeping inflation low, or bringing it down in line with medium-term objectives.

– Fiscal policies are assumed to remain broadly unchanged (*i.e.* the cyclically-adjusted primary budget balance is held approximately constant from one year to the next),[2] or to follow medium-term programs where these are well-defined parts of the institutional framework for fiscal policy.

The main purpose of the medium-term reference scenario is to provide a basis for comparisons with scenarios based on alternative assumptions and to provide insights on the possible build-up or unwinding of specific imbalances and tensions in the world economy over the medium term. The reference scenario does not embody a specific view about the timing of future cyclical events.

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1. The concept and measurement of structural unemployment rates are discussed in more detail in Chapter V, "Revised OECD measures of structural unemployment", *OECD Economic Outlook 68*, December 2000.
2. This implicitly assumes that the authorities take measures to offset underlying changes to the primary structural balance.

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22. Large fiscal deficits are also projected for the Czech Republic and Hungary but there are no government debt numbers available for these countries.

Table I.15.   **Medium-term reference scenario summary**

Per cent

	Real GDP growth	Inflation rate[a]		Unemployment rate[b]		Current balance[c]		Long-term interest rate	
	2003-2006	2002	2006	2002	2006	2002	2006	2002	2006
Australia	4.0	2.3	2.4	7.2	6.0	–2.5	–1.9	5.5	6.5
Austria	2.2	1.7	1.8	4.4	4.3	–2.4	–1.9	5.0	5.5
Belgium	2.5	1.7	1.7	6.5	6.5	6.1	6.6	5.0	5.6
Canada	3.0	2.0	2.0	7.2	6.8	1.7	2.0	5.3	5.5
Czech Republic	3.9	4.8	3.0	8.1	7.0	–5.5	–4.4	6.6[d]	8.0[d]
Denmark	2.1	2.0	2.0	4.8	5.9	2.4	3.4	5.1	5.6
Finland	3.7	2.1	2.2	8.6	8.0	7.5	8.7	4.9	5.6
France	2.4	1.5	1.7	8.1	8.8	1.4	1.0	4.8	5.4
Germany	2.4	1.5	1.6	6.8	6.2	–0.8	1.8	4.7	5.3
Greece	3.7	2.5	2.4	10.0	9.7	–6.2	–4.3	5.3	5.9
Hungary	4.6	8.0	4.0	6.1	5.8	–4.3	–3.1	10.8[d]	7.5[d]
Iceland	2.3	3.9	2.5	2.6	3.4	–9.9	–8.0	11.0	8.5
Ireland	6.8	3.8	4.2	3.9	5.0	–2.6	–2.6	4.9	5.5
Italy	2.4	2.2	1.9	9.2	9.2	–0.1	0.4	5.0	5.6
Japan	2.2	–0.5	0.2	4.8	4.3	2.7	3.0	1.6	3.5
Korea	5.8	3.5	3.0	4.0	3.7	2.7	–0.9	7.6	8.5
Mexico	4.6	5.8	3.5	2.6	2.8	–4.0	–4.5	12.9	10.0
Netherlands	2.6	2.3	2.1	2.3	3.0	3.1	2.5	5.0	5.6
New Zealand	2.9	2.0	1.5	5.6	5.8	–3.3	–1.9	6.0	6.0
Norway	1.4	1.9	2.5	3.3	3.7	17.5	15.2	5.9	6.4
Poland	4.5	5.0	3.5	17.3	14.4	–5.7	–3.2	15.0[d]	8.8[d]
Portugal	3.3	3.3	2.5	4.2	4.1	–9.6	–8.6	5.1	5.7
Spain	2.7	2.8	2.4	12.6	11.7	–3.2	–3.2	4.9	5.5
Sweden	2.4	2.2	2.3	3.9	5.5	1.8	2.0	4.9	5.5
Switzerland	1.8	1.2	1.3	1.9	1.8	15.2	15.7	3.5	4.0
Turkey	5.3	48.9	8.0	6.7	6.2	–0.5	–1.9	45.7	17.0
United Kingdom	2.4	2.2	2.3	5.5	6.0	–2.2	–2.0	5.0	5.5
United States	3.6	1.6	1.6	5.0	5.0	–4.0	–4.3	5.3	5.3
Euro area	2.6	1.9	1.9	7.8	7.7	–0.1	0.7	4.9	5.5
European Union	2.5	2.0	2.0	7.3	7.3	–0.4	0.3	4.9	5.5
Total of above OECD countries	3.1	1.7[e]	1.7[e]	6.2	6.0	–1.2	–1.2	5.1[e]	5.4[e]

Note: For further details see *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
a) Percentage change from the previous period in the private consumption deflator.
b) Per cent of labour force.
c) Per cent of nominal GDP.
d) Short-term interest rate.
e) Excluding Turkey.
Source: OECD.

from 2003, taking into account the Administration's projection of the phasing in of the tax cut proposal (reaching 1.3 per cent of GDP in 2006) and the additional temporary fiscal easing in 2002.

… while it remains steady above 2½ per cent in the euro area

The euro area is projected to be in a position of both internal and external balance in 2002. This carries through to the medium-term outlook where GDP grows at its potential rate and inflation remains slightly below 2 per cent. In the absence of tax cuts or increased discretionary spending, the fiscal balance of the euro area improves over the medium term, from a deficit of ½ per cent of GDP in 2002 to a surplus of similar magnitude in 2006. By 2006, an almost unique historical situation is projected, with all euro countries being in a position of balance or surplus on the government accounts. In the same year, area-wide government debt is projected to dip below 60 per cent of GDP.

Growth in Japan is set to remain weak up to 2006, reflecting low potential growth

Given continuing near-term weakness, the process of medium-term adjustment is drawn out in the Japanese economy. Despite some slowing of potential output over the medium term (reflecting continued subdued capital accumulation as well as a dimin-

Table I.16.   **Fiscal trends in the medium-term reference scenario**

As a percentage of nominal GDP

	Financial balances[a]		Net financial liabilities[b]		Gross financial liabilities[c]		Gross public debt (Maastricht definition)[d]	
	2002	2006	2002	2006	2002	2006	2002	2006
Australia	0.3	1.0	12	7	26	21	..	..
Austria	0.0	0.4	44	37	59	51	59	51
Belgium	0.7	1.3	91	73	99	81	99	81
Canada	2.2	2.2	55	37	95	77	..	..
Czech Republic	–7.5	–5.1	..	..	..	..	..	..
Denmark	2.9	2.9	19	5	42	28	39	25
Finland	5.6	5.2	–40	–51	35	24	35	24
France	–0.8	0.3	40	35	63	58	57	53
Germany	–1.2	0.2	40	35	58	53	58	53
Greece	0.7	1.7	..	..	97	81	97	81
Hungary	–4.4	–3.5	..	..	..	..	..	..
Iceland	2.8	4.1	21	–1	38	16	..	..
Ireland	4.5	4.2	..	..	22	3	22	3
Italy	–1.2	0.0	92	78	104	91	103	90
Japan	–6.9	–6.6	64	84	138	158	..	..
Korea	6.1	6.5	–39	–51	1	2	..	..
Netherlands	1.6	1.7	36	24	49	36	49	36
New Zealand	1.2	1.4	..	..	..	..	..	..
Norway	13.9	10.6	–83	–114	26	25	..	..
Poland	–2.2	–0.7	..	..	..	..	..	..
Portugal	–1.1	0.2	..	..	52	41	52	41
Spain	0.1	0.1	38	30	64	57	56	50
Sweden	3.4	2.9	1	–11	51	39	45	34
United Kingdom	0.9	–0.4	28	23	50	45	40	36
United States	1.4	1.9	36	22	52	38	..	..
Euro area	–0.4	0.6	51	42	68	59	68	59
European Union	–0.1	0.4	46	38	66	58	62	55
Total of above OECD countries	–0.3	0.2	41	34	69	63		

Note: For further details see *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
a) General government fiscal surplus (+) or deficit (–) as a percentage of GDP.
b) Includes all financial liabilities minus financial assets, as defined by the System of National Accounts (where data availability permits) and covers the general government sector, which is a consolidation of central government, state and local government and the social security sector.
c) Includes all financial liabilities, as defined by the System of National Accounts (where data availability permits) and covers the general government sector, which is a consolidation of central government, state and local government and the social security sector.
d) Debt ratios are based on debt figures for 1999, provided by Eurostat, and GDP figures from national authorities, projected forward in line with the OECD projections for GDP and general government financial liabilities.
Source: OECD.

ishing working-age population) and the projected recovery to growth rates of actual output of just above 2 per cent from 2003, the negative output gap remains substantial (at around 3 per cent by the end of 2003) and is assumed to close only gradually over the medium term. The fiscal balance is assumed to improve only marginally from the 7 per cent of GDP deficit projected for 2002, reflecting that most of the deficit is structural. This implies that general government gross debt is projected to reach almost 160 per cent in 2006. The real interest rate on long-term government bonds is expected to increase accordingly towards levels found in most other OECD countries.

Labour productivity in the OECD area is assumed to accelerate to growth rates of about 2¼ per cent *per annum*. This is ½ percentage point higher than the average since the mid-1990s (Figure I.15, panel A) but only slightly higher than growth in trend labour productivity (Figure I.15, panel B). The increase in both actual and trend labour productivity growth projected for most OECD countries over the medium term mirrors traditional capital deepening as well as continued transmission

Labour productivity is assumed to increase in most countries, partly reflecting transmission of "new economy" forces

Figure I.15. **Growth in labor productivity over the medium term**

Panel A. **Average annual change of labor productivity**

Per cent

1995-2002
2003-2006

Panel B. **Average annual change of trend labor productivity**

Per cent

1995-2002
2003-2006
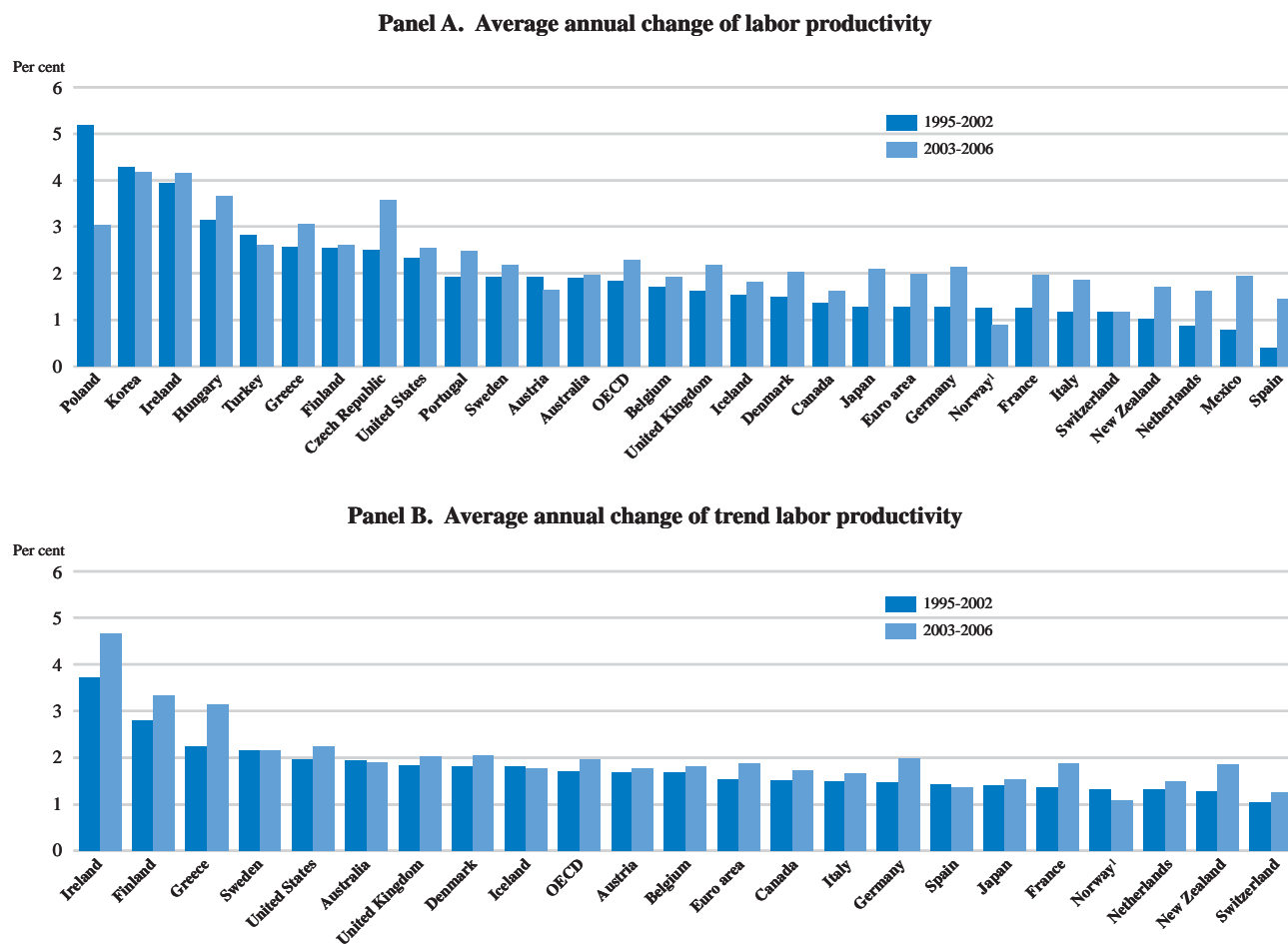
1. Mainland Norway.
Source: OECD.

of "New Economy" forces across OECD Member countries.[23] This, in turn, contributes to higher overall potential output growth compared with the average since the mid-1990s for a majority of countries (Table I.17). However, these beneficial effects are offset by unfavourable changes in potential employment growth for a number of countries, leaving the area-wide average rate of potential growth unchanged.

Unemployment is only reduced slightly…

Area-wide employment in the scenario grows at rates just below 1 per cent *per annum* and, with the labour force increasing at broadly the same rate, there is little further reduction in unemployment for the OECD area. The average OECD unemployment rate edges down to around 6 per cent over the period, reflecting slightly falling unemployment rates in the euro area and Japan, while unemployment in the United States stays constant at 5 per cent from 2002.

23. This shows up as higher growth of multifactor productivity.

Table I.17. **Growth in potential GDP and its components**

Annual averages, percentage points

| | Potential GDP growth | | Potential labor productivity growth (output per employee) | | Potential employment growth | | Components of potential employment[a] | | | | | |
| | | | | | | | Potential labor force participation rate | | Working age population | | NAIRU | |
	1995-2002	2003-2006	1995-2002	2003-2006	1995-2002	2003-2006	1995-2002	2003-2006	1995-2002	2003-2006	1995-2002	2003-2006
Australia	3.8	3.8	1.9	1.9	1.8	1.8	0.4	0.6	1.3	1.2	0.1	0.0
Austria	2.2	2.3	1.7	1.8	0.5	0.5	0.2	0.2	0.2	0.3	0.1	0.0
Belgium	2.5	2.4	1.7	1.8	0.8	0.6	0.6	0.5	0.0	0.0	0.1	0.1
Canada	3.0	3.0	1.5	1.7	1.5	1.2	0.0	0.0	1.2	1.2	0.3	0.0
Denmark	2.1	2.2	1.8	2.1	0.3	0.1	−0.2	0.0	0.2	0.1	0.3	0.0
Finland	3.3	3.8	2.8	3.3	0.5	0.4	0.0	0.2	0.3	0.2	0.2	0.1
France	2.1	2.6	1.4	1.9	0.7	0.7	0.2	0.1	0.3	0.5	0.2	0.1
Germany	1.8	2.3	1.5	2.0	0.3	0.3	0.2	0.4	0.0	−0.1	0.0	0.1
Greece	3.0	3.8	2.2	3.1	0.7	0.6	0.5	0.3	0.3	0.3	−0.1	0.0
Iceland	2.7	2.5	1.8	1.8	0.9	0.7	0.0	0.0	1.0	0.7	−0.1	0.0
Ireland	7.7	8.1	3.7	4.7	3.8	3.3	1.2	1.6	1.8	1.5	0.9	0.2
Italy	2.0	2.2	1.5	1.7	0.5	0.5	0.6	0.7	−0.2	−0.3	0.0	0.2
Japan	1.6	1.2	1.4	1.5	0.2	−0.3	0.5	0.0	−0.1	−0.4	−0.2	0.0
Netherlands	3.2	2.8	1.3	1.5	1.9	1.3	1.1	1.1	0.3	0.1	0.4	0.1
New Zealand	2.8	3.0	1.3	1.9	1.5	1.1	0.0	0.0	1.2	1.1	0.3	0.0
Norway[b]	2.4	1.9	1.3	1.1	1.0	0.8	0.2	0.4	0.6	0.4	0.2	0.0
Spain	2.8	2.8	1.4	1.4	1.4	1.4	0.5	0.9	0.3	0.2	0.6	0.3
Sweden	2.5	2.6	2.2	2.2	0.3	0.4	−0.1	0.0	0.4	0.4	0.0	0.0
Switzerland	1.5	1.8	1.0	1.3	0.4	0.5	−0.1	0.0	0.3	0.5	0.1	0.0
United Kingdom	2.4	2.5	1.8	2.0	0.6	0.5	0.1	0.1	0.4	0.3	0.1	0.0
United States	3.6	3.5	2.0	2.2	1.6	1.2	0.5	0.2	1.1	1.0	0.0	0.0
Euro area	2.2	2.6	1.5	1.9	0.7	0.7	0.4	0.5	0.1	0.1	0.1	0.1
Total OECD	2.7	2.7	1.7	2.0	1.0	0.8	0.4	0.3	0.5	0.5	0.1	0.0

a) Percentage point contributions to potential employment growth.
b) Mainland Norway.
Source: OECD.

For the OECD area as a whole, the external balance remains in small deficit (1¼ per cent of GDP) over the medium term. Moreover, in the absence of major changes in potential growth rates or trade openness and at relatively constant real exchange rates, there is little overall adjustment in the current external imbalances between regions. For the euro area, the current external surplus increases to around ¾ per cent of GDP in 2006. For the United States, the current-account deficit widens marginally to 4¼ per cent of GDP, partly reflecting an increasing outflow of investment income as net foreign debt continues to accumulate. Japan's external surplus stays at around 3 per cent of GDP.

… and current account imbalances in the three major regions are projected to persist over the medium-term horizon

II. DEVELOPMENTS IN INDIVIDUAL OECD COUNTRIES

United States

The long-anticipated slowdown in the US economy finally began in the second half of 2000, but it has been unexpectedly sharp, driven by an abrupt change in sentiment in financial markets. The full magnitude of the slowdown may be seen only in the first half of 2001 as inventories adjust to slower consumption and investment falls. But with an easier stance of economic policy, a recovery seems likely to take hold in the second half of the year. Overall, growth of around 1¾ per cent this year and about 3 per cent next year is projected. Unemployment should rise, helping the core rate of inflation to remain stable. The current-account deficit, though, is unlikely to decline much.

Monetary policy is now supporting demand, but with possible adverse effects on consumption from the large fall in share prices the recovery could be delayed, justifying a further modest cut in interest rates. The details of a substantial package of tax reductions including cuts for the immediate future are now being decided in Congress, but nonetheless the federal government may become a net creditor by the end of this decade. Such a performance still leaves a need to reform Social Security and the medical assistance programme for the elderly.

The economy slowed abruptly in the second half of 2000. The deceleration appears to be related to the marked change in perceptions about the future performance of corporate earnings that was diffused throughout the economy by a substantial fall in the stock market, in particular in the technology sector. Companies cut back the growth of investment markedly. The high-tech sector was hit by a deceleration of outlays on computers, while the traditional sector of the economy was badly affected by a fall in vehicle purchases. Consumer confidence also weakened sharply leading to a marked slowing in the growth of consumption, with car purchases, in particular, declining. This

A marked change in business sentiment triggered the slowdown in growth…

United States

The decline in equity markets has gathered pace[1]
Percentage change at annual rate
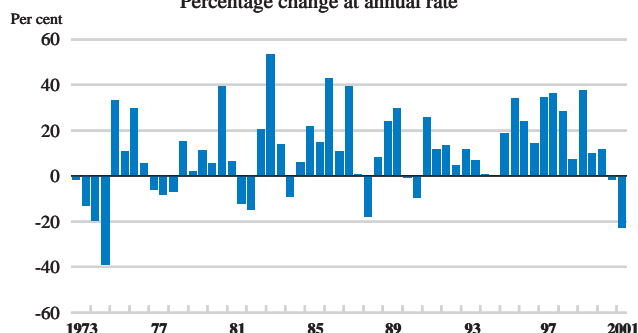
Monetary policy has eased
Real short-term interest rates[2]
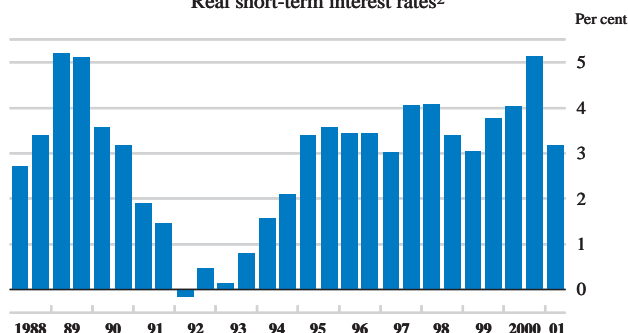
1. The chart measures the change in the semi-annual average of the Standard and Poors 500 index from the previous half-year at an annual rate.
    The figure for the first half of 2001 assumes that the stock market remains unchanged from 20 April.
2. Short-term interest rates less core inflation.
Sources: Bloomberg and OECD.

United States: **Employment, income and inflation**

Percentage changes

	1998	1999	2000	2001	2002
Employment*a*	2.2	1.9	1.8	0.6	0.8
Unemployment rate*b*	4.5	4.2	4.0	4.6	5.0
Employment cost index	3.5	3.2	4.5	4.3	4.4
Compensation per employee *c*	4.9	4.3	4.5	4.7	4.4
Labour productivity *c*	2.3	2.6	3.5	1.1	2.6
Unit labour cost *c*	2.5	1.6	1.0	3.5	1.8
GDP deflator	1.3	1.5	2.0	2.3	1.9
Private consumption deflator	1.1	1.8	2.4	1.9	1.6
Real household disposable income	4.8	3.2	2.8	3.0	4.3

a) Whole economy, for further details see "Sources and Methods".
b) As a percentage of labour force.
c) In the business sector.
Source: OECD.

weakness in both business and consumer demand resulted in a fall in overall manufacturing output in both the fourth quarter of 2000 and the first quarter of 2001.

… but initially the labour market remained tight

The initial weakening in investment and consumption was quickly amplified as the growth of employment slackened. Layoffs spread and compounded the fall in household confidence. The unemployment rate did not rise in 2000, however, as labour force growth eased. Consequently, the labour market remained rather tight, and compensation per employee even accelerated. Inflation, though, slackened, as gasoline prices stabilised and the effective appreciation of the dollar in the second half of 2000 made the pass-through of increased costs difficult. In this context, and with productivity decelerating, there was a slight squeeze on profit margins.

Temporary factors worsened the situation at year-end, but inventory demand may stay weak

At the end of 2000, a number of temporary factors were also adding to the adverse economic situation. A very bad winter not only resulted in weak retail sales and held back housing starts but also hit disposable income as natural gas prices spiked, which, given regulatory dysfunction in California, also led to power short-

United States

Inventories have recently grown faster than sales[1]
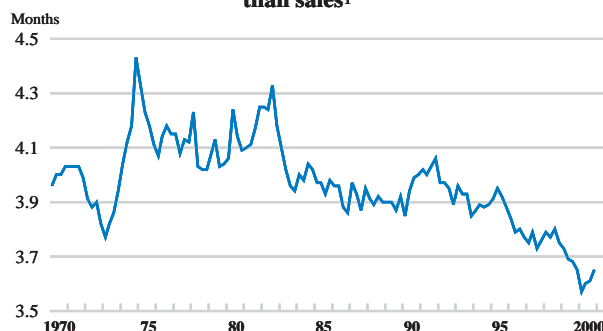
Investment is high relative to output
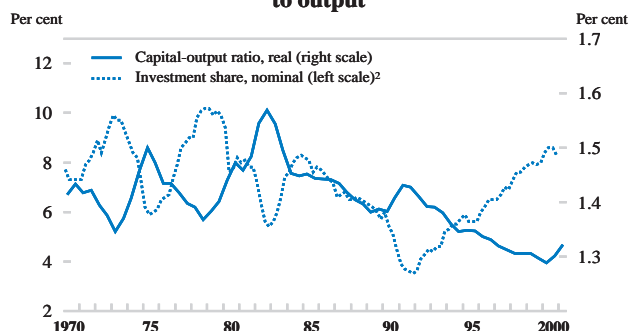
1. Private non-farm inventories expressed as months of final sales of goods and structures.
2. Net non-residential fixed investment relative to net domestic product.
Sources: Bureau of Economic Analysis and OECD.

United States: **Financial indicators**

	1998	1999	2000	2001	2002
Household saving ratio[a]	4.2	2.2	-0.1	0.0	1.0
General government financial balance [b]	0.3	1.0	2.2	2.1	1.4
Current account balance[b]	-2.5	-3.6	-4.4	-4.2	-4.0
Short-term interest rate[c]	5.5	5.4	6.5	4.6	4.4
Long-term interest rate[d]	5.3	5.6	6.0	5.1	5.3

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) 3-month euro-dollar.
d) 10-year government bonds.
Source: OECD.

ages. Companies had also started scaling back their accumulation of inventories as demand slowed, but nonetheless were left with an increase in their stock-to-sales ratio. While the impact of the weather on economic activity has been reversed, the weakness of inventory accumulation is likely to continue in the first half of 2001 and added to the investment contraction this is likely to prolong the period of very slow growth. The increase in the unemployment rate seen in the first months of 2001 should, therefore continue.

With reduced expectations of future company profitability, there is some evidence of a deterioration of business balance sheets in specific sectors, notably in the area of telecommunications. Nonetheless, the financial deficit of non-financial corporations was only slightly above its long-run average prior to the slackening in output growth at the end of the year. Although corporate debt has risen to a new peak relative to output, net interest payments still represent only 13 per cent of cash flow, significantly less than in the 1980s. Despite a surge in outlays on information technology, with such goods now accounting for an estimated 6 per cent of the nominal

Companies are likely to scale back investment…

United States: **Demand and output**

	1997	1998	1999	2000	2001	2002
	current prices billion $	Percentage changes, volume (1996 prices)				
Private consumption	5 529.3	4.7	5.3	5.3	2.8	3.1
Government consumption	1 223.3	1.5	2.1	2.0	1.7	2.4
Gross fixed investment	1 592.3	10.7	9.2	8.8	0.9	2.7
Public	264.7	5.3	9.1	6.3	4.7	4.7
Residential	328.3	8.3	6.4	-0.5	-1.7	0.6
Non-residential	999.4	13.0	10.1	12.6	0.8	2.8
Final domestic demand	8 344.9	5.4	5.6	5.5	2.2	2.9
Stockbuilding[a]	62.9	0.2	-0.4	0.2	-0.4	0.2
Total domestic demand	8 407.8	5.5	5.2	5.7	1.9	3.1
Exports of goods and services	966.4	2.3	2.9	9.0	4.3	7.6
Imports of goods and services	1 055.8	11.9	10.7	13.5	4.8	6.7
Net exports [a]	- 89.4	-1.3	-1.2	-1.0	-0.3	-0.2
GDP at market prices	8 318.5	4.4	4.2	5.0	1.7	3.1

Note: National accounts are based on chain-linked data. This introduces a discrepancy in the identity between real demand components and the GDP. See "Sources and Methods" for further details.
a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
Source: OECD.

—————————— United States: **External indicators** ——————————

	1998	1999	2000	2001	2002
	$ billion				
Merchandise exports	670.3	684.4	773.3	809	877
Merchandise imports	917.2	1 029.9	1 222.8	1 255	1 322
Trade balance	- 246.9	- 345.6	- 449.5	- 446	- 446
Invisibles, net	29.7	14.1	14.1	14	15
Current account balance	- 217.1	- 331.5	- 435.4	- 432	- 431
	Percentage changes				
Merchandise export volumes[a]	2.2	4.0	11.7	4.9	8.0
Merchandise import volumes[a]	11.8	12.5	13.9	4.8	6.7
Export performance[b]	- 1.1	- 2.5	- 1.5	- 2.5	- 0.3
Terms of trade	3.0	- 1.5	- 3.3	1.7	1.6

a) Customs basis.
b) Ratio between export volume and export market of total goods.
Source: OECD.

capital stock, evidence of an overhang of overall capacity was difficult to detect given the rapid growth of demand in the middle of 2000. Indeed, the semiconductor industry was operating at unprecedently high levels of utilisation. However, the capital-output ratio started to rise once output decelerated. The growth of the capital stock remained high at the end of 2000 and, with it, the share of net investment in net product, suggesting the possibility that sluggish investment would persist as output growth slackened.

… and households to try to moderate their debt-service burdens

The financial situation of households is now weakening, increasing the need to moderate the pace of their spending. Their financial deficit has risen considerably faster during this expansion than that of companies. The 1.6 percentage point drop in mortgage interest rates since last year's peak offers only a small opportunity to reduce their debt service. Moreover, the asset side of household balance sheets has been hit by the continued fall in the stock market. By mid-April 2001, despite a pronounced rally, the Wilshire 5000 index was down 23 per cent from its all-time high, a level that eliminates nearly all the gains made since December 1998.

But monetary policy has been eased...

The evidence of a pronounced weakening in demand led to a rapid reaction by the monetary authorities. The restrictive stance of monetary policy in the second half of 2000 was reversed in the first four months of 2001, when the target for the federal funds rate was lowered in four equal steps by a total of 2 percentage points, bringing nominal rates back to 4½ per cent.

... and tax cuts are being worked out

Fiscal policy has remained restrictive but is set to ease. Federal personal income tax receipts rose twice as rapidly as household income during 2000, helping government revenue rise by over 10 per cent. With outlays growing by only 4½ per cent in nominal terms, the federal surplus rose to 2.4 per cent of GDP in national-accounts terms. At the beginning of 2001, it showed signs of rising further, despite the slowdown in the economy, and the general government structural surplus is estimated to increase by almost 1¾ percentage points of GDP between 1999 and 2001. The projections incorporate the new Administration's proposed budget for the next ten years. Most of the cuts will be fully implemented by 2007, when taxes will be almost 1½ per cent of GDP lower than they otherwise would have been. Only part of

the long-run tax cut will be introduced in fiscal year (FY) 2002 that starts in October 2001. However, the projections assume that there will be an additional tax cut of $60 billion in the short-run as in most recent proposals. At the same time, total spending is projected to grow 4 per cent, with the introduction of some new pro- grammes only partly offset by restraint in a number of areas. As a result, the federal surplus may drop back to under 2 per cent of GDP next year.

The economy is projected to grow by only 1¾ per cent in 2001 compared with last year's 5 per cent. Consumers may start to save once again. Companies are pro- jected to trim the level of investment in both inventories and equipment, and this should suffice to reduce the growth of the capital stock substantially and so pave the way for a recovery in business outlays in 2002. By then, households should also be benefiting from the proposed tax cut. Overall, while growth is projected to pick up in the second half of this year and recover to 3 per cent in 2002, the unemployment rate may still rise to 5 per cent and the annual rate of inflation slacken to 1½ per cent, as measured by the private consumption deflator. Given slower domestic demand growth, import increases should moderate and the current-account deficit may ease back slightly – but only to 4 per cent of GDP.

So, after a period of stagnation, a modest recovery may occur…

The main risks to the current economic situation stem from the steps that com- panies and households may take to offset their continued need for increased borrowing to finance the current rate of spending. In particular, if households were to feel uncomfortable in increasing debt-service burdens further, at a time when the value of their assets has declined, then consumer spending and housing investment could stagnate for longer than envisaged. At the same time, if foreigners' net appetite for dollar investments were to shrink substantially faster than the current-account deficit, a significant depreciation of the dollar and the resulting inflation pressures could complicate the task of monetary policy.

… but it could be delayed if households take drastic steps to restore savings to more desirable levels

Japan

After slowing during the second half of 2000, the economy has exhibited further signs of weakness. Indications of a slow-down in exports became more pronounced at the start of this year and, with stock prices low and sentiment increasingly cautious, prospects for investment have deteriorated. Corporate restructuring is still exerting downward pressure on wages, and deflation persists. The low level of stock prices has also intensified concerns about financial stability, especially in the banking system, and this constitutes the greatest downside risk. GDP is projected to expand by about 1 per cent in both 2001 and 2002, despite a more favourable exchange rate and a pick-up in world activity foreseen for next year.

The most pressing requirement for policy is to give a clear sense of direction. This requires an acceleration of structural reforms with priority on those that would open up new business opportunities and facilitate reallocation of resources. Bad loans in the financial sector have to be dealt with squarely, leading to liquidation and/or restructuring of bad debtors. Under such conditions, monetary policy will need to be as expansive as necessary to bring deflation to an end. The Bank of Japan's new procedures, announced on 19 March, are in line with this requirement and should help stabilise price expectations. With the impact of the earlier supplementary budget coming through, fiscal policy remains almost neutral in 2001, but would then tighten in 2002 in the absence of further stimulative measures. A sustained period of consolidation is required thereafter to prevent the snowballing of government debt.

Investment is weakening as exports slow

Activity slowed throughout the second half of 2000 as exports decelerated and public investment fell back to more normal levels. Private investment continued to support activity driven by strong profits, especially in sectors associated with information and communications technologies (ICT). Indeed, this sector accounted for half of the rise in industrial production and for 30 per cent of the cumulative increase in exports from 1999 to 2000, while orders by this sector for machinery have underpinned investment activity in manufacturing. The weakening of exports at the start of this year has led to a sharp decline in industrial production, especially in the ICT area, and to a marked reduction in the level of investment orders. Diminished growth prospects have led to a deterioration of business sentiment, and this has been reinforced by a low level of stock prices.

Deflation has continued and households are concerned about jobs

Although the labour market benefited from growth last year, with overtime rising strongly, household incomes nevertheless remained weak. Unlike in the past, neither the summer nor the winter bonuses reflected the improved profit situation. Falling consumer prices – reflecting general deflationary pressure and structural

Japan

Export weakness is leading to lower production
Year-on-year percentage change
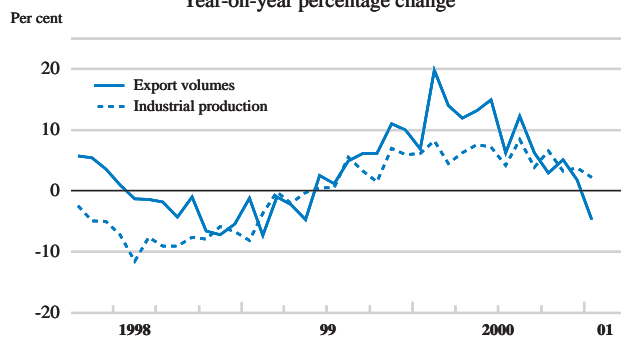
The high-tech sector has led the investment cycle
Year-on-year percentage change
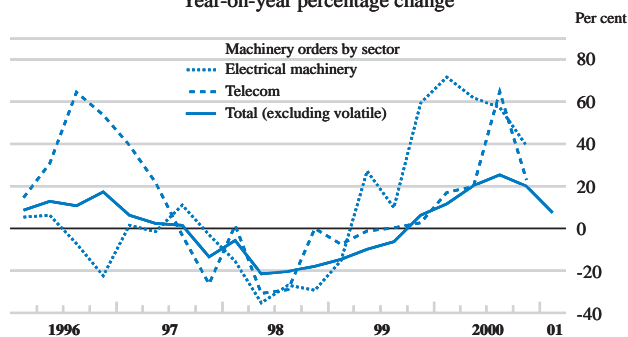
Sources: Ministry of Finance and Economic and Social Research Institute.

Japan: **Employment, income and inflation**

Percentage changes

	1998	1999	2000	2001	2002
Employment	-0.7	-0.8	-0.2	-0.1	0.2
Unemployment rate[a]	4.1	4.7	4.7	4.9	4.8
Compensation of employees	-1.0	-1.6	0.5	0.3	0.6
Unit labour cost	0.1	-2.3	-1.1	-0.7	-0.5
Household disposable income	1.1	-0.2	-0.6	0.4	2.0
GDP deflator	-0.1	-1.4	-1.7	-1.2	-0.4
Private consumption deflator	-0.1	-0.7	-1.2	-0.7	-0.5

a) As a percentage of labour force.
Source: OECD.

changes such as deregulation and the increasing penetration rate of imported goods –
nonetheless served to sustain real household income and probably consumption, and
consumer sentiment remained generally good. However, at the start of this year,
leading indicators of the labour market such as job offers and overtime hours showed
signs of weakening, while bankruptcies remain high, adding to concerns about job
security and triggering a rise in consumer pessimism. Deflation has therefore continued,
although the depreciation of the yen since last November may alleviate the fall in
prices to some extent.

Slowing activity in the leading sectors, together with a low level of stock
prices, is highlighting financial fragility in some parts of the economy. Some strong
companies have continued to restructure their balance sheets, which is reflected in
lower bank credit. It is these companies that should counterbalance the deflationary
forces and underpin an eventual recovery of activity. Many non-financial sector com-
panies are, however, still suffering from excessive debt, falling asset prices and low
profitability, the true extent of which is being revealed with the adoption of tighter
accounting standards. The rising demand for debt forgiveness and an increase in the

*The slowdown is serving to
highlight financial weakness
in some sectors*

Japan

Stock price fall weakens business sentiment
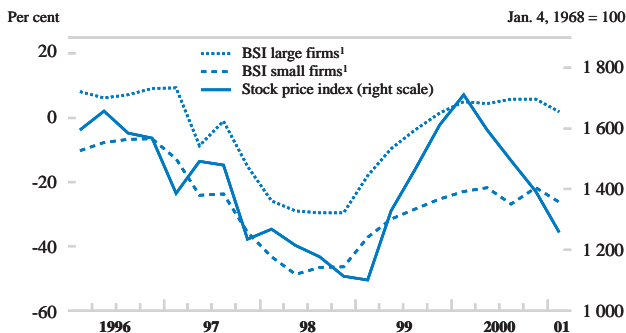
Money is increasing as credit falls
Year-on-year percentage change
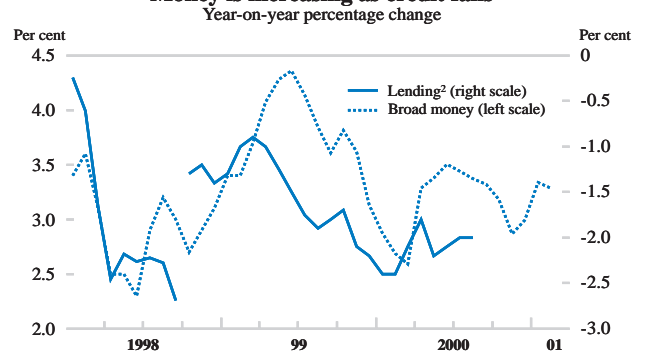
1. Business Survey Index (BSI) refers to firm's judgement on present business conditions, showing the difference in per cent of firms answering "improving" and "getting worse".
2. From third quarter of 1998, adjusted for loan write-offs.
Sources: Ministry of Finance and Bank of Japan.

Japan: **Financial indicators**

	1998	1999	2000	2001	2002
Household saving ratio[a]	11.8	11.1	11.1	11.7	12.8
General government financial balance [b,e]	-5.5	-7.0	-6.3	-6.3	-6.9
Current account balance[b]	3.1	2.4	2.5	2.2	2.7
Short-term interest rate[c]	0.7	0.2	0.2	0.3	0.2
Long-term interest rate[d]	1.5	1.7	1.7	1.4	1.6

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) 3 month CDs.
d) 10-year government bonds.
e) The 1998 deficit does not take account of the assumption by the central government of the debt of the Japan National Railway Settlement Corporation and the National Forest Special Account, which amounts to 5.4 percentage points of GDP.
Source: OECD.

size of liabilities from bankruptcies is in turn generating additional non-performing loans, especially for banks. At the same time, the low level of stock prices has reduced the latent gains of banks from their equity holdings, which have been a major source of funding for writing off loans. In addition, the introduction of full mark-to-market accounting in fiscal year (FY) 2001 (which starts in April 2001) will mean that all losses on financial assets will need to be recognised, raising concerns about tighter lending if bank capital proves insufficient.

The Bank of Japan responded to the slowdown in activity and a tightening of financial conditions

Faced with indicators of a slowdown and tighter financial conditions arising from stock price declines and widening margins on private debt, the Bank of Japan took measures in February to ease deflationary pressure. The target overnight call rate was trimmed by 10 basis points to 0.15 per cent. The rate charged on the discount window, which was made an automatic *Lombard-type* lending facility, was

Japan: **Demand and output**

	1997	1998	1999	2000	2001	2002
	current prices trillion yen	Percentage changes, volume (1995 prices)				
Private consumption	287.2	0.1	1.2	0.5	0.5	1.2
Government consumption	79.2	1.9	4.0	3.6	3.1	2.7
Gross fixed investment	146.6	-4.0	-0.9	1.1	1.1	-1.4
Public[a]	39.8	-2.1	4.9	-5.6	-3.8	-7.4
Residential	23.7	-13.7	1.1	1.5	-2.5	-1.3
Non-residential	83.1	-2.3	-4.2	4.4	4.3	1.1
Final domestic demand	513.0	-0.8	1.0	1.2	1.1	0.7
Stockbuilding [b]	3.2	-0.6	-0.2	0.1	0.1	0.0
Total domestic demand	516.1	-1.5	0.9	1.3	1.2	0.7
Exports of goods and services	56.1	-2.3	1.4	12.0	3.4	8.3
Imports of goods and services	50.3	-6.8	3.0	9.7	5.7	5.3
Net exports [b]	5.8	0.3	-0.1	0.4	-0.1	0.5
GDP at market prices	521.9	-1.1	0.8	1.7	1.0	1.1

a) Including public corporations.
b) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
Source: OECD.

Japan: **External indicators**

	1998	1999	2000	2001	2002
	$ billion				
Merchandise exports	374.0	403.5	459.2	444	480
Merchandise imports	251.5	280.2	342.3	356	373
Trade balance	122.5	123.3	116.8	88	107
Invisibles, net	- 1.5	- 16.3	0.3	4	7
Current account balance	121.0	106.9	117.2	91	114
	Percentage changes				
Merchandise export volumes[a]	- 1.2	2.1	9.4	1.5	8.7
Merchandise import volumes[a]	- 5.3	9.6	10.9	5.2	5.8
Export performance [b]	- 3.1	- 7.8	- 7.0	- 5.8	- 0.1
Terms of trade	6.5	4.8	- 5.2	- 3.7	0.4

a) Customs basis.
b) Ratio between export volume and export market of total goods.
Source: OECD.

also reduced to 0.35 per cent, thereby capping any upward movement in short-term rates and helping the funding of banks and security firms faced with financial stress. The Bank of Japan announced on 19 March further measures of monetary easing through an expansion of base money achieved in part by an increased outright purchase of government bonds. This has led the overnight call rate to decline to virtually zero again. The Bank declared its determination to maintain this policy until the year-on-year change in the consumer price index (excluding food items) becomes positive on a sustained basis.

Fiscal policy could be neutral this year although public investment will weaken

Although the central government budget for FY 2001 is based on last year's initial budget, the carry-over from last November's fiscal package is projected to boost public investment in the first half of this year, followed by a marked decline thereafter. Government consumption is expected to grow vigorously over the projection period reflecting increasing expenditures on social welfare. The stance of fiscal policy will therefore remain almost neutral in 2001: after adjusting for one-off payments of taxes on maturing postal savings, the cyclically-adjusted fiscal deficit is projected to remain at around 6½ per cent of GDP in 2001. In the absence of an additional fiscal package later this year, and a continued reduction in public investment by local governments, the cyclically-adjusted fiscal deficit is then projected to decline to around 6 per cent in 2002 while gross debt should reach 138 per cent of GDP.

The latest economic package is not taken into account

The government announced an "Emergency Economic Package" on 6 April. This was more in the nature of a blueprint of policy intentions to deal with the likely downward pressure emanating from the sales of mutually-held shares by banks, to accelerate the direct disposal of bad loans and to reinvigorate transactions in securities and property. As concrete measures are still to be worked out, the current projections do not take this package into account but implicitly assume that banks will continue to dispose of bad loans at the same pace as that observed in recent years.

Economic growth is expected to slow in 2001 and to stabilise in 2002

The projection assumes that the current level of stock prices will prevail more or less through the projection period, which will mean that both business and consumer sentiment will remain subdued. Weakening business sentiment and the current slowdown of the world economy are projected to lead to a decline in business fixed investment in the second half of 2001. Although last November's fiscal package is

expected to offset the negative external shock in the first half of 2001, a sharp decline in public investment in the second half is likely to amplify the slowdown. GDP is expected to rise by around 1 per cent this year following growth of around 1¾ per cent in 2000. With the world economy expected to improve through next year, and with the weaker exchange rate assumed in these projections (stable at ¥ 123.3 to the dollar), exports should recover and help offset the headwinds from corporate restructuring. Wage growth is projected to remain very low so that only a mild increase is expected in private consumption through 2001 and 2002. Deflationary pressures will thus only unwind slowly and GDP is expected to grow by around 1 per cent also in 2002.

Risks appear to be fairly balanced

Risks appear to be fairly balanced. On the upside, a strong recovery in the world economy would strengthen the projection, although growth would remain narrowly based as in the past two years. On the downside, the slowdown is serving to highlight old structural problems. The most apparent risk is associated with the balance sheet problems of the banking sector. Although an accelerated disposal of non-performing loans is likely to generate some additional deflationary impact, any delay would likely result in further losses, magnifying risks in the future.

Germany

The economy expanded strongly in 2000 with real GDP growth reaching 3 per cent. But activity decelerated in the second half of the year when the growth contribution of the external sector faded, due to accelerating imports, and domestic demand weakened. With world trade slowing, growth in 2001 is projected to slow to 2¼ per cent. But Germany's increased competitiveness and rising disposable incomes, related to the income and business tax reductions in 2001 and improving terms of trade, should support a re-acceleration of activity later this year and next.

Fiscal policy will be expansionary in 2001 due to the tax reductions. Meeting the government's consolidation targets for this year and the years thereafter will thus require strict spending control in view of substantially lower tax revenues and a number of fiscal risks on both the spending and the revenues side of the budget. The slowing of the economic expansion reinforces the need to continue with structural reform so as to raise the growth potential of the German economy.

GDP grew by 3 per cent in 2000, driven by buoyant exports and investment in machinery and equipment. This reflected a marked improvement in the country's competitiveness due to the depreciation of the euro in 2000 and the year before, and roughly constant unit labour costs. But activity slowed from some 4 per cent annualised growth in the first half of 2000 to 2 per cent in the second. While exports were buoyant throughout the year, rising imports squeezed the growth contribution of the external sector in the second half. Domestic demand slowed, reflecting the adverse impact of the rise in energy and import prices on real disposable incomes and hence consumption, and business profits were also adversely affected. While investment in machinery and equipment grew at double-digit rates in the first half of 2000, the expansion slowed thereafter. Construction slid back into recession in 2000, mainly on account of continued downward adjustments in the new states.

GDP growth slowed in the second half of 2000

While orders in manufacturing came in very strongly in autumn and winter 2000 – driven by foreign demand – both domestic and foreign orders fell at the beginning of 2001. The business climate also weakened in the second half of 2000 and into 2001. But capacity utilisation in manufacturing remained at high levels, well above average, and surveys still indicate a sentiment among enterprises to expand capacity.

Business sentiments weakened, and orders started falling recently from high levels

Germany

Business[1] sentiment has deteriorated

% balance

Current evaluation
6-month expectations
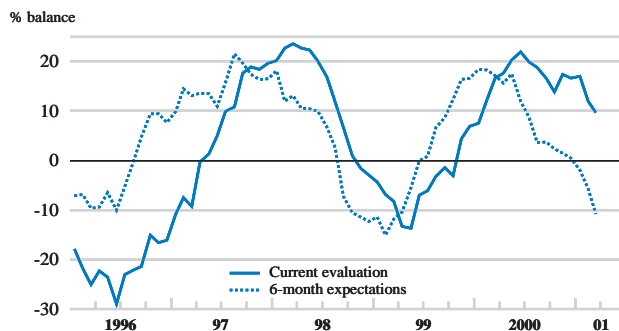
Industrial orders have been strong, falling recently

1995 = 100

Industrial production (incl. construction)
Inflowing domestic orders[2]
Inflowing export orders[2]
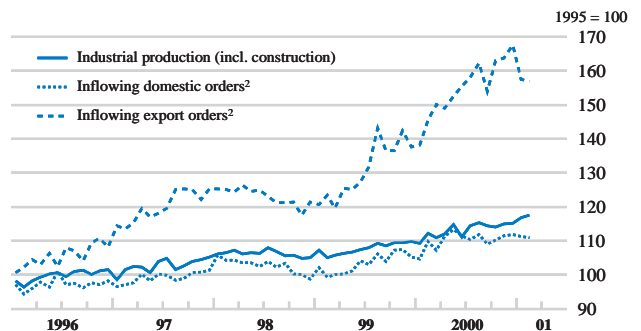
1. Manufacturing excluding food.
2. In manufacturing, volume.
Sources: Ifo Institut für Wirtschaftsforschung; Deutsche Bundesbank and OECD.

Germany: **Employment, income and inflation**

Percentage changes

	1998	1999	2000	2001	2002
Employment	0.9	1.1	1.5	0.9	0.8
Unemployment rate[a]	8.9	8.3	7.8	7.3	6.8
Compensation of employees	1.9	2.4	3.0	2.7	3.1
Unit labour cost	-0.1	0.8	0.0	0.5	0.6
Household disposable income	2.8	2.6	2.9	4.5	3.5
GDP deflator	1.1	0.9	-0.4	1.1	1.4
Private consumption deflator	1.1	0.3	1.4	1.8	1.5

a) As a percentage of labour force.
Source: OECD.

Employment growth has continued but is slowing

Employment growth slowed with greater part-time employment accounting for a large part of the remaining increase. Unit labour costs were roughly constant in 2000, owing to subdued wage rises, higher productivity growth, and reductions in social security contribution rates, which were largely financed by higher energy taxes.

Core inflation drifted up

Core inflation increased, and the headline inflation rate (consumer price index) continued drifting up, to some 2½ per cent in the first quarter of 2001. Increases in energy taxes, which became effective in January of this year, contributed to the rise in consumer prices. But with energy prices declining, inflation is likely to decrease in the course of the year. Almost the entire yield curve has shifted downwards in recent months, and real interest rates remain low by historical standards.

After a pause in 2001 fiscal consolidation will resume in 2002

The general government balance swung into a surplus of 1.5 per cent of GDP in 2000, owing to one-off receipts from the auctioning of universal mobile telephone service (UMTS) licenses amounting to 2.5 per cent of GDP. Net of these receipts, the deficit improved by 0.4 per cent of GDP to 1 per cent of GDP while the structural (cyclically-adjusted) balance remained roughly unchanged. In 2001 general government finances will be expansionary due to the revenues foregone

Germany

Unemployment[1] has recently levelled off

Consumer confidence is volatile
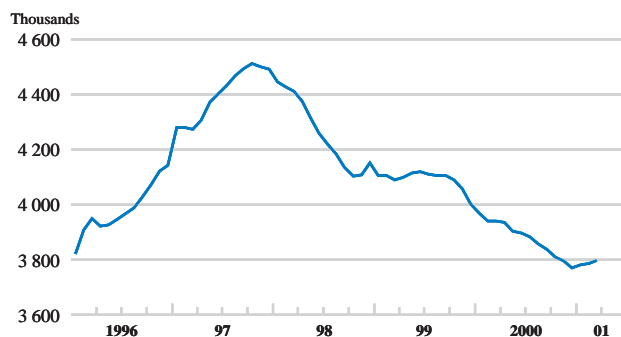
1. Seasonally adjusted, registered unemployment.
Sources: Deutsche Bundesbank and OECD.
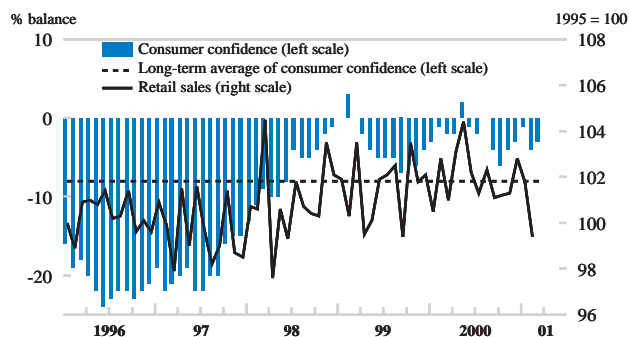
─────── Germany: **Financial indicators** ───────

	1998	1999	2000	2001	2002
Household saving ratio[a]	10.2	9.9	9.8	10.2	9.9
General government financial balance [b]	-2.1	-1.4	1.5	-1.7	-1.2
Current account balance[b]	-0.3	-0.9	-1.1	-1.3	-0.8
Short-term interest rate[c]	3.5	3.0	4.4	4.4	4.3
Long-term interest rate[d]	4.6	4.5	5.3	4.8	4.7

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) 3-month interbank rate.
d) 10-year government bonds.
Source: OECD.

associated with the income and business tax reform. While spending restraint in some fields will bring some relief to the budget, the general government deficit is projected to be some ¾ per cent of GDP higher than in 2000, once the UMTS receipts are excluded. This will be roughly in line with the deficit target laid down in Germany's Stability Programme (1½ per cent of GDP). Consolidation will resume in 2002, with the structural deficit projected to improve slightly. Debt is projected to fall to some 58 per cent by 2002 (Maastricht definition). But with activity slowing, social programmes being extended in some fields, and with the risk that the changes in the income and energy tax code may be associated with unforeseen tax revenue losses, meeting the government's consolidation targets will require tight spending control. This will need to be combined with further structural reforms, notably with respect to achieving a more effective control over social spending, reducing subsidies, and implementing measures that improve public sector efficiency.

─────── Germany: **Demand and output** ───────

	1997	1998	1999	2000	2001	2002
	current prices billion DM	Percentage changes, volume (1995 prices)				
Private consumption	2 112.3	2.0	2.6	1.6	2.2	2.2
Government consumption	713.3	0.5	-0.1	1.4	0.5	0.5
Gross fixed investment	784.6	3.0	3.3	2.4	2.1	2.9
Public	69.2	0.1	5.4	-2.2	0.2	0.4
Residential	276.2	0.3	-0.2	-2.9	-1.7	0.2
Non-residential	439.2	5.2	5.0	6.1	4.3	4.6
Final domestic demand	3 610.1	1.9	2.2	1.7	1.9	2.1
Stockbuilding[a]	6.2	0.4	0.2	0.2	0.2	0.0
Total domestic demand	3 616.4	2.4	2.4	2.0	2.0	2.0
Exports of goods and services	1 021.1	7.0	5.1	13.2	8.7	7.4
Imports of goods and services	971.0	8.6	8.1	10.2	8.4	6.4
Net exports[a]	50.1	-0.3	-0.8	1.0	0.2	0.5
GDP at market prices	3 666.5	2.1	1.6	3.0	2.2	2.4
GDP at market prices in billion euros	1 874.7					
Memorandum items						
Investment in machinery and equipment	303.5	9.4	7.4	9.0	6.1	6.1
Construction investment	481.1	-1.0	0.5	-2.5	-1.2	0.1

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
Source: OECD.

Germany: **External indicators**

	1998	1999	2000	2001	2002
	$ billion				
Merchandise exports	542.4	542.9	550.0	596	646
Merchandise imports	464.7	472.0	494.0	540	579
Trade balance	77.8	71.0	56.0	56	67
Invisibles, net	- 84.5	- 88.9	- 76.5	- 79	- 82
Current account balance	- 6.7	- 18.0	- 20.5	- 24	- 15
	Percentage changes				
Merchandise export volumes[a]	5.7	6.3	12.5	7.4	7.5
Merchandise import volumes[a]	11.0	6.7	10.2	6.9	6.5
Export performance [b]	- 2.4	0.1	- 0.2	- 0.5	- 0.4
Terms of trade	3.3	- 0.2	- 6.2	- 1.2	0.3

a) Customs basis.
b) Ratio between export volume and export market of total goods.
Source: OECD.

With world trade slowing GDP growth should decelerate temporarily, the decline being limited by favourable domestic conditions…

With world trade growth expected to slow this year, the net contribution to growth of the external sector seems likely to decline. In 2002 export growth should strengthen again, reflecting the projected recovery in world trade. Robust domestic demand is likely to support growth both this year and next. Private consumption is projected to accelerate significantly in 2001, based on rising real disposable incomes induced by the income tax reductions and falling energy and import prices. Declining unemployment will also support consumption. Investment in machinery and equipment is projected to continue growing strongly benefiting from tax cuts (despite a tightening of depreciation rules), continued high capacity utilisation in manufacturing, and the favourable investment climate associated with wage moderation embodied in collective agreements that are largely fixed until spring 2002. Construction, however, is projected to remain in recession this year, and is unlikely to contribute to growth in 2002. All in all, GDP growth is projected to decelerate to 2¼ per cent in 2001, before recovering moderately to 2½ per cent in 2002. The unemployment rate should decline from 7.8 per cent in 2000 to 6¾ per cent next year.

… but risks arise from both the domestic and the foreign side

Risks to these projections appear balanced so long as global economic activity does not weaken more than expected: continuing declines in unemployment might increase wage pressures, which could in turn dampen investment and growth. On the other hand, tax reductions might eventually induce a stronger private consumption than assumed in the projections, and generate stronger growth.

France

France has so far largely escaped the production slowdown observed in other OECD countries. Output growth has remained strong, job creation vigorous and unemployment has dropped to its lowest level in ten years. Furthermore, the composition of growth has been dominated by business fixed investment and exports. Recent business surveys suggest a slight moderation of industrial production growth in the near future, but household surveys indicate continuing consumer optimism. In these circumstances, even though international economic forces are losing some momentum, the economy should nonetheless grow slightly above potential in 2001-02.

The authorities are implementing a multiyear programme of tax cuts. They are also taking measures to "make work pay" and facilitate the return of unemployed persons to the labour market. Additional structural reforms will be necessary to further reduce unemployment. In particular, taxes that hinder the return to work could be phased out, the new system of "employment bonuses" could be better targeted toward low-income wage earners, and the choice of the retirement age could be tailored to individual preferences in the context of an actuarially-neutral pension system.

Output growth was strong in 2000

The French economy ended 2000 with strong growth momentum. After slackening slightly in the wake of the energy price hikes, household spending rebounded under the impulse of robust job creation, lower taxes and strong consumer confidence. Business fixed investment has also been vigorous, as companies were expanding their capacities to deal with high utilisation ratios and incorporate new technologies. Export performance has been robust, with large foreign sales directed to outside the euro area. In this generally bright landscape, activities related to information and communication technologies seem to have been particularly strong.

Production bottlenecks have been widespread in the industrial sector, but price increases have remained subdued

With output on a strong upward trend, tensions on productive capacities have become more widespread. Manufacturing and construction firms have reported difficulties in producing more, capacity utilisation has increased to a record high in the manufacturing sector, and employers have faced growing hiring difficulties. Nonetheless, price increases have generally remained subdued, thanks to several factors. First, the import penetration ratio (import as a share of GDP) has risen sharply, especially for manufactured products, helping to bridge the gap between demand and output. Second, consumer price increases have been reduced by indirect tax cuts (value-

France

Business expectations are edging down
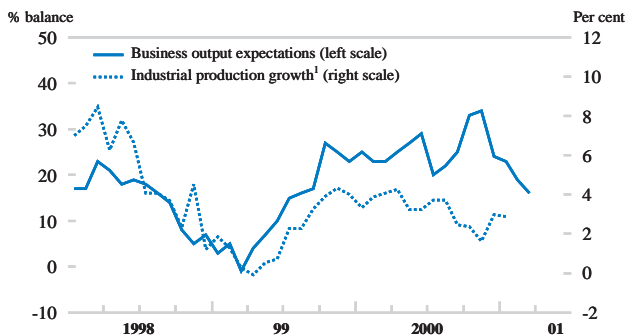
Private consumption growth has slowed despite high consumer confidence
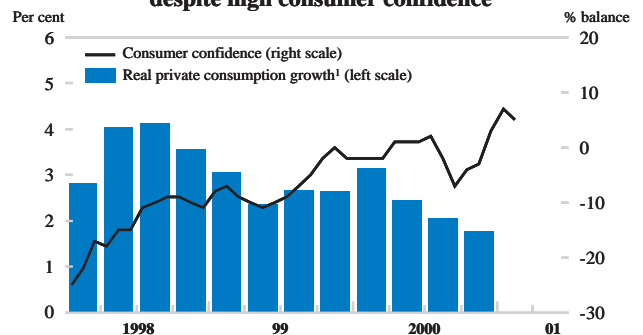
1. Percentage change year-on-year.
Source: National Institute for Statistics and Economic Studies (INSEE).

—————— France: **Employment, income and inflation** ——————

Percentage changes

	1998	1999	2000	2001	2002
Employment	1.4	1.4	2.4	1.6	1.5
Unemployment rate[a]	11.8	11.2	9.7	8.6	8.1
Compensation of employees	3.9	3.9	4.4	4.4	4.6
Unit labour cost	0.5	0.7	1.1	1.7	1.9
Household disposable income	3.7	3.0	4.2	4.2	4.2
GDP deflator	0.7	0.2	0.5	1.5	1.9
Private consumption deflator	0.5	0.4	1.2	1.4	1.5

a) As a percentage of labour force.
Source: OECD.

added tax, gasoline tax), greater market competition (especially in telecommunications) and administrative measures (medicines). Third, wage moderation has continued to prevail in an environment of greater labour market flexibility. With strong investment, tensions on productive capacity stopped increasing in early 2001.

The labour market keeps on improving

Unemployment continued to fall in early 2001, reaching less than 9 per cent – its lowest level in ten years. One million jobs have been created in the past two years in the business sector, thanks to strong output growth, but also with the help of pro-employment public measures, such as the substantial cuts in social security contributions that accompanied the weekly working time reduction to 35 hours. A number of recent structural reforms also aim at improving the functioning of the labour market. In particular, social partners have agreed on a new programme to help job -seekers return to employment, and the authorities have decided to introduce an "employment bonus" (*prime à l'emploi*) to "make work pay" for low-income families. These structural measures are expected to reduce the tax wedge and encourage those excluded from the labour market to work again.

Less fiscal consolidation

The authorities are implementing a three-year programme of tax cuts, encompassing a gradual lowering of personal income tax rates and a decrease in corporate income taxa-

—————— **France** ——————

Tension on capacity utilisation has been accompanied by higher import penetration
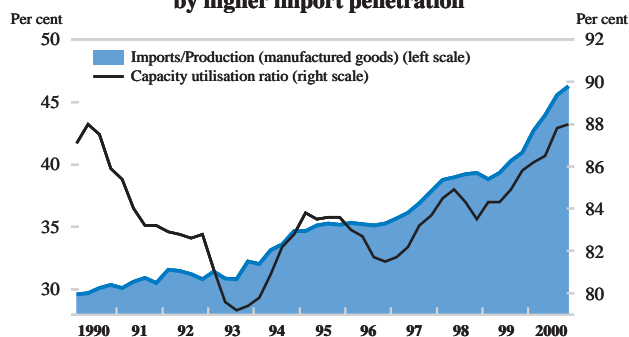
The general government net lending position was below euro area average in 2000[1]
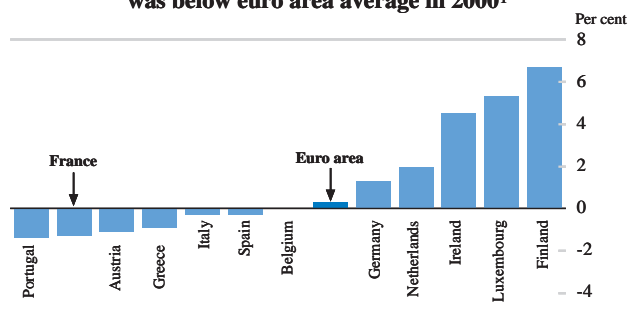
1. Including revenues from UMTS licences, as a percentage of GDP.
Sources: Eurostat and National Institute for Statistics and Economic Studies (INSEE).

─── France: **Financial indicators** ───

	1998	1999	2000	2001	2002
Household saving ratio[a]	15.6	15.5	16.1	16.3	16.0
General government financial balance [b]	-2.7	-1.6	-1.3	-0.5	-0.8
Current account balance[b]	2.6	2.6	1.9	1.7	1.4
Short-term interest rate[c]	3.6	3.0	4.4	4.4	4.3
Long-term interest rate [d]	4.7	4.6	5.4	4.9	4.8

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) 3-month interbank rate.
d) 10-year benchmark government bonds.
Source: OECD.

tion. In addition, social partners have decided to reduce contributions to the unemployment fund (UNEDIC). In 2001, discretionary measures will reduce taxes by the equivalent of 1 per cent of GDP, while further tax cuts are planned for 2002. The multi-year public finance programme adopted by the authorities constrains the real annual increase in general government spending to 1.8 per cent this year and 1.6 per cent next year. These limits may be exceeded, however, because of the rapid pace of health care spending increases. In addition, pro-employment and social protection initiatives – in particular the financing of the working time reduction to 35 hours – are putting the state budget under pressure. New agricultural expenditures related to the bovine spongiform encephalopathy (BSE) and foot-and-mouth cattle diseases are a possible further source of spending overruns. Overall, little fiscal consolidation is assumed for 2001, and only a moderate tightening is projected for 2002. So far, proceeds from the sale of third generation telephone licenses have reached only half of the amount envisaged earlier, because the "beauty contest" failed to attract enough candidates. The proceeds (0.5 per cent of GDP in 2001) will be mainly used to reduce government debt.

─── France: **Demand and output** ───

	1997	1998	1999	2000	2001	2002
	current prices billion FF	Percentage changes, volume (1995 prices)				
Private consumption	4 509.0	3.6	2.7	2.4	2.6	3.0
Government consumption	1 986.1	0.3	2.6	1.8	1.6	1.5
Gross fixed investment	1 473.0	6.6	7.3	6.7	5.0	3.8
General government	243.2	2.8	2.2	4.1	0.7	1.0
Household	374.3	3.6	8.3	5.7	1.3	0.9
Other	855.6	9.0	8.3	7.8	7.4	5.4
Final domestic demand	7 968.1	3.4	3.6	3.1	2.8	2.8
Stockbuilding[a]	- 7.0	0.6	-0.3	0.2	0.1	0.1
Total domestic demand	7 961.2	4.0	3.2	3.3	2.9	2.9
Exports of goods and services	2 093.2	7.7	4.0	13.6	7.4	6.5
Imports of goods and services	1 849.2	11.3	4.0	14.7	8.7	7.5
Net exports[a]	244.0	-0.6	0.1	0.1	-0.2	-0.1
GDP at market prices	8 205.2	3.3	3.2	3.2	2.6	2.7
GDP at market prices in billion euros	1 250.9					

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
Source: OECD.

———————— France: **External indicators** ————————

	1998	1999	2000	2001	2002
	$ billion				
Merchandise exports	302.8	298.1	293.6	313	337
Merchandise imports	278.0	278.4	290.6	314	342
Trade balance	24.8	19.8	2.9	- 1	- 5
Invisibles, net	13.3	17.8	21.8	23	25
Current account balance	38.2	37.5	24.7	22	19
	Percentage changes				
Merchandise export volumes[a]	8.8	4.0	14.0	7.2	6.7
Merchandise import volumes[a]	12.3	4.9	15.9	8.8	7.7
Export performance [b]	- 0.2	- 2.1	1.7	- 1.0	- 0.6
Terms of trade	1.5	- 1.1	- 4.3	- 0.2	- 0.2

a) Customs basis.
b) Ratio between export volume and export market of total goods.
Source: OECD.

A gentle slowdown of output growth

Although international economic forces are becoming less supportive, the French economy should continue to grow slightly above potential in 2001-02, thanks to continuing strong domestic demand. Private consumption is projected to be supported by solid increases in real disposable income, due to positive net job creation, reductions in personal income taxes and slightly faster real wage growth. After years of weakness in the 1990s, business fixed investment has picked up and should remain strong in the near future. Industrial firms are investing to ease production bottlenecks resulting from high capacity ratios and to integrate new information and communication technologies. Net earnings have been at historical highs, which create a favourable environment for continuing expansion of the capital stock. On the negative side, exports are projected to lose some momentum in tandem with the weakening of foreign demand. Overall, as suggested by business surveys in the industrial sector, production growth is likely to slow down gently, but should nonetheless remain slightly above trend. In this context, job creation is projected to stay robust, and unemployment should drop further, although at a slightly less rapid pace than recently observed. Lower energy prices and moderate increases in unit labour costs should keep both core and headline inflation below annual rates of 2 per cent.

The main risk is for a more severe weakening

Two factors could contribute to a less favourable short-term outlook. First, the weakening of the international environment could be more pronounced than envisaged, in particular if the projected recovery in North America does not occur with the expected speed and strength, or if recent weak indicators in Germany persist. A less vigorous path for world trade flows is thus conceivable, which would risk undermining trends in the euro area and weaken France's export prospects and business expectations. So far, foreign order books appear to remain relatively well garnished, but a more severe downturn cannot be excluded. The second factor that could contribute to sluggishness would be a sharp fall in the demand for information and communication products. The recent difficulties in attracting buyers of the third generation telephone licenses shows that the future demand for these products is hard to predict and that consumers and investors could reduce their spending in this area. Although this is difficult to quantify precisely, the French economy would not remain immune to any protracted domestic and international downturn in the demand for technology products.

Italy

Following robust GDP growth in 2000, the pace of the expansion seems set to decelerate to about 2¼ per cent this year, due largely to weaker exports. Private spending is also slowing somewhat, but is being underpinned by expanding employment and real incomes and supportive macroeconomic conditions. As exports recover, real GDP growth should pick up in 2002, while the unemployment rate will continue to fall. Inflation, though declining, is likely to remain above the European Union average.

Further progress in product and labour-market reform is essential to meet the objectives of the development strategy adopted for the South, to remove the inflation differential with the rest of the euro area and to enhance the external competitiveness of the whole territory. Reducing the burden of taxation as planned requires decisive control of public spending, mainly in the domain of health and social security expenditures.

Economic activity firmed in 2000, as strong exports and improving labour market conditions helped to support business and household confidence, notwithstanding the negative contribution of inventories and robust import growth. GDP growth was 2.9 per cent, close to double the average annual growth rate over the decade of the 1990s. The output gap fell to its lowest level since 1996.

Economic activity firmed in 2000…

Employment rose markedly in the course of 2000, due mainly to recovering output and the widening recourse to temporary and part-time contracts. With the number of job seekers continuing to fall, the rate of unemployment declined to 10 per cent in the first quarter of 2001, down from 11.4 per cent a year earlier. The forces underlying this progress were not uniform in their impact, however: in the North, the rate of unemployment fell to 4.2 per cent, pointing to a further tightening of labour conditions; in the South, though having declined, it was still 20.3 per cent, with the youth unemployment rate continuing to exceed 50 per cent.

… supporting the expansion of employment…

On the external side, the trade surplus fell further in 2000 as accelerating oil prices and currency weakness led to a terms of trade loss that more than offset the improvement in trade volumes. Excluding the oil component, the trade surplus

… and assisted by a strengthening of exports

Italy

Labour market conditions have improved markedly

Per cent — Millions

Employment[1] (right scale)
Unemployment rate[1] (left scale)

1998   99   2000   01
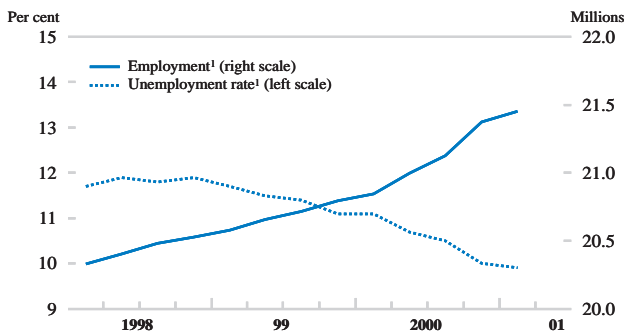
Inflation has risen but wage growth is moderate

Per cent

CPI inflation[2]
Hourly wage rate[2]

1998   99   2000   01
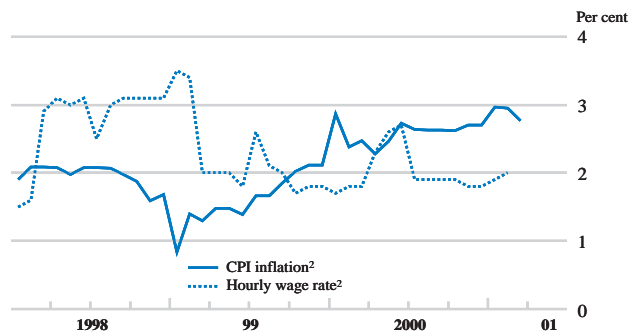
1. Seasonally adjusted.
2. Year-on-year percentage change.
Source: OECD.

————— Italy: **Employment, income and inflation** —————

Percentage changes

	1998	1999	2000	2001	2002
Employment	1.1	1.2	1.9	1.6	1.7
Unemployment rate[a]	11.9	11.5	10.7	10.0	9.2
Compensation of employees	-0.2	3.6	4.5	4.0	4.5
Unit labour cost[b]	-2.0	2.0	1.5	1.7	2.0
Household disposable income	3.2	3.0	4.5	4.3	4.5
GDP deflator	2.7	1.6	2.2	2.8	2.5
Private consumption deflator	2.1	2.1	2.9	2.7	2.2

a) As a percentage of labour force.
b) The figure for 1998 reflects the introduction of the regional tax (IRAP) which was accompanied by the partial
    abolition of the employers' compulsory contributions to the health care system.
Source: OECD.

widened in 2000, supported by strong exports of machinery and equipment, furniture, textiles and clothing – all goods in which Italian exporters are highly specialised.

Inflation has accelerated recently

After remaining stable for several months, the annual rate of inflation, as measured by the consumer price index, picked up to 3 per cent by early 2001, compared with 2.2 per cent a year earlier. The effect of rising import prices in 2000 may still not have come through fully, pointing to the possibility of residual inflationary pressures in the second half of the year. Wage growth has been fairly moderate, with only a negligible wage catch-up for purchasing power losses suffered in 2000. Combined with sizeable business-sector productivity gains, this has resulted in a very modest rise in unit labour costs for 2000 (less than 1 per cent in manufacturing).

Monetary conditions remain supportive…

Monetary conditions continue to be relatively supportive. Despite some recent appreciation, the real exchange rate has weakened over the last two years, while real short-term interest rates, at around 2 per cent measured by current inflation, are historically low, being nearly half a percentage point below the euro area average.

————— **Italy** —————

Though tightening, monetary conditions are still supportive

Per cent
— Real short-term interest rate[1] (left scale)
······ Yield gap[2] (left scale)
– – – Real effective exchange rate[1] (right scale)

1995 = 100
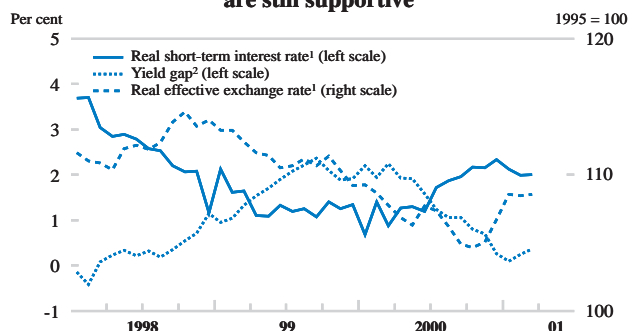
The leading indicator has turned down

1995 = 100

— Composite leading indicator
······ Industrial production
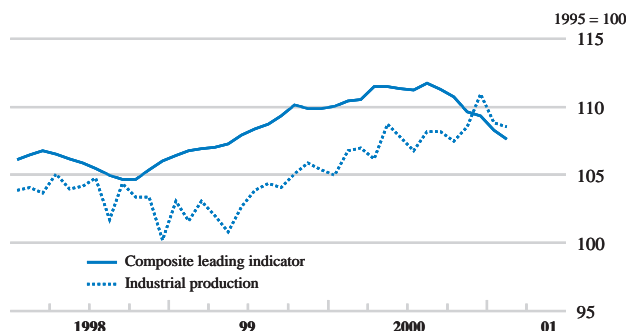
1. Deflated using the consumer price index.
2. Long-term interest rate minus short-term interest rate.
Source: OECD.

───────── Italy: **Financial indicators** ─────────

	1998	1999	2000	2001	2002
Household saving ratio[a]	12.8	11.5	10.3	9.7	9.5
General government financial balance [b]	-2.8	-1.8	-0.3	-1.3	-1.2
Current account balance [b]	1.8	0.7	-0.4	-0.3	-0.1
Short-term interest rate[c]	5.0	3.0	4.4	4.4	4.3
Long-term interest rate[d]	4.9	4.7	5.6	5.1	5.0

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) 3-month interbank rate.
d) 10-year government bonds.
Source: OECD.

Declining yields on government bonds have translated into lower costs of borrowing for both corporations and households.

The general government deficit for 2000 was 1.5 per cent of GDP (equivalent to 0.3 percentage points of GDP after taking into account the revenues from the sale of third-generation mobile phone licences, UMTS). This was 0.2 per cent over the target, despite higher than expected growth for the year. For 2001, the OECD projects some further slippage from the official target of 1 per cent of GDP. This reflects a less optimistic view as to the ability to control current expenditures (in particular for health) as well as the projection of slower real GDP growth than officially assumed. Taking into account the fiscal stimulus provided by the 2001 budget (tax cuts for households and business, increased benefits for lower-income groups and a revival in public work projects), OECD calculations point to a decline in the struc-

… and fiscal policy is also likely to be expansionary

───────── Italy: **Demand and output** ─────────

	1997	1998	1999	2000	2001	2002
	current prices trillion L.	Percentage changes, volume (1995 prices)				
Private consumption[a]	1 170.9	3.1	2.3	2.9	2.3	2.5
Government consumption	361.0	0.3	1.5	1.6	1.4	1.4
Gross fixed investment	362.8	4.3	4.6	6.1	3.0	4.2
Machinery and equipment	203.5	7.8	6.0	7.8	4.1	5.4
Construction	159.3	-0.2	2.8	3.6	1.4	2.4
Residential	88.8	-0.6	1.8	2.5	1.5	2.3
Non-residential	70.5	0.3	4.1	5.1	1.4	2.5
Final domestic demand	1 894.7	2.8	2.6	3.3	2.3	2.6
Stockbuilding [b]	12.0	0.3	0.4	-1.0	-0.2	0.1
Total domestic demand	1 906.7	3.1	3.0	2.3	2.0	2.7
Exports of goods and services	524.1	3.6	0.0	10.2	8.2	6.1
Imports of goods and services	443.6	9.0	5.1	8.3	7.7	7.1
Net exports [b]	80.5	-1.2	-1.3	0.6	0.3	-0.2
GDP at market prices	1 987.2	1.8	1.6	2.9	2.3	2.5
GDP at market prices in billion euros	1 026.3					

a) Final consumption in the domestic market by households.
b) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
Source: OECD.

Italy: **External indicators**

	1998	1999	2000	2001	2002
	$ billion				
Merchandise exports	245.5	236.1	238.3	261	281
Merchandise imports	209.2	212.4	227.5	253	273
Trade balance	36.4	23.6	10.9	8	9
Invisibles, net	- 14.6	- 15.0	- 14.8	- 12	- 10
Current account balance	21.8	8.6	- 3.9	- 4	- 2
	Percentage changes				
Merchandise export volumes[a]	2.6	1.8	10.2	8.2	6.2
Merchandise import volumes[a]	8.5	7.9	8.3	9.9	7.5
Export performance[b]	- 6.5	- 4.0	- 2.4	0.5	- 1.3
Terms of trade	3.7	0.8	- 7.4	- 0.6	1.1

a) Customs basis.
b) Ratio between export volume and export market of total goods.
Source: OECD.

tural primary surplus of close to half a percentage point of GDP. On the assumption of unchanged policies, the actual deficit is projected to fall further to 1.2 per cent of GDP by 2002.

Real GDP growth is expected to decelerate in 2001, picking up in 2002…

Real GDP growth is projected to slow to about 2¼ per cent in 2001, the effects of weaker exports being only partly offset by relatively strong domestic private consumption and capital investment. The private sector should benefit from continued low interest rates in real terms and from a demand-supportive fiscal policy stance. Slowing, but still strong employment growth, combined with rising households' incomes, should further help private consumption. An acceleration in activity is expected for 2002, reflecting the continuation of robust domestic demand and firmer world demand conditions. The rate of unemployment should decline over the projection period to close to 9 per cent in 2002. Even though the effects of the recent oil shock are assumed to dissipate in the projections, the inflation rate for 2001, measured on the basis of the consumption deflator, may be only slightly below the 2000 level. Core inflation is unlikely to fall over the projection horizon. A smaller invisibles deficit will contribute to a gradually improving current account balance, despite the impact of a further shrinking trade surplus.

… although there are risks in both the international and domestic environments

A major uncertainty derives from possibly slower export growth. Italian firms direct sizeable amounts of exports to the US and Asian markets, and are vulnerable in that respect. Domestically, there is a risk that the tight labour market might lead to high wage demands, especially in the North, which could be transmitted to the South, putting at risk the incipient recovery of that region. There are also risks on the fiscal side. Improvements in tax compliance could result in stronger than expected fiscal revenues, but pressures in spending could cause a deviation from the programme of fiscal consolidation and undermine confidence.

United Kingdom

Growth has slowed somewhat, against the background of a tight labour market and remarkably subdued inflation. The expansion is set to continue at a solid pace, however, supported by easing monetary conditions, tax cuts and accelerating public spending.

Downward risks surround this seemingly benign outlook, possibly justifying a further precautionary interest rate cut. A challenge on the fiscal and structural side is to ensure that the extra budgetary resources channelled into public services are used efficiently so as to bring about real improvements. More generally, structural policy should remain geared towards lifting productivity growth so as to narrow the gap vis-à-vis other advanced economies.

While GDP expanded by 3 per cent in 2000 as a whole, output growth slowed markedly during the second half of the year, falling well below potential in the final quarter. The weakness in the autumn might have been accentuated by exceptionally wet weather and disruptions in rail transport. It also reflected a very steep production drop in the oil and gas sector. In contrast, household confidence and consumption held up well and total domestic demand was remarkably strong in the second half, notwithstanding some inventory decline. Export growth also remained vigorous but so did import growth, so that external trade continued to exert a significant drag. The trade deficit for goods and services widened to 2 per cent of GDP in 2000, notwithstanding the boost to net oil sales imparted by higher oil prices.

Activity has been slowing down

Unemployment has continued to decline, to levels not seen in the United Kingdom for many years. On a labour force survey basis, the unemployment rate has come down to 5.2 per cent. At the same time, retail price inflation excluding mortgage interest payments also eased to historically low levels, and has now remained below the 2½ per cent target for almost two years. On a harmonised basis, consumer price inflation continued to hover around only 1 per cent, the lowest rate in the European Union. Several factors are helping to contain the impact of tight labour market conditions on price-setting, including the lagged effects of a strong exchange rate, intensifying competition in certain product markets, the first signs of the long-awaited pick-up in

Both unemployment and inflation are at historical lows

United Kingdom

Growth has slowed[1]
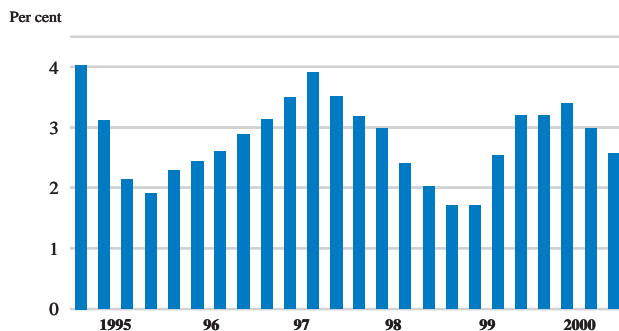
Per cent

Unemployment and inflation have reached new lows

Per cent   Per cent

Unemployment rate (left scale)
RPIX inflation[2] (right scale)
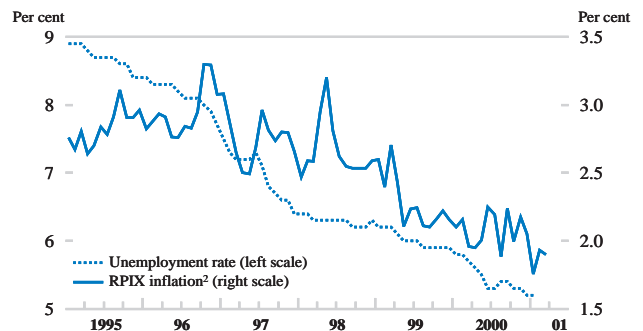
1. Real GDP, year-on-year percentage changes.
2. All items excluding mortgage interest payments, year-on-year percentage changes.
Sources: Office for National Statistics (ONS) and OECD.

United Kingdom: **Employment, income and inflation**

Percentage changes

	1998	1999	2000	2001	2002
Employment	1.1	1.3	1.0	0.6	0.4
Unemployment rate[a]	5.9	6.0	5.5	5.4	5.5
Compensation of employees	7.1	6.4	5.8	5.4	5.2
Unit labour cost	4.3	4.0	2.7	2.8	2.6
Household disposable income	2.5	5.2	4.0	5.0	4.9
GDP deflator	3.0	2.3	1.8	2.2	2.4
Private consumption deflator	2.4	1.6	0.8	1.9	2.2

a) As a percentage of labour force.
Source: OECD.

productivity and some indirect tax measures. Wage pressure has nonetheless built up in recent months, with some acceleration of earnings and settlements.

Monetary conditions have eased

Faced with mounting evidence of a deceleration in demand overseas, the Monetary Policy Committee of the Bank of England has cut the repo rate by 50 basis points so far in 2001, to 5½ per cent, in two steps of 25 basis points taken in February and April. The February cut was its first move since the rate increase one year earlier. Also contributing to easing monetary conditions, sterling depreciated by over 4 per cent in effective terms in the five months to March 2001, mainly reflecting the euro's rebound. Even so, most estimates continue to suggest that sterling is overvalued. Long-term interest rates have been declining as well since early 2000 and have stayed below corresponding euro area averages. As a result, the yield curve has remained negatively sloped.

The fiscal stance has again been tighter than projected in the Budget…

As in the three previous years, the fiscal year (FY) 2000-01 ended with government net lending far exceeding the budgeted level. Besides the deliberately cautious assumptions underpinning these budgets, this outcome reflected positive surprises on the revenue side, in particular as regards income taxes, and, to a lesser extent, under-

United Kingdom

Monetary conditions have eased somewhat

Per cent — Official repo rate (left scale)
······ Long-term interest rate (left scale)
- - - Nominal effective exchange rate (right scale)
1995 = 100
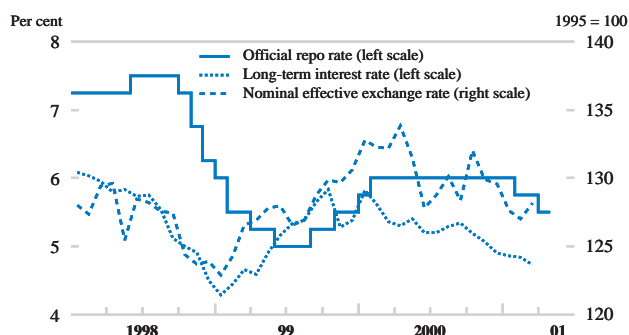
The fiscal balance has consistently been better than budget projections[1]

Per cent
■ Budget
■ Outcome[2]
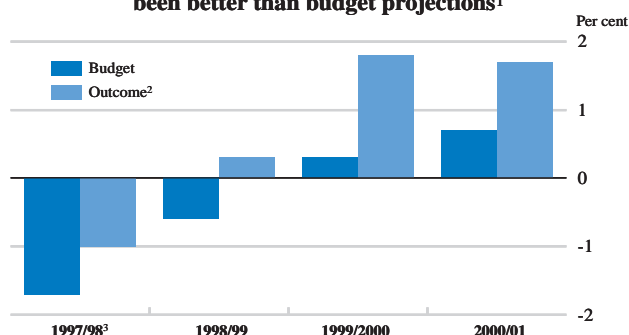
1. Net lending in per cent of GDP.
2. Estimated as of March 2001 by HM Treasury.
3. July 1997 Budget.
Sources: Bank of England, HM Treasury and OECD.

United Kingdom: **Financial indicators**

	1998	1999	2000	2001	2002
Household saving ratio[a]	5.8	5.2	4.7	4.8	4.9
General government financial balance [b]	0.4	1.3	1.9	1.2	0.9
Current account balance[b]	0.0	-1.1	-1.7	-2.1	-2.2
Short-term interest rate[c]	7.3	5.4	6.1	5.4	5.3
Long-term interest rate[d]	5.5	5.1	5.3	5.0	5.0

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) 3-month interbank rate.
d) 10-year government bonds.
Source: OECD.

shooting in social security and debt interest payments. With a cyclically-adjusted surplus approaching 2 per cent of GDP in 2000 and a net debt ratio down to 33 per cent of GDP, the United Kingdom's public finances are in better shape than in most other European Union countries and in a healthier position than at any time in the 1990s.

Fiscal consolidation has taken the form of increases in taxes and expenditure compression even in areas where public funding was reckoned to be insufficient. Accordingly, the 2000 Spending Review and the March 2001 Budget foresee a sizeable expenditure boost, notably for transport, education and health. Commitments are also increased in favour of low-income working families, pensioners and parents of new-born children. Benefiting all income tax payers, the bottom income tax band is widened on top of indexation for inflation. As a result, the government is projecting a cumulative 1.7 percentage point of GDP decline in the cyclically-adjusted surplus over FY 2001-03, against the background of a small positive output gap. The

… while public spending is picking up

United Kingdom: **Demand and output**

	1997	1998	1999	2000	2001	2002
	current prices billion £	Percentage changes, volume (1995 prices)				
Private consumption	517.9	4.0	4.4	3.7	3.0	2.6
Government consumption	148.4	1.1	4.0	2.7	4.3	3.3
Gross fixed investment	134.2	10.1	5.4	2.6	3.3	3.0
Public[a]	11.5	3.7	-2.8	10.0	7.0	6.7
Private residential	29.6	-0.3	0.6	0.4	1.6	2.9
Private non-residential	93.0	13.8	7.5	2.4	3.3	2.6
Final domestic demand	800.5	4.5	4.5	3.3	3.3	2.8
Stockbuilding [b]	4.4	0.1	-0.8	0.4	-0.1	0.0
Total domestic demand	804.9	4.6	3.8	3.7	3.1	2.8
Exports of goods and services	229.3	2.6	4.0	8.4	6.6	7.0
Imports of goods and services	228.8	8.8	8.1	9.6	7.7	7.0
Net exports [b]	0.5	-2.0	-1.5	-0.8	-0.8	-0.4
GDP at market prices	805.4	2.6	2.3	3.0	2.5	2.6

a) Including nationalised industries and public corporations.
b) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
Source: OECD.

United Kingdom: **External indicators**

	1998	1999	2000	2001	2002
	$ billion				
Merchandise exports	271.9	268.9	283.4	293	320
Merchandise imports	305.9	311.2	327.0	346	379
Trade balance	- 34.1	- 42.4	- 43.6	- 53	- 58
Invisibles, net	33.9	26.4	19.1	24	25
Current account balance	- 0.2	- 16.0	- 24.5	- 29	- 33
	Percentage changes				
Merchandise export volumes[a]	1.5	3.7	9.2	5.4	7.2
Merchandise import volumes[a]	9.4	7.3	9.2	7.4	7.3
Export performance [b]	- 6.6	- 2.5	- 2.9	- 2.1	- 0.4
Terms of trade	1.7	0.8	0.2	- 0.8	- 0.1

a) Customs basis.
b) Ratio between export volume and export market of total goods.
Source: OECD.

OECD projection is for a somewhat smaller but still significant shift in the fiscal stance.[1] Net public debt would continue to fall, but only marginally.

Growth is projected to remain relatively robust

Over the next two years, growth is projected to revert to around trend, on the assumption of a small further interest rate cut and taking into account the aforementioned budget measures. Consumption is set to slow somewhat after several years of rapid increases stoked by rising asset prices and the household saving ratio to edge up from its recent trough. Consumption is nonetheless expected to be supported over the projection horizon by sustained confidence, itself underpinned by a robust labour market and continued strong income growth. The 10.8 per cent increase in the national minimum wage in October 2001 should also sustain consumption. With a somewhat less overvalued exchange rate, imports seem likely to decelerate more than exports, reducing the external drag on GDP. While unemployment is likely to remain around current levels, a small positive output gap and tight labour markets should lead to a gradual and limited increase in inflation to around target.

Risks are skewed downwards

The balance of risks surrounding this outlook is on the downside, owing more to international than to domestic uncertainties. Not only is there a risk that the US slowdown may be more abrupt or protracted than foreseen, but its impact on the United Kingdom could be larger than suggested by trade flows alone. This could happen via confidence effects or because faltering earnings of US firms in which British companies or banks hold a stake would depress the latter's profitability. In addition, the United Kingdom would be affected if the downside risks surrounding the outlook in the euro area were to materialise. Working in the opposite direction are risks that domestic demand would expand faster than potential output, stimulated by the easing of the macroeconomic policy stance and resilient consumer confidence. But the likelihood that such risks would dominate has lessened since *OECD Economic Outlook* 68.

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1. The government's projection is not strictly comparable with the OECD's, if only because the latter is based on calendar years.

Canada

Economic growth fell below its trend rate in late 2000 as export demand weakened and businesses reduced capital spending. Although tax cuts are providing support to activity, output growth is likely to remain sluggish through mid-2001, to pick up again, exceeding its potential rate, during the course of 2002. While developments in the United States pose a downside risk to the outlook, improved macroeconomic fundamentals together with the business sector's favourable financial condition have put the economy in a better position to cope with such external developments.

Given the re-emergence of some excess supply in the economy, recent interest rate cuts have been consistent with the official inflation-control target. Should new information point to persistent economic slack, however, further monetary easing might be needed to meet the target. Since fiscal policy is already supportive of growth through the government's medium-term tax-reduction programme, a tight rein on spending should be kept to ensure ongoing repayment of Canada's still high public debt.

Economic activity has weakened

Following two years of growth in the 5 per cent range, real GDP expanded by only 2½ per cent (annual rate) in the fourth quarter of 2000. The slowdown has been led by weakening US demand for Canadian products (especially automobiles) and was compounded by a sharp inventory correction and decline in business investment towards the end of the year. The latter occurred in the face of a continued rise in corporate profits, which reached their highest level in two decades as a share of GDP. The decline in investment was entirely due to the machinery and equipment component, which fell sharply following exceptionally strong growth (driven by spending on computers) averaging more than 20 per cent in the first three quarters of the year. Underpinned by healthy real disposable income growth, private consumption has remained robust except for spending on motor vehicles, which fell back as dealer incentives became less attractive. With demand shifting towards Canadian-produced goods and services, the current account surplus continued to widen, exceeding 2 per cent of GDP in the fourth quarter of 2000.

Inflation has remained under control

As employment has only just begun to respond to the slowdown in output growth, productivity growth has slowed. While this has put upward pressure on unit labour costs, wage increases have remained relatively moderate. In recent months, the underlying rate of wage growth appears to have been about 3½ per cent,

Canada

Growth has slowed markedly
GDP volume growth
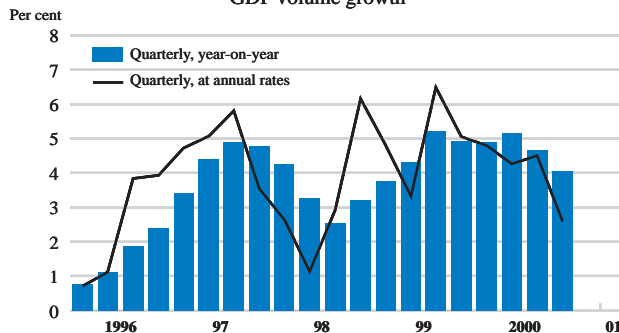
Inflation may have peaked
Year-on-year change
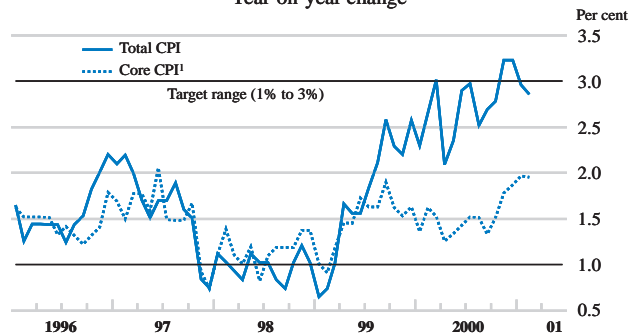
1. Excluding food, energy and the effect of indirect taxes.
Source: Statistics Canada.

Canada: **Employment, income and inflation**

Percentage changes

	1998	1999	2000	2001	2002
Employment	2.6	2.8	2.6	1.2	1.3
Unemployment rate[a]	8.3	7.6	6.8	7.2	7.2
Compensation of employees	4.7	5.1	7.2	5.0	4.8
Unit labour cost	1.4	0.5	2.4	2.6	1.6
Household disposable income	3.9	4.0	5.6	5.6	5.1
GDP deflator	-0.6	1.6	3.6	2.1	2.1
Private consumption deflator	1.0	1.3	1.8	2.4	2.0

a) As a percentage of labour force.
Source: OECD.

somewhat above headline inflation which has been pulled up by the substantial rise in energy prices over the past year. Although the Bank of Canada's indicator of core inflation (the annual increase in the consumer price index excluding food, energy and the effect of indirect taxes) has also picked up of late, it has so far only reached the mid-point of the official 1 to 3 per cent inflation-control range. To some extent its upward move reflects efforts by motor vehicle manufacturers and dealers to reduce price discounting, but more fundamentally it would also seem to provide additional evidence that the economy was operating at full capacity before the recent slowdown in activity.

Monetary policy has been eased

In the light of the deteriorating outlook for the US economy, the Bank of Canada lowered its target for the overnight interest rate by 25 basis points in late January. The decision to ease the monetary stance less aggressively than the Federal Reserve reflected the Bank's assessment that economic slack had been largely absorbed along with the fact that inflation had accelerated a little faster than expected. However, in view of increasing downside risks to US demand and new information suggesting that the underlying momentum in the Canadian economy was less strong than previously assumed, the authorities then reduced their target for the overnight rate by 50 basis points in early March, and again by 25 points in mid-April, bringing it down

Canada

Monetary policy has been relaxed recently

Per cent

— Canadian target overnight interest rate
······ US target Federal funds rate
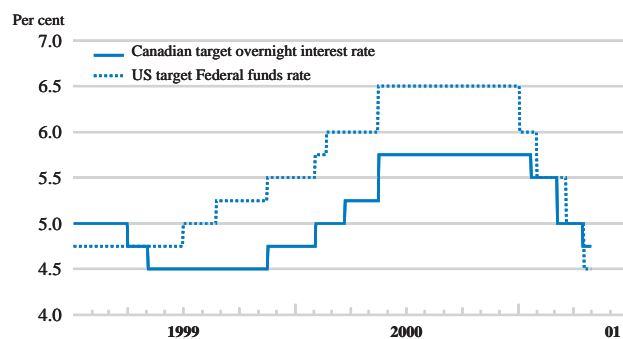
A comfortable budget surplus has been achieved

% of GDP

■ General government net lending
— Federal government net lending
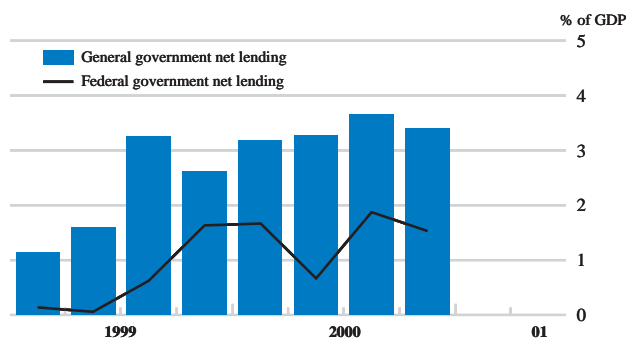
Sources: Statistics Canada, Bank of Canada and US Federal Reserve.

––––– Canada: **Financial indicators** –––––

	1998	1999	2000	2001	2002
Household saving ratio[a]	6.1	5.4	5.2	5.6	5.9
General government financial balance [b]	0.2	2.2	3.4	2.6	2.2
Current account balance [b]	-1.8	-0.4	1.8	1.6	1.7
Short-term interest rate[c]	5.0	4.9	5.7	4.7	4.6
Long-term interest rate [d]	5.5	5.7	5.9	5.4	5.3

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) 3-month prime corporate paper.
d) Over-10-year government bonds.
Source: OECD.

to 4¾ per cent. With the Canadian dollar having weakened again following its some-what stronger tone around the turn of the year and with interest rates having fallen, there has been a marked easing in overall monetary conditions in recent months. While assuming unchanged exchange rates, the projections incorporate a further small cut in interest rates in the near term, followed by a modest increase in mid-2002 when activity is projected again to approach potential output.

Reflecting buoyant economic activity over most of 2000, general government net lending increased further, reaching 3½ per cent of GDP. The federal budget surplus widened to 1½ per cent of GDP (national accounts basis). This was achieved despite a slight easing in the fiscal stance, as measured by the change in the cyclically-adjusted primary balance, following six consecutive years of restraint. A first round of tax reductions at the federal level and ongoing provincial tax cuts contributed.

Fiscal policy should bolster economic growth

––––– Canada: **Demand and output** –––––

	1997	1998	1999	2000	2001	2002
	current prices billion C$	Percentage changes, volume (1992 prices)				
Private consumption	512.5	2.9	3.5	4.0	2.7	2.7
Government consumption	171.7	1.6	1.3	2.4	1.7	1.5
Gross fixed investment	167.9	3.4	10.1	11.2	3.7	5.8
Public[a]	18.5	1.4	15.9	16.2	4.6	3.5
Residential	45.1	-2.0	6.6	1.6	2.8	4.2
Non-residential	104.2	6.1	10.5	14.0	3.8	6.7
Final domestic demand	852.1	2.8	4.4	5.2	2.8	3.2
Stockbuilding[b]	10.6	-0.5	-0.2	0.3	-0.2	0.1
Total domestic demand	862.7	2.2	4.2	5.5	2.5	3.2
Exports of goods and services	346.5	8.9	10.0	9.6	4.0	6.8
Imports of goods and services	331.5	6.1	9.4	12.0	4.7	7.0
Net exports[b]	15.0	1.1	0.4	-0.7	-0.2	0.0
Error of estimate[b]	0.2	0.0	0.0	0.0	0.0	0.0
GDP at market prices	877.9	3.3	4.5	4.7	2.3	3.2

a) Including nationalised industries and public corporations.
b) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
Source: OECD.

Canada: **External indicators**

	1998	1999	2000	2001	2002
			$ billion		
Merchandise exports	217.4	242.8	281.2	286	308
Merchandise imports	204.6	220.1	244.5	250	270
Trade balance	12.8	22.8	36.6	36	38
Invisibles, net	- 23.8	- 25.1	- 23.9	- 25	- 25
Current account balance	- 11.0	- 2.3	12.7	11	13
			Percentage changes		
Merchandise export volumes[a]	8.5	11.0	10.4	3.9	6.9
Merchandise import volumes[a]	7.3	10.4	12.9	4.8	7.2
Export performance[b]	- 1.5	- 0.9	- 3.2	- 1.6	0.1
Terms of trade	- 3.2	3.2	6.6	0.3	0.0

a) Customs basis.
b) Ratio between export volume and export market of total goods.
Source: OECD.

The fiscal stimulus to the economy will be more pronounced this year and next as the federal government's medium-term tax-reform programme gathers momentum. Together with the effects of slower growth, this will result in some decline in the general government surplus, which should nevertheless remain substantial.

After a growth pause, activity should strengthen again…

Economic trends observed in late 2000 – sluggish export demand and business investment outlays, together with an inventory correction – seem to have continued in the early part of this year. The resulting drag on activity appears to have been partly offset, however, by relatively robust household spending on consumer goods and housing, owing to the fiscal boost to disposable income and lower mortgage rates. From mid-year, some moderate recovery in growth in the United States and the transmission of monetary easing at home should make for a revival in activity as aggregate demand becomes more broadly based. Despite slower productivity gains, the temporary setback to growth is likely to entail some rise in unemployment to beyond its structural rate. Combined with renewed slack in product markets, which will probably not be taken up before late in the projection period, this should ensure that inflation converges to the mid-point of the official target band, although further modest increases in the near term in response to past capacity pressures cannot be excluded. The external balance is expected to weaken a bit, due to terms-of-trade losses and declining real net exports, but is projected to remain in comfortable surplus.

… but downside risks exist

Risks to the outlook would seem to concern mainly developments in the United States. Given the strong trade linkages between the two countries – last year 86 per cent of Canada's merchandise exports went to its neighbour – a US recession would obviously have serious consequences. Apart from the direct trade effects, confidence and thus spending propensities would be adversely affected. On the other hand, in most respects the economy is now better positioned to withstand an international downturn than it was in the early 1990s. It would thus seem to be important to continue to focus on reducing the few remaining imbalances that still leave Canada vulnerable to external shocks, notably high public-sector indebtedness.

Australia

Economic growth slowed in the second half of 2000, reflecting a fall in domestic demand, which was induced mainly by the bringing forward of housing investment ahead of the introduction of the Goods and Services Tax in July. Employment weakened and unemployment increased, while underlying inflation remained low, despite the leap induced by the new tax in headline inflation. Given the absence of major imbalances, the slowdown is expected to be temporary with growth at 2 per cent, in 2001, although external developments pose an important downside risk.

Nevertheless, there is room for further monetary policy support if the slowdown turns out more severe than expected. Looking further ahead, budgetary pressures looming from health expenditure and future pension liabilities should not be allowed to undermine the budget consolidation so far achieved. Structural reforms should be continued on a broad front, to safeguard the achieved high trend productivity growth and further reduce structural unemployment.

Following strong activity in the first half of 2000, real GDP growth slowed quite sharply thereafter and fell in the fourth quarter, for the first time since mid-1991. This profile was heavily influenced by the transition to the new Goods and Services Tax (GST)[2] on 1 July, as dwelling investment had been brought forward to avoid taxation under GST and fell steeply in the second half of 2000. The ending of the boost to demand generated by the Olympic Games also accentuated the slow-down. In addition, higher world energy prices had a negative effect on household finances and confidence, while the weakening in the US economy depressed the business climate.

Domestic demand has weakened

Employment growth had been temporarily raised by the Olympics but subse-quently fell sharply, the reversal being most pronounced for part-time work. The unem-ployment rate has risen by ½ percentage point since mid-2000, reaching 6¾ per cent in the first quarter of 2001, while the number of job vacancies has declined. Headline inflation jumped to an annual rate of around 6 per cent in the second half of 2000 and in early 2001, mainly as a consequence of GST, although higher oil prices also contributed.

Employment weakened and unemployment increased, while core inflation remains low

Australia

Domestic demand has weakened
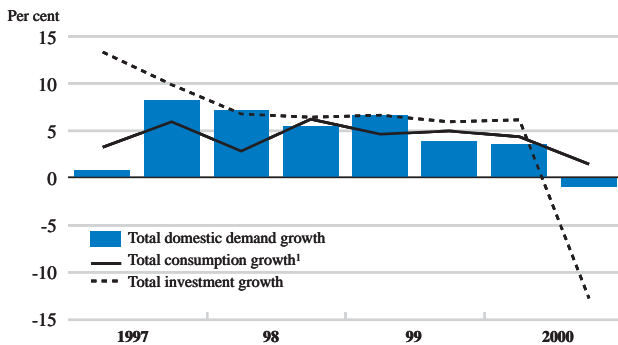
Exports remained robust
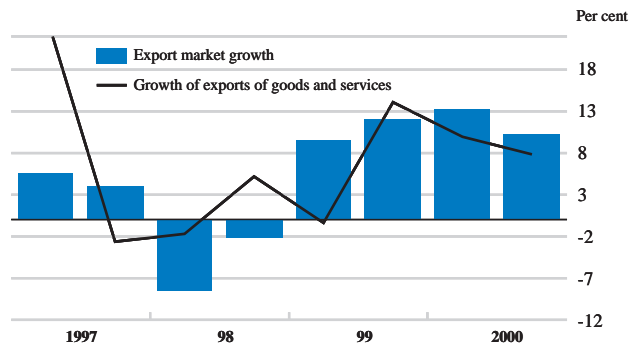
1. Private and public consumption.
Source: Australian Bureau of Statistics.

2. The GST is a value-added tax.

Australia: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion A$	Percentage changes, volume (1998/99 prices)				
Private consumption	325.8	4.6	5.2	3.5	2.4	3.2
Government consumption	98.7	4.0	4.8	4.6	2.6	3.1
Gross fixed capital formation	126.5	7.5	6.4	1.1	-1.7	5.7
Final domestic demand	551.0	5.2	5.4	3.1	1.5	3.7
Stockbuilding *a*	- 4.5	1.8	0.3	-0.6	-0.2	0.2
Total domestic demand	546.5	7.0	5.7	2.5	1.3	4.0
Exports of goods and services	112.3	-0.3	4.5	10.4	7.0	7.1
Imports of goods and services	110.5	5.9	9.3	7.4	3.7	7.5
Net exports *a*	1.8	-1.3	-1.1	0.4	0.6	-0.2
Statistical discrepancy *a*	0.0	-0.2	0.0	0.8	0.1	0.1
GDP at market prices	548.3	5.6	4.7	3.7	2.0	3.8
GDP deflator	_	0.1	1.0	3.3	2.7	2.6
Memorandum items						
Private consumption deflator	_	1.0	0.6	2.5	3.0	2.3
Unemployment rate	_	8.0	7.2	6.6	7.4	7.2
Household saving ratio *b*	_	2.1	1.9	2.7	3.6	4.4
General government financial balance *c*	_	0.6	1.0	-0.2	0.1	0.3
Current account balance *c*	_	-5.0	-5.8	-4.0	-2.7	-2.5

Note: National accounts are based on chain-linked data. This introduces a discrepancy in the identity between real demand components and the GDP. See "Sources and Methods" for further details.
a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income.
c) As a percentage of GDP.
Source: OECD.

Thus far, however, the significant effective depreciation of the Australian dollar since mid-1999 has had little discernible impact on consumer prices. Underlying (core) inflation is estimated to have run at about 2¼ per cent during the second half of 2000 and in early 2001. Moderate wage increases and a sharp fall in inflation expectations suggest that there have been no major second-round inflation effects from GST.

Monetary policy has eased…

With the economy slowing and little or no passthrough from GST or the earlier exchange rate depreciation, the Reserve Bank of Australia (RBA) cut the cash rate by accumulative 125 basis points between February and April 2001. Further rate cuts are incorporated in the projections, broadly parallel to action by the US Federal Reserve. Inflation is likely to stay comfortably within the RBA's 2 to 3 per cent inflation target band over the 2001-02 period.

… while the recent tax reform package and new spending initiatives should support domestic demand

Along with the introduction of a 10 per cent GST, the tax reform package of July 2000 provides substantial income tax cuts and welfare benefit increases in fiscal year 2000-01. Moreover, the 2001-02 Budget, due in May 2001, is set to introduce additional spending programmes, which should lend some support to economic activity.

Economic growth will fall short of potential in 2001 but should strengthen in 2002

With no major economic imbalances apparent, the current economic slowdown should be temporary. Company profitability is strong and corporate balance sheets are in good shape, which bodes well for business investment. In spite of the substantial indebtedness of households, their debt-service burden appears manageable, espe-

cially after the RBA's recent interest rate cuts. However, consumption growth may be damped by the adverse effect of slowing house-price increases on households' wealth and their capacity to borrow. A weakening labour market may also adversely impact on consumer confidence. But with export market growth remaining solid and a competitive exchange rate, exports are set to remain a major engine of growth. Altogether, GDP growth is projected to slow to 2 per cent in 2001 and accelerate to 3¾ per cent in 2002, thus approaching potential output growth. The current account deficit should narrow further, from 4 per cent of GDP in 2000, to 2½ per cent in 2002. More prolonged weakness in the US economy is the main risk to the outlook, although Australia would seem reasonably well prepared to cope with a global slowdown.

Austria

Economic growth was strong in 2000, but decelerated over the year as private domestic demand weakened following a deterioration in the terms of trade. The pace of economic activity is expected to moderate as exports slow in line with lower export market growth, and private consumption growth is reduced by higher effective taxes on income in 2001. Following GDP growth of 3¼ per cent in 2000, economic activity is projected to decelerate to about 2¼ per cent in 2001 before picking up slightly in 2002.

The government's objective of a balanced budget in 2002 is within reach if the announced fiscal consolidation programme is implemented rigorously. However, weaker-than-projected growth among Austria's main trading partners stemming from a harder landing of the US economy could slow economic activity. This would endanger the budget outlook and require the government to implement additional fiscal measures to accomplish its targeted fiscal turnaround.

The economic recovery is slowing…

Overall growth in 2000 came in at 3¼ per cent, but the economic recovery slowed during the year. Private consumption and investment decelerated under the impact of higher prices for oil and other imports and this in turn reduced import volume growth. Exports maintained their momentum in the first half of 2000, partly reflecting an improvement in the external competitiveness related to the weaker euro, before decelerating thereafter. For the year as a whole, however, the growth contribution from net exports increased somewhat.

… although employment creation is remaining strong

Strong employment creation in 2000 was concentrated in the private service sectors – resulting in a higher share of part-time employment – and further underpinned by public job creation schemes. Helped by slower expansion of the labour force, the unemployment rate (SNA definition) fell by half a percentage point to 4½ per cent in the latter part of 2000. Recent labour market reforms – reduced non-wage labour costs, stricter eligibility control of unemployment benefits and measures to increase the age of early retirement – should provide room for more employment by both stimulating labour demand and expanding labour supply. Collectively bargained wages accelerated a bit during 2000, reaching 2½ per cent in early 2001, accompanying an increase in core inflation (excluding food and energy). Consumer

Austria

Confidence is declining

% balance

— Business climate[1, 2]
······ Production plans[2]
- - - Consumer confidence[2]
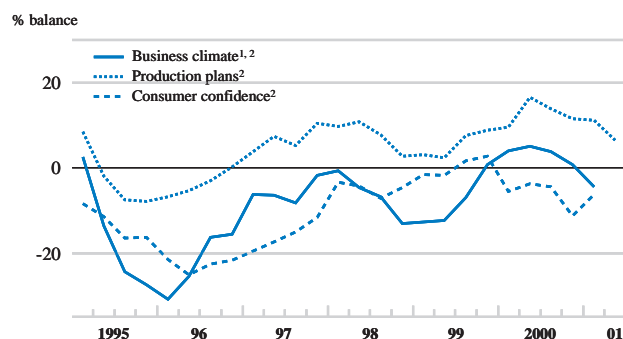
Monetary conditions are broadly neutral

Per cent   1995 = 100

- - - 3-month interbank[3] (left scale)
······ 10-year government bonds (left scale)
— Nominal effective exchange rates (right scale)
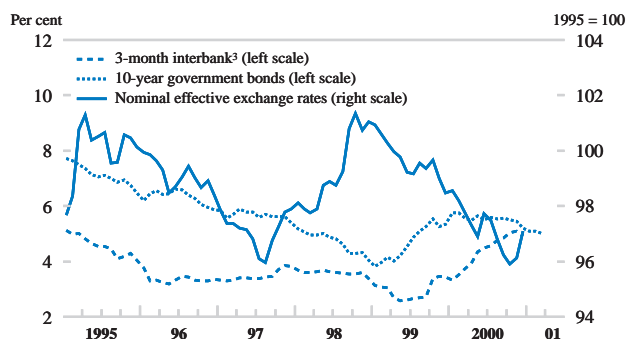
1. Anticipated business conditions.
2. Seasonally adjusted. Balance of positive-negative replies.
3. From January 1999, Euribor.
Sources: WIFO Institut für Wirtschaftsforschung and OECD.

─────── Austria: **Demand, output and prices** ───────

	1997	1998	1999	2000	2001	2002
	current prices billion Sch	Percentage changes, volume (1995 prices)				
Private consumption	1 440.9	2.9	2.3	2.7	2.0	2.3
Government consumption	494.5	2.8	3.2	2.3	1.5	1.0
Gross fixed capital formation	589.8	2.7	3.2	2.9	2.2	2.6
Final domestic demand	2 525.3	2.8	2.7	2.7	2.0	2.1
Stockbuilding *a*	17.9	0.0	-0.3	0.1	0.0	0.0
Total domestic demand	2 543.2	2.8	2.4	2.7	2.0	2.1
Exports of goods and services	1 074.3	5.5	7.6	9.8	6.0	6.5
Imports of goods and services	1 113.1	3.7	7.1	9.2	5.5	5.9
Net exports *a*	- 38.8	0.8	0.2	0.3	0.3	0.4
GDP at market prices	2 513.5	3.3	2.8	3.2	2.3	2.5
GDP at market prices in billion euros	182.7					
GDP deflator	_	0.8	0.9	1.2	1.5	1.7
Memorandum items						
Private consumption deflator	_	0.5	0.7	1.8	1.7	1.7
Unemployment rate *b*	_	5.7	5.3	4.6	4.6	4.4
General government financial balance *c*	_	-2.2	-2.1	-1.1	-0.6	0.0
Current account balance *c*	_	-2.5	-2.8	-3.2	-2.7	-2.4

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) See data annex for details.
c) As a percentage of GDP.
Source: OECD.

price inflation nevertheless declined from its peak of just above 3 per cent in late 2000 to 2¾ per cent in early 2001 as the effects of earlier rises in oil and other import prices began to peter out.

The fiscal stance is restrictive…

The government's fiscal consolidation programme, together with a stronger-than-projected economic recovery, lowered the 2000 budget deficit to 1.1 per cent of GDP (including third generation mobile telephone (UMTS) proceeds amounting to 0.4 per cent of GDP) -– half a percentage point lower than stipulated in the 2000 Budget. The government's fiscal consolidation measures in 2001 and 2002 – as outlined in the Austrian stability programme – total Sch 50 billion (1¾ per cent of GDP in 2000) with about half resulting from higher revenues in 2001 and the rest from reduced expenditures in 2002. The better budgetary outcome in 2000, combined with the consolidation measures, should allow the general government budget to balance by 2002. The government reports that the fiscal consolidation programme restricts economic activity by ¼ percentage point in both 2001 and 2002. Despite the appreciation of the euro, the concurrent reduction in long-term interest rates should keep monetary conditions broadly neutral.

… and economic activity is projected to slow…

The pace of economic activity is expected to slow over the projection period compared with last year. Exports growth is likely to be less buoyant under the impact of slower growth in world trade. Domestic demand growth should also be weaker as higher effective taxes on income – mostly arising from a widening of the tax base and the bringing forward of tax payments – temporarily slow private consumption growth. Investment in machinery and equipment should also weaken somewhat in response to lower capacity utilisation before recovering in 2002, while construction activity is expected to remain subdued with no recovery in housing demand or public spending

on infrastructure. On the other hand, slowing import growth should ensure a continued positive contribution to GDP from net exports. Overall, economic activity is projected to expand at an annual rate of about 2¼ per cent in 2001, before picking up slightly in 2002, underpinning continued employment growth and further declines in unemployment. A resulting pick-up in wage growth is likely to limit a substantial easing of core inflation, although headline inflation should fall half a percentage point in mid-2001 as the effects of higher indirect taxes in mid-2000 disappear.

… though downward risks may emerge

There is a downward risk to the export projection if a harder-than-projected landing of the US economy materialises. The resulting slowing of growth might make it difficult for the government to achieve its objective of a balanced budget by 2002, thus reinforcing the need for strict implementation of current plans and possibly requiring additional fiscal measures.

Belgium

Real GDP growth is projected to slow, from nearly 4 per cent last year, to a little less than 3 per cent in 2001-02, reflecting a loss of buoyancy in both net exports and domestic demand. The forthcoming income tax reform – which is scheduled to take place over five years – will increase household disposable income, and should contribute broadly to preserving wage moderation despite fairly tight labour markets. The general government budget was in balance in 2000 and is expected to move into a small surplus over the projection period, with the debt-to-GDP ratio falling below 100 per cent in 2002.

With the economy virtually at potential and with public-sector indebtedness still high, it is important that public spending be contained, and that budget surpluses be used to reduce the debt. By enhancing wage moderation and increasing incentives to work, the tax reform could have a significant positive effect on the economy, especially if accompanied by further structural measures to increase labour mobility.

Real GDP growth has progressively declined from a peak of 5.4 per cent (year-on-year) in the first quarter of 2000 to 3.1 per cent in the fourth. While this deceleration has primarily reflected a slowdown in export growth, terms-of-trade losses have also weighed on domestic demand. Recent data, including the monthly conjunctural indicators of the National Bank of Belgium, suggest that in the first months of this year, economic growth may have slowed to around 2¾ per cent. Job creation, which in 2000 reached 1¾ per cent – the best outcome in 40 years – has remained robust. The standardised unemployment rate has fallen to 6.8 per cent in February 2001, compared with 7.4 per cent a year earlier. Wage moderation has broadly continued, and the increase in labour costs has also been dampened by further cuts in employers' social security contributions. Consumer price inflation, after reaching a peak of 3.4 per cent (year-on-year) in September 2000, has progressively declined – to 2.1 per cent in March – as the impact of the terms-of-trade loss has begun to fade. The "health index" (which excludes alcohol, tobacco and oil products for transport and is used for the indexation of wages and social security contributions) has been more stable, and has prevented the mechanical pass-through of higher oil prices into wages.

After a deceleration, economic growth is stabilising at more sustainable rates

Belgium

Exports and growth have slowed

Per cent

Real GDP[1]
Exports, volume[1, 2]
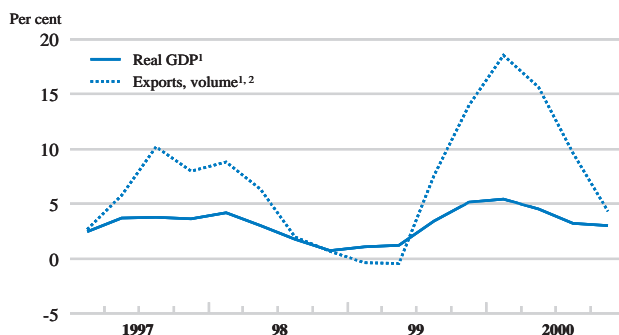
The labour market remains tight

Per cent · Per cent

Unemployment rate[3] (left scale)
Vacancy rate[4] (right scale)
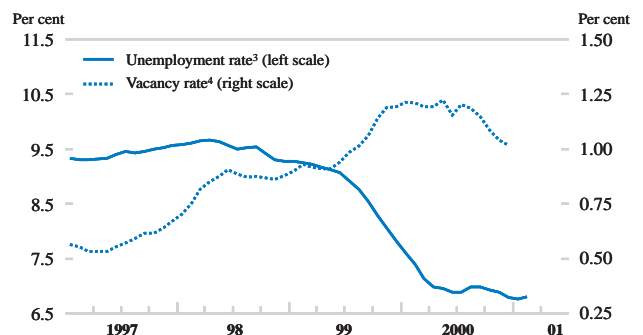
1. Year-on-year percentage changes.
2. Goods and services.
3. Standardised unemployment rate.
4. Unfilled vacancies as a percentage of the labour force.
Source: OECD.

——————— Belgium: **Demand, output and prices** ———————

	1997	1998	1999	2000	2001	2002
	current prices billion BF	Percentage changes, volume (1995 prices)				
Private consumption	4 694.7	3.3	1.9	3.1	2.5	2.4
Government consumption	1 857.2	1.4	3.4	2.0	1.4	1.3
Gross fixed capital formation	1 801.6	4.6	4.8	4.4	3.0	3.0
Final domestic demand	8 353.5	3.2	2.9	3.1	2.3	2.3
Stockbuilding [a]	- 20.0	0.6	-0.7	0.3	0.0	0.0
Total domestic demand	8 333.4	3.9	2.1	3.4	2.3	2.3
Exports of goods and services	6 608.3	4.4	5.2	11.8	7.7	6.5
Imports of goods and services	6 214.7	6.5	4.5	11.4	7.4	6.3
Net exports [a]	393.6	-1.2	0.7	0.8	0.6	0.5
GDP at market prices	8 727.0	2.4	2.7	4.0	2.8	2.7
GDP at market prices in billion euros	216.3					
GDP deflator	_	1.6	1.0	1.2	2.5	2.1
Memorandum items						
Private consumption deflator	_	1.0	1.2	2.5	1.7	1.7
Unemployment rate	_	9.5	8.8	7.0	6.8	6.5
Household saving ratio [b]	_	14.0	14.5	14.1	14.4	14.7
General government financial balance [c]	_	-0.9	-0.7	0.0	0.7	0.7
Current account balance [c]	_	4.1	3.9	4.4	5.3	6.1

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income.
c) As a percentage of GDP.
Source: OECD.

While fiscal policy is expected to be broadly neutral…

Under the assumption of an average annual rate of growth of real GDP of 2½ per cent, the 2001 Budget and the stability programme for 2001-05 set as a target a small overall surplus for both 2001 and 2002 – the first in 50 years. The OECD expects somewhat larger budget surpluses – around ¾ per cent of GDP – due to a slightly higher projected rate of growth and the inclusion of the proceeds of the recent sale of the third generation of mobile telephone (UMTS) licences (representing 0.2 per cent of GDP). On a cyclically-adjusted basis, however, the primary surplus (*i.e.* net of debt service) increases by somewhat less, to a little over 7 per cent of GDP in 2001, pointing to a broadly neutral discretionary stance of fiscal policy. The debt-to-GDP ratio is projected to fall below 100 per cent in 2002.

… the tax reform should enhance wage moderation and economic growth

The general wage negotiations (*accord interprofessionnel*) for the years 2001-02 seem to have broadly preserved wage moderation, since the "indicative norm" for the maximum increase in wage costs (7.0 per cent over the two years) set by the law on employment and competitiveness has again been accepted, including an additional one-off increase of 0.4 per cent for the sectors which have performed "especially well" over the past two years. The forthcoming income tax reform, which is scheduled to take place over five years, will increase household purchasing power by an estimated 1¼ per cent of GDP, making wage moderation more acceptable and increasing incentives to work, thereby enhancing economic growth.

The expansion is projected to continue, albeit at a slower, more sustainable pace

The economy is projected to grow at around 2¾ per cent both this year and next, virtually closing the output gap by 2002. Private consumption and business fixed investment are likely to decelerate but only moderately, as they will continue to be supported by strong job creation and good profitability, respectively. While the

contribution of net exports to growth is likely to decline, it should remain positive. The standardised unemployment rate may decline to 6.5 per cent in 2002. The private consumption deflator is projected to fall back from 2.5 per cent last year to around 1¾ per cent in 2002. Compensation per employee, on average, is projected to accelerate over the coming two years, reflecting smaller future reductions in employers' social security contributions. However, there is a risk that the national wage norm may not be fully respected in wage negotiations at the sectoral and firm levels. On the external side, the main risk is that export markets may be weaker than embodied in these projections.

Czech Republic

GDP grew by 3.1 per cent in 2000, spurred on by strong investment spending and an expansionary fiscal policy. Exports grew rapidly but imports, reacting to both strong domestic and export demand, increased even faster. This, coupled with higher oil prices, caused the current account deficit to widen sharply. Inflation picked up somewhat in response to oil and food prices, although high unemployment and a strong currency kept domestic cost pressures in check. Looking forward, domestic demand should strengthen further but the supply response will be restrained and, as a result, the current account deficit is expected to exceed 5 per cent of GDP.

Fiscal policy needs to be tightened by reducing mandatory expenditures if the emerging twin deficit problem is not to generate macroeconomic instability when privatisation inflows slow in 2003-04. This needs to be complemented by improving the speed and quality of legal decisions under the commercial code, which should strengthen already approved structural reforms and lay a foundation for sustainable growth in the future.

Strong investment and recovering consumption led to a moderate pick-up of growth in 2000…

Aggregate output increased by 3.1 per cent in 2000, spurred by a pick-up in personal consumption and surging investment, which grew by 1.4 and 5.2 per cent respectively. Despite strongly rising exports, imports picked up even more and as a result the contribution of net exports to GDP growth was negative. This, combined with a terms of trade deterioration as a result of higher oil prices and an appreciation of the currency, led the current account deficit to widen abruptly from 2.0 to 4.8 per cent of GDP.

… while inflation increased and unemployment remains high

Both headline and "net" inflation (*i.e.* changes in the prices of non-regulated goods and services) rose during 2000 reaching 4.6 and 3.0 per cent (year-over-year) respectively in early 2001. The hike in inflation was largely anticipated and, despite high unemployment, real wages in the business sector rose by 3.8 per cent – broadly in line with productivity. Employment continued to fall throughout the year, albeit at a slowing rate, but early-retirement incentives contributed to a commensurate drop in the labour force so that the standardised unemployment rate ended the year virtually unchanged at 8.8 per cent.

Macroeconomic policy remains easy, helping to swell domestic demand…

The recovery of domestic demand reflected a substantial easing of macroeconomic policy in 2000. Despite the pick-up in inflation, the Central Bank held policy rates constant throughout 2000 and actually lowered them in early 2001, reducing the real two-week repo rate to 1 per cent. As a result, and despite an appreciation of

Czech Republic

Domestic demand strengthened
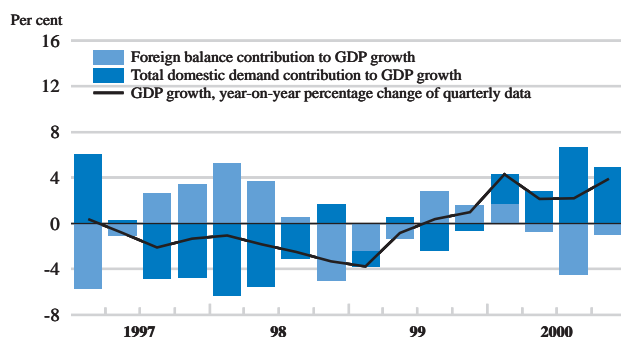
Budget and current account deficits widened
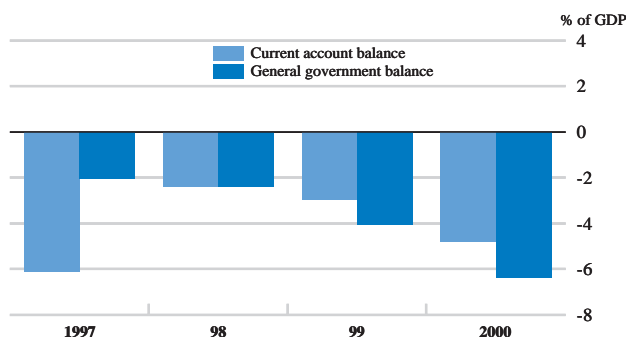
Sources: OECD; Czech National Bank; Czech Statistical Office.

—————— Czech Republic: **Demand, output and prices** ——————

	1997	1998	1999	2000	2001	2002
	current prices billion Kc	Percentage changes, volume (1995 prices)				
Private consumption	889.6	-2.6	0.5	1.4	2.4	2.5
Government consumption	331.8	-0.9	-0.1	-0.2	1.6	1.0
Gross fixed capital formation	514.4	-3.9	-4.4	5.2	6.5	6.5
Final domestic demand	1 735.8	-2.7	-1.1	2.2	3.5	3.5
Stockbuilding [a]	33.0	-0.4	0.1	2.1	0.1	0.9
Total domestic demand	1 768.8	-3.0	-0.9	4.1	3.4	4.2
Exports of goods and services	949.7	10.7	4.8	18.8	15.9	14.9
Imports of goods and services	1 049.7	7.9	4.0	18.7	15.3	14.8
Net exports [a]	- 100.0	1.1	0.2	-1.2	-0.7	-1.1
GDP at market prices	1 668.8	-2.2	-0.8	3.1	3.0	3.5
GDP deflator	_	10.2	2.7	1.1	4.4	4.5
Memorandum items						
Consumer price index	_	10.7	2.1	3.9	4.2	4.8
Private consumption deflator	_	9.6	2.2	4.3	4.2	4.8
Unemployment rate	_	6.5	8.8	8.8	8.4	8.1
Household saving ratio [b]	_	14.9	16.5	17.5	18.0	17.6
General government financial balance [c,d]	_	-2.4	-4.0	-6.3	-7.5	-7.5
Current account balance [c]	_	-2.4	-3.0	-4.8	-5.2	-5.5

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income.
c) As a percentage of GDP.
d) OECD estimate which adjusts official data so as to increase international and intertemporal comparability.
Source: OECD.

the currency, overall monetary conditions were relaxed. Meanwhile, the fiscal deficit widened sharply in 2000, reaching 6.3 per cent of GDP, and according to budget documents is expected to rise further to 7.5 per cent of GDP in 2001. While part of the increase reflects expenditures related to cleaning up the banking sector, even correcting for this factor, fiscal policy is estimated to have eased by 0.7 per cent of GDP in 2000 and 2.4 per cent in 2001.

Over the period 2001-02, both consumption and investment demand are expected to expand rapidly under the impact of the continued strong fiscal stimulus. Ongoing restructuring at the firm level and tight domestic credit conditions will constrain the economy's capacity to meet this demand. As a result, GDP is projected to grow by less than 3.5 per cent. Moreover, imports should continue to outpace exports and the current account deficit could rise to more than 5 per cent of GDP. Nevertheless, capital inflows associated with privatisation and foreign direct investment inflows will continue to place upward pressure on the currency. Although domestic policy considerations would argue for higher rates, the strength of the currency and the authorities' desire to limit speculative inflows will probably require the central bank to maintain interest rates at relatively low levels. By 2002, however, the rising current account deficit is projected to increase the risk premium on the Koruna, allowing interest rates to rise. Despite low interest rates, high unemployment and the strong currency should mute inflationary pressures.

… but growth will be moderate, as imports rise and the current account deficit widens

*The main risk concerns the
medium-term when a slowdown
in capital inflows could place
the currency at risk*

The main risks to this projection derive from the very relaxed stance of fiscal policy and the sustainability of the twin deficits over the medium term. Privatisation-related and other inflows of foreign capital are expected to finance the current account deficit in 2001 and 2002. But as the external deficit grows and privatisation inflows slow there is an increasing risk of an exchange rate reversal and the subsequent release of substantial inflationary pressures.

Denmark

Denmark experienced growth of nearly 3 per cent in 2000, driven mainly by booming exports and exceptionally strong investment increases. Wage pressures have eased slightly, while employment has risen and unemployment has remained steady at a low rate. Private consumption has been sluggish, but it is likely to pick up gradually, while public consumption will be significantly higher in 2001. But even with slower growth of 2 per cent over the projection period, output remains slightly above its potential and any additional demand could translate into accelerating wages and prices.

If demand picks up or monetary conditions ease further, a tighter fiscal stance might become necessary, despite the already comfortable budget surplus. In any event, the strong rise in public consumption this year is unhelpful, making future tax cuts harder to realise, even though these could strengthen work incentives.

The Danish economy expanded by around 3 per cent in 2000, led by very buoyant exports, stemming not only from strong market growth and additional capacity in oil and shipping, but also from the decline in the effective exchange rate from the beginning of 1999 until the latter part of 2000. Business investment in plant, machinery and transport also surged, reflecting a combination of high capacity utilisation and a steady pick-up in business confidence. Housing investment growth was high, but only because of repair work after the December 1999 hurricane: underlying construction trends remain weak, despite rising house prices during most of 2000. In contrast, real household disposable incomes experienced only weak growth in 2000, after a decline in 1999. Although confidence has risen slightly, consumers have remained reluctant to boost discretionary spending, perhaps because of the widespread expectation that house prices might soon begin to fall – a factor which has traditionally had a strong effect on consumption. Government consumption was also relatively subdued, coming in well under the government's long-run target annual growth rate of 1 per cent.

The economy grew strongly in 2000

Employment rose by close to 1 per cent in 2000, in large part mirroring the continuing strong expansion of business services. The standardised unemployment rate has fallen further, stabilising at just under 5 per cent. Wage growth has eased slightly, to just below 4 per cent per year, perhaps incorporating the widespread expectations

Unemployment has stabilised, while wage growth has eased

Denmark

Consumption remains subdued
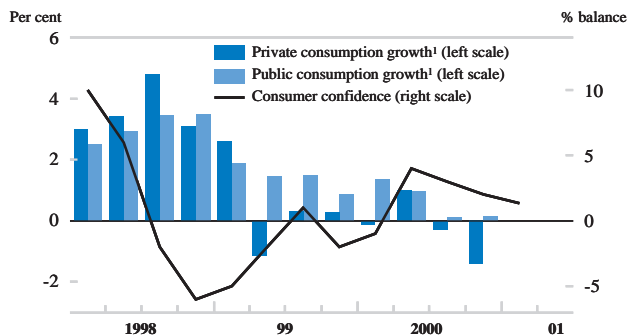
Exports continue to be strong
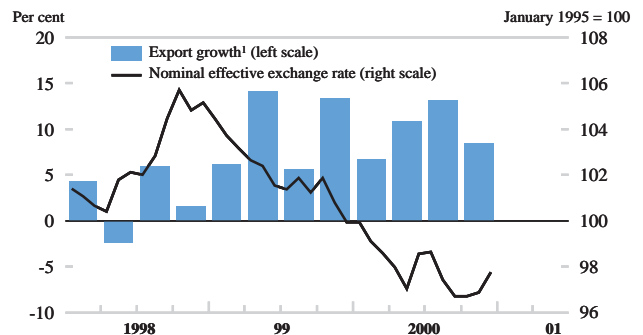
1. Year-on-year percentage change.
Sources: Statistics Denmark; OECD.

Denmark: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion Dkk	Percentage changes, volume (1995 prices)				
Private consumption	560.9	3.6	0.5	-0.2	1.4	1.7
Government consumption	284.5	3.1	1.4	0.6	1.9	1.5
Gross fixed capital formation	218.8	7.8	1.4	11.1	2.1	1.6
Final domestic demand	1 064.2	4.3	0.9	2.5	1.7	1.6
Stockbuilding [a]	12.9	0.2	-1.6	0.3	-0.1	0.0
Total domestic demand	1 077.1	4.5	-0.7	2.8	1.6	1.6
Exports of goods and services	406.9	2.4	9.7	9.8	7.1	6.3
Imports of goods and services	367.7	7.4	2.2	10.2	6.5	5.8
Net exports [a]	39.2	-1.7	2.8	0.2	0.5	0.4
GDP at market prices	1 116.3	2.8	2.1	2.9	2.0	2.0
GDP deflator	–	1.9	3.0	3.7	2.5	2.3
Memorandum items						
Private consumption deflator	–	1.8	2.6	3.1	2.2	2.0
Unemployment rate	–	5.2	5.2	4.8	4.7	4.8
Household saving ratio [b]	–	3.6	1.6	3.0	3.8	4.0
General government financial balance [c]	–	1.1	3.1	2.4	2.9	2.9
Current account balance [c]	–	-0.9	1.7	1.5	2.2	2.4

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income.
c) As a percentage of GDP.
Source: OECD.

of weaker economic activity overall when local wage agreements were being negoti-ated in the first half of last year. Consumer price inflation peaked in the second quar-ter of 2000, despite relatively strong contributions from higher energy and import prices in the second half of last year.

Monetary policy will reflect euro-area developments

As monetary policy remains dedicated to maintaining a fixed relationship between the Danish krone and the euro, official interest rates are assumed to decline in the first half of 2001 and remain steady over the rest of the projection period, in line with euro-area developments. The effective exchange rate has appreciated in recent months but long-term interest rates have fallen. Hence overall monetary con-ditions are likely to remain broadly neutral.

The budget surplus is substantial, despite a large increase in public consumption

Despite a smaller surplus of around 2½ per cent of GDP in 2000, public finances remain in good shape and debt reduction is likely to continue at a steady rate. Although the cyclically-adjusted primary surplus is projected to remain stable, central and local government budgets for 2001 project real increases in public con-sumption of close to 2 per cent, and around 6 per cent in public investment, probably to some extent reflecting pre-election spending priorities. This additional spending, if sustained, will reduce the scope for tax cuts in the future. It may also prove diffi-cult for the government to return to its long-term target for public consumption growth in 2002.

Growth will moderate, but overheating remains a risk

With the expansion in activity in 2000 reflecting a number of one-off factors which resulted in exceptionally strong investment spending, output growth is pro-jected to slow to around 2 per cent, despite significant budgeted increases in public consumption and an expected gradual pick-up in private consumption as real house-

hold incomes recover. Although exports are projected to expand more slowly, net exports continue to provide a positive contribution and the current-account surplus is projected to strengthen to around 2½ per cent of GDP. Unexpectedly strong growth in 2000 has accentuated the positive output gap, and with activity expanding at close to the rate of potential, the output gap may shrink only slowly. Any faster growth over the projection period may therefore lead to higher wage and price inflation as there is little scope for higher labour force growth without significant policy initiatives, and actual unemployment is already low. On the other hand, concerns about falling house prices could continue to dampen private consumption, and exports could be weakened by a greater-than-expected global slowdown.

Finland

Weaker export demand should lead to a substantial decline in economic growth from 5¾ per cent in 2000 to around 3¾ per cent in 2002. Labour market tensions are, nevertheless, likely to remain. With oil prices falling gradually, headline inflation should decelerate from 3¼ per cent in 2000 to slightly above 2 per cent in 2002.

A large part of the sharp improvement in the government budget in 2000 was due to exceptional revenue rises. These should not be used to permanently increase government spending and the government should stick to its medium-term budgetary framework. Though the tax cuts in 2001 and 2002 will strengthen the supply side, other structural policy measures are also needed to ensure a further fall in unemployment.

Surging exports spurred growth and labour market tensions have intensified

Boosted primarily by robust external demand – particularly for information and communication technology (ICT) products – output growth accelerated by 1.5 percentage points to 5.7 per cent in 2000. Production of the electronic equipment industry increased by a third. Nevertheless, unemployment fell only a little to 9.8 per cent, which is still above the euro area average. Vacancies, however, soared by 20 per cent in the twelve months to March 2001, pointing to increasing labour market tensions despite still high unemployment. In light of this, the pay rises agreed in the central wage settlement for 2001 and 2002 are moderate, even if stronger than elsewhere in the euro area. With oil prices falling, inflation (measured by the harmonised consumer price index) has decelerated from the peak of 3.4 per cent in October 2000 to 2.5 per cent in March 2001, marginally below the euro area average.

The government surplus rose steeply due to an exceptional increase in tax revenues

Direct tax revenues rose by a quarter in 2000 due to extraordinarily high one-off income tax receipts from share options as well as large increases in corporate taxes which were boosted by record profits, corporate restructuring and a 1 percentage point increase in the corporate tax rate. As a consequence, the general government surplus surged by 4.9 percentage points to 6.7 per cent of GDP. The surplus will fall somewhat as tax receipts on stock options will drop substantially in 2001, corporate profits are set to decline and income taxes are cut by 0.7 and 0.5 per cent of GDP in 2001 and 2002, respectively. Overall, the fiscal stance will become looser.

Finland

Electronic equipment production slows down[1]
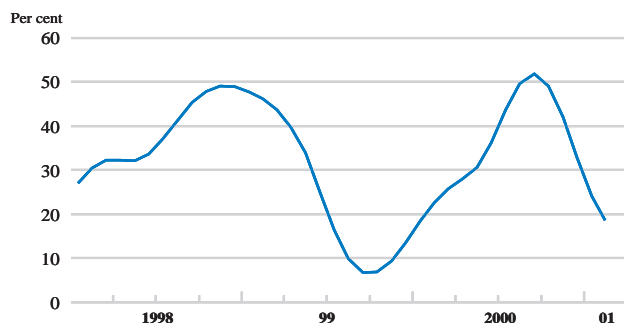
Unemployment[2] falls, but is still high
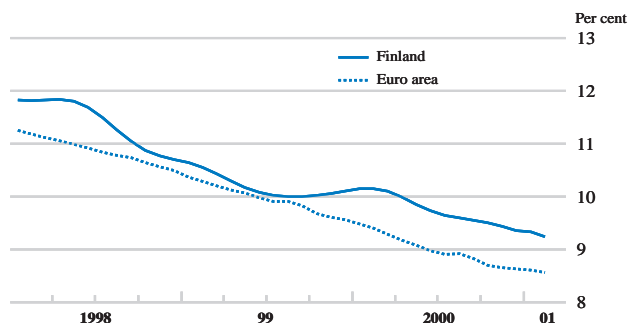
1. Electronic, electrical and optical equipment; trend series, year-on-year percentage change.
2. Standardised unemployment rate.
Sources: Statistics Finland, Eurostat and OECD.

──────── Finland: **Demand, output and prices** ────────

	1997	1998	1999	2000	2001	2002
	current prices billion FIM	Percentage changes, volume (1995 prices)				
Private consumption	323.6	5.1	3.7	3.0	2.9	2.6
Government consumption	142.6	1.7	2.0	0.4	1.1	0.9
Gross fixed capital formation	114.3	9.3	2.7	4.8	4.5	4.6
Final domestic demand	580.5	5.1	3.1	2.7	2.8	2.6
Stockbuilding [a]	2.8	0.7	-0.5	0.3	-0.1	0.0
Total domestic demand	583.3	5.8	2.5	3.0	2.6	2.6
Exports of goods and services	248.3	8.9	7.1	17.7	7.9	7.4
Imports of goods and services	196.5	8.5	4.3	12.8	6.2	6.1
Net exports [a]	51.8	1.0	1.6	3.5	1.7	1.5
GDP at market prices	635.5	5.3	4.2	5.7	4.0	3.7
GDP at market prices in billion euros	106.9					
GDP deflator	_	3.0	0.5	2.9	1.5	1.3
Memorandum items						
Private consumption deflator	_	1.7	1.3	3.2	2.3	2.1
Unemployment rate	_	11.4	10.2	9.8	9.1	8.6
General government financial balance [b]	_	1.3	1.8	6.7	5.3	5.6
Current account balance [b]	_	5.6	5.9	7.8	7.4	7.5

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of GDP.
Source: OECD.

Owing mainly to weaker external demand, economic growth is expected to slow down significantly to around 4 per cent in 2001 and 3¾ per cent in 2002. Business sentiment has already weakened substantially in the first months of 2001. Nevertheless, projected growth would still be significantly above the euro area average and the labour market would remain tight, with the unemployment rate declining to 8½ per cent in 2002. Although softening slightly, labour productivity growth should remain strong, with unit labour costs rising broadly in line with the euro area average, despite stronger wage increases. Notwithstanding some rebound in the saving ratio, private consumption, underpinned by income tax cuts, is likely to remain solid. The sharp stock market correction of roughly 50 per cent is unlikely to have a sizeable negative effect on private consumption, as non-residents hold about 70 per cent of the total stock market capitalisation and households have invested only a third of their financial assets in equities and mutual funds. With oil prices down, consumer price inflation is projected to decelerate substantially to slightly above 2 per cent by 2002. As export growth continues to surpass that of imports, the current account surplus is projected to remain high at around 7½ per cent of GDP.

Weaker external demand will lead to lower but still robust output growth

There is substantial uncertainty about the global demand for ICT products. As telecommunication equipment is nowadays the major Finnish export category, weaker world demand for such products constitutes a substantial downward risk to activity. Demand for mobile handsets may be weaker because a less favourable economic development elsewhere could lead to lower replacement sales and the results of coming innovations may be disappointing. Demand for mobile phone network systems may also be lower because telecom companies could postpone investment, partly due to the high costs of the third generation mobile telephone (UMTS) licenses.

The main downside risk concerns world demand for ICT products

Greece

Economic activity remained vigorous in 2000. Critical to its strength has been the qualification for the adoption of the euro. Output growth is set to remain broadly unchanged at around 4 per cent in 2001, but it should pick up in 2002. Inflation is expected to fall, reflecting lower energy prices, although an inflation differential will persist with the rest of the euro area, while the unemployment rate will remain among the highest in the OECD.

The easing of monetary conditions in Greece during 2000 in the run-up to joining the euro area makes it opportune to step up fiscal consolidation by reining in primary government expenditure. Bolder reforms in the labour market and a faster implementation of product-market reforms, including a more rapid liberalisation of network industries, would boost competitiveness and facilitate non-inflationary output growth over the medium term.

Growth has been robust and headline inflation has moved down

Economic activity remained resilient in 2000, with real GDP estimated to have grown by around 4 per cent, driven by strong exports and investment activity. Despite the waning impact of the car sales-tax cuts and the stock-market downturn, retail sales volumes grew more rapidly than in 1999, supported by lower interest rates and the boost from the September 1999 tax/benefit package. Residential construction activity continued to recover, following a slump in 1999. Consumer price inflation edged up to 4.1 per cent in November 2000, reflecting higher oil prices, the depreciation of the drachma, and the waning effects of indirect tax cuts. Inflation has since moved down, to 3.2 per cent in March 2001, with lower energy prices, but underlying inflation has increased due to the second-round effects from the oil price hike. However, the two-year national collective agreement, concluded in May 2000, ensures subdued labour-cost pressures until the end of 2001, by providing for an explicit catch-up clause in 2002 only.

Monetary conditions have eased…

Monetary conditions eased further in 2000, as the interest rate differential with the euro area was eliminated prior to Greece's entry into the single currency area in January 2001. The Bank of Greece reduced its key intervention rate by an additional 2.75 percentage points between October 2000 and the end of the year, bringing it down to 4.75 per cent. The liquidity of the banking system will increase between January 2001 and July 2002, as the Bank of Greece gradually releases banks' reserve

Greece

Core inflation has increased

Per cent

- Overall inflation[1]
- Core inflation[1, 2]
- Inflation differential with euro area
- Wholesale price inflation
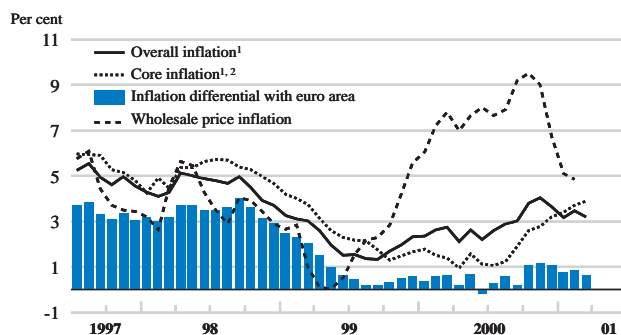
In joining the euro area interest rates have fallen sharply

Per cent / GRD/euro

- Interest rate[3] spread with euro area (left scale)
- GRD/euro exchange rate (right scale inverted)
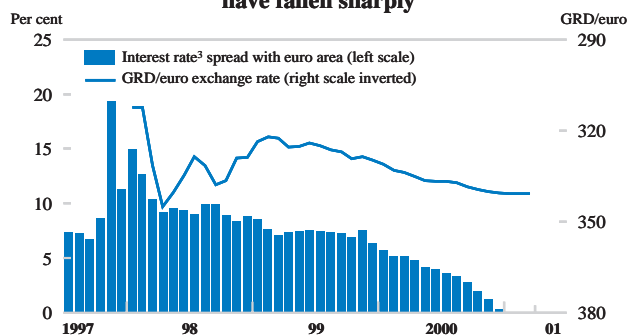
1. Harmonised index of consumer price. Year-on-year percentage change.
2. Excluding energy and seasonal food.
3. 3-month ATHIBOR and EURIBOR rates.
Sources: OECD; Eurostat.

―――― Greece: **Demand, output and prices** ――――

	1997	1998	1999	2000	2001	2002
	current prices billion Dr	Percentage changes, volume (1995 prices)				
Private consumption	23 905.9	3.1	2.9	3.0	2.9	3.1
Government consumption	5 018.9	1.7	-0.1	0.8	0.5	0.5
Gross fixed capital formation *a*	6 612.4	11.8	7.3	8.1	9.0	9.5
Final domestic demand	35 537.3	4.5	3.4	3.8	3.9	4.3
Stockbuilding *b,c*	64.4	0.2	-0.5	0.0	0.0	0.0
Total domestic demand	35 601.7	4.7	2.9	3.8	3.9	4.3
Exports of goods and services	6 432.0	5.9	6.5	12.3	9.4	8.9
Imports of goods and services	8 929.9	11.3	3.9	8.7	7.5	7.2
Net exports *b*	-2 497.9	-2.0	0.2	0.0	-0.3	-0.2
GDP at market prices	33 103.8	3.1	3.4	4.1	4.0	4.4
GDP at market prices in billion euros	97.1					
GDP deflator	_	5.2	2.9	3.1	3.1	2.8
Memorandum items						
Private consumption deflator	_	4.5	2.4	3.0	2.8	2.5
Unemployment rate	_	11.2	12.0	11.3	10.8	10.0
General government financial balance *d*	_	-2.5	-1.8	-0.9	0.0	0.7
Current account balance *d,e*	_	-3.2	-4.2	-7.1	-6.5	-6.2

a) Excluding ships operating overseas.
b) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
c) Including statistical discrepancy.
d) As a percentage of GDP.
e) On settlement data basis.
Source: OECD.

holdings that are in excess of their current reserve requirements, following the reduction in the required reserve ratio from 12 per cent to 2 per cent as from July 2000. In addition, liquidity will be boosted by the reduction in due course of the mandatory foreign currency deposits of the commercial banks to 2 per cent.

The general government deficit is estimated at 0.9 per cent of GDP in 2000, in line with the official projection. As in 2000, the 2001 budget includes tax cuts and various spending initiatives, with further tax reductions having been announced for 2002. Despite the tax package, the budget balance is expected to improve over the projection period, due mainly to lower interests payments and cyclical gains, moving to a surplus of 0.7 per cent of GDP in 2002. The structural primary balance (*i.e.* net of debt service) suggests that the fiscal stance will remain broadly neutral in 2001 and 2002.

… and the fiscal stance will be broadly neutral in 2001 and 2002

The current momentum of the economy should be sufficient to maintain a growth rate of about 4 per cent in 2001, despite the slowdown in world activity. Output growth is expected to firm to around 4½ per cent in 2002 as domestic demand strengthens. Low interest rates, tax cuts and the preparations for the 2004 Olympic Games are expected to boost private consumption and spur business and residential investment over the projection period. At the same time, company profitability should be supported by the moderate collective wage agreement, at least until the end of 2001, and by strong productivity gains. The private consumption deflator is projected to decline to 2.8 per cent this year, helped by the decline in oil prices, falling to 2½ per cent, in 2002. The main uncertainty attaches to the sustainability of low inflation in the face of strong growth and the expiration of one-off price-dampening effects. Capacity constraints and stronger wage drift in some fast-growing sectors could generate cost pressures. A downward risk to the outlook arises from the possibility of a significant downturn in the global demand.

Economic prospects are expected to improve in the projection period, but inflationary pressures could rise

Hungary

GDP grew by over 5 per cent in 2000. Strengthening domestic demand and high oil prices were reflected in a deteriorating trade balance, while inflation began to accelerate in the second half of the year and into 2001. Looking forward, domestic demand is projected to keep growth strong, also contributing to a widening current account deficit, while inflation is expected to come down only gradually from its currently high levels.

Plans to loosen fiscal policy by permanent increases to expenditures in 2001 and 2002 should be reconsidered, so as to combat inflationary pressures and ensure external balance. The government should resist the temptation to spend additional revenues associated with higher than budgeted-for inflation and instead allow the budget deficit to fall.

Growth in 2000 was strong, contributing to a worsening of the current account deficit in the second half…

GDP expanded by 5.3 per cent in 2000, spurred on by accelerating consumption and a fourth quarter pick-up in investment, which had been weak for much of the year. Nevertheless, the pace of growth was slower in the second half of the year, mainly because of an acceleration in imports. As a consequence, the trade balance deteriorated and this began to be reflected in the cash-flow-based current account numbers towards the end of the year.

… while falling unemployment was accompanied by an acceleration in inflation

With demand growing strongly, aggregate employment increased by 1 per cent and the unemployment rate declined to 6.4 per cent. But the latter was much lower in some regions where bottlenecks emerged. Real wages grew moderately in 2000 as a result of higher than expected price increases but have accelerated in 2001, partly in response to a 50 per cent hike in the minimum wage. This, plus a delayed response to higher oil prices has been reflected in an acceleration in both core and headline inflation, which reached 11 and 10.5 per cent respectively by March 2001.

The exchange rate regime caused monetary policy to react pro-cyclically in 2000, offset somewhat by a tighter fiscal stance

The stance of macro policy was broadly easy in 2000. Strong capital inflows, combined with the narrow exchange rate fluctuation band, forced the Central Bank to lower interest rates pro-cyclically in 2000. As a result, real interest rates were low and despite the decision to reduce the rate of crawl, overall monetary conditions remained loose. In an effort to increase their capacity to combat inflation more directly, the authorities widened the exchange rate's fluctuation band from 4.5 to 30 per cent on 4 May 2001 and the currency has since appreciated by about 3 per cent. The easing of monetary policy the year before was partly offset by a fiscal tightening as the

Hungary

Disinflation has stalled
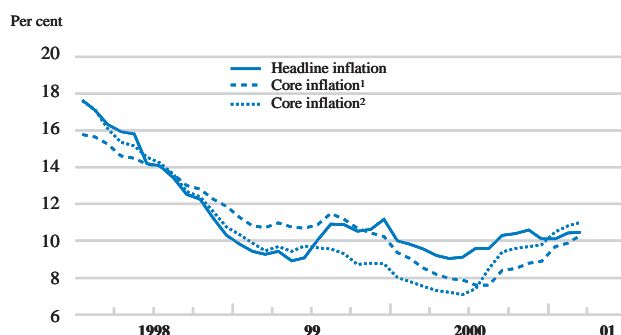
The trade deficit has widened
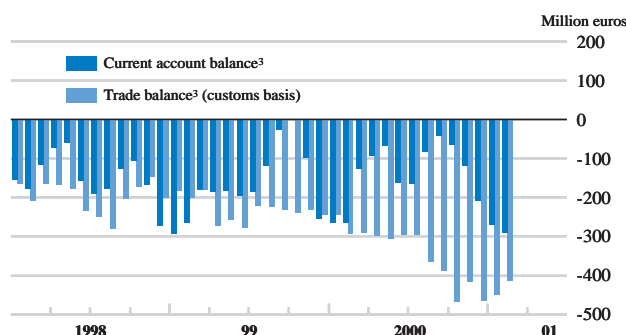
1. As measured by the Central Statistical Office.
2. As measured by the National Bank of Hungary.
3. Three-month moving averages.
Sources: OECD, Central Statistical Office; National Bank of Hungary.

Hungary: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion HUF	Percentage changes, volume (1995 prices)				
Private consumption	4 206.2	4.8	5.1	3.8	5.0	5.0
Government consumption	1 964.7	2.8	2.5	1.5	4.1	4.0
Gross fixed capital formation	1 898.9	13.3	6.6	6.7	6.7	6.8
Final domestic demand	8 069.8	6.3	4.8	4.0	5.2	5.2
Stockbuilding *a*	467.9	1.9	-0.2	1.4	0.8	0.6
Total domestic demand	8 537.7	7.8	4.3	5.1	5.7	5.4
Exports of goods and services	3 885.6	16.7	13.2	21.8	15.0	11.1
Imports of goods and services	3 882.6	22.8	12.3	21.1	15.4	11.7
Net exports *a*	3.0	-2.9	0.1	-0.1	-0.7	-0.8
GDP at market prices	8 540.7	4.9	4.5	5.1	5.1	4.7
GDP deflator	_	12.6	9.0	7.8	9.1	7.2
Memorandum items						
Consumer price index	_	14.2	10.0	9.8	9.4	8.0
Private consumption deflator	_	13.3	10.5	9.7	9.4	8.0
Unemployment rate	_	8.0	7.1	6.5	6.3	6.1
General government financial balance*b,c*	_	-6.1	-5.3	-3.1	-4.0	-4.4
Current account balance *b*	_	-4.9	-4.3	-3.3	-3.7	-4.3

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of GDP.
c) OECD estimate which adjusts official data so as to increase international and intertemporal comparability.
Source: OECD.

general government deficit fell to about 3 per cent of GDP thanks to stronger than expected revenues. However, the two-year budget for the period 2001-02, which includes tax cuts and substantial new spending measures, implies an important loosening of the fiscal stance as the deficit rises to just under 4½ per cent of GDP in 2002.

Output is expected to continue growing rapidly and progress on disinflation will be moderate

Looking forward, GDP is projected to expand by 5 per cent in 2001 and somewhat less rapidly in 2002. Stimulated by recent wage hikes and government spending, domestic demand should remain the driving force behind growth. Exports are expected to expand rapidly, but less quickly than in the past because of reduced foreign demand, emerging capacity constraints and a slowdown in the rate at which new capacity comes on line. Imports should grow more quickly, resulting in a widening of the current account deficit to about 4½ per cent of GDP this year and 5 per cent in 2002. Despite the rapid pace of growth, increased labour force participation is expected to moderate the fall in unemployment and, given strong wage increases, inflation is unlikely to subside quickly despite the impact of lower energy prices.

Stronger wage growth or weaker exports risk yielding a further deterioration in the external balance

A stronger than projected reaction of private-sector wages to tightening labour conditions and/or spillover effects from rising minimum and government-sector wage levels could boost domestic demand further. This, in turn, could result in additional inflationary pressures and a further worsening of the current account deficit. Alternatively, European demand for Hungarian exports could be weaker than projected which would also impact the current account but tend to reduce aggregate activity and inflationary pressures. In either case, a higher current account deficit would be likely to lead to an increase in the risk premium on the currency and higher interest rates. Finally, the recent exchange rate regime change and the subsequent appreciation of the currency may result in a tightening of monetary conditions and lower levels of activity and inflation than projected here.

Iceland

Although the pace of economic expansion slowed slightly last year, there was still rising pressure on capacity that contributed to a surge in inflation and generated a current-account deficit of over 10 per cent of GDP. Output is expected to slow markedly this year, in part reflecting a cutback in the allowable fish catch. With rising unemployment, inflationary pressures are projected to ease somewhat further but remain greater than those of trading partners.

The exchange-rate band has recently been replaced by a medium-term inflation target of 2½ per cent, with the Central Bank given the independence to set interest rates to meet that objective. Monetary policy should remain restrictive and might need to be tightened further should inflation fail to move toward the target. The government should play its part in restraining demand and keep fiscal policy tight by ensuring that expenditure growth does not exceed targeted rates. In addition, the financial supervisory framework should be strengthened to head off potential systemic risks.

The economy remained overheated last year, and average inflation rose considerably

The pace of the expansion eased in 2000, but real GDP growth of 3½ per cent continued to exceed the increase in potential output. Labour markets tightened, with the unemployment rate averaging 1¼ per cent and job vacancies rising steeply. These pressures on the economy's productive capacity were reflected in a growing external imbalance and an acceleration in employee compensation. Inflation averaged over 5 per cent in 2000 but eased to 4½ per cent by the beginning of 2001 as the housing market cooled and petrol prices slackened. Fuelled by import growth, the current-account deficit surged to over 10 per cent of GDP in 2000.

Restrictive monetary and fiscal policies are playing a role in cooling down the economy

Official interest rates were raised to 11.4 per cent in November 2000, and real rates rose further in early 2001 as inflation expectations receded. At the end of March, the Central Bank lowered the repurchase rate 50 basis points. At the same time, the government and the Central Bank agreed to eliminate the fluctuation bands for the exchange rate and to adopt a target for consumer price inflation of 2½ per cent by the end of 2003. The Central Bank has been granted operational independence to achieve this goal and is required to justify its policy if inflation diverges from the target by more than 1½ percentage points by that date, with a somewhat wider band in the interim. The projections assume that interest rates will remain high, as inflation is projected to decline only gradually. Supporting the restrictive monetary policy stance, the general government surplus expanded to a record 3 per cent of GDP last year, as revenue growth exceeded expectations. The current budget is expected to lead to an increase in the primary structural balance this year.

Iceland

Inflation remains above rates abroad
Year-on-year change, consumer price index

The current balance and net foreign assets have deteriorated markedly
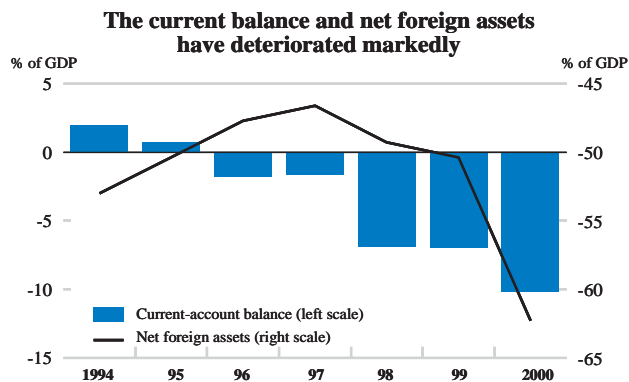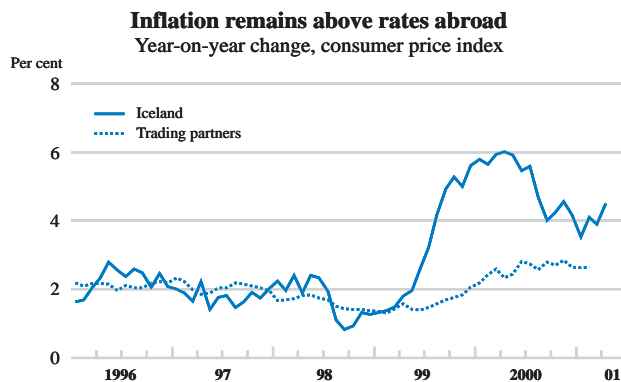
Sources: Central Bank and OECD.

Iceland: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion Ikr	Percentage changes, volume (1990 prices)				
Private consumption	299.4	10.0	6.9	4.0	1.8	2.4
Government consumption	112.8	3.4	5.1	3.7	2.5	2.0
Gross fixed capital formation	109.5	26.6	-0.8	9.0	-1.4	1.0
Final domestic demand	521.7	12.1	4.8	5.1	1.2	2.0
Stockbuilding [a]	- 0.2	0.1	-0.1	0.3	-0.2	0.0
Total domestic demand	521.4	12.3	4.7	5.4	1.0	1.9
Exports of goods and services	190.9	2.2	4.4	5.1	0.0	4.0
Imports of goods and services	187.7	23.3	5.7	9.3	-1.0	2.5
Net exports [a]	3.2	-7.6	-0.8	-2.2	0.4	0.3
GDP at market prices	524.7	4.5	4.1	3.6	1.5	2.4
GDP deflator	_	5.3	3.8	3.6	3.7	4.9
Memorandum items	_					
Private consumption deflator	_	1.0	3.3	5.0	4.3	3.9
Unemployment rate	_	2.8	1.9	1.3	2.2	2.6
General government financial balance [b]	_	0.5	2.2	3.0	2.4	2.8
Current account balance [b]	_	-6.9	-7.0	-10.2	-10.8	-9.9

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of GDP.
Source: OECD.

A sharp reduction in the fish catch for this year, combined with restrictive monetary and fiscal policies, is expected to produce a considerable slowdown in activity. Real GDP growth is projected to drop to 1½ per cent in 2001, with a substantial deceleration in domestic demand, especially business investment. Combined with falling oil prices, this slackening in demand should help reduce inflationary pressures. The external deficit may widen further, however, with continuing weakness in marine export volumes and persistent increases in the burden of servicing the burgeoning foreign debt. In 2002, growth should pick up somewhat, and the current-account deficit could improve slightly as export earnings turn up.

Output growth may slow significantly from the rapid pace of the past four years

With external imbalance at an unsustainable level, the economy remains vulnerable to a change in investor sentiment. Such a change could reaccelerate inflationary pressures by weakening the exchange rate and might contribute to financial instability, especially as businesses and households have accumulated high levels of debt, much of which is denominated in foreign currency.

The yawning current-account deficit continues to pose a risk

Ireland

Despite slower export growth due to a fall in demand for high technology products, GDP is projected to expand by 7¾ per cent this year underpinned by continuing rapid increase of both the labour force and productivity. Inflation is projected to ease in line with lower oil prices and the strengthening of the euro at the start of this year, but with service prices growing rapidly in line with rising wages in a tight labour market, consumer price increases should remain above the euro area average.

To ensure sustainable growth, policy needs to continue to focus on improving both human capital and the provision of infrastructure. The budget surplus needs to be maintained at a high level in relation to GDP in order not to increase pressure on fully employed resources. Fiscal policy should not be committed to meeting targets for aggregate net take-home pay. The social partnership needs to evolve toward setting general principles guiding pay determination rather than pre-committing fiscal policy.

Rapid growth in 2000 is the peak of the current growth phase

Growth of real GDP accelerated to nearly 11 per cent last year with a surge in the second half owing to cyclical strength in the OECD area, particularly strong demand for the information and communications technology sector, and a favourable exchange rate. Labour force growth slowed in the course of the year and, with unemployment declining to under 4 per cent, signs of labour shortage have become more widespread, especially in the rapidly growing service sector. However, at the start of this year, with the considerable slowing in the US and some other markets, surveys indicated sharply lower export demand leading to slower manufacturing growth. On the other hand, the rapid expansion in the service sector appeared to be continuing.

Inflation is likely to continue to exceed the euro area average for some time yet

Inflation has begun to ease in the traded goods sector of the economy, reflecting the strengthening of the euro during the fourth quarter of last year and lower oil prices. Consumer price inflation reached a 16-year high of 7 per cent in November 2000 (6 per cent on a harmonised basis) but has since slowed, most recently to 5.4 per cent (4.1 per cent) in March, as indirect tax increases have fallen out of the year-on-year measure of inflation. Consumer prices nevertheless continue to rise at rates well in excess of those in the euro area reflecting high inflation in services, driven by estimated wage increases of some 9 per cent outpacing productivity growth in this sector.

Ireland

A stronger euro has eased inflation
Year-on-year change

Employment growth remains high but is slowing
Year-on-year change[1]
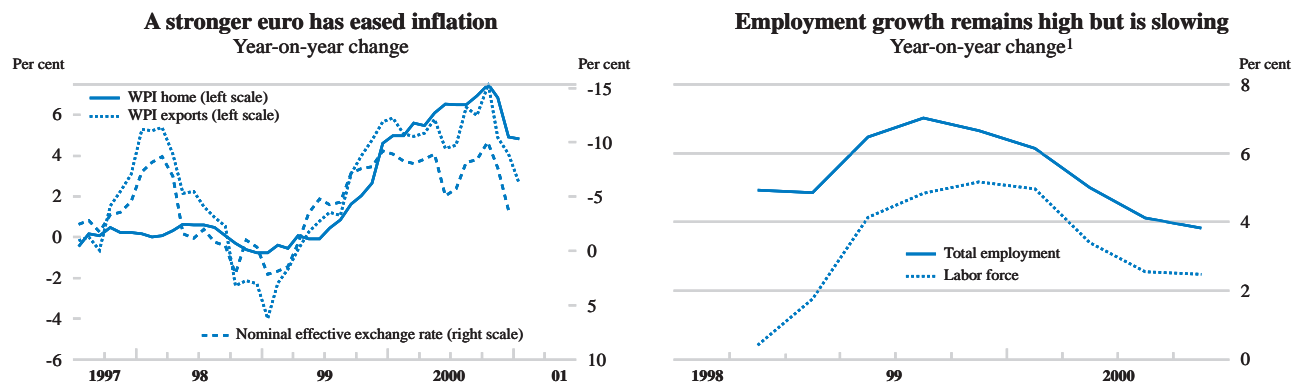
1. Comparable data are not available prior to the fourth quarter of 1997.
Sources: Central Statistics Office and OECD.

Ireland: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion Ir£	Percentage changes, volume (1995 prices)				
Private consumption	27.9	7.8	7.7	8.5	8.0	8.0
Government consumption	7.3	5.1	5.2	4.8	4.7	3.8
Gross fixed capital formation	10.7	15.5	13.0	11.3	10.6	9.3
Final domestic demand	45.8	9.1	8.6	8.7	8.2	7.7
Stockbuilding [a]	0.7	0.3	-1.9	-1.5	-0.2	0.3
Total domestic demand	46.5	9.4	6.3	7.0	8.2	8.2
Exports of goods and services	42.1	21.4	12.4	20.0	11.9	10.6
Imports of goods and services	35.4	25.8	8.7	18.5	13.0	11.5
Net exports [a]	6.7	-0.3	4.5	4.2	1.0	0.9
GDP at market prices	52.8	8.6	9.8	11.0	7.8	7.8
GDP at market prices in billion euros	67.0					
GDP deflator	_	5.8	3.8	4.8	4.6	3.8
GNP at market prices	46.4	7.8	7.8	9.0	6.0	6.4
Memorandum items						
Private consumption deflator	_	3.8	3.3	6.5	4.8	3.8
Unemployment rate	_	7.6	5.6	4.3	3.9	3.9
Household saving ratio [b]	_	10.4	9.0	6.0	7.1	7.5
General government financial balance [c]	_	2.2	2.1	4.7	4.5	4.5
Current account balance [d]	_	0.9	0.7	-0.1	-0.9	-2.6

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income.
c) As a percentage of GDP.
d) As a percentage of GNP.
Source: OECD.

Increasing strains on infrastructure have led the government to implement a major investment programme, the National Development Plan, of Ir£ 17.7 billion (some 20 per cent of GDP in 2000) up to 2006. In addition, a number of steps have been taken to improve the flexibility of training and human capital formation in order to attract and retain foreign direct investment which can support higher wages than in the past. At the same time, regulatory reform is being strengthened and competition fostered.

Policies to ensure the sustainability of growth in the medium term have been a priority

This year's budget was heavily influenced by the government's priority to preserve the social agreement involving moderate pay increases combined with tax reductions. The budget provides for tax cuts and increases in social benefits amounting to some 1½ per cent of GDP on a full year basis, while current and capital expenditures are set to rise by 10 and 28 per cent, respectively. The general government surplus is projected to decline this year by about ¼ percentage point of GDP to some 4½ per cent and to stay at that level next year. No further tax cuts are included in the projection. The cyclically adjusted surplus is projected to remain broadly unchanged after deducting the effect of one-off revenues in 2000.

Fiscal policy has been oriented to preserving the social agreement

Broad-based GDP growth of 7¾ per cent is projected this year, which is close to potential.[3] Labour force growth of around 3 per cent and marked gains in productivity are continuing to support the rapid expansion of activity. Although export growth

Growth is expected to remain strong

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3. Estimates of the impact of Foot-and-Mouth Disease are not available; the current projections make some allowance for this by reducing slightly both export and import volumes and private consumption.

is projected to slow from 20 per cent in 2000 to 12 per cent this year, import growth will also fall. Investment spending should remain strong, driven by infrastructure projects and by strong housing demand. Private consumption should continue to grow rapidly, underpinning buoyant tax revenues. Consumer price inflation is expected to decelerate but may still amount to some 3¾ per cent next year, above the euro-zone average.

But some risks remain   Risks are more balanced than in the recent past. Private sector balance sheets appear to be sound. But if a marked correction in house prices were to occur, that could lead to weaker consumption and a more cautious lending attitude. A more general risk is that the economy will not slow to around potential, leading to a surge in wage demands and a greater likelihood of a sharper, and more disruptive, correction at some stage in the future.

Korea

The economy slowed sharply to a virtual standstill in the fourth quarter of 2000, as a marked fall in export growth compounded underlying weaknesses in domestic demand. Emerging signs of improving business and consumer confidence suggest that the downturn may be short, with a recovery beginning in the second half of 2001. Output growth is projected to reach 5½ per cent in 2002, while inflation could decelerate from its current rate of above 4 per cent to around 3½ per cent.

Achieving an early recovery requires effectively addressing the problems in the corporate and financial sectors, while limiting direct government intervention and avoiding "moral hazard". Although the effectiveness of monetary policy is limited by financial-sector problems, letting the automatic stabilisers operate would allow fiscal policy to play a supportive role in 2001.

The strong expansion that began in mid-1998 came to an end in the fourth quarter of 2000 as economic output fell 1.7 per cent (seasonally-adjusted annual rate) while export growth decelerated sharply. The slowdown boosted the seasonally-adjusted unemployment rate from 3.7 per cent in mid-2000 to over 4 per cent in early 2001. Despite weak demand, inflation picked up to more than 4 per cent at the beginning of this year owing to the lagged impact of higher oil prices and increases in public fees. The rise in oil prices also contributed to the narrowing of the current account surplus from 6 per cent of GDP in 1999 to around 2½ per cent in 2000.

The economy experienced a sharp downturn at the end of 2000…

In addition to falling overseas demand, the deterioration in the terms of trade and problems in restructuring the corporate and financial sectors were the key factors responsible for the downturn. The weak financial condition of many chaebol-affiliated companies raised the threat of major bankruptcies. This undermined confidence, as reflected in the index of business sentiment and the stock market, which fell 50 per cent during 2000, resulting in a large negative wealth effect. Banks, burdened by non-performing loans, became more cautious in their lending behaviour, while the flight of money away from the capital market since 1999 limited the scope for indirect financing by firms. This was a major concern, with 65 trillion won (12 per cent of GDP) of corporate bonds maturing in 2001.

… due, in part, to the terms of trade loss and problems with corporate and financial-sector restructuring, which have undermined confidence

The government has responded to these challenges with a bond-recycling scheme run by Korea Development Bank, a publicly-owned institution, which aims to help roll

The policy response has been prompt

Korea

The economy has slowed sharply
Seasonally adjusted
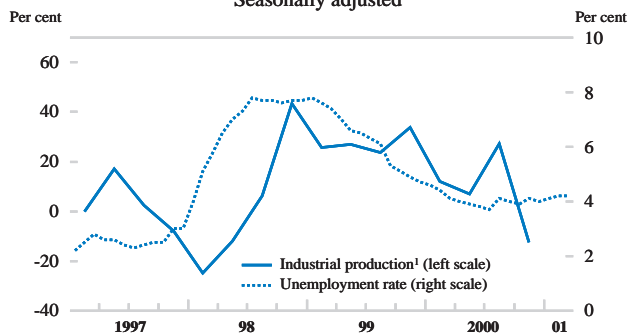
Business and household confidence is recovering
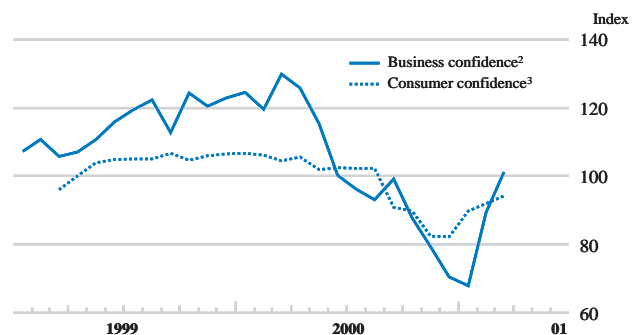
1. Percentage change over previous quarter, annual rates.
2. Seasonally adjusted. A score of 100 means that overall business conditions are expected to be the same as the previous month.
3. A score of 100 means that consumption is expected to be the same in six months as at present.
Sources: National Statistical Office and Federation of Korean Industries.

Korea: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices trillion won	Percentage changes, volume (1995 prices)				
Private consumption	255.0	-11.7	11.0	7.1	2.5	4.5
Government consumption	45.7	-0.4	1.3	1.3	1.0	0.8
Gross fixed capital formation	159.1	-21.2	3.7	11.0	-0.9	4.0
Final domestic demand	459.8	-14.0	7.6	7.7	1.3	4.0
Stockbuilding [a]	- 3.9	-5.5	5.4	-0.9	0.9	0.0
Total domestic demand	455.8	-19.8	14.7	6.7	2.4	4.0
Exports of goods and services	157.4	14.1	15.8	21.6	11.0	12.0
Imports of goods and services	162.0	-22.1	28.8	20.0	9.8	12.0
Net exports [a]	- 4.6	12.5	-1.0	3.5	2.2	2.1
Statistical discrepancy [a]	2.1	0.0	-0.4	-0.5	0.0	0.0
GDP at market prices	453.3	-6.7	10.9	8.8	4.2	5.5
GDP deflator	_	5.1	-2.1	-1.5	1.5	1.6
Memorandum items						
Private consumption deflator	_	7.9	0.5	2.0	4.0	3.5
Unemployment rate	_	6.8	6.3	4.1	4.1	4.0
Household saving ratio [b]	_	22.9	22.9	22.5	21.0	19.9
Consolidated central government balance [c]	_	-4.2	-2.7	1.1	0.0	0.0
Current account balance [c]	_	12.8	6.0	2.4	2.7	2.7

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income.
c) As a percentage of GDP.
Source: OECD.

over 25 trillion won of bonds during 2001. In addition, the authorities are implementing the second-round financial-sector restructuring plan announced last fall. Forty trillion won of new public money is being used to re-capitalise weak banks and address problems in other areas, such as life insurance, bringing total net expenditures for financial restructuring since 1998 to 134 trillion won, more than a quarter of GDP. Although these primarily debt-financed expenditures have boosted government interest outlays, the growth of overall spending has been limited. With an unexpectedly large 23 per cent rise in tax revenue in 2000, the consolidated central government budget recorded a significant surplus, three years earlier than under the medium-term plan. To support the economy in 2001, the government is frontloading expenditures in the first half of the year and allowing automatic stabilisers to work, which is likely to eliminate the surplus in 2001. Monetary policy has also been aimed at supporting growth, with the central bank cutting the overnight call rate by 25 basis points to 5 per cent in February 2001, but the impact of lower rates is limited by current financial-market conditions.

An economic recovery is projected to begin in mid-2001 with a pick-up in Korea's export market growth

The rebound in business and consumer sentiment that began in February 2001 suggests that the downturn is likely to be short. Provided that overseas demand, notably from the US economy, bounces back in the second half of 2001, Korea's economy is projected to recover beginning around mid-year, picking up to a growth rate of 5½ per cent in 2002. Inflation is expected to slow to 3½ per cent in 2002 as the effects of oil prices and the 15 per cent fall in the won since October 2000 dissipate. The current account is likely to stay in significant surplus, further increasing Korea's net external asset position, which has swung from a net debt of $54 billion at the end of 1997 to net assets of $31 billion at the end of 2000. Potential difficulties in the restructuring of the corporate sector, with negative repercussions on the financial sector, appear to be the major domestic risk to an early economic recovery.

Luxembourg

Real GDP growth is projected to decline progressively from 8½ per cent in 2000 to 5½ per cent in 2002 owing to less buoyant conditions in export markets. Headline inflation should also fall quite sharply in 2001, to 2¼ per cent, reflecting the decline in oil prices since late last year. This will also slow wage increases, progressively reducing underlying inflation pressures. The projected decline in employment growth is unlikely to have much effect on the unemployment rate, which should remain at around 2½ per cent.

Progress should continue to be made in liberalising network industries and in raising the employment ratio, both of which would contribute to sustaining high growth in real incomes over the next few years. The discretionary easing in fiscal policy in 2001-02 should attenuate the slowdown in growth while still leaving the government with sound finances.

Economic growth is weakening but remains high

Real GDP growth is estimated to have risen further in 2000, to 8½ per cent, well above the long-term average (5½ per cent since 1985). Economic activity continued to gain momentum until mid-2000, but has since weakened, especially in the machinery and equipement sector (which is highly sensitive to international developments) and in construction. The OECD composite leading indicator points to a further decline in growth in coming months. Employment, which tends to lag changes in economic growth, has continued to increase, growing by around 6 per cent (year-on-year) in recent months. As usual, cross-border workers have filled most of the new jobs. The unemployment rate has risen slightly since mid-2000, to 2.7 per cent in recent months, but remains lower than a year earlier.

Inflation has begun to moderate

Following the decline in oil prices since late 2000, consumer price inflation has fallen back from around 3½ per cent in the second half of 2000 to just under 3 per cent in early 2001; meanwhile, underlying inflation has increased to 2.4 per cent in the first quarter of 2001 from 1.7 per cent in the corresponding period one year earlier.[4] Wage increases have risen progressively since early 1999, reaching 5.7 per cent in the third quarter of 2000. The main factor behind this acceleration has been the

Luxembourg

Slower growth expected

Per cent (left scale): 25, 20, 15, 10, 5, 0, -5, -10
Per cent (right scale): 10, 8, 6, 4, 2

— Leading indicator[2] (left scale)
···· Real GDP[1] (right scale)

1995 96 97 98 99 2000 01

Headline inflation[1] has peaked

Per cent: 4, 2, 0, -2

— Total
···· Underlying inflation[3]

1998 99 2000 01

1. Year-on-year percentage changes.
2. 6-month percentage changes.
3. CPI excluding petroleum products, solid fuels, coffee, tea, cocoa, potatoes and cut flowers.
Sources: Central Service of Statistics and Economic Studies (STATEC) and OECD.

4. Underlying inflation excludes petroleum products, solid fuels, coffee, tea, cocoa, potatoes and cut flowers.

Luxembourg: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion LF	Percentage changes, volume (1995 prices)				
Private consumption	289.0	2.3	4.1	3.5	4.5	4.3
Government consumption	107.9	2.8	12.8	4.9	3.6	3.9
Gross fixed capital formation	125.8	1.5	26.6	0.5	5.7	5.4
Final domestic demand	522.8	2.2	11.4	3.0	4.6	4.5
Stockbuilding [a]	1.8	0.1	0.1	0.1	0.0	0.0
Total domestic demand	524.6	2.3	11.5	3.0	4.6	4.5
Exports of goods and services	685.5	9.9	7.9	14.3	8.0	7.5
Imports of goods and services	585.6	8.3	11.2	10.5	7.6	7.1
Net exports [a]	100.0	3.0	-1.9	5.9	1.9	1.8
GDP at market prices	624.6	5.0	7.5	8.5	5.6	5.5
GDP at market prices in billion euros	15.5					
GDP deflator	_	1.5	2.3	4.1	3.4	2.4
Memorandum items						
Private consumption deflator	_	1.7	1.4	3.1	2.3	1.8
Unemployment rate	_	3.1	2.9	2.6	2.5	2.5
General government financial balance [b]	_	3.2	4.7	5.3	3.6	3.4

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of GDP.
Source: OECD.

greater frequency of automatic index-linked rises (the last two were less than one year apart), which occur whenever cumulative price increases since the last threshold was breached amount to 2½ per cent.

Monetary conditions and export markets are less supportive of growth

In contrast to developments in 1999-2000, a firmer euro and the anticipated deterioration in export markets are likely to slow economic growth over the projection period. Fiscal policy is set to ease quite substantially, though this is unlikely to be as significant for activity as movements in the euro or in export markets. The government has announced personal income tax cuts amounting to 1.2 per cent of GDP in 2001 and 0.6 per cent of GDP in 2002. As a result, the budget surplus is projected to decline to 3½ per cent of GDP in 2002 from 5¼ per cent in 2000. These projections do not include the planned reduction in corporate income taxes in 2002 (amounting to about 1 per cent of GDP) as it has not yet been legislated.

Growth and inflation should slow from a peak in 2000

Economic growth is projected to slow to 5½ per cent in 2001 and to remain at this rate in the following year. Employment growth may thus slow to around 4 per cent in 2002; but as most of the decline is likely to be absorbed by lower inflows of cross-border workers and immigrants, there is unlikely to be much effect on the unemployment rate, which should remain at around 2½ per cent. Consumer price inflation is likely to fall quite sharply this year, mainly reflecting lower oil prices. This will also reduce the frequency of automatic indexed wage increases, with the next one, after that in April 2001, not likely to occur until the third quarter of 2002. Declining cost and import price pressures should lower underlying inflation, especially in 2002. The main risk to these projections is that export markets could be weaker than expected. On the other hand, growth in the large financial sector, which is only weakly related to the business cycle, may not decline in line with the rest of the economy.

Mexico

Output growth accelerated to almost 7 per cent in 2000, underpinned by robust demand in the United States and an easy fiscal stance. Yet the strength of the peso and tight monetary conditions helped inflation to come down. The deterioration of the current account was limited by improving terms of trade. Owing to the slowdown in the United States, GDP growth is projected to weaken in 2001, regaining momentum thereafter. Inflation is projected to fall further, but the current account deficit could widen significantly, as oil export revenues decline.

Sustained improvement in economic performance will require the maintenance of prudent macroeconomic policies. Despite the United States slowdown, fiscal restraint is needed to take pressure off monetary policy and cool domestic demand. In the structural area, the proposed tax reform should strengthen budget revenue, while reducing tax distortions. Further steps to increase product market competition are also needed to enhance Mexico's supply-side performance.

Real output growth reached close to 7 per cent in 2000, driven by persistently robust exports to the United States and booming domestic demand. Retail sales and consumer and investment goods imports were still expanding rapidly at the start of 2001, but exports have shown some signs of slowing. Owing to high oil prices and a strong peso, Mexico's terms of trade improved, helping to stabilise the current account deficit at around 3 per cent of GDP, despite the buoyancy of imports. Foreign direct investment reached a record US$13.2 billion, financing three-quarters of the current account deficit.

GDP growth reached close to 7 per cent in 2000…

Following election-induced volatility in the first half of 2000, the nominal exchange rate has remained strong, while real interest rates have moved up, helping the disinflation process. Despite sharp increases in prices of farm products and public goods near year-end, consumer price inflation had fallen to 9 per cent by December, below the central bank target of 10 per cent. It continued to decline in the early months of 2001, with core inflation dropping below 7 per cent in the first quarter.

… while inflation fell further, helped by the strength of the peso

Owing to booming activity and high oil-related revenues (still accounting for one-third of budget revenue), a substantial windfall was recorded in 2000, which was matched by higher public spending. The public sector deficit came in at 1.1 per cent of GDP, close to target. While a part of the revenue windfall was used to repay public

After some easing last year, fiscal policy has turned restrictive

Mexico

Inflation is coming down

Per cent

Consumer price index[1]
Core inflation[2]

1998   99   2000   01
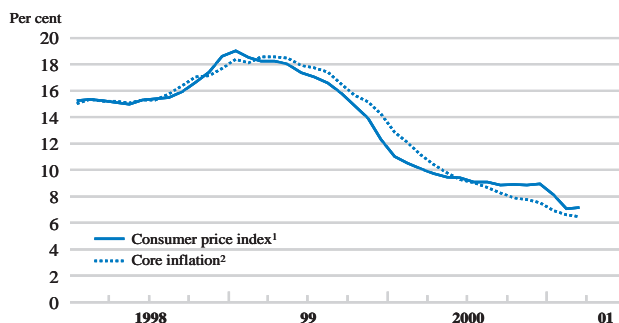
The peso remains strong and real interest rates have moved up

US$/pesos   Per cent

Exchange rate (left scale)
Real returns on 3-month Cetes (right scale)

1998   99   2000   01
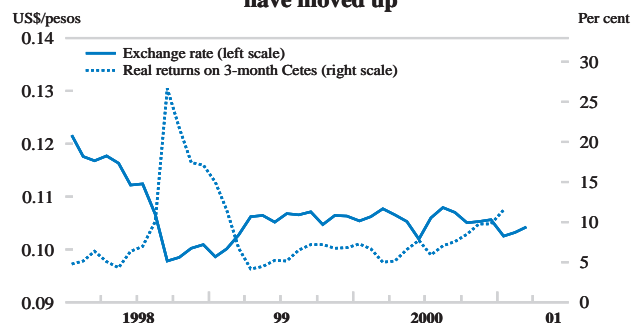
1. Consumer price index inflation, year-on-year percentage change.
2. Excluding food prices, education fees and prices controlled by or agreed with the government.
Sources: Bank of Mexico; OECD.

──────── Mexico: **Demand, output and prices** ────────

	1997	1998	1999	2000	2001	2002
	current prices billion Pesos	Percentage changes, volume (1993 prices)				
Private consumption	2 040.4	5.4	4.3	9.5	4.0	5.0
Government consumption	314.6	2.3	3.9	3.5	1.7	2.6
Gross fixed capital formation	619.5	10.3	7.7	10.0	6.5	7.8
Final domestic demand	2 974.5	6.0	4.9	8.9	4.3	5.4
Stockbuilding [a]	206.3	0.3	-0.5	0.1	0.0	0.1
Total domestic demand	3 180.8	6.1	4.3	8.8	4.2	5.3
Exports of goods and services	963.9	12.1	12.4	16.0	8.1	9.0
Imports of goods and services	965.6	16.6	13.8	21.4	9.0	10.4
Net exports [a]	- 1.7	-1.1	-0.5	-1.9	-0.5	-0.8
GDP at market prices	3 179.1	4.9	3.8	6.9	3.7	4.7
GDP deflator	_	15.4	14.8	10.8	8.0	6.0
Memorandum items						
Private consumption deflator	_	20.7	13.8	8.9	7.8	5.8
Unemployment rate [b]	_	3.2	2.6	2.3	2.5	2.6
Current account balance [c]	_	-3.8	-3.0	-3.1	-3.6	-4.0

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) Based on the National Survey of Urban Employment.
c) As a percentage of GDP.
Source: OECD.

debt and to create a stabilisation fund, thus serving to consolidate the fiscal position, the rest was used for additional expenditures and provided a stimulus to aggregate demand, at a time when activity was booming. The 2001 budget foresees a tightening of fiscal policy, with the deficit scheduled to fall to around ½ per cent of GDP. Increased social spending is to be financed by higher tax revenue, based on an announced tax reform.

High real interest rates might be slow to come down

Short-term interest rates turned up from mid-2000, partly as a result of central bank action. In April 2001, the three-month C*etes* rate reached 15.5 per cent, up from a low of 14 per cent in mid-2000. With inflation declining steadily, this has implied a rise in real interest rates, and these are assumed to come down only gradually as the central bank maintains tight monetary conditions to consolidate the disinflation process.

Economic growth is projected to return to a more moderate pace in 2001, with external uncertainties clouding the outlook

The favourable factors at work in 2000 – strong export demand and oil prices – have started to move against Mexico. But no sharp downturn in activity is expected. The negative impact of the United States slowdown should be felt in the early part of 2001. In the context of tight macro-economic policies, domestic demand is also projected to decelerate this year so that real GDP growth may slow to 3¾, but then gain momentum again in 2002, helped by a more supportive external environment. Inflation should continue to come down gradually, to 5 per cent by the end of 2002, under the usual assumption of fixed nominal exchange rates. As the terms of trade become less favourable and export growth moderates, the current account deficit is projected to widen, to about 4 per cent of GDP in 2002. There are some uncertainties as to the final shape of the tax reform soon to be introduced and the budget remains vulnerable to volatile oil prices. Lower-than-budgeted revenue would require spending cuts, as in 1998. Indeed, fiscal restraint is required to cool off domestic demand and reduce the burden on monetary policy.

Netherlands

Real GDP growth is projected to slow from an annual rate of about 4 per cent during the past four years to around 3 per cent in 2001-02, as a result of less buoyant investment and net exports. While the positive output gap will progressively decline, labour market conditions are expected to remain tight. The income tax reform implemented at the beginning of 2001 entailed a shift from direct to indirect taxation, resulting in higher personal incomes, but a spike in consumer prices. Underlying inflation, which excludes this effect, has been more moderate, but it is nonetheless projected to rise to around 2½ per cent in 2001-02. Mainly reflecting the tax reform, the general government budget surplus is expected to fall this year, before rebounding somewhat in 2002.

In view of the still tight conditions in the labour market, it is important to avoid a further easing of fiscal policy through the use of revenue windfalls for additional spending. Efforts to increase labour participation rates should be stepped up, notably by "activating" some of the numerous working-age benefit recipients without a job and by curbing the inflows of new benefit claimants into the disability and other welfare programmes.

The economy slowed significantly in the second half of 2000, reflecting weak residential investment and less buoyant business investment. On the other hand, expenditure on durable goods picked up in the fourth quarter ahead of the increase in value-added tax (VAT) at the beginning of 2001; and exports remained buoyant, so that for 2000 as a whole GDP growth approached 4 per cent for the fourth year in a row. Labour market conditions have remained very tight. Consumer price inflation has risen from 2.9 per cent in December 2000 (year-on-year) to 4.6 per cent in March 2001 – with 1.1 percentage point of the increase being accounted for by the hike in value-added tax (VAT) and environmental taxes and by the dropping out of the effect of abolishing the broadcasting licence fee in January 2000. Under-lying inflation (excluding food, energy and indirect taxes) while rising much less – to 3 per cent in February – has also been on an upward trend over the past few quarters. The increase in contractual wages so far has remained relatively moder-ate, but recent wage negotiations in important industries seem to have become increasingly difficult.

Economic growth has decelerated but inflation has picked up

Netherlands

Growth has slowed but inflation has increased
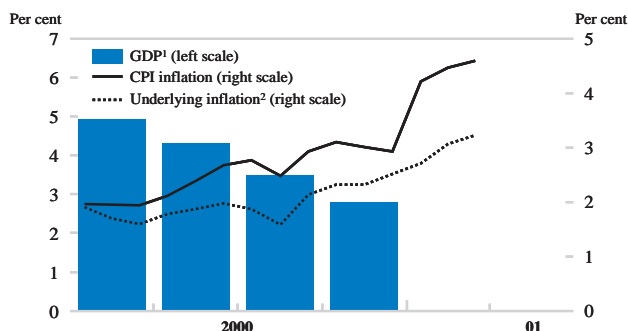
The labour market has remained tight
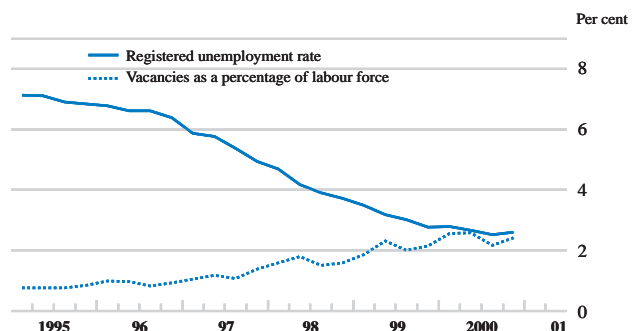
1. Volume, year-on-year percentage changes of quarterly data.
2. CPI excluding vegetables, fruits, energy, government services, broadcasting licence fee and indirect taxes (not an official Statistics Netherlands definition).
Sources: CPB Netherlands Bureau for Economic Policy Analysis; Statistics Netherlands; OECD.

——————— Netherlands: **Demand, output and prices** ———————

	1997	1998	1999	2000	2001	2002
	current prices billion Gld	Percentage changes, volume (1995 prices)				
Private consumption	363.6	4.4	4.4	3.9	4.0	3.8
Government consumption	168.4	3.4	2.5	3.1	2.0	2.1
Gross fixed capital formation	158.0	4.1	6.5	4.0	2.8	1.9
Final domestic demand	690.0	4.1	4.4	3.7	3.2	3.0
Stockbuilding [a]	1.9	0.1	-0.2	-0.1	-0.1	0.0
Total domestic demand	691.8	4.2	4.2	3.6	3.1	3.0
Exports of goods and services	449.2	7.4	5.6	9.1	7.0	6.0
Imports of goods and services	405.6	8.0	6.3	9.1	7.5	6.5
Net exports [a]	43.6	0.1	-0.1	0.5	0.1	0.0
GDP at market prices	735.4	4.1	3.9	3.9	3.0	2.8
GDP at market prices in billion euros	333.7					
GDP deflator	_	2.0	1.6	3.2	4.6	2.6
Memorandum items						
Private consumption deflator	_	1.8	1.9	2.8	4.0	2.3
Unemployment rate	_	4.2	3.2	2.4	2.2	2.3
Household saving ratio [b]	_	13.4	10.6	9.4	10.1	9.7
General government financial balance [c]	_	-0.7	1.0	2.2	1.3	1.6
Current account balance [c]	_	3.3	4.3	3.7	3.5	3.1

Note: National accounts are based on chain-linked data. This introduces a discrepancy in the identity between real demand components and the GDP. See "Sources and Methods" for further details.
a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income, excluding net contributions (actual and imputed) to life insurance and pension schemes.
c) As a percentage of GDP.
Source: OECD.

While fiscal policy is supportive of growth, net exports are weakening

At the beginning of 2001, a major tax reform was implemented, with substantial reductions in direct taxes and social security contributions and an increase in indirect taxes. Overall it entails a tax cut of around 0.7 per cent of GDP. The resulting decrease in benefit replacement rates is aimed at boosting the participation rate and encouraging persons of working age on welfare to return to the labour market. A further easing of fiscal policy, by additional spending of revenue windfalls, cannot be excluded. On the other hand, export growth is set to decrease due to a decline in export market growth, some losses in international competitiveness, and increasing capacity constraints. At the same time, the strength of private consumption will sustain robust import growth, so that the contribution of the foreign balance to growth may decline from around ½ per cent of GDP in 2000 to close to zero.

Growth growth is expected to stabilise…

Despite this weakening in net exports, real GDP growth is expected to stabilise at around 3 per cent over the projection period, with the output gap coming down slightly, but remaining positive at around ½ per cent in 2002. Private consumption should be rather buoyant owing to the strong increase in disposable income as a result of the tax reform. On the other hand, the growth in business investment, which has been very high over the past few years is likely to progressively ease. Although employment growth is expected to decelerate in line with the economic slowdown, the unemployment rate is nevertheless projected to stabilise at 2¼ per cent, reflecting the decline in growth of the labour supply.

… but inflationary risks are likely to persist

Despite the moderating impact of the tax reform, the increase in wage rates and compensation per employee is projected to pick up somewhat over the 2001-02 period, on average. Consumer price inflation is expected to reach 4 per cent on aver-

age this year, mainly reflecting tax changes, before falling back to 2¼ per cent in 2002. Underlying inflation is also projected to decline to around 2¼ per cent in 2002. In view of the relative strength of the economy the main risk seems to be an acceleration in wages which, if accompanied by a further easing of fiscal policy, could result in a wage-price spiral, undermining competitiveness and employment prospects.

New Zealand

Economic activity rebounded in the second half of 2000 on the back of a recovery in business and consumer confidence. With strong job creation, the unemployment rate has fallen to its lowest level since the late 1980s. Meanwhile, inflation has exceeded the official target band, peaking at 4 per cent before returning to just over 3 per cent in the first quarter of 2001. A temporary setback to growth in response to external developments is likely, but with a competitive export sector and increasing momentum in domestic demand, the economy should continue to operate close to its productive potential.

Monetary policy has to be vigilant lest recent price hikes spill over into more generalised inflation, although some easing might be warranted should growth slow more markedly in the event of a sharp fall in trading-partner growth. While in this case fiscal stabilisers should be allowed to operate, ongoing spending discipline is crucial to maintaining budget balance over the medium term.

Economic growth has resumed

After declining in the second quarter of 2000, real GDP bounced back and kept growing in the final part of the year. Export earnings benefited from strong world demand, a very competitive exchange rate, higher commodity prices and favourable climatic conditions. Rising external-sector incomes have flowed through to domestic spending, which had declined through the first half of 2000 along with business and consumer confidence. The subsequent recovery in sentiment reflects, among other things, a more favourable assessment of government policies and improving labour-market conditions. Despite a pick-up in labour-force participation, the unemployment rate dropped to 5½ per cent at the end of last year, which is its lowest level since mid-1988 and a little below the OECD estimate of the structural rate. At the same time, annual consumer price inflation reached 4 per cent at the end of 2000. This was mainly attributable to higher prices of tradable goods due to exchange-rate depreciation and rising world market prices, although non-tradable inflation also moved up toward the ceiling of the official 0 to 3 per cent target range. In the first quarter of 2001, annual consumer price inflation fell back to just over 3 per cent, with the introduction of income-related rents on public housing accounting for half of the decline. Helped by better terms of trade and with increasing real net exports, the large current account deficit has fallen below 5 per cent of GDP (down about 2 percentage points from 1999).

New Zealand

With rising confidence, GDP growth has resumed

GDP production[1] (left scale)
Consumer confidence[2] (right scale)
Business situation[2] (right scale)

Inflation has increased markedly
Year-on-year percentage changes

Consumer price index
Non-tradable consumer price index

Target range
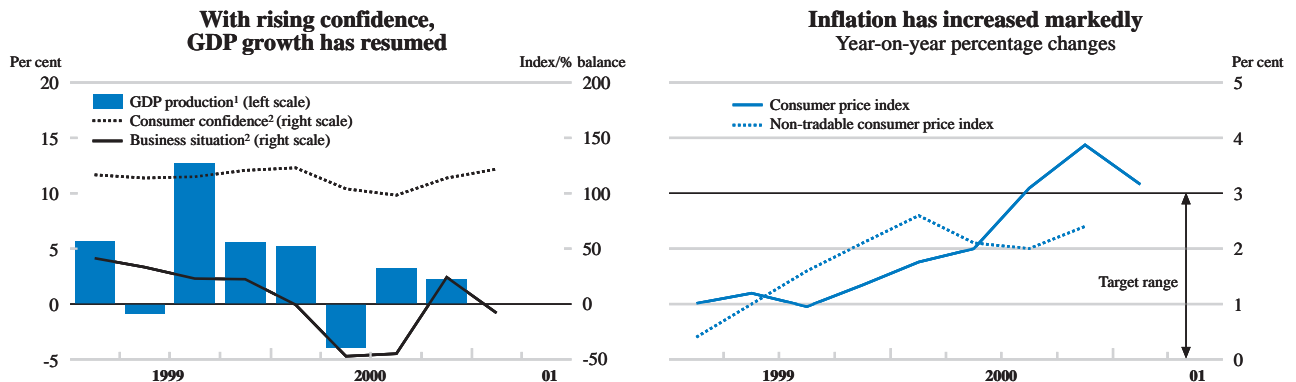
1. Percentage changes from previous period at annual rate.
2. Consumer confidence: normal = 100; business situation: per cent balance.
Source: Statistics New Zealand.

New Zealand: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion NZ$	Percentage changes, volume (1995/96 prices)				
Private consumption	59.0	1.6	3.5	1.7	1.8	1.7
Government consumption	18.3	-1.0	5.4	-3.3	0.8	1.0
Gross fixed capital formation	21.0	-3.7	5.7	7.4	4.1	4.4
Final domestic demand	98.3	-0.1	4.4	2.0	2.1	2.2
Stockbuilding ^{a,b}	0.8	-0.5	1.2	-0.6	0.0	0.0
Total domestic demand	99.1	-0.5	5.5	1.4	2.1	2.2
Exports of goods and services	28.0	0.8	7.3	6.4	3.9	7.4
Imports of goods and services	27.7	1.3	12.3	1.2	3.5	5.0
Net exports ^{a}	0.4	-0.1	-1.5	1.6	0.1	0.8
GDP (expenditure) at market prices	99.5	-0.7	4.0	3.0	2.2	3.0
GDP deflator	_	1.3	-0.2	2.4	3.3	2.1
Memorandum items						
GDP (production)	_	-0.1	3.9	3.4	2.2	3.0
Private consumption deflator	_	1.8	0.2	2.0	3.2	2.0
Unemployment rate	_	7.5	6.8	6.0	5.6	5.6
Current account balance ^{c}	_	-4.0	-6.6	-5.3	-4.2	-3.3

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) Including statistical discrepancy.
c) As a percentage of GDP.
Source: OECD.

In its December 2000 Monetary Policy Statement, the Reserve Bank had signalled a need for further interest-rate increases, noting that the economy was regaining momentum and that the low exchange rate was providing considerable stimulus to activity. Subsequently, with the New Zealand dollar strengthening somewhat and the world outlook deteriorating, the Bank indicated that it felt it could prudently leave the official interest rate unchanged. More recently the Bank lowered its target rate by 25 basis points in both mid-March and mid-April as an insurance against global slowdown, but commented that there were strong grounds, notably the renewed weakening in the exchange rate, for being cautious about further cuts. The projections described below assume a modest rise in interest rates next year to avoid a reacceleration in inflation when growth picks up and again exceeds its potential rate.

Interest rates have been lowered a little

In its December 2000 Economic and Fiscal Update, the government lowered somewhat its projections for the operating surplus in the current and subsequent fiscal years, but this was due to revised economic forecasts, with no adjustments to policy settings. So far budget outcomes (in particular tax revenues) have been better than expected. The projections below incorporate a modest tightening in the fiscal stance, following several years of relaxation, as the government acts to gradually rebuild budget surpluses in order to prepare for future demographic pressures through the proposed superannuation fund. To achieve this, spending pressures, especially in the health-care and education sectors, will need to be carefully managed.

Fiscal policy settings have remained unchanged

Following a slowdown in the first half of 2001 owing to lower export-market growth, activity is projected to strengthen again. A number of favourable factors suggest that the economy is well placed to expand at or above its estimated potential rate of 2½ to 3 per cent per annum in the period ahead. Trading-partner growth is expected to pick up again; the agricultural outlook, which is crucial to exports,

Economic prospects look favourable…

remains bright; the effective exchange rate is well below its equilibrium level and, thus, very stimulatory; interest rates would seem to be broadly neutral; and the fiscal stance is only mildly restrictive. Reflecting these broad influences, the external sector is expected to continue to be the mainstay of growth, with domestic demand being less buoyant than during the 1990s. This would reduce economic imbalances, allowing households to strengthen their balance sheets and making for a gradual decline in the large external deficit. With a temporary easing in capacity pressures and lower energy prices, inflation is projected to move back towards the mid-point of the official target band.

… but there are both external and domestic risks to the outlook

Despite positive growth fundamentals and New Zealand's recent propensity to rebound quickly from periods of weak activity, there are significant risks and uncertainties surrounding this outlook. Economic developments in major trading-partner countries, notably Australia, could be less favourable than projected. In addition to direct trade effects, this could again depress business and consumer confidence and thus domestic spending. On the other hand, should demand hold up relatively well, productivity will need to rise at healthy rates if bottlenecks and inflation pressures are to be avoided. A key uncertainty in the near term is the nature of the wage response to current levels of unemployment and reported skill shortages, given recent changes to labour-market legislation. The challenge for policy makers is to balance the risk of second-round effects of current high rates of headline inflation against that of a more severe downturn in the world economy.

Norway

Mainland GDP growth is likely to dip to around 1½ per cent in 2001, but recover to 2 per cent in 2002 as fiscal policy will be slightly expansionary and investment in the oil sector is likely to increase. Due to the tight labour market, wage and price inflation will outpace the euro area average. Very large current account surpluses are likely to continue.

The recent introduction of a formal inflation target for the central bank is welcome as it further reduces the focus on exchange rate developments, which has, at times, led to a pro-cyclical monetary stance. At the same time, the government proposed increased spending of oil revenues that will necessitate a gradual reallocation of resources from the exposed to the sheltered sector. To guarantee an effective use of this additional spending, modernisation of the public sector – including a greater use of outsourcing – is needed.

After rapid growth in the two previous semesters, output was flat in the second half of 2000 mainly reflecting the impact of monetary tightening on private consumption. Nevertheless, mainland GDP growth picked up to 1.8 per cent in 2000 from 0.8 per cent in 1999. Due to capacity constraints in the processing industries and the continuing deterioration in competitiveness since 1995, manufactured exports increased by only 2½ per cent in 2000, implying a further loss in market share. The sharp drop in oil investment from the extraordinarily high level in 1998 remained a substantial drag on activity, reducing domestic demand growth by 1½ percentage points in 2000. Moreover, it led to an employment fall of 10 per cent in the oil platform construction industry, which was the main cause for the marginal rise of the unemployment rate to 3.4 per cent. As a consequence of the tight labour market, especially in the public and private service sectors, wage increases remained strong. Labour costs are rising even more because of the gradual introduction of a fifth week of holidays. The marked rise in labour costs in combination with the oil price hike led to an acceleration of consumer price inflation to 3.1 per cent in 2000, 0.6 percentage point above the euro area average (measured by the harmonised index).

Output was flat in the second half of 2000 reflecting the interest rate hikes

In reaction to increasing inflationary pressures, the key deposit rate was raised by 150 basis points to 7 per cent between April and September 2000. As demand weakened thereafter, the central bank kept its key rate unchanged and maintained a neutral bias. In March 2001, the government introduced a formal inflation target for the central bank – of 2.5 per cent – formalising the implicit inflation targeting in

Monetary policy remains restrictive to reduce inflationary pressures, while fiscal policy is neutral in 2001

Norway

Wage inflation[1] stays above the euro area average
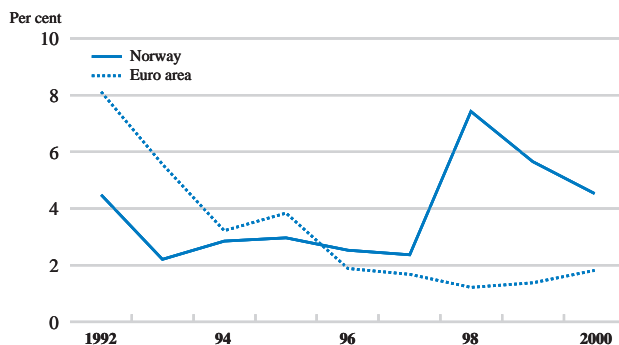
The budget surplus reaches a record level
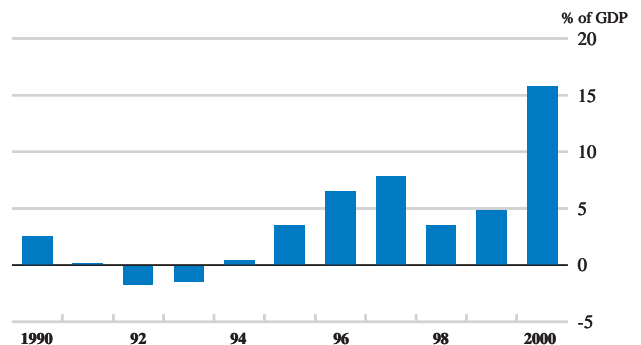
1. Private compensation per employee (on a national accounts basis).
Source: OECD.

Norway: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion NOK	Percentage changes, volume (1997 prices)				
Private consumption	520.8	3.3	2.4	2.1	1.7	2.4
Government consumption	218.4	3.8	2.7	1.4	2.4	2.7
Gross fixed capital formation	252.1	5.8	-5.6	-2.7	-0.1	1.6
Final domestic demand	991.3	4.0	0.4	0.8	1.4	2.3
Stockbuilding *a*	23.0	1.4	-1.3	0.8	0.0	0.0
Total domestic demand	1 014.2	5.4	-1.0	1.6	1.4	2.2
Exports of goods and services	448.1	0.3	1.7	2.8	3.8	3.5
Imports of goods and services	366.2	9.3	-3.1	1.2	2.7	4.3
Net exports *a*	81.9	-3.0	1.8	0.7	0.7	0.0
GDP at market prices	1 096.2	2.0	0.9	2.2	2.0	2.0
GDP deflator	_	-0.8	6.6	15.1	7.1	1.5
Memorandum items						
Mainland GDP at market prices *b*	_	3.3	0.8	1.8	1.5	2.0
Mainland GDP deflator *b*	_	3.9	2.8	3.6	5.9	3.4
Exports of non-manufactures (incl. energy)	_	-2.8	2.4	5.9	4.5	2.0
Private consumption deflator	_	2.7	2.2	3.3	3.0	1.9
Unemployment rate	_	3.2	3.2	3.4	3.4	3.3
Household saving ratio *c*	_	6.6	6.7	6.3	6.5	7.0
General government financial balance *d*	_	3.6	4.8	15.7	15.3	13.9
Current account balance *d*	_	-1.3	3.9	13.9	18.1	17.5

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) GDP excluding oil and shipping.
c) As a percentage of disposable income.
d) As a percentage of GDP.
Source: OECD.

place since early 1999. Fiscal policy was neutral in 2000 and the approved budget for 2001 foresees the continuation of a neutral fiscal stance to avoid a demand stimulus, with additional spending offset by tax increases. At the same time, high oil prices resulted in an allocation to the Petroleum Fund amounting to 16 per cent of GDP in 2000. While weaker oil prices will reduce contributions, they are projected to remain far above 10 per cent of GDP. Given these strong oil revenues, the government in March 2001 proposed for 2002-10 an increase in government spending and tax cuts with the structural non-oil budget deficit rising by around 0.4 per cent of mainland GDP each year. A slightly expansionary fiscal policy stance is therefore likely in 2002.

Tight labour market conditions should prevail

Mainland GDP growth is projected to decelerate somewhat to 1.5 per cent in 2001 due to the rise in interest rates in 2000, the return to a normal level of electricity production and the tapering-off of world trade. With investment by the oil sector rising and a slightly expansionary fiscal stance, growth could pick up to 2 per cent in 2002. The unemployment rate could stay at the current low level and the labour market will remain stretched. It is thus likely that the wage negotiations in 2002 will lead to settlements with marked wage increases. Strong rises in labour costs are likely to keep core inflation high, but the halving of the value-added tax (VAT) on food is expected to have a temporary damping effect in 2002. Deteriorating competitiveness could result in further market share losses, though high oil revenues will keep the current account surplus clearly above 10 per cent of GDP.

There are substantial risks to the projection. On the one hand, the high oil price may imply stronger investment in the oil sector, private consumption could be boosted in 2002 by stronger than projected wage rises and fiscal policy could be more expansionary. On the other hand, world trade and the terms of trade may develop less favourably, impacting negatively on growth.

The risks to the projection are substantial

Poland

The Polish economy slowed down markedly in the second half of 2000. Domestic demand growth was curbed by a sharp erosion in household incomes, declining business expectations and rising real interest rates. A positive contribution from net foreign trade for the first time since several years was insufficient to prevent output growth from falling sharply. Unemployment neared a record high, but macroeconomic imbalances were reduced: inflation dropped from two-digit numbers to levels within the range targeted by the National Bank of Poland for end 2001, and the current account deficit began to shrink toward a more sustainable position.

The short-term challenge for policymakers now is to assure that the recent economic stabilisation does not become a protracted weakness, while nonetheless achieving steady declines in inflation. The initial easing of monetary policy in early March is well judged in this respect but additional interest rate cuts may become necessary. Beyond the short term, a policy mix with lower interest rates and a tighter fiscal stance would contribute to putting the economy on a sustained low-inflation growth path. Structural reforms to further open markets – especially food markets – to competition would also increase scope for lower interest rates over the medium term.

Output growth slowed sharply in the second half of 2000…

Economic conditions deteriorated surprisingly fast in the second half of 2000. After having reached 6 per cent in the first half, real GDP growth dropped to about 2½ per cent year-on-year in the fourth quarter. Retail sales decelerated sharply, industrial companies announced large layoffs, and the unemployment rate (labour force survey basis) jumped to 16 per cent – almost a record high. A main factor behind this downtrend was the stagnation of household real disposable incomes due to the unexpected hike in energy prices. Another contributing factor was the tightening of monetary conditions that occurred as the exchange rate appreciated and the central bank kept interest rates high despite the decline in inflation. As a result, credit expansion fell sharply (especially consumer credit), business expectations weakened and investment plans were curtailed.

… helping to reduce inflation and the external deficit

The recent slowdown has helped reduce macroeconomic imbalances. In each of the last two years, inflation had exceeded the official target range, sometimes significantly. Although this overshooting partly originated from supply-side factors, it nonetheless risked triggering higher inflation expectations and resulting in a wage-price

Poland

Domestic demand growth is no longer outpacing output growth

1. Annual change in per cent.
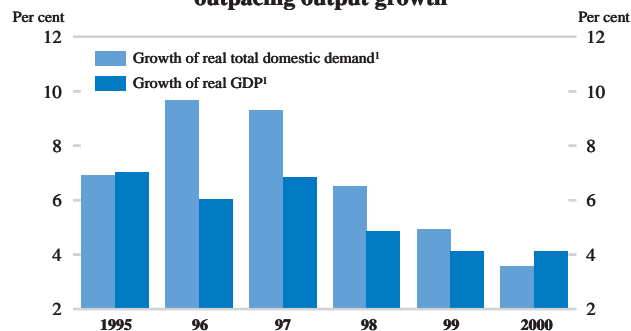
Unemployment is nearing a record high

2. Based on LFS.

Source: Central Statistical Office.

--- Poland: **Demand, output and prices** ---

	1997	1998	1999	2000	2001	2002
	current prices billion Zl	Percentage changes, volume (1995 prices)				
Private consumption	301.1	4.8	5.4	2.6	2.7	2.3
Government consumption	75.7	1.4	1.0	1.5	1.8	2.2
Gross fixed capital formation	110.9	14.2	6.5	3.1	4.5	5.6
Final domestic demand	487.6	6.5	5.0	2.6	3.0	3.1
Stockbuilding [a,b]	5.2	0.1	-0.1	1.0	0.0	0.0
Total domestic demand	492.7	6.5	4.9	3.5	3.0	3.1
Exports of goods and services	120.4	14.3	-2.6	12.8	10.0	11.0
Imports of goods and services	140.8	18.5	1.0	9.1	6.0	7.3
Net exports [a]	- 20.4	-1.8	-1.2	0.5	0.9	0.9
GDP at market prices	472.4	4.8	4.0	4.1	3.8	3.9
GDP deflator	_	11.8	6.9	11.0	7.5	6.0
Memorandum items						
Private consumption deflator	_	11.5	7.2	10.2	6.5	5.0
Unemployment rate	_	10.6	13.9	16.1	16.6	17.3
General government financial balance [c]	_	-2.3	-2.7	-3.0	-2.5	-2.2
Current account balance [c]	_	-4.4	-8.1	-7.2	-6.2	-5.7

Note: National accounts are based on chain-linked data. This introduces a discrepancy in the identity between real demand components and the GDP. See "Sources and Methods" for further details.
a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) Including statistical discrepancy.
c) As a percentage of GDP.
Source: OECD.

spiral. The tighter monetary conditions have brought inflation back to within the target range established for the end of 2001 (6 to 8 per cent). After having jumped to a record high of 7 per cent of GDP in 2000, the current account deficit has also been brought down to a more sustainable level, with imports stabilising in line with domestic demand, exports accelerating strongly, and the terms of trade improving.

Following the recent economic stabilisation, the policy challenge has been to establish the conditions for a rebound of output and job creation, without rekindling inflation and pushing the current account deficit to excessive levels. The Monetary Policy Council reduced its leading interest rate in March by 200 basis points, but hesitated to move further in view of the uncertainties prevailing on the implementation of the budget and on privatisation proceeds, as well as the possibility of a very rapid increase in private consumption following large transfers to households. At the same time, the government has targeted a tightening of fiscal policy to improve the policy mix and set conditions for lower interest rates over the medium term. After two years of fiscal slippages, the authorities are targeting an "economic deficit"[5] of 1.8 per cent of GDP in 2001, which implies an adjustment of 0.9 percentage point of GDP. This adjustment is projected to stem largely from stronger revenue collection – due to the improved financial position of the railways and mining sectors, which previously incurred tax arrears – and a significant increase in non tax revenues.

The policy challenge is to set the stage for a sustainable economic rebound

5. The economic deficit is the general government cash balance, net of transfers to second pillar pension funds, compensation payments to wage earners for inflation in the early 1990s, and receipts from mobile phone licenses.

Tighter spending control than achieved in recent years will however be necessary to achieve the economic deficit target.

Growth is projected to pick up in 2001-02, save for weakness abroad

Output growth is projected to rebound during 2001 and gather some momentum in 2002. The main driving force of this rebound would be private consumption. The rapid decline in consumer price inflation, in the context of wage inertia, is expected to provide support to real wages in 2001. In addition, household incomes are projected to be boosted by compensation payments to pensioners and transfers related to World War II forced labour. This big boost to household incomes is expected to result in faster private consumption growth, even though continuing labour market weakness should moderate its pace. Finally, business fixed investment should revive, after having been very weak in the past two years. Stronger domestic demand, together with a pickup in exports driven by foreign direct investment, should make it possible for output to rebound. Assuming that fiscal targets are realised, interest rates could decline further, and output growth would gather some momentum in 2002. The projected pace of growth would not be sufficient, however, to prevent a further deterioration of the labour market. This short-term outlook is subject to a significant downside risk stemming from large uncertainties about growth in the European Union – Poland's main export market. The main risk for the short-term outlook is thus one of export sluggishness, which would result in a longer period of economic weakness than projected.

Portugal

Output growth is likely to moderate to 2½-3 per cent in 2001 and 2002 after five years of growth of 3 per cent or above. Domestic demand growth is slowing, dampened by the impact of higher inflation on consumption and by cuts in current government spending. Unemployment is likely to stay close to its structural rate of 4 per cent, with inflation projected to remain above the euro area average. The current account deficit, estimated to have reached 10¼ per cent of GDP in 2000, in part as a result of terms of trade losses, is unlikely to diminish significantly.

Achieving a smooth re-absorption of the very large current account deficit will require a tight fiscal policy to raise national saving. The tax reform in progress should aim at reducing distortions and improving compliance, by broadening the base and lowering tax rates. In the future, fiscal consolidation will require stronger efforts to address the structural causes of spending overruns.

Activity began to lose momentum in the second half of 2000. Private consumption decelerated sharply, as rising interest rates and higher inflation affected real disposable income and the household saving ratio stopped falling. Still, boosted by strong exports and investment spending, real output is estimated to have grown by 3¼ per cent in 2000, the fifth year of growth in excess of 3 per cent. Employment increased significantly and the unemployment rate fell to a low of 4 per cent. A tight labour market and a weaker euro contributed to higher inflation, with consumer prices rising by 4¾ per cent year-on-year in the first quarter of 2001 – more than 2 percentage points above the euro area average. Buoyant import growth, combined with a sharp deterioration in the terms of trade, led to a widening trade imbalance and the current account deficit is estimated to have reached 10¼ per cent of GDP in 2000.

Output growth has decelerated

The budget deficit was reduced from 2 per cent of GDP in 1999 to 1.4 per cent in 2000, which was slightly better than targeted. Domestic taxes on oil products were lowered to offset higher international energy prices, leading to an excise tax shortfall of 0.5 per cent of GDP in 2000. This was more than offset by strong revenues from other taxes and the sale of mobile telephone licences, as well as a mid-year spending freeze, which cut capital expenditures. The 2001 budget foresees a further reduction in the budget deficit to 1.1 per cent of GDP. On a cyclically-adjusted basis and con-

The 2001 budget envisages a fiscal tightening

Portugal

Inflation continues to rise[1]
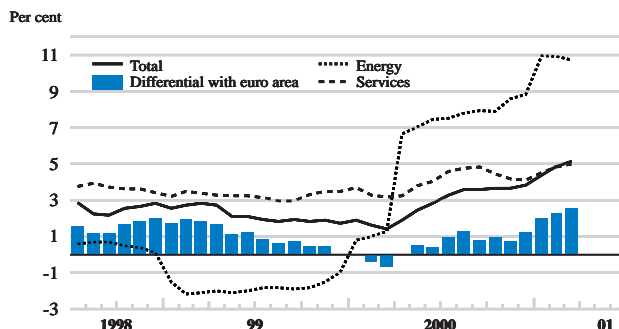
The current account deficit has widened further
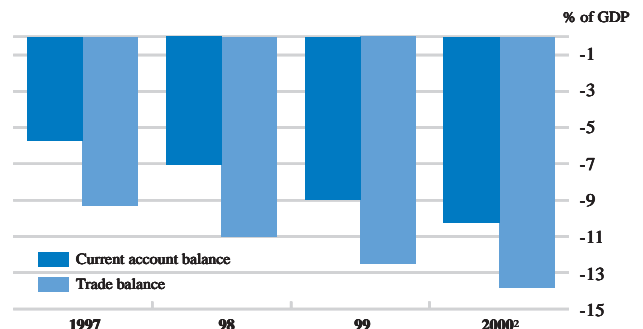
1. Harmonised index of consumer price. Year-on-year percentage change.
2. Estimates.
Sources: Banco de Portugal; Eurostat.

Portugal: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion Esc	Percentage changes, volume (1995 prices)				
Private consumption	11 851.6	6.0	4.6	2.8	2.1	2.4
Government consumption	3 561.1	3.0	3.8	3.8	1.4	2.4
Gross fixed capital formation	4 442.8	8.8	5.4	5.2	6.0	5.3
Final domestic demand	19 855.5	6.1	4.6	3.5	2.9	3.1
Stockbuilding [a]	116.5	0.0	0.1	-0.2	0.0	0.0
Total domestic demand	19 972.0	6.1	4.7	3.3	2.8	3.1
Exports of goods and services	5 685.6	7.6	2.5	7.0	7.7	8.1
Imports of goods and services	7 076.1	13.8	7.0	6.5	7.0	7.5
Net exports [a]	-1 390.5	-2.9	-2.1	-0.5	-0.5	-0.6
GDP at market prices	18 581.5	3.6	3.0	3.2	2.6	2.8
GDP at market prices in billion euros	92.7					
GDP deflator	_	3.8	3.5	2.8	3.8	3.3
Memorandum items						
Private consumption deflator	_	2.6	2.5	2.9	3.7	3.3
Unemployment rate	_	5.0	4.4	4.0	4.1	4.2
Household saving ratio[b]	_	8.2	7.5	7.7	8.1	8.4
Current account balance[c]	_	-7.1	-9.0	-10.3	-9.7	-9.6

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income.
c) As a percentage of GDP.
Source: OECD.

sidering the non-recurrent exceptional revenues of 2000, this implies a significant fiscal tightening. The Stability and Growth Programme envisages a deficit of 0.7 per cent of GDP in 2002. Meeting these targets continues to depend on significant annual increases in the tax take, which are predicated on the success of measures aiming to strengthen the fight against tax evasion. But the impact of these measures is actually uncertain, and even if revenues from better tax compliance do materialise, stronger measures to improve spending control are also required.

As growth slows, imbalances should start to be corrected

Activity is likely to slow further as consumption decelerates, due to lower employment growth and fiscal tightening. Export growth may also slow in line with the cooling of export markets. Investment spending is however expected to remain buoyant, as European Union transfers are stepped up. GDP growth is projected to ease to 2½ -3 per cent in 2001 and 2002, and inflation should fall from the second quarter of 2001 as the increase in domestic oil prices and its pass-through effects disappear from the index. Nonetheless, the inflation differential with the euro area is projected to remain above 1 percentage point, partly reflecting the tight labour market. The unemployment rate is expected to increase only slightly to 4.2 per cent in 2002, close to its structural level. Even if imports decelerate and the terms of trade improve, the current account deficit is unlikely to narrow significantly, staying at around 9½ per cent of GDP in 2002.

There are risks to competitiveness and export markets

The main risk to this scenario arises from the possibility that wages will rise faster than projected, in which case there could be an erosion of cost competitiveness, with lower exports and investment and an even wider current account deficit. Such a development would increase the risk of a sharper slowdown in the future,

especially as the deficit has been associated with a rapid build-up in private-sector indebtedness. The risk of a widening external imbalance would be aggravated if there were a more general slowdown in Europe, since Portuguese exports depend heavily on activity elsewhere in the region.

Slovak Republic

Strong export growth continued to support GDP throughout 2000 despite falling domestic demand. Export competitiveness was supported by real wage moderation, but unemployment increased. The government was able to meet its fiscal targets and pushed ahead with reforms, inducing a significant increase in foreign direct investment. However, structural changes are taking longer than expected to work through the economy. Nevertheless, domestic demand is expected to increase in 2001, and GDP growth to strengthen despite a sharply reduced contribution of net exports.

Some deterioration in the budget position is expected this year, largely accounted for by the one-off costs of bank restructuring. But with the fiscal room for manoeuvre extremely limited, the authorities will have to guard against any lapse of discipline on current expenditure.

Weak growth was a result of structural adjustment

Two years of structural reforms have begun to enforce budgetary discipline on both public and private sector enterprises. This has initially reduced growth: domestic demand fell by 1.3 per cent in 2000 (following a 4.6 per cent fall in 1999), though household and government consumption revived somewhat in the last quarter. By contrast, export demand was exceptionally strong, supported in the second half by improving price competitiveness. Overall, GDP grew by over 2 per cent despite a strong rebound in imports. The current account deficit narrowed further, to around 3½ per cent of GDP.

Price and wage increases remained moderate

Core inflation remains subdued, though the exchange rate depreciated, both in nominal and real effective terms, during the second half of 2000. Real wages recovered slightly in the second half of 2000, though they still fell by nearly 5 per cent for the year as a whole. Registered unemployment rose, reaching 17.9 per cent at the end of the year, as government measures to alleviate long term unemployment expired.

Increasing consumption is expected to lead to a further pick up in growth...

After two years of decline, private consumption is likely to strengthen this year. As structural changes begin to increase productivity, real wages should rise; the recent fall in net employment creation should also begin to reverse; and repayment of government privatisation bonds issued in 1995 will add to household income. Government investment is also expected to recover, though this is partially contin-

Slovak Republic

Exports have grown strongly[1]
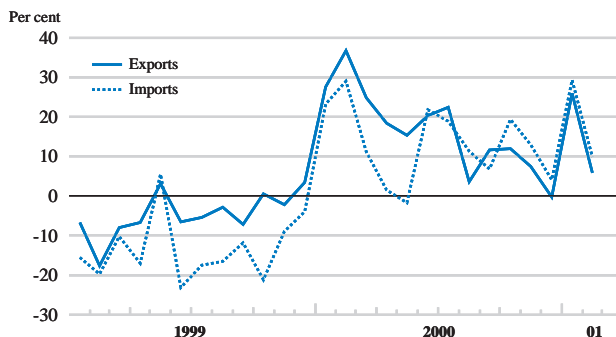
Export price competitiveness has improved[2]
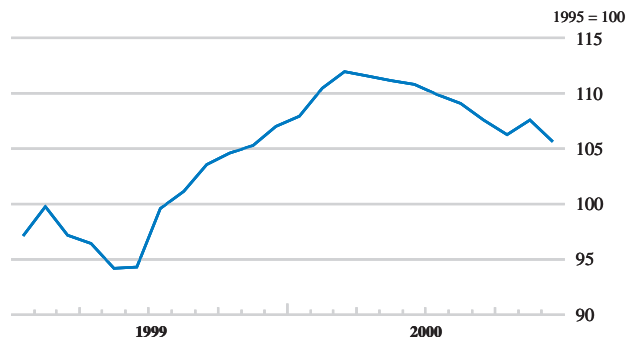
1. Year-on-year percentage changes.
2. Real effective exchange rate.
Sources: Slovak Statistical Office, IMF and OECD.

──────── Slovak Republic: **Demand, output and prices** ────────

	1997	1998	1999	2000	2001	2002
	current prices billion SkK	Percentage changes, volume (1995 prices)				
Private consumption	356.6	5.8	-0.2	-3.4	1.2	3.0
Government consumption	145.7	4.0	-6.9	-0.9	1.0	2.5
Gross fixed capital formation	246.5	11.1	-18.8	-0.7	8.5	6.5
Final domestic demand	748.8	7.2	-7.7	-2.1	3.3	4.0
Stockbuilding [a]	4.7	2.2	3.5	0.8	-0.5	0.0
Total domestic demand	753.5	9.5	-4.6	-1.3	2.7	3.9
Exports of goods and services	397.8	12.2	3.4	15.9	14.2	13.2
Imports of goods and services	465.2	19.8	-6.0	10.2	14.0	13.5
Net exports [a]	- 67.4	-5.9	7.0	3.6	0.1	-0.3
GDP at market prices	686.1	4.1	1.9	2.2	2.8	3.6
GDP deflator	_	5.1	6.6	6.5	5.6	5.3
Memorandum items						
Private consumption deflator	_	6.1	10.2	11.3	7.5	7.0
Unemployment rate	_	12.1	16.4	18.8	18.3	17.5
General government financial balance [b,c]	_	-4.6	-3.6	-3.4	-4.9	-4.0
Current account balance [b]	_	-10.0	-5.8	-3.7	-4.3	-5.1

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of GDP.
c) Figure for 2001 includes costs of the bank restructuring programme.
Source: OECD.

gent on tax collection exceeding budget estimates. Even with a diminishing contribution from net exports, GDP growth should rise to around 3½ per cent by 2002.

There are some risks to this projection of moderate growth. On the upside, the substantial rise in foreign direct investment ($1.1 billion in 2000) will help cover the current account, and is a positive indication of enterprise sector reform. But careful budget management will be needed to maintain domestic and international confidence: reform of the welfare system, the power utilities and the railways needs to be financed, and the costs included in the budget. In these circumstances any overshooting of current expenditure could compromise the government's ability to borrow, both from official lenders and international markets.

... which will only be sustained if fiscal discipline can be maintained

Spain

Private consumption and equipment investment slowed substantially in the second half of 2000, although GDP growth again averaged over 4 per cent for the year as a whole. Headline inflation has been pushed up by higher energy prices. Core inflation has also risen, though wages have accelerated rather little so far. Activity is expected to decelerate in 2001 and 2002 to just under 3 per cent, close to potential.

The fiscal stance was slightly restrictive in 2000, and is likely to remain so in 2001. But without a further fiscal tightening, underlying inflation is unlikely to drift down significantly. Recently, permanent contracts with lower firing costs have been extended to new groups of workers and more flexibility has been introduced in part-time contracts, but severance payments for temporary workers have been raised. Overall, the recent labour market reform package is timid and additional reforms are needed to support the continuation of strong job creation. Product markets reforms should continue in order to raise the very slow pace of productivity growth.

Domestic demand has decelerated

In 2000, real GDP expanded by more than 4 per cent, despite a sharp deceleration of domestic demand in the second half of the year. Private consumption slowed to 2¾ per cent in the fourth quarter of 2000, reflecting a rapid deterioration in the net financial position of households, sluggish real income gains due to higher oil prices and negative confidence effects from the stock market contraction. Investment in construction has remained strong, but equipment investment slowed markedly to under 2 per cent in the second half of the year. Exports were buoyant in 2000 but also weakened at the end of the year. As imports decelerated more than exports, the contribution of external demand to GDP growth turned positive again. The slowdown of activity has reduced the rapid pace of job creation, though it has remained buoyant, while the unemployment rate fell by 1¾ points over the year coming down to 13½ per cent in the last quarter of 2000.

Underlying inflation has increased steadily

In 2000, consumer price inflation was pushed up by the energy price hike and ended the year at 4 per cent. It has remained near that level in early 2001 despite the moderation of oil prices. Underlying inflation also increased during the year and the gap with core inflation in the euro area has widened. On the other hand, wage settle-

Spain

Domestic demand has decelerated[1]

Per cent

- Total domestic demand
- Foreign balance
- Gross domestic product

Core inflation has drifted up

Per cent

- Output gap (% of GDP)
- Core inflation[2]
- HICP differential with euro area[3]
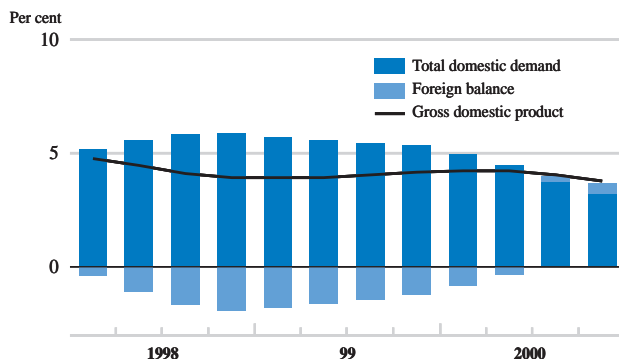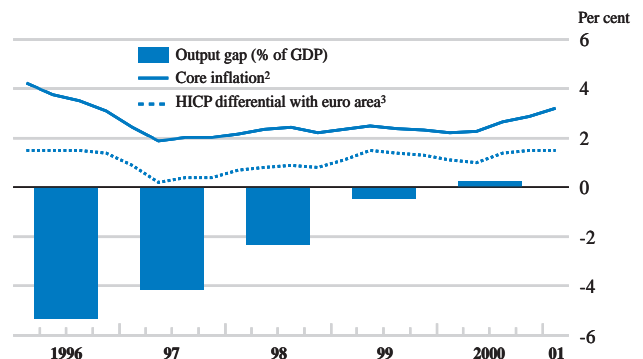
1. Year-on-year percentage change for total domestic demand and GDP, contribution to GDP growth for the foreign balance.
2. Excluding energy and unprocessed food.
3. HICP: harmonised index of consumer prices. Excluding energy and unprocessed food.
Sources: OECD and Eurostat.

Spain: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion Ptas	Percentage changes, volume (1995 prices)				
Private consumption	48 626.2	4.5	4.7	4.0	2.9	2.9
Government consumption	14 415.3	3.7	2.9	2.6	2.3	1.7
Gross fixed capital formation	17 999.2	9.7	8.9	5.9	4.1	3.9
Final domestic demand	81 040.7	5.5	5.4	4.2	3.1	2.9
Stockbuilding [a]	180.2	0.1	0.2	-0.1	-0.1	0.0
Total domestic demand	81 220.9	5.6	5.5	4.1	2.9	2.9
Exports of goods and services	21 989.9	8.3	6.6	10.8	8.2	7.4
Imports of goods and services	21 151.3	13.4	11.9	10.4	8.0	7.3
Net exports [a]	838.6	-1.3	-1.5	-0.1	-0.1	-0.1
GDP at market prices	82 059.5	4.3	4.0	4.1	2.9	2.9
GDP at market prices in billion euros	493.2					
GDP deflator	_	2.3	2.9	3.5	3.5	3.0
Memorandum items						
Private consumption deflator	_	2.0	2.4	3.6	3.2	2.8
Unemployment rate	_	18.8	15.9	14.1	13.2	12.6
Household saving ratio [b]	_	12.7	12.0	11.6	12.1	12.3
General government financial balance [c]	_	-2.6	-1.2	-0.3	0.0	0.1
Current account balance [c]	_	-0.5	-2.1	-3.1	-3.2	-3.2

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of disposable income.
c) As a percentage of GDP.
Source: OECD.

ments have only accelerated moderately so far, although many wage contracts incorporate catch-up clauses linked to headline inflation.

Higher inflation than in the euro area implies lower real interest rates and, despite the recent recovery of the euro, monetary conditions remain relaxed. In 2000, the government deficit fell to ¼ per cent of GDP, lower than budgeted, largely due to stronger than projected receipts from the corporate income tax and from social security contributions. For 2001, continued restrictions on public employment and wages have been implemented, although pension payments will grow substantially due to mandatory catch up clauses for higher-than-expected inflation in 2000. The target of a balanced budget is likely to be met even if GDP growth is significantly lower than the official budget projection of 3.6 per cent,[6] due in part to the conservative initial estimates of public receipts. Overall, this implies a slight tightening of the fiscal stance.

The policy stance has tightened somewhat, but remains relaxed

Output growth is projected to decelerate in 2001 and 2002 to around 3 per cent, which is close to the economy's estimated potential growth rate. Household saving rates are projected to rise somewhat, but private consumption should continue to be bolstered by further brisk job creation. Investment is likely to weaken in 2001, although only moderately as interest rates remain low, profitability favourable and pressures on capacity still high. Lower internal demand should induce a deceleration

Output growth is projected to slow down to close to potential

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6. In April the official projection for GDP growth was revised down to 3.2 per cent in 2001.

of imports, while exports should also slow because of subdued external demand. With oil prices declining somewhat, headline inflation is expected to decelerate, but core inflation may remain close to the current level as demand pressures will not dissipate. The main risk to this scenario is that the recent high headline inflation rates could spill over into wage settlements, thus further reducing competitiveness. Moreover, the slowdown in domestic demand evident since mid-2000, or a weaker international environment, could undermine confidence, resulting in lower consumption and a more pronounced weakening in activity than projected.

Sweden

Output growth slowed from an annual rate of 4 per cent in the first half of 2000 to 2½ per cent in the second. In contrast, employment continued to increase rapidly. Indicators of near-term prospects for activity have been mixed, although monetary conditions and fiscal policy remain supportive. Growth is expected to continue at a more moderate pace in the first half of 2001, before reverting to a rate of around 3 per cent, with renewed increases in employment.

The output gap has closed and labour markets remain fairly tight. While inflation is still low, it has picked up of late. Therefore, even though the budget surplus showed a further remarkable improvement in 2000, macroeconomic policy needs to be cautious. Significantly reducing the number of people tied up in labour-market programmes could ease inflationary pressures.

Economic growth remained high at 3½ per cent over 2000 as a whole, slowing to a more modest rate of 2½ per cent by the fourth quarter. Exports suffered from slower expansion in world trade and problems in the telecommunications sector, but the slowdown in activity mainly reflected weaker private consumption. This was partly due to lower consumer confidence, prompted primarily by the sharp fall in equity prices since their peak a year ago.

Growth tapered off during 2000 as private consumption weakened

Employment rose 2 per cent in 2000 and continued rising in early 2001. Notwithstanding an increase in labour-market programmes, labour supply grew by 1.2 per cent in 2000 and unemployment fell considerably to reach 4 per cent (national definition) by the end of the year. Headline consumer price inflation has increased to almost 2 per cent, while the domestic component – excluding items that are mainly imported – has accelerated rather more to above 2½ per cent. Private-sector wage increases have remained broadly stable at around 3½ per cent. Recent collective agreements in manufacturing imply continued modest wage inflation; hourly wages (excluding wage drift at the enterprise level) are set to increase only slightly above 2½ per cent in each of the years from 2001 to 2003.

Employment increased strongly, while inflation picked up from low rates

The budget surplus increased by 2¼ percentage points to over 4 per cent of GDP in 2000. The improvement was remarkable even in cyclically-adjusted terms, although this measure does not properly adjust for the surge in revenues from capital gains taxes, which is unlikely to be repeated. Fiscal policies are expansionary

Discretionary fiscal policies have reduced the surplus in 2001…

Sweden

Weaker confidence has slowed consumption

Per cent (left scale) / % balance (right scale)

- Real retail sales[1] (left scale)
- Real private consumption[1] (left scale)
- Consumer confidence (right scale)

1996 97 98 99 2000 01
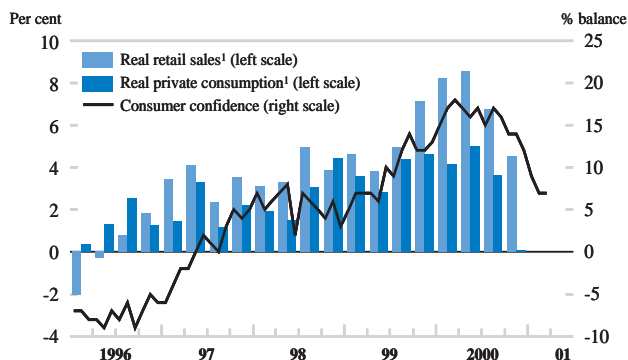
Households' economic situation has improved

Per cent (left scale) / Q1 1996 = 100 (right scale)

- Households' real disposable income[1] (left scale)
- Equity prices (right scale)
- House prices (Stockholm) (right scale)
- House prices (whole country) (right scale)

1996 97 98 99 2000 01
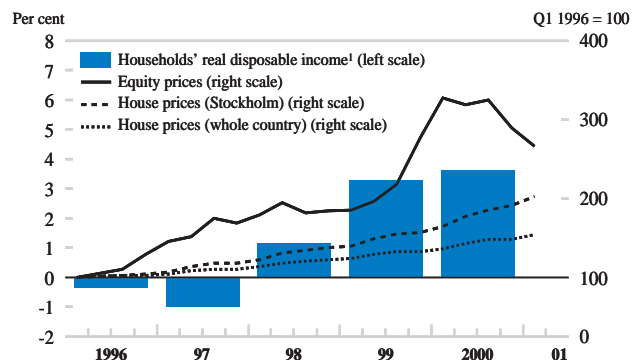
1. Year-on-year percentage change.
Source: Statistics Sweden; OECD.

————————— Sweden: **Demand, output and prices** —————————

	1997	1998	1999	2000	2001	2002
	current prices billion SKr	Percentage changes, volume (1995 prices)				
Private consumption	922.0	2.7	3.8	4.1	2.5	2.9
Government consumption	484.0	3.2	1.7	-1.7	1.0	2.0
Gross fixed capital formation	276.8	8.5	8.1	4.5	6.1	6.4
Final domestic demand	1 682.9	3.8	4.0	2.6	2.8	3.3
Stockbuilding *a*	7.6	0.4	-0.5	0.6	-0.2	-0.1
Total domestic demand	1 690.5	4.3	3.4	3.2	2.5	3.3
Exports of goods and services	778.2	8.4	5.9	9.8	6.5	7.3
Imports of goods and services	644.9	11.2	4.3	9.7	6.3	8.3
Net exports *a*	133.3	-0.3	1.1	0.9	0.7	0.2
GDP at market prices	1 823.8	3.6	4.1	3.6	2.8	3.0
GDP deflator	_	0.9	0.5	0.8	1.1	2.2
Memorandum items						
Private consumption deflator	_	1.0	0.8	0.9	1.6	2.2
Unemployment rate *b*	_	6.5	5.6	4.7	4.1	3.9
Household saving ratio *c*	_	2.4	2.0	2.0	4.0	4.2
General government financial balance *d,e*	_	1.7	1.8	4.1	3.6	3.4
Current account balance *d*	_	2.9	3.5	2.5	2.1	1.8

Note: National accounts are based on chain-linked data. This introduces a discrepancy in the identity between real demand components and the GDP. See "Sources and Methods" for further details.
a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) Based on monthly Labour Force Surveys.
c) As a percentage of disposable income.
d) As a percentage of GDP.
e) Maastricht definition.
Source: OECD.

in 2001, with further income tax cuts amounting to some 1¼ per cent of GDP, and the Spring Budget implies some further easing in 2002, even without additional tax cuts, which remain high on the agenda. Nevertheless, cyclically-adjusted net lending is projected to show a robust surplus of around 3 per cent of GDP both this year and next, and gross public debt should continue to decline rapidly. While the Spring Budget projects that total expenditures will remain just below their ceiling, the absence of a contingency margin implies that any unexpected pick-up in spending must be fully offset by discretionary savings.

… while monetary conditions remain supportive of growth

The monetary policy stance remains relatively easy. The Riksbank raised the repo rate by ¼ percentage point in December 2000, but at 4 per cent, the rate is still well below that of the euro area. The nominal effective exchange rate has weakened since the middle of 2000, and it recently reached its lowest level in five years. Thus, monetary conditions are supportive of robust growth. With inflation projected to edge up, policy-controlled interest rates should not be lowered from the current level.

GDP is projected to expand slightly above potential rates

Real GDP is projected to expand by 2¾ per cent in 2001 and by 3 per cent in 2002. This is slightly higher than estimated potential growth, which could reach 2¾ per cent per year if labour-market programmes are scaled back to make room for continued robust employment growth. The latter is projected to increase by an average of more than 1 per cent annually so that unemployment could fall to around 3½ per cent by late 2002. Inflation is projected to increase from less than 1 per cent in 2000 to around 2¼ per cent in 2002.

Despite recent indicators suggesting weakness, the balance of risks is neutral. Reduced buoyancy could come from slower export market growth or from further deterioration in consumer confidence. On the other hand, the projected increase in the household savings rate may be excessive given the underlying supportive macro-economic environment. Upside risks to inflation could emerge if macroeconomic policy is eased or if labour-market programmes are not scaled back. On the other hand, a marked currency appreciation, as assumed by both the Riksbank and the government, could help to contain inflation.

The balance of risks to output looks neutral

Switzerland

GDP growth hit 3.4 per cent in 2000, the best performance in ten years. However, the expansion slowed markedly during the year. The gradual tightening of monetary policy up to June 2000 and the rise in oil prices brought growth down to a more sustainable rate of around 2 per cent in the second half of the year. In 2001 and 2002, growth should continue at this pace, close to potential, which would prevent tensions appearing in the economy. Inflation, which slowed to less than 1 per cent in early 2001, should therefore remain moderate and unemployment should stabilise at around 2 per cent.

While it does not seem necessary at this point to ease the stance of monetary policy further, the target of balancing the budget in 2001 does not seem particularly ambitious, given better than expected budget outcomes in 2000. Fiscal discipline should not be relaxed, and priority should be given to the reduction of public debt. These macroeconomic policies need to be backed up by more determined efforts to strengthen competition in product markets.

The slowdown in activity has continued and inflation has fallen

Output growth, which reached an annual rate of approximately 4 per cent in the first quarter of 2000, fell to around 2 per cent in the second half of the year. The rise in inflation caused by the oil price hike and monetary tightening between late 1999 and June 2000 induced a moderation of consumption growth while, a rapid increase in imports – pushed by more dynamic equipment investment – reduced the external contribution to economic activity. Household confidence remains high. Unemployment has stabilised at around 2 per cent since spring 2000 and job creation is still buoyant. The increase in the foreign labour force has limited the pressures on the labour market. After accelerating until late 2000, inflation has slowed as a result of the recent easing of oil prices, reaching 1.0 per cent in March 2001, while underlying inflation has hovered between ½ and 1 per cent since mid-1999.

The Central Bank has reduced interest rates slightly

The Swiss National Bank reduced interest rates by ¼ of a point at the end of March 2001, when the fluctuation band of the three-month LIBOR was lowered to 2¾ to 3¾ per cent. The Swiss franc has appreciated a little (2½ per cent) against the euro since last summer, even though the negative three-month interest rate differential *vis-à-vis* the euro area has widened slightly. Long-term interest rates have edged down somewhat since spring 2000 and the yield curve has flattened, possibly reflecting

Switzerland

Inflation has decelerated[1]
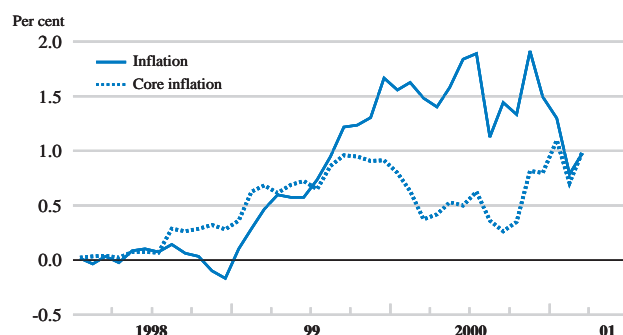
The slowdown in activity is confirmed
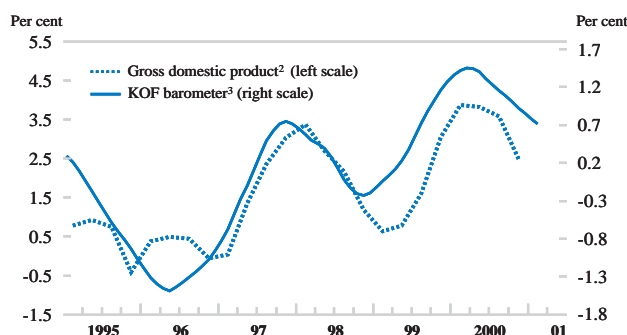
1. Year-on-year percentage changes.
2. Real terms. Year-on-year percentage changes.
3. The KOF barometer is a leading indicator of future development of GDP growth, with an average lead of 6 to 9 months.
Sources: Swiss Institute for Business Cycle Research/Swiss Federal Institute of Technology of Zurich (KOF) and OECD.

Switzerland: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices billion SF	Percentage changes, volume (1990 prices)				
Private consumption	224.2	2.2	2.2	2.0	2.0	1.9
Government consumption	55.8	0.7	-0.4	0.2	0.3	0.3
Gross fixed capital formation	72.9	4.5	1.8	6.8	5.2	4.3
Final domestic demand	353.0	2.6	1.7	3.0	2.6	2.3
Stockbuilding [a]	2.2	1.7	-0.2	0.2	0.0	0.0
Total domestic demand	355.2	4.3	1.4	3.1	2.6	2.3
Exports of goods and services	147.1	5.0	5.9	9.5	4.4	5.7
Imports of goods and services	130.9	9.6	5.5	8.6	5.5	6.0
Net exports [a]	16.2	-1.9	0.1	0.3	-0.6	-0.3
GDP at market prices	371.4	2.3	1.5	3.4	2.1	2.0
GDP deflator	_	0.2	0.6	1.3	1.7	1.6
Memorandum items						
Private consumption deflator	_	-0.3	0.3	1.5	1.0	1.2
Unemployment rate	_	3.9	2.7	2.0	1.9	1.9
Current account balance [b]	_	9.8	11.6	12.9	13.9	15.2

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of GDP.
Source: OECD.

a slightly restrictive assessment of monetary policy by the markets, bearing in mind inflationary expectations. It is assumed that interest rates will remain almost stable through the next 18 months.

The budget target of the Confederation for 2000 was more than realised. Due to better than expected macroeconomic conditions, a surplus of around 1 per cent of GDP was attained, instead of a deficit of ½ per cent. In 2001 the federal authorities approved a balanced budget, whereas a deficit of ¼ per cent of GDP is expected for the general government. The federal fiscal stance could become expansionary if the target is not exceeded again this year.

The target of balancing the federal budget in 2001 should be attained

Output growth should continue at 2 per cent in 2001 and 2002, close to potential. Faster growth of real wages should underpin household demand and offset the slight slowdown in employment growth, while investment should remain buoyant. However, the negative contribution of the foreign sector to activity will probably increase, due to the slowdown in foreign demand and the real effective appreciation of the Swiss franc. With smaller rises in import prices and the pressures on capacity still limited, inflation could stabilise at around 1 per cent and unemployment at 2 per cent. The risks surrounding this projection are balanced: activity could slow more than projected if the external slowdown is more marked, but domestic growth rests on a solid base and fiscal policy is likely to be slightly expansionary, so that the risk of inflation picking up cannot be ruled out if labour market pressures mount.

Activity should increase at the same pace as potential growth

Turkey

The economic situation has worsened sharply. The collapse of the stabilisation programme supported by the International Monetary Fund has led to a the abandonment of the crawling currency peg, the anchor of the programme, and to a resurgence of high real interest rates. The exchange rate has so far fallen by over 40 per cent, but tight fiscal and monetary policies in the context of the government's new programme are expected to limit the pass-through of the devaluation into inflation. With such policy tightness coming on top of the financial and monetary shock, the economy is expected to contract this year, before recovering in 2002.

Stabilisation of the economy will depend on re-establishing the credibility of the reform effort, which is a formidable challenge. The banking system requires a massive restructuring, including the take-over, sale or liquidation of many insolvent banks, and the capitalisation and privatisation of the state banks. Significant expenditure reductions will be necessary to offset higher debt service. At the same time, a broad-based incomes policy is essential to ensure the equity of the adjustment process and to avert the risk of a wage-price spiral.

A build-up of macro tensions…　　The economy rebounded sharply in 2000, thanks to the initial confidence in the stabilisation programme and sharp decline in real interest rates. Inflation fell steadily, from a peak of 70 per cent in February 2000 to a low of 33 per cent by February 2001 (year-on-year changes in the consumer price index). Strong domestic demand and continuing resistance to real wage cuts prevented a faster deceleration of prices and the 25 per cent end-year target for consumer price inflation was overshot by some 15 points. Given the fixing of the exchange rate path to the inflation target, this implied a substantial real appreciation of the currency. The spill-over of demand into imports, plus rising oil prices, caused the current-account deficit to widen to nearly 5 per cent of GDP.

… associated with banking-sector weakness led to crisis　　Meanwhile, the structural reforms needed to attract private capital from abroad began to falter in the late summer of 2000, raising concerns about current-account sustainability and halting the decline in nominal interest rates. In November, evidence of banking-sector problems led to a drying-up of the interbank market, provoking a financial crisis that in turn drained reserves and pushed real interest rates back up to around 40 per cent, where they remained even after a rescue package

Turkey

The crisis has been severe

Per cent / US$/TL

- Government bond yield[1] (left scale)
- Exchange rate[2] (right scale)
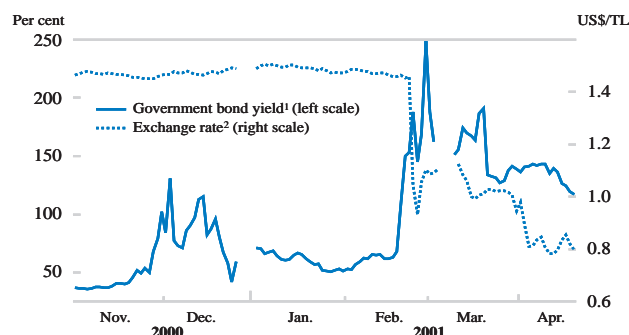
Progress on disinflation will be interrupted

Per cent

- Wholesale price index[3]
- Core inflation[3]
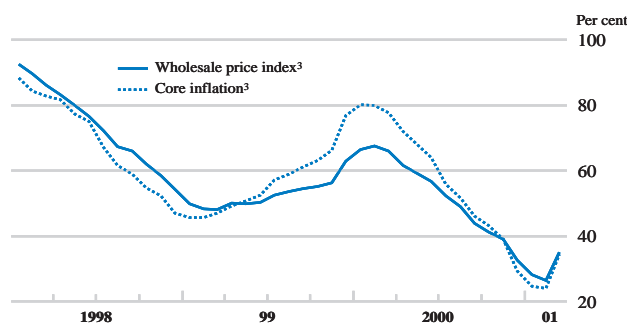
1. Secondary market, composite of original maturity.
2. US$ per million of Turkish Lira.
3. Year-on-year percentage changes.
Sources: Central Bank of Turkey; Undersecretariat of Treasury.

Turkey: **Demand, output and prices**

	1997	1998	1999	2000	2001	2002
	current prices trillion TL	Percentage changes, volume (1987 prices)				
Private consumption	19 619	0.6	-2.6	6.4	-6.0	1.1
Government consumption	3 535	7.8	6.5	7.1	-3.0	-1.3
Gross fixed capital formation	6 747	-3.9	-15.7	16.5	-17.6	-3.0
Final domestic demand	29 902	-0.2	-5.6	9.0	-8.9	-0.1
Stockbuilding [a]	- 377	0.9	2.0	0.8	-3.7	0.0
Total domestic demand	29 524	0.6	-3.7	9.6	-12.1	-0.1
Exports of goods and services	7 088	12.0	-7.0	19.3	15.0	22.0
Imports of goods and services	8 763	2.3	-3.7	25.4	-8.5	9.0
Net exports [a]	-1 674	2.6	-0.9	-2.9	8.4	5.3
Statistical discrepancy [a]	115	-0.1	0.0	0.0	0.5	0.0
GDP at market prices	27 965	3.1	-4.7	7.2	-4.2	5.2
GDP deflator	_	75.7	55.6	50.7	56.1	44.0
Memorandum items						
Private consumption deflator	_	83.0	59.0	49.5	63.2	48.9
Unemployment rate	_	6.7	7.5	6.4	6.9	6.7
Current account balance [b]	_	1.1	-0.9	-4.9	-1.9	-0.5

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) As a percentage of GDP.
Source: OECD.

from the International Monetary Fund had calmed the markets down. A second financial crisis in February 2001 followed from the inability to re-establish confidence in the structural reform process. At that point, the authorities saw little choice but to float the lira and exit the programme. The lira has thus far devalued by more than 40 per cent.

Monetary policy needs to be supported by structural reforms

The authorities have announced end-2001 objectives of 53 and 58 per cent for consumer and wholesale price indexes, respectively, and 20 and 17 per cent for end-2002. The precise monetary strategy for achieving these targets has not yet been unannounced, but will necessarily imply a period of high real interest rates and sharp real appreciation of the lira to unwind part of the recent depreciation. In the medium-term, the adoption of an explicit inflation-targeting strategy would be desirable. The basic conditions for a successful inflation targeting strategy are not very different from those that were needed to support the currency peg: an incomes policy to counteract domestic inflation inertia and fiscal consolidation, made credible by structural reforms, to maintain capital inflows.

Banking sector restructuring is most urgent

Bank restructuring is the most urgent of these reforms, and the government has made this a high priority. The combined interest and exchange-rate shock of the crisis has greatly exacerbated balance sheet problems of the banking system. The rise in interest rates, especially in the overnight market upon which many banks (in particular, the state banks) are dependent for funding, has meant heavy losses in view of relatively large pre-existing longer-term asset positions. The devaluation of the currency has sharply increased the domestic currency value of uncovered foreign currency borrowings by the banks (net open positions), which were quite large prior to the crisis. Furthermore, economic weakness and balance sheet problems in the corporate sector are expected to increase the amount of non-performing loans. As a short term measure, the central bank has been supplying the interbank market with

ample liquidity, which has stabilised the overnight rate, but could conflict with the need for a tighter stance.

Incomes policy is critical

In 2000, the wages and incomes of groups such as civil servants, minimum wage earners, and farmers were linked to the inflation target. These groups have borne the brunt of the real wage adjustment. Following the adoption of a floating exchange-rate regime, the authorities have stated their intention to extend the incomes (and price) policy to all components of society, including state enterprise, private unionised and white -collar workers, and firms. Though difficult to achieve, given the loss of monetary credibility during the crisis and the need to absorb large post-devaluation real wage cuts, such a policy will be essential for establishing a measure of social cohesion behind the new strategy.

The fiscal outlook has deteriorated severely

A significant primary budget surplus (*i.e.* net of debt interest payments) was achieved in 2000 with the help of high growth and continued use of one-off tax mea-sures. Primary expenditures were kept almost constant in real terms. In preparation of the 2001 budget, favourable macroeconomic conditions were assumed to continue and a 5 per cent of GDP target for the primary surplus was announced. Post-crisis, the target has been maintained, which on the basis of OECD growth projections (below) implies a severe tightening in cyclically-adjusted terms. The crisis has had an adverse impact on debt service due to higher interest rates; on personnel and cur-rent expenditures because of higher inflation; and on tax receipts, which have been affected by the weakness of economic activity. Thus, achieving the targets will require severe cuts in public expenditure. Besides the burden of rising government bond yields, a deterioration in the debt dynamics will derive from the shortening of the maturity structure of the debt, the high costs of the bank clean up (backed by a full guarantee of domestic deposits and foreign liabilities), and continuing delays in the privatisation programme, with Turk Telekom and Turkish Air not yet sold.

Domestic demand will contract…

The tightening of macroeconomic policies and real balance sheet losses induced by the devaluation, will lead to a severe contraction in domestic demand (12 per cent) in 2001. However, an improvement in the external contribution will limit the contraction of GDP to about 4 per cent. Implementation of the new stabilisation pro-gramme should gradually restore confidence and permit real interest rates to decline toward the 15 -20 per cent level by next year. This is expected to produce a stabilisa-tion of domestic demand, while export performance should continue to benefit strongly from the real devaluation of the lira which will be only slowly unwound. Overall, growth of perhaps 5 per cent may be expected in 2002. Inflation, following a spike in the price level of 25 per cent in the early aftermath of the devaluation (rep-resenting a pass-through of roughly one-half), is assumed to begin to moderate in the coming months. On an annual basis, consumer price inflation is projected to hit 80 per cent by end-2001, but then to fall to 30 per cent by end-2002. The current account is expected to remain in moderate deficit this year, before shifting to near-balance by 2002.

… but major risks remain

The collapse of the programme has intensified the risks facing the Turkish econ-omy. The chief danger is an inability to stabilise the exchange rate and bring down the country risk premium due to the difficulty in rebuilding confidence. Not only would this magnify banking system problems and fiscal stress, but it could also usher in a return to accelerating inflation and budget instability, locking Turkey into a pro-longed period of slow growth.

III. DEVELOPMENTS IN SELECTED NON-MEMBER ECONOMIES

World economic growth was exceptionally strong in 2000, though certain strains began to appear in some regions towards year-end, importantly linked to the slowdown in the United States. In general, growth in non-member regions was driven by strong export demand, recovery in domestic consumption and, in much of Asia, expansionary macro-economic policies. These stimuli helped oil-importing countries absorb the rise in oil prices. Some easing in the cost of energy has reduced risks for this year, while oil producers are still benefiting from the boost to their export revenues.

Growth in the non-OECD areas is expected to moderate in 2001. For many Asian economies, the global adjustment in the market for information and communications technologies is the principal element at work, though concerns about the adequacy of corporate and bank financial restructuring efforts pose additional downside risks. Though less exposed to these global developments, Russia and some transition countries in the region would be vulnerable to any sharp weakening in commodity prices that could result from slower world growth. In South America, the positive effects of lower US interest rates may offset some of the risks associated with lower export growth, providing that domestic factors do not lead to a deterioration in market confidence.

Developments in the three major countries are also being shaped by specific internal conditions. In China, recovery is being supported by consumption and fiscal stimulus but is largely confined to urban areas while performance in rural areas continues to be lacklustre. Growth is likely to continue in Russia, though moderating notably due to the continuing real rouble appreciation and capacity constraints in some industries. In Brazil, the present virtuous cycle of growth and fiscal consolidation may continue, although political uncertainties and a not fully established confidence in the region are sources of risks.

Last year, growth was exceptionally high and widespread in the global economy. However, the recent slowdown in the United States is expected to moderate overall growth prospects. In particular, the sharp reversal in investment and business expectations in two of the most globalised industries, the automobile and the information communication technologies (ICT) sectors, is affecting the countries highly exposed to these markets. Recovery in Asian non-member countries could be delayed if the contraction in world demand for electronics products lasts beyond the present slowdown. The risks to regional trade and foreign direct investment posed by the weakening of the Japanese economy are creating further tensions in the region that are exacerbated in several cases by political turmoil and uncertainties about whether progress on structural reforms will be sustained. Should developments in the United States have a stronger than expected adverse impact in the European Union, the transition countries in Central and Eastern Europe would also be negatively affected. In South America, these external risks are more balanced, as the impact of lower exports from a slowdown in world trade might be partially offset by the benefits of lower international interest rates.

Growth is slowing from last year's exceptionally rapid pace, due to the slowdown in key globalised markets, such as ICT

The US slowdown began to affect Asian non-member economies in the second half of 2000, as imports and exports slowed markedly on a monthly (seasonally adjusted) basis. Real GDP growth also declined, most noticeably in Singapore, Chinese Taipei, and Thailand, although growth in China has largely been maintained. The impact of the US slowdown is substantially magnified by the large concentration of several Asian countries on production of semiconductors and other electrical goods, demand for which is slowing much more rapidly than aggregate US demand. Malaysia, Singapore, and Chinese Taipei, where such products account for between

The global trends are particularly important for growth prospects in Asia…

45 and 65 per cent of total exports, are particularly exposed in this respect. Overall, average real GDP growth for the Dynamic Asian Economies is expected to slow from around 7 per cent in 2000 to 4 to 5 per cent in 2001. Import growth is likely to slow even more sharply as weaker export growth sparks inventory de-stocking. The risks posed by the weakening of external demand are increased by the fact that the recovery in domestic demand is not yet firmly established. The nascent revival in capital spending faces at least a temporary cut, and perhaps a more durable period of retrenchment. Growth in Asian non-members could rebound in 2002 if the United States' economy recovers and demand for computers and other electrical products revives with the completion of adjustment in those sectors.

… notably because domestic financial sectors are still fragile

The possibility of a greater than projected slowdown in Europe and Japan, or a sharp fall in the dollar, pose further downside risks to the Asian non-member outlook. Slower growth has highlighted serious remaining private sector debt and other structural problems that in some cases now appear worse than anticipated. Earlier optimism about economic fundamentals in Chinese Taipei has been seriously dented by the rise in non -performing loans in 2000. Such loans are still almost 19 per cent of total bank loans in Thailand and nearly 10 per cent in Malaysia and could start to rise again as the economies slow (see Box III.1). The sharp drop in equity prices in many Asian countries since early 2000 is symptomatic of investor concerns over lingering structural problems but is also likely to damp consumption demand where households hold a significant amount of equity, notably in Chinese Taipei and Hong Kong, China. Despite these risks, a re-emergence of crisis conditions remains unlikely, given the large current account surpluses, high international reserves, and a considerably improved level and structure of external debt compared with that prevailing before the 1997 crisis. Although fiscal policy is constrained by the growth in expenditures and budget deficits in the aftermath of the 1997 crisis, most countries retain significant room to sustain or even reinforce expansionary monetary policy, and their room for manoeuvre has been further increased by declining US interest rates.

South America has recovered, but restoring confidence in Argentina required a large financial package

Most South American countries have experienced a growth recovery over the past year, although with varied strengths. While activity has been strong in Brazil and Chile, economic expansion has been modest in most other countries partly due to fiscal consolidation efforts. Strong growth in international trade and higher export prices were the key factors supporting the recovery. The more rapid growth of exports than imports in South American countries has also narrowed the current account deficit for the region and foreign capital inflows have continued to finance the gap, with a major role played by foreign direct investment. In Venezuela and, to a certain extent, Colombia, oil revenues have helped balance fiscal and external accounts, thus removing some growth constraints and smoothing social and political problems. In Ecuador, strong oil revenues are also easing the transition towards "dollarisation". In Argentina, however, the overvalued exchange rate continued to erode competitiveness and perpetuated a large external deficit. At the same time, tight macroeconomic policies were needed to meet the constraints of the currency board. As a result, the economy stagnated. By the end of 2000, the country was threatened by a financial crisis, and so negotiated an exceptional financial assistance package.[1] To

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1. The preventive financial package of $40 billion over a two-year period (2001-02) involved a broad set of lenders. It included the International Monetary Fund ($13.7 billion), the World Bank ($2.5 billion), the Inter-American Development Bank ($2.5 billion), the government of Spain ($1 billion), and institutional investors and local market makers that agreed to purchase government securities (up to $20 billion).

Box III.1. **Banking sector restructuring in Asian crisis countries**

Substantial progress has been made over the past year in restoring the soundness of the banking system in the three Asian non-OECD countries hardest hit by the 1997 crisis – Indonesia, Malaysia, and Thailand. The approaches being taken to bank restructuring have also converged somewhat, with separate bank asset management companies now playing a key role in all three countries in dealing with non-performing loans. Bank restructuring is being accompanied by efforts to improve prudential standards and bolster governance. The banking landscape is undergoing significant changes with many banks either being merged, closed or having greater foreign participation. However, the restructuring process is still incomplete and subject to risks of a setback given the more limited progress that has been made in resolving non-financial corporate debt problems. Other future challenges are to dispose of the problem loans acquired from the banks, to re-privatise banks acquired by the governments in the aftermath of the 1997 crisis and to deal with the large and still growing costs of the bank restructuring itself.

Of the three countries, Malaysia is furthest along in its bank restructuring process. Danaharta, the bank asset management agency created by the government in 1998, completed its acquisition of non-performing bank loans (amounting to about 12 per cent of total commercial bank loans) in 2000. Remaining non-performing loans, net of provisions, had fallen to 9.6 per cent of total bank loans by the end of 2000. Danaharta also made substantial progress in working out the assets acquired from the banks and the recovery rate has been rising. Capital injections of RM 7.6 billion ($2 billion) of public funds have helped to bring banks' core capital adequacy ratio to 12.1 per cent in January 2001, substantially above the minimum set by the Bank for International Settlements (BIS). Despite several setbacks, the government's ambitious plan to restructure the banking sector made significant progress in 2000 with the establishment of six of the ten core financial groups ultimately envisaged. Significant but less progress has been made in corporate debt restructuring, which has been hindered by government protection of some strategic enterprises and restrictions on foreign ownership in certain areas.

Compared to Malaysia, Thailand's restructuring of its private banks has relied more heavily on the efforts of the banks themselves. The private banks have been responsible for establishing asset management companies to carve out their non-performing loans. Most banks have chosen to raise capital in the market to meet the progressively higher requirements set by supervisory authorities rather than participate in the government's voluntary re-capitalisation programme. Indeed, banks have had substantial success in raising capital from domestic and foreign investors, and managed to raise their capital adequacy ratio to 11.4 per cent by the end of 2000. However, non-performing bank loans declined gradually and were still above 30 per cent of total loans as late as August 2000. They have since dropped much further to below 20 per cent, as banks transferred assets to their recently established asset management companies and as the maturity of loans rescheduled earlier was extended. But new non-performing loans continue to emerge, remaining non-performing loans are proving to be more difficult to restructure, and banks appear reluctant to write down bad loans. Progress on non-financial corporate sector debt restructuring has also been more limited and there continues to be "strategic withholding" of loan payments by some corporations that are able to repay.

Despite its exceptionally severe economic problems, Indonesia has also made considerable progress toward restoring its banks to financial soundness. By the end of 2000, the government-established Indonesia Bank Restructuring Agency (IBRA) had carved out 82.6 per cent of banking sector non-performing loans, bringing the overall non-performing ratio down to 18.8 per cent. However, less than 3 per cent of the assets acquired had been disposed of by early this year. The government programme to inject capital into three state banks and three private banks was completed in October 2000, although it was only able to raise their average capital adequacy ratio to 4 per cent, or half the BIS minimum. Further progress in bank restructuring continues to be limited by the weakness of the economy and especially by the non-financial corporate debt overhang. Corporate debt restructuring has been gaining momentum but bad debts remain massive.

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further restore confidence, a new economic team was appointed in late March 2001, which announced a plan to improve competitiveness in the economy.

The slowing US growth, weakening information and communications technology trends and global effects induced by adjustments in this sector, are less important directly for South America than for Asia. But, of course, a global economic downturn would have important spillover effects. For Chile and Peru, in particular, slowing demand in Asia would be a downside risk as it could significantly affect their primary commodity exports. A significant fall in oil prices would also be a major risk for South American oil exporting countries. It would lead to fiscal and external imbalances in Venezuela, Ecuador and Colombia and could trigger political and social unrest. For the area as a whole, the impact of lower world growth could be

The slowdown in the United States is expected to have a limited impact on the region

counterbalanced or even more than offset by lower international interest rates. In Argentina, in particular, a weakening of the dollar could significantly ease the current very tight financial conditions.

China

China's real GDP growth accelerated in 2000…

China's real GDP growth accelerated in 2000 for the first time since 1992, reaching 8 per cent growth compared to 7.1 per cent in 1999. This acceleration was led by industry, with heavy industry and export-oriented sectors such as electronics and telecommunications equipment exhibiting particularly strong upturns. In contrast, the agricultural sector suffered from a 9 per cent fall in grain output caused by severe natural disasters and the continued shrinkage of land under cultivation. Exports surged by 28 per cent in value terms in 2000 over the previous year, helped by strong global demand and significant gains in market share. However, export growth slowed substantially in the last quarter of 2000, due to a slowdown in external demand, primarily from the United States and other Asian countries. Spurred by demands from state infrastructure spending and accelerated purchases of foreign capital equipment by enterprises in preparation for WTO entry, imports grew even faster than exports, surging by 36 per cent in value terms in 2000. Due to the stronger import growth, both trade and current account balances deteriorated last year, but remained positive.

… bolstered by recovery of domestic demand

An acceleration of investment and a continued pick-up of consumer demand further bolstered the recovery (Table III.1). The rise in domestic demand has been supported by the government's fiscal stimulus programme, easing monetary conditions, rising enterprise profits, and improved business and consumer sentiment. The deflationary trend of the previous two years has finally been arrested, with the consumer price index moving into a positive range since mid-2000 and recording its first annual increase (0.4 per cent) since 1998. The increase in the consumer price index has been mainly due to higher oil and services prices, while retail prices are still falling.

The recovery was uneven…

The upturn in the economy in 2000 was, however, uneven and accompanied by rising income inequalities. The slowdown in rural residents' income, which started in 1997, continued last year, with rural incomes rising just 2.1 per cent, compared

Table III.1.   **Projections for China**[a]

	1999	2000	2001	2002
Real GDP growth	7.1	8.0	7.5	7.8
Inflation	−1.4	0.4	0.8	1.2
Fiscal balance (% of GDP)	−2.1	−2.8	−2.7	−2.6
Current account balance (US$ bn)	15.7	9.8	5.3	0.7
Current account balance (% of GDP)	1.5	0.9	0.5	0.1

a) The figures given for GDP and inflation are average percentage changes from the previous period. Inflation refers to the consumer price index.
Source: Figures for 1999 and 2000 are final figures from national sources, except for the current account balance in 2000, which is an OECD estimate. Figures for 2001 and 2002 are OECD projections.

with a 7 per cent increase in urban incomes. Farmers' incomes were hit particularly hard by the large fall in grain output last year. As a result, the growth in private consumption has been concentrated in the booming large cities in the coastal area, while consumption growth in rural areas has remained subdued. Other parts of the economy including collective enterprises also continued to lag behind the dynamic foreign-investment sector and the relatively small number of large state-owned enterprises in certain sectors such as petroleum, power, telecommunications, and electronics.

The government continued to inject substantial fiscal stimulus last year, with an issuance of extra-budgetary treasury bonds of RMB 150 billion ($18 billion), which is estimated to have contributed 2 percentage points to last year's GDP growth. The continued fiscal pump priming resulted in a significant rise in the budget deficit, from 2.1 per cent of GDP in 1999 to 2.8 per cent in 2000. The government has pledged to issue the same level of treasury bonds this year, which will mark the fourth consecutive year of large fiscal spending aimed at maintaining growth and employment. As last year, this year's fiscal package will mainly be used for infrastructure construction, in particular, in relatively underdeveloped western regions.

… and continued to be supported by fiscal stimulus

The direct effects of the fiscal stimulus are expected to abate over the next two years, so that growth will become more dependent on private consumption and enterprise investment. Real GDP growth this year is expected to moderate to around 7½ per cent, due to the smaller contribution from net exports and state investment. Nonetheless, higher corporate earnings in 2000 and the projected rise in the inflows of foreign direct investment are expected to sustain investment spending in 2001. The growth of private consumption is expected to remain stable, driven by the strong rise of incomes in urban areas and improving consumer sentiment, although growth in rural consumption is likely to remain subdued. The economy should pick up in 2002, pulled up by higher export growth as external demand recovers and domestic demand continues to be strong. Import growth, spurred by purchases of foreign capital equipment, will continue to outpace export growth. The current account surplus is projected to decline as the goods and services trade balances deteriorate. Beyond the near term, growth prospects depend on further progress in implementing structural economic reforms, in particular rationalisation of the state-owned industrial and financial sectors. The capacity for further fiscal stimulus is narrowing given the rising deficit, the relatively low level of government revenues, and the future demands that will arise from social security and other economic reforms.

Output growth will remain strong

The Russian Federation

The Russian economy exhibited strong expansion in 2000 for the first time since the beginning of economic transition. Preliminary estimates indicate growth of nearly 8 per cent, with fixed capital investment rising by 17 per cent. The increase in output was based broadly across many sectors and branches of the economy, while investment was concentrated in energy and transportation. Russian firms benefited from a weak rouble, strong export prices especially for oil, and higher domestic demand. Household incomes rose by an estimated 9 per cent during the year, yet still remain almost 20 per cent below their values on the eve of the 1998 economic crisis. Leading indicators and

The Russian economy has exhibited strong growth, but the pace appears to have slowed since the fourth quarter of 2000

business expectations since late 2000, however, point to a possible slowdown in the pace of economic activity in 2001. Many manufacturing firms appear to have been affected by relative increases in domestic energy and transportation prices, as well as the real appreciation of the rouble (over 10 per cent in 2000).

A record current account surplus was recorded, while inflationary pressures have been kept largely under control

Bolstered by strong export prices and still somewhat weak imports, Russia's current account surplus rose to $46 billion in 2000 (Table III.2), compared with $25 billion in 1999 and only $1 billion in 1998. In this context, the gross foreign currency and gold reserves of the Central Bank more than doubled in 2000, reaching $29 billion by the end of the year. By central bank estimates, however, over $10 billion continued to leave the country in 2000 in legal and illegal capital flight, reflecting a still difficult investment climate. The exit of capital, a federal budgetary surplus (see below), and foreign debt repayments have helped moderate the impact of the strong current account inflows on inflation, given policies aimed at preserving nominal exchange rate stability. But early 2001 did witness a modest jump in both inflation and inflationary expectations. Consumer prices increased in the first quarter of 2001 by over 7 per cent, while nominal interest rates also rose.

The federal and consolidated budget deficits have been eliminated

For the first time in the transition period, Russia recorded federal and consolidated budgetary surpluses in 2000, currently estimated at 2½ and 3 per cent of GDP, respectively. The most important contributing factor to the federal budgetary turn-around was higher tax receipts, predominantly from export, excise and profit taxes. The budgetary situation remains more complicated at the regional and local levels. Sub-national budgetary balance was supported by very tight borrowing constraints, while a number of regions continued to conduct a significant share of budgetary operations in various money surrogates. Russia adopted its first balanced budget law for the federal government in 2001.

Economic growth should continue in the short term, but at a more modest pace

Economic growth should continue in Russia this year and next, although at a more modest pace in the face of a stronger rouble, relatively higher input prices for manufacturing firms, slower expansion in demand, and the rising capacity constraints in some industries. A slowdown in growth in OECD countries could also have a negative impact on demand and prices for Russian exports. While there does not appear to be any immediate threat to financial stability in Russia, the rate of inflation in 2001 will depend on the future conduct of monetary and exchange rate policy, which has yet to be fully clarified. The official December-on-December inflation target of 12 to 15 per cent in 2001 may prove difficult to achieve. Meanwhile,

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Table III.2. **Projections for the Russian Federation**[a]

	1999	2000	2001	2002
Real GDP growth	3.5	7.7	3.0	4.0
Inflation	36.7	20.2	20.0	15.0
Fiscal balance (% of GDP)[b]	–2.0	3.0	0.0	0.0
Current account balance (US$ bn)	25.0	46.3	40.0	30.0
Current account balance (% of GDP)	14.0	18.0	14.0	9.0

a) The figures given for GDP are percentage changes from previous year. Inflation refers to end-of-year consumer price index.
b) Includes federal, regional and local budgets.
Source: Figures for 1999 are final figures from national sources, figures for 2000 are preliminary estimates from national sources or the OECD estimates, and figures for 2001 and 2002 are OECD projections.

the current account should remain quite strong. Medium and longer-term prospects continue to depend on further progress in implementing key elements of the structural reform agenda, particularly measures to improve the overall environment for investment, entrepreneurship, and competition. In this regard, some draft legislation is currently being considered in the state Duma.

Brazil

The economy continued to rebound last year (Table III.3). Rising employment and a gradual recovery in real wages increased consumer demand, while improved business confidence and lower interest rates fostered fixed capital investment. Industrial production surged at the end of 2000, with durable goods' production up 39 per cent year-on-year and automobile production up 62 per cent year-on-year. Employment was on average 4 per cent higher in 2000 than in 1999 and, more importantly, employment growth in the second half of 2000 was concentrated in the formal sector, with a consequent reduction in the share of the informal sector. Failure to improve the trade balance is a source of disappointment, but it is mainly due to strong import growth as volume exports increased significantly. So far, the current account deficit has been more than financed by foreign direct investment.

A broad-based recovery…

The central bank has adopted a cautious stance and inflation objectives have been met, despite pressures from rising oil and administered prices. The reference interest rates had slowly declined by 3¾ percentage points since mid-1999. But, reacting to market pressures notably arising from the situation in Argentina, the central bank increased the rate by ½ percentage point at the end of March 2001, and again by ½ per cent, to 16.25 per cent, in April. A positive element is that fiscal targets have continued to be met and the debt to GDP ratio has stabilised at below 50 per cent of GDP. This responsible fiscal behaviour and enforcement should support market confidence, reducing the risks to the domestic economy from any adverse reactions in international financial markets.

… has been supported so far by lower interest rates and responsible fiscal policy

The outlook is for continuing growth led by domestic demand. Fixed investment is expected to provide sufficient additional productive capacity to accommodate expanding activity without price pressures. Productivity gains could

The short-term outlook remains positive…

Table III.3.   **Projections for Brazil**[a]

	1999	2000	2001	2002
Real GDP growth	0.8	4.5	4.0	4.5
Inflation	5.0	7.0	5.3	4.0
Fiscal balance (% of GDP)	−10.0	−4.6	−4.0	−3.5
Primary fiscal balance (% of GDP)	3.2	3.4	3.0	3.0
Current account balance (US$ bn)	−25.1	−24.6	−26.8	−27.4
Current account balance (% of GDP)	−4.7	−4.2	−4.4	−4.2

a) The figures given for GDP and inflation are average percentage changes from the previous period. Inflation refers to consumer price index.
Source: Figures for 1999 and 2000 are from national sources. Figures for 2001-2002 are OECD projections.

accommodate some real wage growth that, in turn, will sustain consumer demand. Some decline in oil prices and lack of pressure from administered prices should help moderate price increases and keep inflation within the target bands (of +/–2 per cent) both in 2001 and 2002.

… although there are uncertainties related to the political cycle and confidence in the region

A major risk to the outlook arises from delays in implementing much needed structural reforms and possible complacency in meeting fiscal targets prior to the 2002 presidential elections. There are also risks that strong domestic demand will result in a widening of the trade deficit, a weakening of the exchange rate and upward pressures on inflation. This might put the new monetary policy framework under pressure and call for yet further increases in interest rates. Moreover, the fragile situation in Argentina could present a risk if it leads to a more general reversal of confidence in the region. The tighter external financing constraints which may result would risk undermining growth. Recent announcements on electricity shortages are also creating additional downside risks for the outlook, although their impact on growth is still rather uncertain.

IV. FISCAL IMPLICATIONS OF AGEING: PROJECTIONS OF AGE-RELATED SPENDING

Introduction

The combination of the baby boom in the early post-war period, the subsequent fall in fertility rates from the end of the 1960s and increasing life expectancy is leading to a progressive ageing of the population in virtually all OECD countries. This will begin to affect public finances significantly as the baby boom generation progressively reaches retirement age over the next few decades. The impact of these developments on public finances is an issue of concern and debate in most OECD countries, and a substantial number of policy reforms have been introduced over the past decade. This paper reviews these public finance developments on the basis of more up-to-date estimates covering the next half century. The estimates are based on results generated by Member countries, using the models of national administrations or research institutes in order to ensure that better account is taken of institutional detail affecting expenditures than has been possible in previous OECD work.[1] At the same time, consistency and comparability across countries have been strengthened by using a set of population projections and common assumptions for establishing GDP growth and other key macroeconomic variables that were agreed between countries and the OECD. Because of the wide margins of uncertainty over such a long time horizon, sensitivity tests are also provided which show the impact of changes to key assumptions. On the basis of these results, the paper then assesses the need for further reforms and which kinds of reforms are likely to have the greatest impact on budget outcomes.[2]

New projections provide information on the fiscal impact of ageing to 2050 for OECD countries

A number of considerations need to be kept in mind when interpreting the results. First, the OECD has helped co-ordinate the preparation of the results, with the actual projections based on the work of national experts using their own models. This approach differs from previous OECD exercises – where a standardised modelling approach was used – but, as noted, has the advantage of providing richer institutional detail. Further, the OECD has not controlled the use of underlying assumptions within the models beyond those agreed by the participating countries (population and the macroeconomic environment). While the OECD believes that a reasonable

Country projections are based on different models, but broad cross-country consistency has been achieved

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1. See Hagemann and Nicoletti (1989), Van den Noord and Herd (1993, 1994), Leibfritz *et al.* (1995), Roseveare *et al.* (1996), OECD (1997, 1998 and 2000), Turner *et al.* (1998) and Visco (2000, 2001).
2. This work has been carried out in collaboration with the Working Group on Ageing of the Economic Policy Committee of the European Union. Both of these projects have been based on the same macroeconomic framework and population projections. However, the public expenditure components covered as well as the timing of the studies have differed somewhat. Preliminary results for the European Union countries were presented to the Economic Policy Committee of the European Union (2000).

Table IV.1. **Assumptions for fertility, life expectancy and immigration**

	Fertility (children per woman)			Life expectancy at birth for males	
	2000	**2050**		**2000**	**2050**
Australia	1.72	1.56	Australia	76.7	82.6
Austria	1.31	1.50	Austria	75.0	80.3
Belgium	1.54	1.80	Belgium	75.3	80.5
Canada	1.62	1.50	Canada	75.5	80.0
Czech Republic	1.14	1.50	Czech Republic	71.5	75.2
Denmark	1.77	1.80	Denmark	74.8	79.1
Finland	1.73	1.70	Finland	73.9	79.9
France	1.73	1.80	France	74.8	80.0
Germany	1.40	1.50	Germany	74.7	80.0
Hungary	1.30	1.60	Hungary	66.8	74.6
Italy	1.22	1.50	Italy	75.5	81.0
Japan	1.38	1.61	Japan	77.4	79.4
Korea	1.71	1.59	Korea	70.6	76.2
Netherlands	1.71	1.80	Netherlands	75.5	80.0
New Zealand	..	..	New Zealand[a]	74.3	79.5
Norway	1.80	1.80	Norway	75.7	80.0
Poland	1.34	1.58	Poland	69.9	78.5
Portugal	1.53	1.70	Portugal	72.0	78.0
Spain	1.19	1.50	Spain	74.9	79.0
Sweden	1.50	1.80	Sweden	77.3	82.0
United Kingdom	1.72	1.80	United Kingdom	75.2	80.0
United States	2.05	1.95	United States	73.9	79.1
Average of countries above[b]	**1.54**	**1.66**	**Average of countries above[b]**	**74.1**	**79.3**

	Immigration (per cent of total population)			Life expectancy at birth for females	
	2000	**2050**		**2000**	**2050**
Australia	0.90	0.41	Australia	82.2	87.8
Austria	0.12	0.26	Austria	81.2	86.0
Belgium	0.10	0.15	Belgium	81.4	85.5
Canada	0.60	0.43	Canada	81.3	84.0
Czech Republic	0.09	0.18	Czech Republic	78.4	81.5
Denmark	0.20	0.18	Denmark	79.2	82.8
Finland	0.11	0.10	Finland	81.1	85.0
France	0.08	0.08	France	82.8	87.0
Germany	0.36	0.26	Germany	80.8	85.0
Hungary	-0.09	-0.04	Hungary	75.2	81.1
Italy	0.09	0.17	Italy	82.0	86.0
Japan	..	..	Japan	84.1	86.5
Korea	..	..	Korea	78.1	83.0
Netherlands	0.21	0.20	Netherlands	80.9	85.0
New Zealand	..	..	New Zealand[a]	81.0	85.5
Norway	0.30	0.19	Norway	81.4	84.5
Poland	..	..	Poland	78.2	84.7
Portugal	0.12	0.23	Portugal	79.2	84.0
Spain	0.08	0.17	Spain	82.1	85.0
Sweden	0.17	0.22	Sweden	82.0	86.0
United Kingdom	0.15	0.11	United Kingdom	80.0	85.0
United States	0.33	0.25	United States	79.6	83.5
Average of countries above[b]	**0.22**	**0.20**	**Average of countries above[b]**	**80.6**	**84.7**

a) Data are for 1996 and 2051.
b) OECD average is unweighted and excludes countries where information is not available.
Source: OECD.

degree of uniformity has been obtained, complete consistency across countries in assumptions and approach has not necessarily been achieved. Second, it should also be noted that the projections presented below may differ from those used by national administrations in their "most likely" scenarios, because of differences in assumptions.

Third, in any case, projections over such a long period are, by their nature, highly uncertain as economies will evolve and policies will change in ways that cannot be foreseen.

The baseline projections

Underlying assumptions

Estimates of the degree of ageing over the next 50 years were based on the middle variant of Eurostat population projections for the countries in the European Union (EU) and national projections for the remaining countries. While there is considerable cross-country variation, these projections show an average increase in fertility of around 8 per cent and a lengthening in average lifetimes of about 4½ years (Table IV.1). Generally speaking, these developments lead over the period as a whole to:

Projections to 2050 show declining working-age populations and rising numbers of retired people

– Very modest growth or declines in the total population (except in Australia, Canada, the Netherlands, New Zealand and Norway).

– A fall in the working age population (20 to 64 years of age) (except in Australia, Canada, New Zealand, Norway, and the United States), and, increases in the number of elderly and, particularly, in those over 80.

– A near doubling, on average, in the ratio of the elderly (individuals 65+) to the working-age population (individuals 20-64) between 2000 and mid-century (the old-age dependency ratio) (Figure IV.1). For most countries, the ratio is projected to increase until about 2035 to 2045 (depending on the country), and then to stabilise or decline by a small amount thereafter. However, in Australia, the Czech Republic, Hungary, Japan, Poland, Spain, and, to a lesser degree, Canada and Korea, ageing appears to be increasing even at the end of the period, suggesting that these countries may experience further pressures on spending from ageing beyond 2050.

The old-age dependency ratios double by 2050, reflecting the baby-boom generation entering retirement

– A rise in the average age both of the working-age population and of the elderly, *i.e.* both the share of those aged 55 to 64 in the population aged 20 to 64 and the share of the very old (aged 80+) among the elderly (aged 65+) increase (Table IV.2). This latter development reflects the passing of the baby-boom generation and longer life expectancy.

The number of very old people will increase as lifetimes lengthen…

– In contrast, a small decline in the ratio of youth (individuals less than 20) to the working-age population, suggesting some minor offsetting declines in spending on children (Table IV.2).

… while the youth dependency ratios will fall slightly

The common assumptions on unemployment and participation rates (Box IV.1) imply that countries that now have high rates of unemployment relative to the OECD average and low participation rates of women (*e.g.* Italy and Spain) have more scope for growth over the period. In practice, however, the declines projected for the working-age population offset such effects in most countries and average employment growth over the period is either weakly positive or negative. Almost all of the GDP growth – which averages 1.9 per cent annually – is due to the increase in labour productivity, which was set to converge, from about 2020, to a trend rate of 1¾ per cent per annum (see Box IV.1 for details).

GDP grows by 1.9 per cent per annum over the period on average, mainly reflecting productivity growth

Figure IV.1. **Trends in old-age[1] dependency ratios**

Panel A. Faster-ageing countries

Panel B. Slower-ageing countries
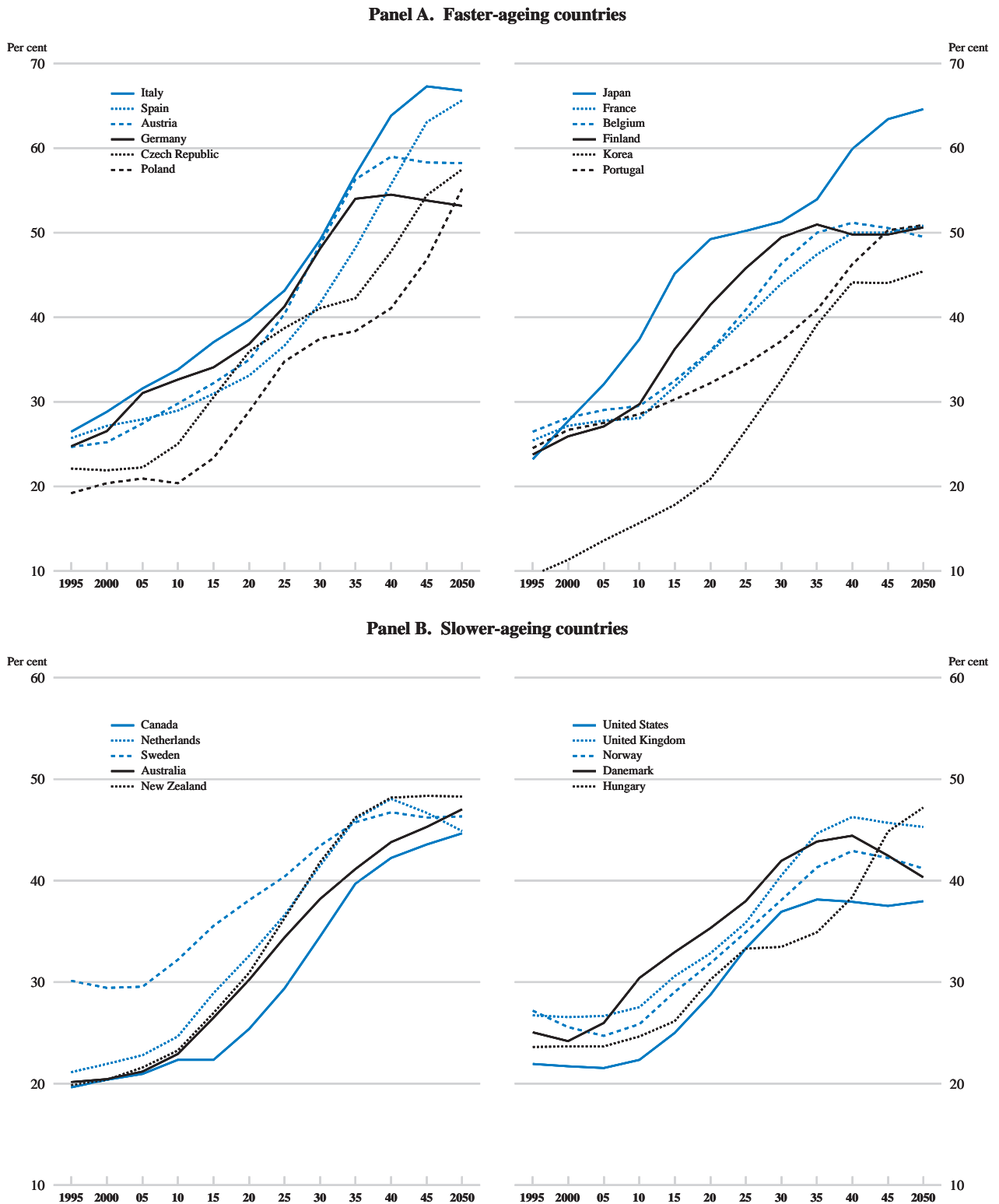
1. The old-age dependency ratio is the elderly population [65+] as a percentage of the working-age population [20-64].
Source: OECD.

Table IV.2. **Share of older workers (55-64), the very old (80+) and youth ratio (0-19)**

(Per cent share and changes in percentage points)

	Older workers		The very old		Youth dependency ratio	
	Individuals aged 55-64 as a per cent of those 20-64		Individuals aged 80+ as a per cent of those 65+		Individuals aged 0-19 as a per cent of those 20-64	
	2000	Change, 2000-50	2000	Change, 2000-50	2000	Change, 2000-50
Australia	15.3	8.1	..	..	..	..
Austria	18.4	5.8	22.2	16.5	36.3	–4.0
Belgium	17.1	6.5	20.6	15.8	39.3	–0.6
Canada	14.8	9.4	23.8	12.3	41.9	–9.0
Czech Republic	17.1	9.8	..	..	36.1	–4.3
Denmark	20.8	2.2	26.3	8.2	39.7	–6.1
Finland	..	..	22.3	13.4	38.5	–3.5
France	15.8	7.0	22.5	15.1	43.6	–4.0
Germany	20.7	3.7	21.8	17.6	34.1	–1.4
Hungary	17.8	7.1	..	..	38.2	–3.5
Italy	19.0	5.6	21.7	17.2	31.7	0.9
Japan	20.8	2.6	..	..	33.0	2.5
Korea	12.8	9.6	..	..	47.0	–11.7
Netherlands	16.1	6.0	23.2	13.8	39.3	0.3
New Zealand	15.4	8.7	..	..	51.1	–10.0
Norway	16.4	5.7	..	..	43.8	–2.9
Poland	14.4	12.5	..	..	46.5	–12.7
Portugal	17.5	3.8	18.5	9.6	35.9	0.5
Spain	16.3	7.4	22.0	11.2	35.1	–1.5
Sweden	19.9	5.4	28.4	7.3	40.9	–3.1
United Kingdom	17.0	2.8	25.2	11.5	43.3	–5.4
United States	14.9	6.5	26.5	9.6	48.7	–4.4
Average of countries above[a]	**17.1**	**6.5**	**23.2**	**12.8**	**39.1**	**–3.8**

a) OECD average is unweighted and excludes countries where information is not available.
Source: OECD.

The baseline projections for public expenditure

While much recent discussion has focused on old-age pension programmes, many other public expenditure programmes are affected by demographic shifts. These include programmes permitting early withdrawal from the labour market (long-term unemployment, disability, and early retirement programmes for labour market reasons), health care and long-term care for the frail elderly, family/child benefits and education. However, in this exercise, the coverage of projections for these other components is much less complete across countries than is the case for pensions.[3] Based on information from countries that provided a wide range of spending items, spending components that are sensitive to the age structure of the population represent between 40 and 60 per cent of total public spending.[4]

Some 40 to 60 per cent of public spending is sensitive to the age structure

3. Thirteen countries provided information on programmes permitting early withdrawal from the labour market; eleven included child and family benefits and education and fourteen provided data for health and long-term care. Only eight countries provided data for all components of age-related spending, although, in some cases, this may reflect the fact that these programmes do not exist or that spending has been included under other components of age-related spending.
4. For further information see Dang *et al*. (forthcoming).

Box IV.1. Population projections and background assumptions

Population projections

Projections were based on the middle variant of national or, in the case of EU countries, Eurostat population projections. The profile of populations over time in these projections depends on assumptions about fertility, mortality and immigration (see Table IV.1). The Eurostat population projections were specially prepared for this exercise.

Fertility

In virtually all countries fertility rates are projected to rise from an average of around 1.5 towards levels ranging between 1.5 and 1.8 by 2050, with most of the increase occurring over the next two decades. The largest increases are expected to occur in low-fertility countries such as the Czech Republic, Hungary, Italy and Spain but increases are also substantial in Belgium and Sweden. Denmark, Finland and Norway are assumed to have fairly constant fertility rates. Only Australia, Canada and the United States are projected to experience significant declines.

Life expectancy

Life expectancy at birth is expected to increase, on average, by above 5 years for males and 4 years for females from 2000 to 2050, thus allowing some catch-up between the two sexes. Gains in life expectancy are similar across the majority of countries, although they are smaller for men in the Czech Republic and Japan and higher in Hungary and Poland which have a particularly low level at the beginning of the period. For women, the increases are smaller in Canada, the Czech Republic, Japan, Norway and Spain and significantly higher in Australia, Austria, Hungary, Poland and the United Kingdom.

Net immigration

Net immigration is difficult to predict since it will depend on countries' economic situation and policies. Countries with higher levels of immigration at the beginning of the period tend to project falls (Australia, Canada, Germany, Norway and the United States), while a number of countries with low levels project increases (Austria, Belgium, Italy and Spain). Once again, changes tend to be concentrated in the first half of the period.

Implications for dependency

These various developments contribute to the flattening in the dependency ratios toward the middle of the century. The replacement of the baby-boom generation by smaller cohorts leads to slower growth in the number of elderly. At the same time, the projected increase in fertility during the first few decades, combined with rising immigration (excluding North America, Australia, Germany and Norway), contributes to a more rapid rise in the working-age population towards the end of the period.

Main common background macroeconomic assumptions

Taking these population projections as the starting point, the profile of GDP to 2050 was calculated in the following manner:

– Participation rates for the period to 2010 are based on ILO projections (ILO, 1997). For the subsequent period, the participation rates stay constant for men aged 20 to 54 (prime age) and 55 to 64 (older workers) as well as for all retirement-age individuals and all persons under the age of 20. Participation rates for women aged 20 to 54 and 55 to 64 rise progressively towards a ceiling at the end of the period equal to 5 percentage points below those of men in countries with widely subsidised child-care and 10 percentage points below elsewhere. Some countries deviate marginally from these rules because of the expected impact of recent policies (*e.g.* higher retirement ages). However, with the exception of Austria,[1] these differences do not appear large enough to affect the results significantly.

– Unemployment rates converge to their structural levels (as defined by the OECD) in 2005, with unemployment rates held constant at the 2005 rate throughout the period to 2050, except for countries where existing labour-market reforms presupposed a further decline in structural unemployment over the period.[2] The authorities in Belgium, France and Italy built in this decline. The Spanish authorities allowed its unemployment rate to fall over the period to 4 per cent, well outside the agreed limits.

– Labour productivity growth (measured as GDP per worker) converges towards an annual rate of 1¾ per cent as from between 2020 and 2030. Some catch-up is allowed for initially low-productivity countries such as the Czech Republic, Hungary, Korea, Poland and Portugal. Assumptions for productivity growth were so high as to seriously compromise cross-country comparability in Portugal, and this country has been treated separately in this documentation. Average productivity growth rates are significantly lower in Canada and Norway. GDP was established by multiplying the number of employed by average productivity.

Where countries have short- to medium-term budget projections up to 2005, the ageing projections were run off these. Non-age-related expenditures and government revenues are kept constant as a share of GDP after this point, except to the degree that there are clearly identified effects arising from ageing or from background assumptions – *e.g.* reduced spending on unemployment insurance as unemployment falls or higher tax revenues as a result of pensions paid from tax-sheltered savings in pension funds.

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1. Instead of broad constancy in the participation rates for older male workers after 2010, the Austrian projections assume that they will rise by 33 percentage points, to 71 per cent, by the end of the period. This reflects the assumed impact of recent reforms to early-retirement policies.
2. This adjustment was limited to one third of the structural unemployment levels in 2005.

Old-age pension spending

Levels of spending around 2000

Old-age pension spending includes, in principle, all old-age pension spending, all early retirement pension spending which is an integral part of the public pension system, and survivors and minimum pensions. Currently, public old-age pension spending, as drawn from the national projection data, represents around 7½ per cent of GDP. Comparisons with OECD sources[5] suggest that the programme coverage in the projections may be less than full for Austria, Korea, the Netherlands, Norway, the United Kingdom and the United States and, hence, for these countries, the spending projections reported here may involve some degree of underestimation. Little of the cross-country variation in pension spending in 2000 is explained by the degree of ageing as measured by the old-age dependency ratio. Rather, differences reflect wide variation in programme characteristics, including the degree of system maturity, and the degree to which pensions are financed through the public sector:

Public old-age pension spending averages currently 7½ per cent of GDP

– In countries with programmes where benefits are largely paid through state-run or bi- or tri-partite earnings-related (ER) schemes, public retirement income is linked to past work and/or contribution histories, although flat-rate elements are nearly always present in the form of minimum pensions.[6] Virtually all countries with well-developed and mature public-sector earnings-related systems (Austria, Belgium, France, Germany, Italy, Poland, Spain and Sweden) tend to have above average pension spending, although the level of spending varies with the generosity of benefits and the age of retirement (Figure IV.2, Panel A). The US system provides low average benefits relative to previous earnings and has a higher retirement age compared with most of the European countries just referred to. In Korea and Norway, the pension system is still maturing;[7]

Public earnings-related systems are more costly to the budget…

– In other countries, predominately flat rate (FR) schemes generally aim to provide a minimum basic income for the elderly irrespective of their work history. Spending under these systems is lower (Figure IV.2, Panel B), partly reflecting the fact that the basic pension component often serves as a safety net (and is therefore set at a lower level), with a larger share of income in retirement coming from private sources than for most countries with ER systems. For many countries with flat-rate schemes, the retirement age is 65 with little opportunity to receive pension benefits before this age. Such FR arrangements can be complemented by mandatory labour-market arrangements of a public or private nature and with various degrees of funding. The public component of these add-ons is, at present, generally less generous than in ER schemes.[8]

… than flat-rate pension arrangements

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5. Compared with the OECD Social Expenditure Data File (SOCX). See Dang *et al.* (forthcoming) for details.

6. In some of these countries, there are additional, compulsory complementary pension arrangements negotiated on an industrial sector or professional basis (*e.g.* blue-collar or white-collar), and often managed by the social partners (*e.g.* France), although this spending does not always appear in the government accounts.

7. While Korea is currently closer to a flat-rate system, spending increases are driven by a maturing earnings-related scheme introduced in 1988.

8. The maturing of the Canada and Quebec Pension Plans may lead to a greater role for ER schemes in the future.

Figure IV.2. **Public pension spending in 2000 and changes 2000-2050**
Levels in per cent of GDP and changes in percentage points

Level in 2000   **Change between 2000 and 2050**

Panel A. Mainly earnings related pension schemes
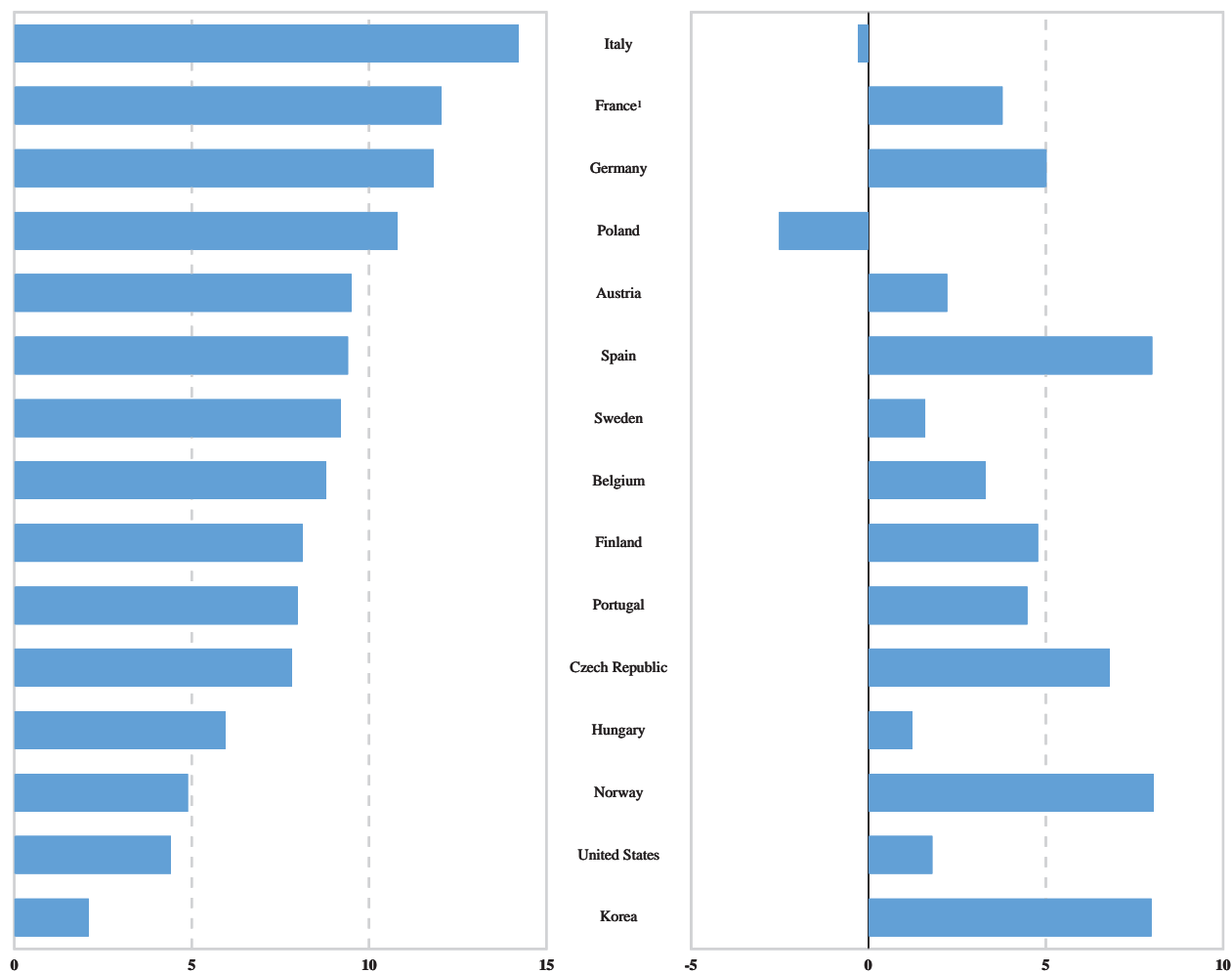
Panel B. Mainly flat-rate pension schemes
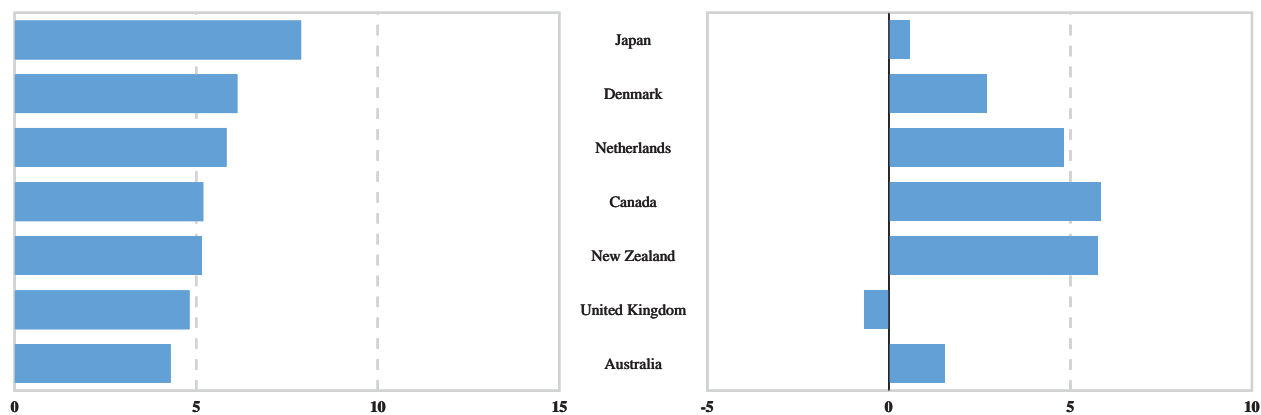
1. For France, estimations refer to the period from 2000 to 2040.
Source: OECD.

Old-age pension spending trends to 2050

Projections based on assumptions of unchanged policy – though taking into account legislated but-not-yet implemented reforms – suggest that old-age pension spending will rise on average by around 3 to 4 percentage points of GDP in the period to 2050 (Table IV.3, Panel B), but with considerable cross-country variation. Pension spending is projected to fall as a share of GDP over the period for Poland, where shifts are taking place towards private pension arrangements, as well as for the United Kingdom, and to remain broadly stable for Italy, partly reflecting recent reforms. In contrast, increases of more than 4 percentage points of GDP are projected for ten countries (including Portugal) and for seven among these, it will be 5 percentage points or more. Spending relative to GDP starts to rise quickly in the latter part of the current decade, but then slows from around 2035-40, with declines in a few countries.[9] Indeed, significant differences between the change to the peak and the change over the entire period are projected by Austria, Belgium, Denmark, Italy, Japan, the Netherlands, Sweden and the United Kingdom.

Old-age pension spending rises by 3 to 4 percentage points of GDP to 2050, but by more than this in many countries

To illustrate the forces driving the change in the share of spending in GDP over the period 2000-2050, Table IV.4 breaks it into four factors:[10]

This spending increase is mainly driven by population ageing…

- A dependency or population-ageing effect, reflecting changes in the ratio of those aged 55+ to the population aged 20 to 64.[11]

- An employment effect, driven by changes in the ratio of the population aged 20 to 64 to employment.

- The benefit effect, related to changes in the average pension benefit relative to GDP per worker.

- An eligibility effect, corresponding to changes in the share of those receiving benefits in the 55+ age group.[12]

The results show the increase in spending associated with the change in each one of these components taken independently. The last two factors are measures of the changing generosity of pension systems.

While the results of such decompositions need to be treated with caution, they suggest that increased ageing/dependency is the key factor driving pension spending over the period (Table IV.4, third column). The average impact of ageing taken alone is around 5 percentage points of GDP. The ageing-induced increases are highest in a

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9. Projected effects of reforms in a few countries (*e.g.* Italy and Sweden) contribute to this result.
10. This is based on the following multiplicative formula:

$$\frac{PENS}{GDP} = \frac{POP\ (55+)}{POP\ (20-64)}\ x\ \frac{POP\ (20-64)}{EMPL}\ x\ \frac{AVBEN}{AVPDTY}\ x\ \frac{REC}{POP\ (55+)}\ , \text{where}$$

PENS/GDP is the ratio of old-age pension spending to GDP, POP(55+) is the population 55 and over, POP(20-64) is the population 20-64, EMPL is employment, AVBEN is total old-age pension spending divided by the number of recipients, AVPDTY is labour productivity and REC is the number of recipients. The change in spending associated with each component is roughly equal to the ratio of old-age pensions to GDP in 2000 multiplied by the growth rate of the component over the period. For further information see Dang *et al.* (forthcoming).

11. This takes into account the fact that a considerable number of older workers retire before 65.
12. For France, Japan, Sweden and the United Kingdom, it was necessary to assume that the number of beneficiaries equalled the non-active share of the population aged 55+. This approximation for the eligibility ratio leads to an overestimation of the number of beneficiaries. Correspondingly, with average benefits defined as total pension expenditure in any year divided by the number of beneficiaries, this procedure leads to an underestimation in the average benefit (calculated as the residual) for these countries.

Table IV.3. **Age-related spending**

(Levels in per cent of GDP, changes in percentage points)

	Total age-related spending			Old-age pension			"Early retirement"programmes			Health care and long-term care			Child/Family benefits and education		
	Panel A			Panel B			Panel C			Panel D			Panel E		
	level 2000	change 2000-peak[a]	change 2000-50	level 2000	change2000-peak[b]	change 2000-50	level 2000	change 2000-peak[c]	change 2000-50	level 2000	change 2000-peak[d]	change 2000-50	level 2000	change 2000-peak[e]	change 2000-50
Australia	16.7	5.6	5.6	3.0	1.6	1.6	0.9	0.2	0.2	6.8	6.2	6.2	6.1	0.0	–2.3
Austria[f]	10.4	4.6	2.3	9.5	4.3	2.2	..	..	..	..	..	..	..	..	..
Belgium	22.1	5.4	5.2	8.8	3.7	3.3	1.1	0.1	0.1	6.2	3.0	3.0	6.0	0.0	–1.3
Canada	17.9	8.7	8.7	5.1	5.8	5.8	..	..	..	6.3	4.2	4.2	6.4	0.0	–1.3
Czech Republic	23.1	6.9	6.9	7.8	6.8	6.8	1.8	–0.7	–0.7	7.5	2.0	2.0	6.0	..	–1.2
Denmark[g]	29.3	7.3	5.7	6.1	3.6	2.7	4.0	0.8	0.2	6.6	2.7	2.7	6.3	0.3	0.0
Finland	19.4	8.5	8.5	8.1	4.8	4.8	3.1	–0.1	–0.1	8.1	3.8	3.8	..	..	..
France[h]	..	..	..	12.1	4.0	3.9	..	..	..	..	..	..	..	..	..
Germany	..	..	..	11.8	5.0	5.0	..	..	..	..	..	..	..	..	..
Hungary[i]	7.1	1.6	1.6	6.0	1.2	1.2	1.2	0.3	0.3	..	..	..	..	..	..
Italy	..	..	..	14.2	1.7	–0.3	..	..	..	..	..	..	..	..	..
Japan	13.7	3.0	3.0	7.9	1.0	0.6	..	..	..	5.8	2.4	2.4	..	..	..
Korea	3.1	8.5	8.5	2.1	8.0	8.0	0.3	0.0	0.0	0.7	0.8	0.5	..	..	..
Netherlands[j]	19.1	10.1	9.9	5.2	5.3	4.8	1.2	0.4	0.4	7.2	4.8	4.8	5.4	0.1	0.0
New Zealand	18.7	8.4	8.4	4.8	5.7	5.7	..	..	..	6.7	4.0	4.0	7.2	0.0	–1.3
Norway	17.9	13.7	13.4	4.9	8.2	8.0	2.4	1.6	1.6	5.2	3.5	3.2	5.5	0.5	0.5
Poland[i]	12.2	–2.6	–2.6	10.8	–2.5	–2.5	1.4	0.2	–0.1	..	..	..	..	..	..
Spain	..	..	..	9.4	8.0	8.0	..	..	..	..	..	..	..	..	..
Sweden	29.0	3.4	3.2	9.2	2.2	1.6	1.9	–0.2	–0.4	8.1	3.2	3.2	9.8	0.0	–1.2
United Kingdom	15.6	0.8	0.2	4.3	0.0	–0.7	..	..	..	5.6	1.8	1.7	5.7	0.0	–0.9
United States	11.2	5.5	5.5	4.4	1.8	1.8	0.2	0.3	0.3	2.6	4.4	4.4	3.9	0.0	–1.0
Average of countries above[k]	**16.9**	**5.9**	**5.5**	**7.4**	**3.8**	**3.4**	**1.6**	**0.3**	**0.2**	**6.0**	**3.3**	**3.3**	**6.2**	**..**	**–0.9**
Average of countries which provide all or nearly all spending components	18.7	7.2	6.9												
Portugal[l]	15.6	6.6	4.3	8.0	4.5	4.5	2.5	0.4	–0.4	..	..	..	..	..	..

a) The peak values are in 2050 except for Denmark (2030), Sweden and the United Kingdom (2035), and Belgium, Norway, the Netherlands and Korea (2040).
b) The peak values are in 2050 except for Japan (2015), the United Kingdom and Italy (2030), the United States, Sweden, Austria, Denmark and France (2035) and the Netherlands, Norway and Belgium (2040).
c) The peak values are in 2050 except for Belgium and Denmark (2025), Finland (2010), the Netherlands (2020), Poland (2035) and Sweden (2005). For Czech Republic the highest level is in 2000.
d) The peak values are in 2050 except for Denmark and Korea (2035), Norway and the United Kingdom (2040).
e) 0.0 indicates the highest level is in 2000. The peak values are in 2035 for Denmark and in 2040 for Norway and the Netherlands.
f) Total pension spending includes other age-related spending which does not fall within the definition in Panels B to E. This represented 0.9 per cent of GDP in 2000 and rises by 0.1 percentage point in the period to 2050.
g) Total includes other age related spending not classifyable under the other headings. This represents 6.3 per cent of GDP in 2000 and increases by 0.2 percentage points from 2000 to 2050.
h) For France, the latest available year is 2040.
i) Total includes old-age pension spending and "early retirement" programmes only.
j) "Early retirement" programmes only include spending on persons 55+.
k) OECD average excludes countries where information is not available and Portugal which is less comparable than other countries.
l) Portugal provided an estimate for total age-related spending but did not provide expenditure for all of the spending components.
Source: OECD.

Table IV.4. **Decomposition of changes in old-age pension spending: 2000-2050**[a]

(Level in per cent of GDP, changes in percentage points)

	Total old-age pension spending, level in 2000	Total old-age pension spending, change from 2000 to 2050	Contributions of :			
			Old-age dependency ratio	Employment ratio	Benefit ratio[b]	Eligibility ratio
Australia	3.0	1.6	2.5	–0.1	–0.5	–0.2
Austria	9.5	2.2	7.6	–1.9	–1.1	–2.4
Belgium	8.8	3.3	4.7	–0.7	–1.6	1.0
Canada	5.1	5.8	5.1	0.0	–0.6	1.3
Czech Republic	7.8	6.8	8.2	–0.8	–0.1	–0.1
Denmark	6.1	2.7	2.7	–0.3	–1.5	1.7
Finland	8.1	4.8	5.2	–0.1	–0.2	0.0
France[c]	12.1	3.8	7.6	–0.5	–3.4	0.4
Germany	11.8	5.0	6.4	–0.7	–2.7	2.1
Hungary	6.0	1.2	2.9	–1.0	–0.3	–0.4
Italy[d]	14.2	–0.3	10.1	–3.2	–5.5	–1.5
Japan[d]	7.9	0.6	5.1	–1.2	–3.9	0.9
Korea	2.1	8.0	4.8	–1.0	0.2	5.0
Netherlands	5.2	4.8	3.8	–0.5	0.2	1.4
New Zealand	4.8	5.7	4.7	–0.1	1.0	0.0
Norway	4.9	8.0	3.0	0.1	3.9	1.2
Poland	10.8	–2.5	7.3	–1.3	–5.9	–2.1
Spain	9.4	8.0	8.6	–2.6	0.0	2.0
Sweden[d]	9.2	1.6	3.9	–0.5	–2.1	0.4
United Kingdom[d]	4.3	–0.7	1.7	0.1	–2.5	0.1
United States	4.4	1.8	2.4	–0.1	–0.2	–0.3
Average of countries above[e]	**7.4**	**3.4**	**5.2**	**–0.8**	**–1.3**	**0.5**
Portugal	8.0	4.5	6.1	–1.0	–2.7	1.1

a) See Dang *et al.* (forthcoming) for methodology and detailed information on the time profile. Columns do not add up because linear approximations are used.
b) The associated percent declines in average benefits relative to average productivity over the period 2000 to 2050 is particularly important in the following countries: Belgium (–16), Denmark (–11), France (–21), Germany (–20), Italy (–30), Japan (–38), Poland (–51), Sweden (–22) and the United Kingdom (–47) per cent. All other countries are under 10 per cent except Norway where the average benefit is projected to rise by 53.6 per cent.
c) For France, data are available for 2040.
d) For these countries information on the number of pension recipients and average pensions was not available. These variables were estimated by the OECD except for Italy, where data refer to the number of pensions and not the number of pensioners.
e) Average excludes countries where national information is not available and Portugal which is less comparable than other countries.
Source: OECD.

number of European countries which have fully developed and generous earnings-related pension schemes and/or rapid ageing (*e.g.* Austria, the Czech Republic, France, Germany, Italy, Poland, Portugal and Spain). Smaller increases are found in countries with limited ageing and low initial spending levels (*e.g.* Denmark, Hungary, the Netherlands, Norway, the United Kingdom and the United States).

Almost all country projections have increasing employment ratios as a result of assumed higher female participation rates, lower unemployment or increased average retirement ages. This boosts output and reduces the cost of pension systems taken as a share of GDP. This effect is stronger in countries with currently low female participation rates and/or high unemployment rates at the beginning of the period (especially Austria, Hungary, Italy, Japan, Korea, Poland as well as Spain, where unemployment is assumed to fall to the same levels as in the early 1970s).

… offset by the effects of assumed higher participation rates and lower unemployment on GDP…

As a general rule, the effects of the two aspects of system generosity reflect maturing pension systems, changes in behaviour and the impact of reforms.[13] Most

13. A recent review of reforms can be found in OECD (2000).

countries project increases in the share of beneficiaries in the population aged 55 and over. Higher assumed employment of women and maturing pension systems should lead, by themselves, to an increase in the share of beneficiaries but be offset by the reforms undertaken in a significant number of countries aimed at directly increasing the effective age of retirement. But aside from Austria, Italy and Poland, these do not appear to be considered sufficient to reduce significantly the overall share of pensioners in the target population over the period.

… and by lower average benefits

In contrast, the projections indicate widespread declines in average benefits relative to productivity, making for a fall in expenditure averaging around 1½ percentage points of GDP. Once again, this reflects a range of offsetting factors. There have been important reforms aimed at reducing benefit rates: shifts from indexation of pensions on wages towards prices[14] (Finland, France, Hungary, Italy, Japan, Korea) or from pre-tax to after-tax wages (Germany), lengthening of the contribution period for a full pension (France) and lengthening of the reference period for calculating pensions (Belgium, the Czech Republic, Finland, France, Italy and Spain). These changes appear to have been large enough to offset a number of effects associated with the higher labour-market participation of women,[15] lengthening contribution periods[16] and composition effects as the baby boom generation enters retirement.[17]

Many changes in average benefits reflect earlier reforms or assumptions regarding the development of real benefits

Relative declines in benefits are particularly marked in a few countries. Italy will shift to a system where benefits are contribution-based, indexed to prices and actuarially adjusted to allow for increasing life expectancy. This is projected to lead to a reduction in average benefits equivalent to 5 to 6 percentage points of GDP. Similar reforms in Sweden are also expected to lead to substantial declines in average benefits. The sharp fall for Japan reflects legislation that requires benefits to be adjusted every five years to bring the pension system into balance. For France, the shift to indexing on prices, the lengthening of contribution periods and of the reference period for calculating pensions will progressively impact on spending. Declines in pension benefits in Poland reflect shifts to a private system. In the United Kingdom, the overall fall in pension spending reflects the assumed constancy in real terms of the flat-rate basic pension. Such policy reforms will lead to falls in average benefits relative to wages – 20 per cent or more in some countries. These changes are sufficiently large as to require a build-up in private pension saving if income adequacy in retire-

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14. This refers to earnings-related schemes. This change, in general, does not affect the individual's level of benefit at the time of retirement. However, over the retirement period, real benefits will grow by less than productivity. This will lead to a fall in total public pension spending during a transition period, as a progressively larger share of pensioners experience indexing only to prices through all of their retirement period. Estimated average benefits calculated over all retirees fall during the transition period, though eventually pensions increase at the same (constant) rate of productivity growth.

15. The assumed increase in women's participation should also lead to a progressive decline in the number of individuals on widows and survivor benefits and an increase in regular pension benefits which are generally higher in ER schemes. But outcomes will depend on hours worked and the development of male-female wage differentials.

16. Where pensions are linked to the number of years of work or contribution, average benefits will increase as pension systems mature. Many of the currently retired have short contribution histories and receive minimum pensions. Longer contribution periods, particularly for women, will be reflected in higher average pensions.

17. In the case of an earnings-related schemes with pensions indexed to prices, those entering retirement have higher pensions than those at the end of their lifetimes. The baby boom cohorts are larger than the current cohorts in retirement. As a consequence, they will weigh more heavily in the total number of pensioners when they enter retirement. Since they have higher benefits than the average when they retire, the average benefit (calculated over all pensioners) will tend to rise. This process will be reversed towards the end of the period as these cohorts are replaced by the smaller cohorts that follow them.

ment is to be maintained for all. Failing this, lower incomes and increased poverty among the elderly raise the risk of political pressure for a reversal of these policies, particularly as the elderly will make up a growing share of the electorate. This underlines the need for creating conditions that encourage private savings for retirement.

Programmes permitting early withdrawal from the labour market ("early retirement" programmes)

In addition to old-age pensions, most countries have programmes that provide income support for those of working age – for example, disability pensions, long-term unemployment benefits and early-retirement arrangements for labour-market reasons. In a number of countries, expenditure on these programmes is high, and they are often seen as an integral part of overall pension arrangements (*e.g.* Denmark, Finland, Norway). These programmes can be affected by ageing, for example *via* larger numbers of older workers with their higher probabilities of becoming disabled. They are also sensitive to labour-market developments as these programmes have often been used to provide income support for older workers who have difficulties finding employment, or remaining in employment, until retirement age is reached. Such programmes have contributed in many countries to the marked fall in the participation rates of older male workers over the past several decades. Many countries have introduced reforms to tighten access to these programmes and to limit benefits.

While the coverage varies across countries, these programmes represent around 1½ percentage points of GDP in the countries providing data, although considerably more in Denmark, Finland, Norway and Portugal (Table IV.3, Panel C). Despite the increasing average age of the working population over the period, countries providing these data generally project broad stability or marginal declines in expenditures, possibly reflecting programme reforms already undertaken and declining unemployment. Significant increases over the full 50-year period are projected only by Norway.

Spending on "early retirement" may remain broadly stable

Health care

Public health-care and long-term care spending varies considerably across countries, even among those at the same level of per capita income, reflecting a wide range of historical and institutional factors, including the fact that the share of total spending which is paid for directly by households (including via private insurance schemes) can vary substantially. Reported public health- and long-term care spending averages around 6 per cent of GDP in 2000 (Table IV.3, Panel D), although some differences in coverage mean that these results may not be rigorously comparable across countries.

Public health- and long-term care expenditure is about 6 per cent of GDP on average

Projections of health-care spending (including costs of care for the frail elderly) are considerably more uncertain than for pension expenditure. Pension legislation provides a framework for estimating future benefits. No equivalent set of rules is available for projecting the demand for and supply of health care. Further, there is a great deal of uncertainty as to which demographic features are most important for driving health-care spending – in particular, whether it is the fact of having a higher share of the population that are relatively old or whether it is having a higher share in the final years of their lives. Partly as a result, the method of projecting health-care spending can vary considerably. For most countries, projections are broadly based on projected per capita health-care expenditures by age group (which rise with age) multiplied by the number of people in each age group. However, the projections for the Netherlands allow for the fact that a large share of total lifetime health-care costs

While projecting health-care expenditure is uncertain,…

occur in the last year or two of life. Non-age-related factors (such as higher income and technology change) have been taken into account to varying degrees.

… spending is estimated to increase by more than 3 percentage points of GDP to 2050

The average increase over the 2000-2050 period for the 14 countries where this information is available is 3 to 3½ percentage points of GDP. But for five countries (Australia, Canada, the Netherlands, New Zealand and the United States) increases of 4 percentage points or more are projected. Slow ageing is partly responsible for the smaller increases in spending in Denmark, Sweden and the United Kingdom.

Child-related programmes

Child-related spending might offset these increases by around 1 percentage point of GDP on average

Spending on education and family/child benefits taken together average 6¼ per cent of GDP for the countries presenting data (Table IV.3, Panel E). With modest falls in youth dependency ratios expected over the projection period, these two programmes are projected to offset spending increases elsewhere to the extent of around 1 percentage point of GDP on average over the projection period. Falls in spending as a share of GDP are foreseen in all countries except Denmark, the Netherlands and Norway. There is no certainty that all of these potential economies will be reaped. In practice, it has been difficult to make cuts in these areas and there may well be further pressures arising from longer periods of education for the young, increased training for older workers and more demand for publicly-subsidised child care as the share of women working increases.

Total government spending, taxes and the primary deficit

Deficits increase…

The projections point to a generalised deterioration in the public-sector primary financial balance over the projection period reflecting:

– The increase in old-age pension spending.

– Changes to other age-related spending in countries providing such information.

– Changes to non-age-related spending and to revenues.

As regards the last tiret, it was agreed that, with some exceptions, the projections of revenues and non-age-related spending would be based on assumptions of unchanged shares in GDP over the projection period. However, some countries have taken into account changes to spending and/or revenues in the period to 2005 as a result of policies already enacted. Other changes in non-age-related spending can also be expected as a result of the macroeconomic assumptions, for example lower levels of spending on unemployment benefits. Moreover, Canada, Denmark and the Netherlands with large tax-sheltered private-sector pension schemes include increases in tax revenues from taxes paid on the associated pensions.

… by 6 to 7 percentage points of GDP on average

Bearing in mind these considerations, the projections point to a decline in the primary surplus or increase in the deficit of 6 to 7 percentage points of GDP, over the period 2000-2050 for countries projecting more spending categories than just old-age pensions (Table IV.5, Panel A). Excluding the effects of other age-related spending (column 4), the change in the deficit related to old-age pension spending across the same set of countries amounts to around 4½ percentage points of GDP, but with wide country variation. In the three countries providing projections for old-age pension spending only, there is a large reduction in the surplus for Spain, a more modest fall for Germany (where, like the Netherlands, the rise in pensions is partly offset by a substantial rise in revenues) and a limited increase for Italy (Table IV.5, Panel B).

Table IV.5. **Changes in spending, revenues and the primary balance**

(Per cent of GDP and changes in percentage points of GDP)

	Total revenue	Total spending	Primary deficit (–) / Surplus (+)	
			Primary balance Total	Old age pension spending only[a]
Panel A. Countries reporting age-related spending items in addition to old-age pensions				
Belgium				
2000, level	48.1	41.3	6.8	
Change 2000-2050	0.1	4.3	–4.2	–2.4
Canada				
2000, level	38.7	29.0	9.7	
Change 2000-2050	–1.2	8.2	–9.4	–6.6
Czech Republic				
2000, level	39.5	41.9	–2.4	
Change 2000-2050	0.0	6.8	–6.8	–6.7
Denmark				
2000, level	52.6	48.3	4.3	
Change 2000-2050	1.7	5.7	–4.0	–1.0
Finland				
2000, level	47.4	41.9	5.5	
Change 2000-2050	–1.7	8.5	–10.2	–6.4
Japan				
2000, level	29.4	32.3	–2.9	
Change 2000-2050	0.1	3.0	–2.9	–0.5
Korea				
2000, level	28.1	25.6	2.5	
Change 2000-2050	–1.8	8.4	–10.2	–9.7
Norway				
2000, level	49.8	43.2	6.6	
Change 2000-2050	–0.5	16.5	–17.0	–10.5
Netherlands				
2000, level	46.9	42.7	4.2	
Change 2000-2050	3.2	10.1	–6.9	–1.8
New Zealand				
2000, level	36.2	34.9	3.2	
Change 2000-2050	0.9	11.2	–10.3	–7.5
Poland[b]				
2000, level	38.2	39.1	–0.9	
2000-2050	–1.2	–2.2	1.0	1.3
Sweden				
2000, level	56.5	52.2	4.3	
Change 2000-2050	–3.3	3.6	–7.0	–5.4
United Kingdom				
2000, level	40.1	36.1	4.0	
Change 2000-2050	–0.3	1.2	–1.5	–0.6
United States[c]				
2000, level	29.7	25.5	4.2	
Change 2000-2050	–0.3	4.9	–5.2	–1.6
Average change for countries above	**–0.3**	**6.4**	**–6.8**	**–4.2**
Panel B. Countries reporting old-age pension spending only				
Germany				
2000, level	46.9	44.4	2.4	
2000-2050	2.8	5.0	..	–2.2
Italy				
2000, level	46.9	42.0	5.0	
2000-2050	0.0	–0.3	..	0.2
Spain				
2000, level	40.1	37.0	3.2	
2000-2050	0.0	8.0	..	–8.0
Average change for countries above	**0.9**	**4.2**	**..**	**–3.3**
Portugal				
2000, level	*47.0*	*48.8*	*–1.8*	
2000-2050	*1.5*	*2.4*	*–0.9*	*..*

a) Changes in the primary balance holding age-related spending other than pensions constant.
b) For Poland, total includes old-age spending and "early retirement" spending only.
c) Projections for revenues do not include the recent tax reduction proposals of the United States Administration.
Source: OECD.

| Box IV.2. | **Ageing in a "stylised" country: the impact of deficits on debt** |

The change in debt associated with the rise in age-related spending is a better indicator for the overall fiscal impact of ageing than the change in the primary balance. However, debt profiles for individual countries are sensitive to assumptions and to the situation at the start of the projection period, making cross-country comparisons difficult to interpret. To provide some idea of likely magnitudes, this box traces developments of the impact of ageing on debt and of policy measures needed to offset this impact, using a "stylised" OECD country (one which has the features of the median OECD country as regards individual parameters) as an example. In 2000, pension spending of the "stylised" country represents around 8 per cent of GDP, the primary surplus 2.5 per cent and net debt 55 per cent of GDP. The profile of age-related spending over the 50-year period is constructed by using median values for the share of pensioners in the population, average relative pension benefits, health care spending and other age-related spending. This leads to a projected increase in age-related spending of around 6 percentage points of GDP.[1] Assuming other government spending and revenues remain constant as a share of GDP, the change in age-related spending is fully reflected in the overall primary balance.

The impact of ageing on primary balances and debt (Table IV.6, Panel A)

Assuming 1.9 per cent annual real GDP growth and a real interest rate of 4 per cent, debt would increase over the period to 2050 by almost 100 percentage points of GDP. This baseline increase can be broken down into two parts:

– A rise in net debt of around 200 percentage points of GDP from the increase in age-related spending alone, *i.e.* abstracting from the initial levels of debt and the primary surplus.

– A decline in debt or increase in assets of around 115 percentage points of GDP as a result of the initial primary surplus (the non-ageing related component of which is assumed unchanged through the period).[2]

Thus, for the "stylised" country, about half of the impact of age-related spending on debt can be offset by sustaining the initial "non-age-related" primary surplus over the entire period. In contrast, if a country had an initial primary deficit of 1 per cent of GDP, sustained throughout (compared to a surplus of 2.5 per cent in the baseline) its total debt would increase by more than 400 percentage points of GDP by the end of the period. It is also important to sustain initial surpluses over time. If, for example, non-age-related budget items changed so as to reduce the "non-ageing" surplus to

zero after 10 years, the debt would be almost triple the baseline value by the end of the period.

The following sensitivity tests provide some indication of the impact of different assumptions and circumstances in individual countries (changes are indicated relative to baseline):

– A sustained increase in the primary surplus of 1 percentage point of GDP over the baseline will lead to a broadly unchanged debt to GDP ratio at the end of the period.

– If age-related spending rose somewhat less rapidly, ending at 1 percentage point of GDP lower by the end of the period relative to baseline, the increase in net debt would be around 35 percentage points less.

– If debt at the beginning of the period were 10 percentage points lower, the rise in net debt would be around 20 percentage points of GDP less.

– If the interest rate were 1 percentage point lower through the period, the debt increase would be around 35 percentage points of GDP lower at the end of the period.

Policy measures to limit the impact of ageing (Table IV.6, Panel B)

Two stylised reforms of pension systems are considered in Table IV.6, Panel B: a reduction in average pension benefits and a fall in the number of pension beneficiaries (reflecting delayed retirement) that would be required to keep debt in 2050 at the same level in terms of GDP as in 2000.[3] The results suggest that the required per cent fall in the number of pensioners would be lower than for average pensions, reflecting the feedback effects of fewer pensioners on GDP (through higher employment), as well as increased tax revenues.[4]

Delaying the implementation of reforms by 10 years (to 2015) would increase the required adjustment in either the number of pension beneficiaries or average benefits by around one-fourth, while delaying them by 20 years would require an increase of around three-quarters.

Alternatively, countries could offset higher age-related spending through a sustained increase in the primary surplus (from the baseline value of 2.5 per cent) at the beginning of the period. In this case, the increase in the primary surplus needed to keep debt unchanged at the 2000 level of 55 per cent of GDP would be 1.1 percentage points of GDP. To eliminate debt entirely by 2050, the primary surplus would have to increase by 1.8 percentage points of GDP.

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1. This is broadly equivalent to the sum of the averages of each component of age-related spending in Panels B to E of Table IV.3.
2. The change in the primary surplus over the period 2000 to 2050 is the sum of the change due to age-related spending and the change arising from the net effect of the development of non-age-related spending and of revenues. Since both non-age-related spending and revenues are held constant as a share of GDP in these simulations, the second component remains unchanged after 2005.
3. The reduction in both the number of pensioners and average pension benefits is implemented in 2005 and sustained over the period until 2050.
4. This assumes that people postponing retirement will remain employed. For further details on the method, see Dang *et al.* (forthcoming).

Table IV.6.　**The impact of ageing in a "stylised" country, 2000-2050[a]**

(difference between 2000 and 2050 in percentage points of GDP)

	Change in:		Difference relative to baseline
	Primary balance	**Debt**	
Panel A. Changes in primary balances and net debt for a "stylised" country			
Baseline			
Impact of all age-related spending on the "stylised" country	–6.1	–96	
– Impact abstracting from initial debt and primary surpluses[b]	–6.1	–210	
– Impact of initial and sustained primary surpluses[c]		115	
Impact of pension spending alone[d]	–4.2	–74	22
Policy simulations			
Sustained primary deficit of 1 per cent of GDP[e]	–6.1	–435	–340
Primary surpluses disappear after 10 years	–8.6	–274	–178
Sensitivity test			
Sustained increase in the primary surplus of 1 percentage point of GDP[f]	–6.1	–1	97
Age-related spending is 1 percentage point lower in 2050	–5.1	–62	34
Initial debt is 10 percentage points lower	–6.1	–75	21
Real interest rates are one percentage point lower	–6.1	–61	35

	Year policy measure takes effect:		
	2005[g]	**2015[g]**	**2025[g]**
Panel B. Policy measures to keep debt constant as a share of GDP at the end of the period			
Reduction in the number of pension beneficiaries (per cent)	7.7	9.5	12.3
Reduction in average pension benefits (per cent)	17.3	21.3	29.9
Increase in the primary surplus needed to keep debt constant at the level in 2000[h]	1.1		
Memorandum item:			
Increase in the primary surplus needed to eliminate all debt by 2050[h]	1.8		

a) The "stylised" country has pension spending equal to 8 per cent of GDP, a primary surplus of 2.5 per cent and net debt to 55 per cent of GDP. This country experiences an ageing-related shock measured by the median value in country submissions for the number of pensioners, average pensions, health-care spending and other age-related spending over the period.
b) Initial debt and primary balances, excluding the effects of ageing, are set to zero.
c) Assumes that age-related spending increases in line with GDP.
d) Assumes that other age-related spending increases in line with GDP.
e) The primary deficit is assumed to be 1 per cent of GDP initially (compared to a surplus of 2.5 per cent in the baseline). The deficit is assumed to remain constant over the period, excluding the effect of ageing. The impact of ageing is then introduced in this new baseline.
f) Increase throughout the period from 2000 excluding the effect of ageing. The impact of ageing is then introduced in this new baseline.
g) The reduction is fully implemented in the corresponding year and sustained through the period.
h) The surpluses are sustained throughout the period.
Source: OECD.

The projected deterioration in the primary balance is likely to be substantially larger than the impact of old-age pension spending alone in the countries which project only the latter. This can be seen by examining the projections for countries providing estimates of age-related budget items other than pensions (Table IV.5, Panel A). For those countries, the additional deterioration in the primary balance due to non-pension age-related spending is 2½ percentage points of GDP (Table IV.5, Panel A, third and fourth columns).

Projections of old-age pension spending alone seriously underestimate the overall budget impact of ageing

The overall impact on the fiscal situation of these developments will depend on the cumulated change in the primary balance over the projection period, coupled with the associated change in debt-interest payments. The outcome in terms of debt as a share of GDP is highly sensitive to the initial levels of debt and primary balance, the change in the primary balance through the period and the assumed interest rate (relative to GDP growth). As is shown in Box IV.2, small changes can lead to substantial

Despite the improvement in the underlying fiscal situation in the 1990s, ageing will put upward pressure on debt

differences by the end of the period for a "stylised" country,[18] making simulations of debt outcomes for individual countries highly uncertain. Nonetheless, the results shown in Box IV.2 suggest, first, that countries will be in a better position to confront ageing pressures if their primary surpluses are sufficiently high for them to reduce their net-debt positions rapidly in the period before dependency ratios begin to rise sharply. This seems to be the case, for example, in Belgium and Canada (which each have high debt levels currently). Thus, measures to move the primary balance into surplus are desirable, on these grounds, in the near future, and this is all the more the case where countries already have high levels of debt. However, it is important not only to achieve appropriate levels of the primary surplus but also to maintain them over the long-term. Second, for the "stylised" country the accumulated impact on public debt of ageing is large, approximately 200 percentage points of GDP.

Sensitivity tests

For estimates over such a long time frame, it is particularly important to have information on the robustness and the degree of uncertainty surrounding the projections. Sensitivity analysis has been performed for seven of the most important assumptions underlying the projections (Box IV.3) for 13 countries at the level of pension and total age-related spending.

The projections are relatively robust to changes in assumptions

Taken individually, the sensitivity shocks do not appear to alter significantly the broad message of the baseline projections (Table IV.7).[19] The simulation of increased longevity – which has been set, like the simulations of increased fertility, to have a two-thirds probability of occurring on the basis of past projection

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Box IV.3.   Assumptions subject to sensitivity analysis

Demographic assumptions

1. *Higher fertility rate.* Fertility rates for all age groups are assumed to rise by 15 per cent relative to the baseline until 2029 and remain constant at the higher level thereafter.

2. *Longer life expectancy.* Mortality rates are assumed to fall by 30 per cent and 20 per cent respectively for males and females for all age groups by 2050. This corresponds broadly to an extra 3 years of life expectancy at birth for males and 2 years for females by 2050.

3. *Higher migration flows.* Net migration in numbers of persons gradually increases from year 2000 to 50 per cent above the baseline level in 2010, remaining constant over the rest of the period.

Macroeconomic assumptions

4. *Lower participation rates for older workers.* Participation rates of older workers (55 to 64) are set 5 percentage points lower than assumed in the baseline by 2050.

5. *Lower female participation rates.* Total female participation rates (20-54) are 5 percentage points lower than assumed in the baseline projection by 2050.

6. *Lower unemployment rate.* The structural unemployment rate falls by the end of the period to levels experienced in the 1960s (unemployment rates of 3 to 5 per cent).

7. *Lower productivity gains.* Productivity growth is 0.5 percentage points per annum lower than the baseline starting in 2005 and ending in 2050.

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18. The "stylised" country was constructed using a set of parameters which, in each case, were close to the middle range for actual OECD countries. See Box IV.2 for details.

19. For individual country detail see Dang *et al.* (forthcoming).

Table IV.7.   **Average impact of sensitivity tests on total age-related spending: 2000-2050**[a]

(Percentage points of GDP)

	Old-age pensions	Total age-related spending		Old-age pensions	Total age-related spending
Increased longevity (+3 years for males and +2 years for females relative to baseline)	1.0	1.4	Fall in unemployment rates (decline to levels experienced in late 1960s)	–0.2[b]	–0.4[b]
Higher fertility (+15% relative to baseline)	–0.7	–0.7	Lower older worker participation rates (5 percentage points lower by 2050 relative to baseline)	0.3	0.5
Higher migration (+50% by end of period relative to baseline)	–0.4	–0.7	Lower female participation rates (5 percentage points lower in 2050 relative to baseline)	0.3	0.5
Fall in labour productivity growth (fall in growth rate by 1/2 point relative to baseline)	0.5	0.6[c]			

a) For old-age pensions, average of Belgium, Canada, the Czech Republic, Denmark, France, Germany, Italy, Japan, the Netherlands, Poland, Spain, Sweden and the United States. France, Germany, Italy and Spain are excluded from total age-related spending. Results are defined relative to baseline at the end of the period.
b) This indicates the impact relative to baseline. However, the baseline forecasts included some decline in unemployment rates particularly for Belgium, Italy, France and Spain, such that the impact of the total fall in unemployment over the period would be larger than reported here.
c) Excluding the Czech Republic and the United States because projections of spending on health and long-term care and education are insensitive to the change in productivity growth in these two countries, *i.e.* lower productivity growth does not lead to a fall in wage growth relative to baseline in these two countries.
Source: OECD.

errors[20] – indicates that old-age-pension spending could be, on average, about one percentage point of GDP higher, and total age-related spending some 1½ percentage points higher. The probability that the changes assumed in the other sensitivity tests might occur is difficult to assess. But for the magnitudes chosen, the impact is not large. The results for productivity suggest that very substantial increases in economic growth (through higher productivity) would be necessary to significantly offset the increased costs of ageing.[21] Projected tax receipts varied little in the various sensitivity tests.

What are the policy options?

In sum, on the basis of present policies, age-related spending is likely to increase on average by 6 to 7 percentage points of GDP and significantly more in some cases. Spending projections could be still higher than those presented here if the extent of population ageing turns out to be underestimated (Schieber and Hewitt, 2000). These impacts have to be evaluated in the light of the improvement in underlying budget positions over the past half decade. Cyclically adjusted primary

Overall spending may increase by 6 to 7 percentage points of GDP and the improved fiscal situation gives no room for complacency

20. Eurostat has calculated, for each country, a probability distribution of errors on the basis of previous projections for both mortality and fertility. Taking this as a starting point, it then established changes in these two variables that were at the limit of a two-thirds confidence interval of this probability distribution. To increase the comparability across countries, a mean value for the limits of the confidence interval was established across countries and this common value was then applied to all OECD countries. These ensured similar movements in fertility and mortality across countries in the sensitivity tests shown in Table IV.7 and these changes are broadly consistent with a two-thirds chance of occurring.
21. Higher productivity growth increases both GDP growth and pension spending in the case of earnings-related-pension schemes. The size of the impact of the change in productivity growth will be larger in flat-rate schemes, but only if the gap between wages and benefits is allowed to widen.

balances have improved in most OECD countries, in many cases moving into surplus. Debt is falling as a result. If the non-age-related components of these surpluses can be sustained over time, a substantial part of the projected increase in age-related spending can be absorbed, thereby reducing the extent of fiscal strains. Nonetheless, there is no reason for complacency. First, higher non-ageing primary surpluses than currently registered, sustained over half a century, would be required to prevent debt-to-GDP ratios rising above current levels – which are already considered to be too high in many countries. Second, a few countries are still in primary deficit, and reforms in these countries are all the more urgent if rapid accumulation of debt is to be avoided as ageing accelerates. Third, large primary surpluses have been achieved, in most cases, by increases in tax pressure from an already high level, with accompanying distorting effects on markets, potentially leading to slower growth. Fourth, a large stock of public debt implies a high degree of vulnerability to changes in interest rates, particularly when a large share of the debt is short term. Fifth, most governments experience pressure to "spend" surpluses where they occur – either through higher expenditure or lower taxes – implying that these surpluses may not be easy to sustain. Finally, in most countries pension spending already accounts for a large share of social spending and this will progressively increase. This, in turn, will limit budget flexibility and the resources available for other spending programmes.

Comprehensive reforms are still needed in many countries…

As regards pensions, reforms have already been introduced in many countries. But, even if the overall fiscal situation appears better than several years ago, further reforms to age-related programmes are still needed in many countries. While a comprehensive range of policies will be required to limit the rise in spending (OECD, 1998), it is of interest to consider the relative effects of key individual policies taken in isolation, and in particular: a reduction in average benefits of old-age pensions; a reduction in the number of beneficiaries of old-age pensions reflecting delayed retirement; and, an increase in the primary surplus that is sustained throughout the period.

… and policies to encourage later retirement may have a larger fiscal impact than changes to average benefits

On the basis of a simplified methodology, and using the "stylised" country as the model, the OECD has calculated the required change in average benefits and in the number of pension beneficiaries in 2005 (and sustained throughout the period) to keep the debt-to-GDP ratio constant at around 55 per cent of GDP by 2050) (Table IV.6, Panel B).[22] The results – which should only be considered as approximate – suggest that the required reduction in the number of beneficiaries could be close to 8 per cent – corresponding to a rise in the effective age of retirement of more than one year – while the required fall in average benefits might have to be more than double that, at around 17 per cent. The larger required action on pension benefits as opposed to pensioners reflects the feedback effects of fewer pensioners on higher employment and GDP, as well as the effect on tax revenues. In reality, however, cutbacks in pension generosity might well induce people to work longer, while later retirement in some countries automatically leads to higher pensions, suggesting that the separation of these two effects may not be so neat or the differences so marked.

A further improvement now in the primary balance would offset the impact of ageing on debt

Alternatively, countries could choose to increase further their primary surpluses now to offset the impact of ageing on the deficit through the remainder of the period. The simulations for the "stylised" country suggest, for example, that the age-related increase in spending, taken by itself, could be fully offset by an increase in the primary surplus of an additional 1 percentage point of GDP and sustained through the

22. It was assumed that the reduced number of beneficiaries was balanced by an equivalent increase in employment – *i.e.* there was no increase in the share of the unemployed or of the inactive.

period (Table IV.6, Panel B). This is because the higher non-age-related surplus, assumed unchanged, helps counteract the age-related fiscal pressures as they emerge.

There is a narrow window of opportunity before dependency ratios begin to rise rapidly. Countries can profit from this period by improving the overall fiscal situation and announcing reforms, especially as policies have to be phased in progressively so as to allow households the time to adjust. Clearly, if policies are implemented with a considerable delay, stronger measures will be required to achieve the same fiscal outcomes by mid century. For example, the required reductions in pension benefits and the number of beneficiaries to offset the impact of ageing on debt have been re-estimated assuming that reforms were implemented 10 years later (*i.e.* in 2015 rather than 2005). The results indicate that, to achieve the same objective in terms of debt reduction, the reforms would need to be one-quarter larger than if implemented immediately and a delay of 20 years would increase this amount to three-quarters (Table IV.6, Panel B).

Early introduction of policies reduces the size of the needed adjustments

In choosing which reforms to introduce, countries will also focus on the impact on incomes of the elderly. Sharp falls in average benefits may mean a widening gap between wage earners and incomes of the retired and increased poverty among the elderly. Where these changes are large, political pressure may build up to reverse these policies. To palliate such effects on incomes and increase the political sustainability of reforms, there may be a need for flanking policies that provide alternative sources of income in retirement – for example, funded private pension (or savings) arrangements, possibly of a mandatory nature, or scope for maintaining earnings. In this context, it is notable that policies that delay retirement allow fiscal goals to be achieved with less need to reduce retirement incomes, underlining once again the desirability of measures that encourage people to work longer in order to qualify for a full public pension.

Attention should be paid to reform combinations which can be sustained over the long term

In addressing long-term fiscal issues, countries need to consider a wider range of policy instruments than those just discussed and a number of these have been laid out in *Maintaining Prosperity in an Ageing Society* (OECD, 1998) and in the *OECD Jobs Strategy* (OECD, 1999).

Comprehensive reforms may require further changes to labour market policies

– Policies permitting withdrawal of older workers from the labour market will have to be monitored closely. Even though all reporting countries except Norway project broad stability or declines in spending on these programmes as a share of GDP, the rising share of older workers in the working-age population may still put upward pressure on expenditure.

– The impact of later retirement, higher participation rates of older workers and immigration depends on whether the individuals concerned find employment. Their employment opportunities will be promoted by reforms to reduce structural unemployment and encourage rapid employment growth, as laid out in the *OECD Jobs Strategy*.

Closer attention to ways of controlling health- and long-term care costs is also desirable. Demand for publicly provided services will climb with the number of the elderly and of the very old. At the same time, increasing participation rates of the working-age population and smaller family sizes are likely to limit the scope for families to care for the elderly in the future. In this context, it is essential to increase both the efficiency and the effectiveness of the health-care and long-term care system. At the level of health care, budgetary caps remain the main method of spending control.

The health-care system needs to improve efficiency and effectiveness of care

But such policies can lead to rationing and reduced quality of care. Introducing needed micro-economic reforms aimed at improving the efficiency and the effectiveness of health-care systems has proved much more difficult. Over the near future, policy-makers need to find ways of limiting the demand for and supply of those aspects of health care that are unnecessary, strengthening the effectiveness of delivery, and improving the match between health-care needs and the supply of services. Over the longer term, health-care expenditure will be driven – in addition to increased ageing – by incentives embedded in health-care systems, the diffusion of technology and relative prices for medical services, suggesting that a wide range of policies will need to be considered if the long-term costs of health care are to be kept under control.

Finding ways of maintaining the physical, as well as the economic, independence of the elderly is an important policy goal

Limiting the need for state-financed institutional care for the frail elderly will help contain costs of care significantly. In any case, ensuring that individuals are able to remain independent and to care for themselves for as long as possible is an important policy goal in its own right. Since the demand for services for the frail elderly is closely linked to disability, policies of a preventive nature may be a cost-effective response in certain cases (Jacobzone *et al.*, 2000). In addition, an appropriate level and mix of supply, including significant support to remain at home, should help limit costs by ensuring that the level of care is in line with the degree of disability and minimises overall costs – *e.g.* less need to keep elderly requiring long term-term nursing care in higher-cost acute-care institutions.

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V. CHALLENGES FOR TAX POLICY IN OECD COUNTRIES

Modern OECD economies have fundamental economic and social objectives that require public spending. This in turn must be financed mainly through taxation. However, because taxation inevitably impinges on most aspects of economic activity, careful consideration must be given to its design – in addition to its level and hence the level of related expenditure. Three features of taxation are especially important. *First*, so long as taxation affects incentives it may alter economic behaviour of consumers, producers or workers in ways that reduce economic efficiency. These effects should be taken into account when the costs and benefits of public expenditure to be funded are being assessed. *Second*, the distribution of taxation's impact across the population raises issues of equity, or fairness, which must be given substantial weight even if it entails costs in terms of economic efficiency. *Third*, the practical enforceability of tax rules and the costs arising from compliance are important considerations, the more so since these are both affected by, and have implications for, the efficiency and public perceptions of the fairness of tax systems. As elaborated in more detail in Box V.1, the key challenge for tax policy is to strike the best possible balance among these issues.

Tax design needs to balance considerations of economic efficiency, equity and enforceability

In the past two years, the OECD has reviewed the tax systems of a number of Member countries – twelve in total – in *Economic Surveys*, using a common analytical framework.[1] While the challenges facing tax policy in these countries are very diverse, the policy recommendations and their underlying rationale may provide some useful lessons for other OECD countries.[2] This chapter pulls the main lessons together. It starts with a brief overview of major trends in tax receipts. The subsequent sections identify the scope for improving tax systems by:

Useful lessons may be drawn from countries' experiences

– Reducing the distortions in economic behaviour stemming from taxation of saving and business activity.

– Striking a better balance between efficiency and equity in the taxation of labour and of consumption.

– Enhancing the effectiveness of tax collection and enforcement and better matching the assignment of autonomous taxing power with the responsibility for public provision at lower levels of government.

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1. These are (in chronological order): Mexico, Switzerland, Japan, Poland, Spain, the Czech Republic, Norway, Korea, Greece, New Zealand, Iceland and Portugal. See the various issues of the OECD *Economic Surveys* (tax reviews in this series are forthcoming for the United States and Finland). In addition, earlier *ad hoc* tax reviews in the *Economic Surveys* of Canada (1997), Austria (1998) and Sweden (1999) were taken into consideration. A synthesis of the findings is reported in Van den Noord and Heady (2001).

2. To enhance the country coverage of the analysis, an in-depth review of tax policies in the European Union countries was prepared, see Joumard (2001). It focuses in particular on countries not listed above, and highlights a number of tax issues that are specific for the European Union.

Box V.1.   General principles guiding tax policy

Tax design is shaped by the need to raise revenues and by considerations of efficiency, equity and enforceability. If the only concern were to minimise efficiency losses associated with taxation, taxes generally should be designed so as to leave economic behaviour unaffected. Specifically, taxes should be lump sums or relate to tax bases that cannot be influenced by taxpayers, such as natural resources and undeveloped land. While such a tax system would avoid distortions in economic behaviour, it would be highly unlikely to yield sufficient revenues to fund socially useful expenditure without producing substantial inequity. A more useful guideline is that the tax system should be as neutral a possible, *i.e.* minimise discrimination in favour of or against any particular economic choices. In practice, this points to building tax systems substantially around broad income and expenditure bases and minimising differences in tax rates that can be applied. As a rule of thumb, in the absence of compelling considerations to the contrary (see below), improvements in efficiency can be achieved by: *i)* broadening tax bases by eliminating exemptions and special regimes; *ii)* flattening rate structures; and *iii)* integrating or aligning different tax rate structures to avoid arbitrage opportunities.

However, neutrality need not be an overriding consideration; other factors that can usefully be taken into account are:

– Governments may find scope for levering the revenue-raising potential of tax systems by taxing some items more heavily than others. For example, under some circumstances it can be efficient to tax most heavily those items that are comparatively price-inelastic.[1]

– It may be desirable to use the tax system to enhance welfare by correcting market failure. This may involve taxing "bads", such as alcohol, tobacco and polluting substances such as fossil fuels. Where demand for such goods is inelastic there may be revenue benefits which allow distorting taxes elsewhere to be lowered.[2] While market failures could also justify tax reliefs for activities whose social return is high (*e.g.* R&D and training), the advantages need to be weighed against the need for higher distorting taxes elsewhere.

– Allowing taxes to differ across local jurisdictions permits the supply of local public goods and services to be aligned with the particular, but differing, preferences and circumstances of their constituents – although there are different views across countries as to which taxes could usefully be decentralised.[3]

– Tax systems influence income distribution and may have a role to play in the pursuit of equity goals. The resulting loss in neutrality, *e.g.* due to progressive taxation, may involve efficiency losses but may also contribute to the perceived fairness of the system.[4]

– The cost of compliance with the tax code needs to be kept low, requiring tax rules to be clear and avoid unnecessary complexity. While the neutrality principle is often consistent with simplicity, there are cases where departures from the neutrality principle enhance simplicity, for example by exempting income that is difficult to assess such as fringe benefits or imputed rentals.

1. The principle known in the literature as "Ramsey's rule" states that the efficiency loss or "excess burden" is minimised if the product of tax rates and price elasticities is equalised across all items.
2. Provided these revenues have not been earmarked for (environmental) expenditure programmes, see Chapter VI, "Encouraging environmentally sustainable growth: experience in OECD countries".
3. See for an elaboration Atkinson and Van den Noord (2001).
4. Equity is subjective but perceptions about it are important. Greater neutrality in tax systems is usually consistent with better "horizontal " equity; *i.e.* ensuring that persons in the same economic position pay the same amount of tax. However, governments are often faced with trade-offs between neutrality and "vertical equity", *i.e.* requiring that people on higher incomes pay a higher proportion of their income in tax.

Trends in tax receipts and structure

How to measure the tax burden?

The measurement of tax burdens is subject to controversy. The most commonly used gauge, the ratio of taxes to GDP, is only a rough indicator, for a variety of reasons:[3]

– Institutional set-ups differ across countries in ways that significantly affect the reported tax-to-GDP ratio without having much impact on the burdens

3. See OECD (2000*a*).

imposed by taxation. For example, there are differences across countries, and over time, in the taxation of transfer income, the size of tax payments by the public sector itself and the mix of subsidies and tax expenditures (targeted exemptions, allowances and credits).[4]

– Some taxes may have a stronger impact on economic behaviour – *i.e.* act more as a "burden" – than others, and it is therefore useful to examine the breakdown of tax revenues by tax base. Different forms of taxation may also interact to result in pronounced differences in the marginal effective tax rates faced by particular groups, thus heavily affecting their economic choices. Such marginal tax rates have been calculated by the OECD and used to assess tax systems.[5]

– The tax burden needs to be assessed in a wider context, including the "burden" stemming from regulation that mandates the private sector to provide social protection or public goods and services in the government's place.

Even so, bearing these caveats in mind, the ratio of tax revenues to GDP is useful as a "scaling factor": to the extent tax systems matter for economic efficiency, their costs are likely to rise as economic decision makers' exposure to taxation increases.

The evolution of tax revenue as a percentage of GDP in OECD countries since 1965 is reported in Table V.1. Figure V.1 presents an overview of the situation in 1998. The stylised facts are the following:

The tax-to-GDP ratio has trended up until recently…

– There has been a persistent and largely unbroken upward trend in the ratio of tax to GDP since 1965 across most of the OECD area, though recent developments suggest the trend increase may be ending.

Figure V.1. **Total tax revenue in OECD countries**

1998
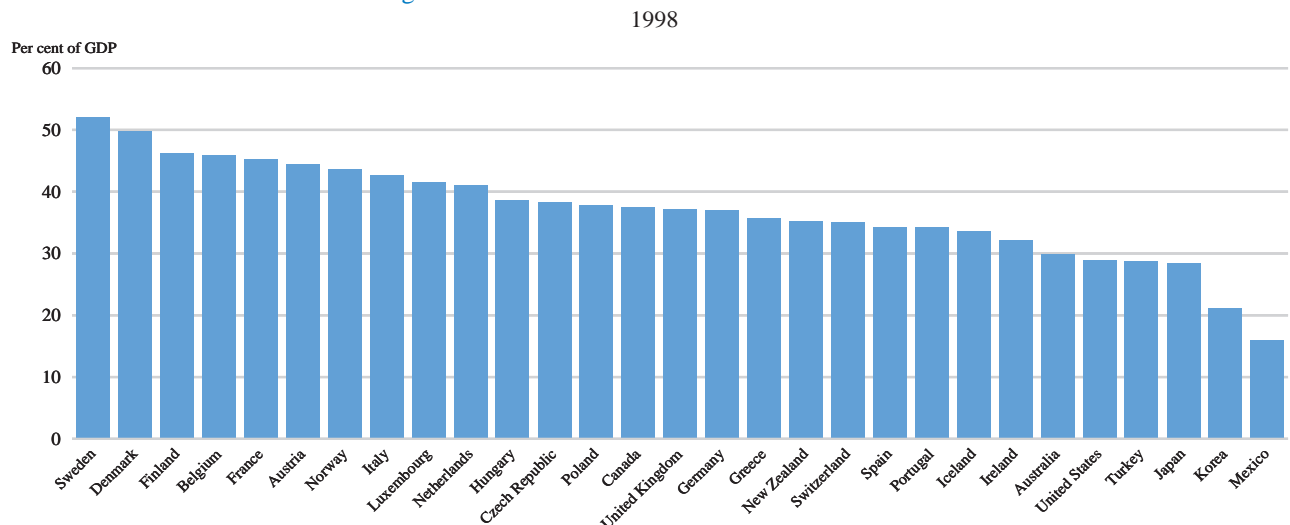
Source: OECD, *Revenue Statistics,* 1965-1999. In the case of Greece, the figure is based on a submission by the national authorities.

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4. See for example Adema (2000).
5. See for example OECD (1991, 1994, 1999*a* and 1999*b*).

Table V.1. **Total tax revenue as percentage of GDP**

	1965	1970	1975	1980	1985	1990	1995	1998	1999[a]
Australia	22.4	22.9	26.6	27.4	29.1	29.3	29.4	29.9	..
Austria	33.9	34.9	37.7	39.5	41.6	40.2	41.5	44.4	44.3
Belgium	31.1	35.7	41.6	43.1	46.3	43.1	44.8	45.9	45.4
Canada	25.9	31.2	33.1	32.0	33.1	36.1	35.7	37.4	..
Czech Republic	..	..	..	..	..	..	40.1	38.3	37.5
Denmark	29.9	40.4	41.4	44.0	47.4	47.1	49.4	49.8	50.6
Finland	30.3	32.5	37.7	36.2	40.0	44.7	45.0	46.2	46.5
France	34.5	35.1	36.9	40.6	43.8	43.0	44.0	45.2	46.0
Germany[b]	31.6	32.9	36.0	33.1	32.9	32.6	38.2	37.0	37.7
Greece[c]	18.2	20.9	21.0	24.0	28.6	29.4	31.7	35.7	37.1
Hungary	..	..	..	..	..	..	42.4	38.7	37.0
Iceland	26.2	27.0	29.6	29.2	28.4	31.4	31.2	33.6	35.4
Ireland	24.9	29.9	30.2	31.5	35.1	33.6	33.1	32.3	31.9
Italy	25.5	26.1	26.2	30.3	34.4	38.9	41.2	42.7	43.0
Japan	18.3	19.7	20.9	25.4	27.6	30.9	28.4	28.4	27.7
Korea	..	..	15.2	17.7	16.9	19.1	20.5	21.1	23.8
Luxembourg	27.7	28.9	39.6	40.8	45.3	40.8	41.9	41.5	42.1
Mexico	..	..	..	16.2	17.0	17.3	16.6	16.0	16.5
Netherlands	32.8	37.1	43.0	43.4	42.4	42.8	42.0	41.0	40.3
New Zealand	24.7	27.4	31.1	33.0	33.6	38.1	37.6	35.2	..
Norway	29.6	34.9	39.9	42.7	43.3	41.8	41.5	43.6	41.8
Poland	..	..	..	..	..	..	39.9	37.9	..
Portugal	15.8	19.8	21.3	24.6	27.1	29.6	32.7	34.2	34.5
Spain	14.7	16.9	19.5	22.9	27.6	33.0	32.8	34.2	35.1
Sweden	35.0	39.8	43.4	47.1	48.3	53.7	47.6	52.0	52.1
Switzerland	19.6	22.5	27.9	28.9	30.6	30.9	33.5	35.1	35.1
Turkey	10.6	12.5	16.0	17.9	15.4	20.0	22.6	28.6	31.8
United Kingdom	30.4	37.0	35.4	35.4	37.7	36.0	35.2	37.2	36.6
United States	24.7	27.7	26.9	27.0	26.1	26.7	27.6	28.9	..
Total OECD									
Unweighted average	25.8	28.9	31.1	32.1	33.8	35.0	36.1	37.0	37.3
Weighted average[d]	23.1	25.4	26.7	28.3	29.1	30.3	31.9	32.8	33.0
European Union									
Unweighted average	27.8	31.2	34.1	35.8	38.6	39.2	40.1	41.7	42.1
Weighted average[d]	29.1	31.6	33.4	34.6	36.8	37.7	39.4	40.3	40.7

a) Figures for 1999 are estimates.
b) Unified Germany beginning in 1991.
c) Figures for 1998 and 1999 are based on a submission by the national authorities.
d) Using 1995 GDP at purchasing power parities as weights. In 1998 and 1999 the average is based on the latest year for which data are available.
Source: OECD, *Revenue Statistics*, 1965-1999.

– Very few countries have consistently resisted this long-term trend. Only in the Netherlands are tax ratios currently below their 1975 level, and in only three other countries, *i.e.* Mexico, the United Kingdom and the United States, have tax receipts developed broadly in line with GDP over a long period.

– A few more, including Ireland, Japan, New Zealand and Sweden, have succeeded in reducing the tax ratio from peak levels of 1985 or 1990, but not by large amounts. Only rather recent data available for transition countries suggest that these countries are recording falling tax revenues relative to GDP as well, although this may reflect in part "erosion" of their tax bases while they are grappling with the transition process.

– Tax ratios in the European Union, averaging more than 40 per cent of GDP, generally exceed those elsewhere. Outside Europe, only Canada and New Zealand have tax ratios above 30 per cent of GDP.

Figure V.2. **Evolution of the tax mix over time**[1]
Per cent of GDP

Social security and payroll taxes   Taxes on personal income   Taxes on corporate income
Consumption taxes   Other taxes including property taxes

OECD[2]

European Union[2]

United States

Japan
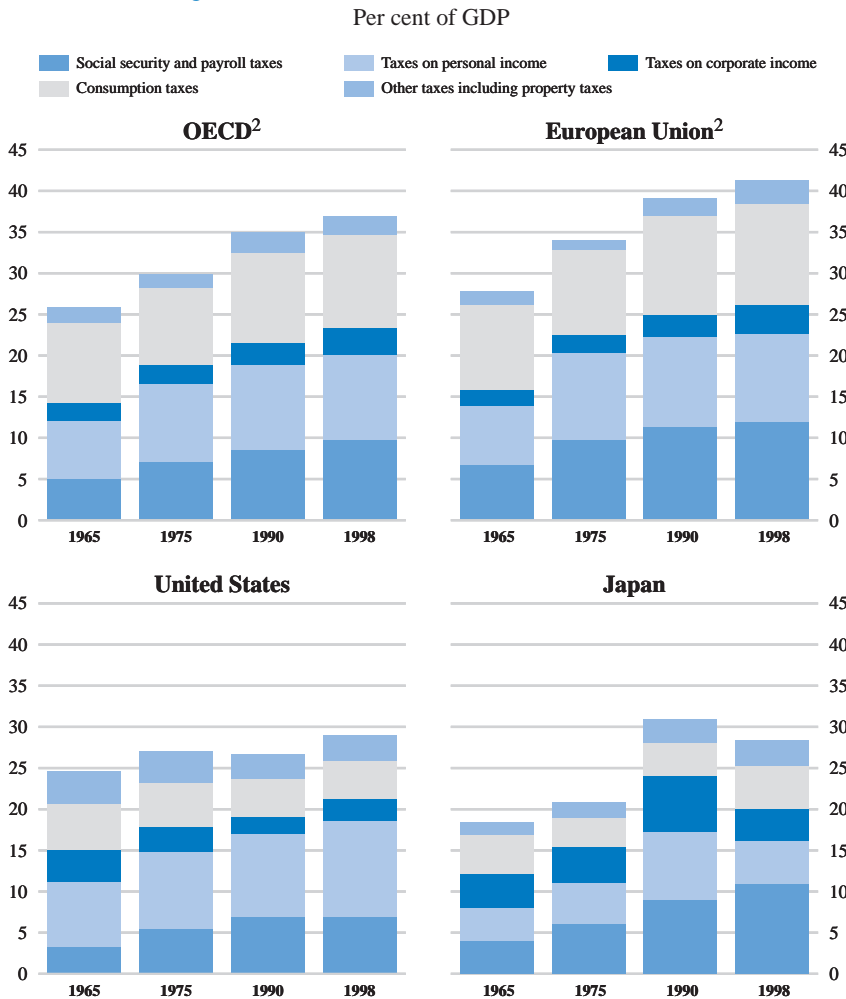
1. The breakdown of income tax into personal and corporate income tax is not fully comparable across countries. A cautious interpretation of the numbers in Figure V.2 is called for. The split between personal and corporate income tax can be misleading for two reasons. First, many OECD countries have some form of integration between corporate and personal income taxes, so that a portion of corporate taxes are refunded to the shareholders as a reduction in personal income tax. This is reflected i the statistics as a reduction in the revenue from personal income taxes, but it could be just as well regarded as a reduction in corporate tax revenue. Second, OECD countries vary in the extent to which businesses are incorporated. For example, German firms are much less likely to be incorporated than firms in the United States. This means that Germany reports a much lower share of tax revenue coming from corporate income tax, even though the taxes on business income have been higer overall.
2. Unweighted average.
Source: OECD, *Revenue Statistics,* 1965-1999.

Declining tax ratios are currently being reported more widely across countries. This largely reflects public expenditure trends,[6] although fiscal consolidation efforts during the 1990s have implied that the success a number of countries have had in reducing expenditure ratios has not yet been reflected in tax ratios that are actually falling. Moreover, a favourable cyclical position has buoyed the tax take as a percentage of GDP notwithstanding tax cuts implemented in a large number of countries.

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6. See Atkinson and Van den Noord (2001).

Figure V.3. **Tax mix by source**[1]

Per cent share of total tax revenue, 1998

A. OECD[2]

B. European Union[2]

C. United States

D. Japan
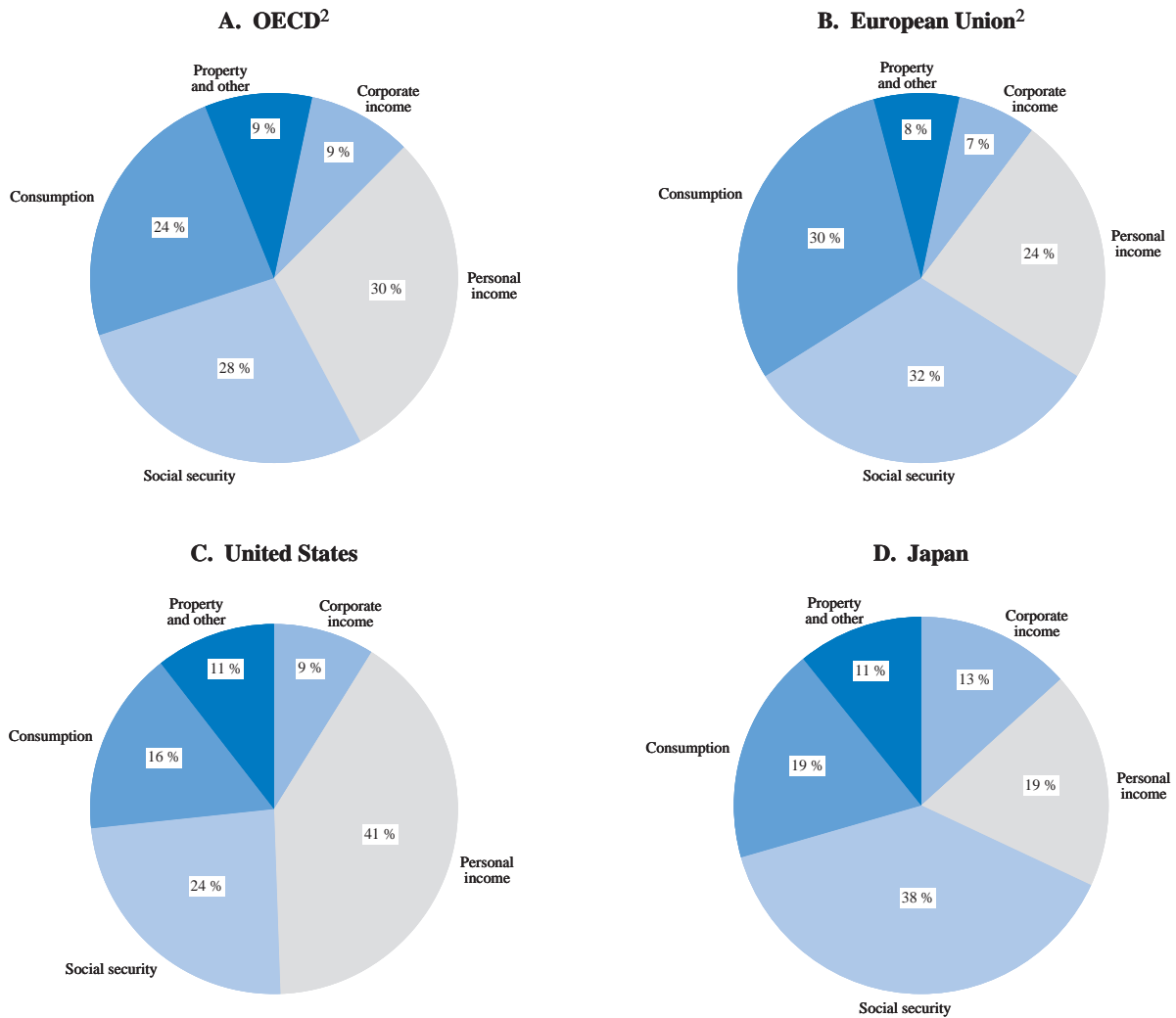
1. The breakdown of income tax into personal and corporate tax is not fully comparable across countries; see footnote 1 Figure V.2.
2. Weighted average.
Source: OECD, *Revenue Statistics,* 1965-1999.

… with social security contributions having borne the brunt of rising revenue needs

As tax GDP to ratios have drifted up over the longer haul, the largest part of the increases has taken the form of higher social security contributions (Figure V.2). This has reflected the expansion of social insurance systems substantially financed by such contributions, notably in Europe. Higher personal income taxes have also played a significant role, although most of the rise in these had taken place by 1975. Taxes on corporate income and wealth, more constrained by the potential geographical mobility of their bases than social security contributions, and taxes on goods and services have risen more modestly.

The vast bulk of tax revenue, *i.e.* more than 80 per cent, currently stems from three main sources of roughly equal size: personal income tax, taxes on goods and services and social security tax. However, countries vary considerably in the relative importance of different tax revenue sources (Figure V.3). Overall, the European Union (EU) relies more on consumption taxes and social security contributions and less on personal income tax than the OECD average. In contrast, the United States collects more in personal income tax and property tax but less in consumption taxes and social security contributions. Japan is similar to the United States in its low share of consumption taxes but collects much less in personal income tax, offsetting this with higher levels of corporate tax and social security contributions.

Taxation of saving and business activity

Mobilising saving and allocating it effectively to areas where it yields a high return is key to maintaining high rates of productivity and economic growth over the medium to longer term. There is little evidence that taxation has a significant impact on aggregate saving or investment. However, tax systems clearly discriminate between specific forms of saving and investment. This influences comparisons of rates of return across savings and investment vehicles, and may result in sub-optimal saving and investment patterns and efficiency losses. Moreover, globalisation and the associated growth in international financial transactions, while enhancing the growth potential of economies and associated tax bases, risks heightening such distorting effects as new possibilities for international tax evasion and avoidance emerge.[7]

Tax incentives change the composition, more than the overall levels, of saving and investment

One longstanding issue is that double taxation of distributed profits, first at the corporate level and subsequently at the shareholders' level, can produce a high combined tax rate on equity. With interest on debt deductible against the corporate tax this can create an incentive to finance investment through debt (bank credit and the issuance of bonds) rather than the issuance of shares.[8] This may make companies more prone to insolvency and discriminate against small companies and start-ups, which have reduced access and less favourable terms on debt financing and thus depend more on equity. This points to the desirability of removing the bias against equity financing. One way that this has been done is by granting a tax credit to dividend recipients corresponding to the corporate tax on distributed profits. This is known as the imputation system (applied in Australia, Finland, France, Mexico, New Zealand and Norway),[9] as opposed to the so-called classical system without such credits. However, the concerns caused by the classical system have eased over time because a major source of debt bias – inflation – has been practically removed. Moreover, in many countries reductions in corporate tax rates have

While tax-induced indebtedness of corporations has become less of a concern,…

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7. Moreover, there is recent evidence that international differences in taxation are having a significant effect on foreign direct invesment flows. See Altshuler *et al.* (1998).
8. Retained earnings are another possible source of finance, but are often in limited supply for new and fast-growing companies. They are usually treated more favourably than new equity financing given that capital gains on shares are often not fully taxed at the individual level beyond a certain holding period.
9. Moreover, several countries apply partial imputation credits, corresponding to some fixed share of imputed corporate profits, notably Canada, Denmark, Ireland, Italy, Korea, Portugal, Spain, Turkey and the United Kingdom.

reduced the "tax value" of interest deductions.[10] At the same time, double taxation relief is often provided indirectly, by adopting low flat tax rates on personal dividend income.[11]

… globalisation has compromised traditional ways of dealing with it

Meanwhile, tax designers in many countries have been moving towards the view that in a world with free cross-border capital flows, imputation credits are unlikely to be effective in reducing the bias towards debt financing of corporations. Indeed, if the pre-tax required rate of return for shareholders is determined in world capital markets and capital is flowing freely across borders, unilateral changes in personal income taxation are thought to be unlikely to change the demand for and supply of equity capital. Moreover, in the absence of a substantial network of accommodating bilateral tax treaties, imputation credits may discriminate against foreign companies and shareholders. As a result, some countries have chosen to maintain (or revert to) a classical system.

Tax systems favour certain industries, locations and business forms in complex ways…

In most countries the tax code contains special tax reliefs to favour certain activities and locations, such as accelerated depreciation allowances for investment in intangible assets (such as training) and tax reliefs for job creation, deprived areas or foreign direct investment. Typically these are intended to target market failure, or to contribute to social policy or equity objectives. But effective targeting is often undermined by arbitrage opportunities which erode the tax base and lead to unintended distortions in the allocation of resources. For example, special tax regimes designed to lower the taxes paid by certain companies alone (*i.e.* "ring-fencing") can lead to a serious distortion of competition. Non-tax measures that lower the overall cost of doing business in a certain region, such as infrastructure development, or the provision of training facilities, are more transparent and may create more durable positive effects. Where tax reliefs are used to complement these measures, they need to be designed very carefully.

In addition to special regimes and allowances, several countries maintain a progressive corporate tax rate structure or grant simplified tax filing to small business (Mexico, Canada, France, Japan, Korea, Netherlands, Portugal, Spain, Switzerland, the United Kingdom and the United States). These measures are designed to offset the disadvantages of new, or small, enterprises in financing their investment projects and the disproportionate costs stemming from administrative complexities, including tax compliance.[12] There is also a case for favouring small corporate business to the extent it is prone to market failure, for example due to imperfections in patent systems penalising start-ups, high cost of compliance with regulations due to diseconomies of scale and reduced access of smaller firms to venture capital. Unfortunately, however, progressive or simplified corporate taxation may give rise to abuse with larger companies splitting up into smaller units for tax purposes, but strict anti-fragmentation rules can help to prevent this occurring.

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10. One country, Italy, introduced a corporate tax rebate for investment financed through new equity or retained earnings.
11. Many countries tax dividends at a lower (flat) rate under the personal income tax code (Austria, Belgium, the Czech Republic, Denmark, Hungary, Iceland, Italy, Japan, Korea, Poland and Sweden). Meanwhile, Germany has recently introduced a "half rate" system whereby only half the dividends received from German corporations enter the personal income tax base. One country, Greece, exempts dividends from personal income tax all together.
12. A progressive rate structure of corporate taxation is motivated in some countries also by equity objectives, but will only be effective to the extent that there is a correlation between the size of corporations and the relative wealth position of their shareholders.

Favourable tax treatment of pension plans, both voluntary and mandatory, is widespread, with Australia, Denmark, Luxembourg, New Zealand and Sweden being notable exceptions. The main purpose of these provisions is to avoid "moral hazard" of workers, who may otherwise be tempted to consume too much of their earnings during working life and "free ride" on the social safety net once they retire. Moreover, countries with a severe ageing problem may find such tax privileges a useful way to smooth the transition from pay-as-you-go financing to pre-funding, by providing some offset for the "double burden" hitting current workers who are required to finance both current and future pension payments. However, these advantages need to be weighed carefully against the risks of poor targeting, as the tax relief may benefit groups who are not affected by moral hazard and whose prospective pension income, with reasonable saving, is well above the social safety net. Moreover, systems that provide tax breaks to pension vehicles often give particular providers a favoured status, something that the design of such systems should avoid.

… while distortions also stem from tax reliefs for pension-saving vehicles…

Another area often favoured by tax systems is home ownership. According to the neutrality principle, the rental income stemming from home ownership should be imputed for tax purposes, while capital gains should be taxable and mortgage interest payments deductible. However, in most countries little or no rental income is imputed for tax purposes and/or capital gains of owner-occupiers are not taxed – even if property taxes may offset this form of tax relief to some extent. Moreover, mortgage interest payments often result in tax deductions against the highest marginal income tax rate. This implies favourable treatment compared to the taxation of most forms of return on personal saving, which in several countries is taxed at low flat rates, and interest on consumer credit, which is usually not tax-advantaged. It also risks favouring higher income groups, who face a comparatively high marginal income tax rate and can afford the investment to qualify for the tax subsidy. Tax relief for house ownership may, finally, result in a bias against the development of commercial property and other business investment, where interest payments are normally deductible against the (typically lower) corporate tax rate.

… and home ownership

There are only few options available to move away from such unfavourable features. Some countries have capped mortgage interest deductions or eliminated them altogether while removing imputed rental income from the personal tax base. While enhancing the simplicity of the tax code and facilitating tax compliance, this type of measure still involves an asymmetry between the taxation of net capital income from housing and other forms of capital income. An alternative approach – more neutral but also more complex – is to impute a rental value and tax both it and any capital gains (net of mortgage interest payments) together with other forms of personal capital income at a uniform flat rate, akin to the dual income tax system adopted by the Nordic countries (see below). However, the experience in the Nordic countries has shown that the transition costs associated with the introduction of such a system, in terms of abrupt declines in house prices and associated solvency problems, may be high. Indeed, whatever change in tax regime is adopted for owner-occupiers, it would need to be phased in gradually.

Taxation of net wealth is applied in a number of OECD Member countries (Finland, France, Germany, Iceland, Luxembourg, the Netherlands, Norway, Spain, Sweden and Switzerland), although several have been considering its abolition. Net wealth tax, which taxes financial and real assets of individuals or corporations after deduction of financial liabilities, is motivated *inter alia* by income redistribution objectives, but its redistribution properties are undermined by the tax planning of higher income groups because of the availability of tax shelters. In particular, net wealth tax

Countries should reassess the merits of net wealth taxes…

… while distortions also stem

generates incentives for taxpayers to inflate their liabilities, *i.e.* take out loans in order to invest in tax-favoured or underassessed assets such as real estate. An alternative to this tax is an increase in the taxation of real property, which would also remove the heavy cost of tax assessment. Some countries find that the information collected in the assessment of net wealth taxes provides a useful check on the accuracy of income tax returns, as a person's wealth accumulation can be compared with his/her income, but there may be other ways of collecting this information. All considered, countries using this tax could usefully reassess the merits of continuing to apply them.

… and are encouraged to continue their co-operation on taxation of savings invested abroad

The pattern of saving flows between countries is influenced by the greater possibilities of tax evasion when savings move across borders. A divergence in source country (withholding) and residence country (income) tax rates can create incentives to shelter income from home country tax by having that income accrue abroad if it can be hidden from the home tax authorities. At the same time, investors may seek securities subject to no, or low, withholding tax at source to minimise the overall tax bill. Abstracting from evasion and avoidance, residence taxation should not affect the choice of whether to invest at home or abroad. In practice, however, evasion and avoidance are problems that need to be addressed through exchange of information between source and residence countries.

Faced with these difficulties, governments have responded in a number of ways. One response, observed a decade ago in a number of Nordic countries, has been to separate the taxation of (geographically mobile) capital and (geographically immobile) labour, by adopting the dual income approach noted above. The essential feature of a dual income tax system is the taxation of capital income at a relatively low flat rate, while earned income and transfers are taxed according to a high (and progressive) rate schedule. Many other countries have since adopted separate capital income tax regimes to move in this direction. Meanwhile, the exchange of information has become common among many OECD countries and has been agreed in principle within the EU recently.

Taxation and the performance of labour and product markets

Heavy taxation of wage earnings discourages employment, notably in Europe,…

As has been extensively analysed in the framework of the OECD *Jobs Strategy*, the heavy taxation of wage earnings which is typical for countries that maintain high levels of public expenditure, drives a large wedge between the real labour compensation as paid by employers and real take-home pay per worker.[13] This phenomenon is particularly pronounced in many countries of the European Union, but the European transition countries are confronted with this problem as well (Figure V.4).[14] To the extent that industrial relations, regulatory constraints or transfer schemes prevent the burden of this wedge from being borne by the workers, firms will be induced to cut back on their use of labour. This may take the form of substitution of (typically

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13. See for example OECD (1999*c*).
14. The tax wedges shown in Figure V.4 refer to income and social security taxes only, abstracting from consumption taxes. The cross-country spread in tax wedges would be even larger if account were taken of the taxation of consumption from wage earnings, with countries in the European Union featuring not only the highest labour taxes but also the highest consumption taxes.

Figure V.4. **Tax wedges on labour, 2000**[1]
As a percentage of gross labour costs[2]

Per cent

Personal income tax
Employee's social security contributions
Employer's social security contributions

OECD unweighted average

Belgium · Hungary · Germany · Sweden · France · Finland · Italy · Austria · Netherlands · Denmark · Czech Republic · Poland · Turkey · Spain · Norway · Greece · Luxembourg · Portugal · Canada · United States · United Kingdom · Switzerland · Ireland · Iceland · Japan · Australia · New Zealand · Korea · Mexico

1. For a single individual at the income level of the average production worker. Data for 2000 are based on estimated wage levels of the average production worker.
2. Gross wage plus employers' contributions.
Source: OECD, *Taxing Wages,* 1999-2000.

low-skill) labour with other production factors, downsizing of activity or relocation of activity to countries that offer lower labour costs for a given level of skills and competencies. At the same time, where tax and social security contributions are shifted back into wages they may generate disincentives to seek work or raise work effort. If tax enforcement is weak, firms and workers may also drift into the "informal" economy.

Concerns about excessive labour costs have prompted initiatives in several EU countries (Belgium, France, Greece, the Netherlands, Spain and the United Kingdom) to cut social security contributions at the bottom end of the pay scale.[15] Such measures have generally been found to be effective in terms of creating job opportunities for low-skilled workers. Several countries, including some in the European Union, have also introduced earned-income tax credits to strengthen incentives for participation in work at low levels of wage earnings, following the example of the United States (Canada, Finland, France, Greece, Ireland, New Zealand and the United Kingdom). This is found to be particularly effective in encouraging labour supply if combined with a minimum wage at a reasonable level, as this limits the extent to which the incidence of the tax credit might be transferred from the worker to their employer. A drawback is that incentives for additional work effort at income levels in the abatement range are reduced (the credit is phased out as earnings approach a statutory threshold). Careful design can help avoid this, but much depends on the shape of the earnings distribution – if this is narrow, the phase-out problem is markedly more difficult to deal with – as well as the overall level of taxation – if this is high, marginal effective tax rates in the phase-out range may become prohibitive.[16]

… and efforts to ease this problem have proved beneficial

15. See for details Joumard (2001), *op. cit*.
16. See: Bassanini *et al.* (1999) and Pearson and Scarpetta (2000).

Progressive income taxation faces difficult trade-offs between efficiency and equity

Progressive income taxation is aimed at enhancing the fairness of income tax systems but also strengthens incentives for tax minimisation to the extent that high-income taxpayers are able to benefit from tax reliefs, via the purchase of pension annuities, housing or other tax-favoured assets (see above). Moreover, although not a large-scale problem yet, top income earners may become more prone to labour mobility *vis-à-vis* other countries where income taxation at the top end of the income distribution is lower. Maintaining strongly progressive tax rates under such conditions frustrates economic efficiency without gaining much in terms of equity. There is scope for governments to continue their ongoing efforts to reduce marginal tax rates at the top end while broadening the base by limiting tax reliefs, especially in countries where the pre-tax income distribution is narrow. Indeed, as opportunities for economic and social mobility of individuals increase, horizontal equity (ensuring that people in the same economic position pay the same amount of tax) may gradually take precedence over vertical equity (requiring that people on higher incomes pay a higher proportion of their income in tax) as a means to promote fairness.

Rate differentiation in indirect taxation often removes neutrality and is not well-suited for income redistribution purposes

All but one OECD country have introduced a value-added tax (VAT). This may have simplified the tax rate structure, but rate differentiation and exemptions still imply a lack of neutrality in most countries. This reflects the fact that these structures have not been dictated purely by tax considerations but also by other, often complex, social and historical factors. They may also be motivated by industrial policy objectives (*e.g.* to favour the tourism industry), but, since they usually favour specific producer interests, lobbying activity can influence the assessment of their merits. VAT exemptions for small companies are intended to facilitate compliance, but recent experience in some countries (*e.g.* Italy) has shown that requiring small (non-incorporated) companies to register for VAT may be a more effective way to encourage overall compliance with the tax code. Low or zero indirect tax rates and exemptions may also be motivated by concerns over indirect taxation hitting disadvantaged groups heavily. However, these policies are rarely successful in alleviating such concerns because consumption patterns of basic goods and services (to which lower rates mostly apply) vary rather little across income groups.[17] Targeted help, for example cash payments (including child benefits) or vouchers for basic staples, could be a more cost-effective way to assist people on low incomes, although there is a need to take account of possible problems: low take up, increased effective marginal tax rates and high administrative costs.

Taxing electronic commerce in a neutral way is an emerging challenge

Electronic commerce continues to grow rapidly,[18] but this new way of doing business also presents certain challenges to established tax policy principles and to effective tax collection, particularly in terms of ensuring a similar tax treatment of electronic traders as compared to more traditional businesses. Specific problems arise in connection with supplies to final consumers and businesses that are not registered for VAT, where there is little incentive for suppliers to fulfil their VAT obligations in relation to such sales. It is important that taxation rules continue to apply fairly and consistently, and with predictable outcomes internationally, so as to avoid distortions. OECD countries are working, in partnership with the international business community and with many non-member economies, to implement the core principles set out in the Ottawa Taxation Framework Conditions.[19] They point, in short,

17. See for example Figure VI.3 in Chapter VI, "Encouraging environmentally sustainable growth: experience in OECD countries", which broadly confirms this in the case of household energy consumption.
18. See OECD (2000*b*).
19. OECD (2001).

to the application of existing taxation principles and norms to e-commerce, albeit with some clarification and development of those norms in selected areas.

Tax compliance, enforcement and decentralisation

The self-employed in many countries face low effective income-tax rates, as they usually have more scope for deductions and credits regarding expenses that qualify as necessary for carrying out their business, contribute relatively little to social security, or underreport income due to weak auditing. This raises concerns not only in terms of tax-revenue loss, but also produces inequities between self-employed and other workers and jeopardises the efficiency of industrial organisation. Strengthening the taxation of self-employment income is imperative in countries where tax compliance is reportedly a key problem. These countries might benefit from the recent experience in Italy, which introduced a system of assessing self-employment income through auditing based on regional benchmarking.[20] A specific problem associated with the dual income tax systems applied in some countries (see above) results from the splitting of self-employment income into labour and capital components, each taxed at its own level. Since the statutory tax rate on labour income is high and relatively progressive, incentives to convert labour income into capital income (dividends) and/or to incorporate may be strong for individuals with high earnings. This may force these countries to reduce the differential between capital and labour income tax, at the risk of undermining the rationale behind the dual income tax system.

The taxation of the self-employed is often the Achilles heel of the tax system

Strengthening the enforcement of tax laws can potentially enhance the perceived fairness of the system and thus compliance. Meanwhile, raising the cost-effectiveness of tax administrations would free-up resources for more beneficial uses, such as combating tax evasion. Current reform strategies that may yield benefits in this regard include:

Clear tax codes and effective tax enforcement enhance tax acceptance and compliance

– Simplifying tax codes and reinforcing voluntary compliance by providing tailored assistance, advice and support to taxpayers; harnessing new information technology to provide improved taxpayer services electronically.

– Improving cost-effectiveness of tax collection by reduction of overlap between various tax (and social security) administrations with regard to collection and processing and the introduction or extension of modern information technology.[21]

– Widening the coverage of tax assessment. This could be achieved by introducing a single tax identification number (TIN) to discourage underreporting of income, up-to-date land registers to allow a proper assessment of real estate, and abolishing lump-sum tax settlements for self-employed while assessing their income based on proper accounting rules.

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20. The so-called *studi di settore*; see for a discussion the 2000 issue of the *OECD Economic Survey* of Italy.
21. Recent progress in, for example, electronic filing of tax returns over the Internet has been rapid in several countries, and in some has had quite striking results both in terms of the number of taxpayers using this facility and the cost of collection and compliance.

– Combating cross-border tax abuse, including failure of taxpayers to declare income from cross-border investment of savings, the use of tax havens to hide companies' profits from their country of residence, and abuse of cross-border sales tax or VAT regimes. These problems are currently being addressed within the framework of the OECD and the EU, mainly on the basis of improving exchange of information between tax authorities.

There is no unique role model for decentralised taxation…

Countries differ in prevailing fiscal arrangements between the central and sub-central levels of government. The combined share of sub-central governments in total tax revenues has been relatively stable in past decades, but shows a wide variation across countries (see Table V.2). Where federal constitutions apply, the sub-central share is higher on average than in unitary countries (27 and 13 per cent,

Table V.2. **Attribution of tax revenues to sub-sectors of general government**

Percentage of total tax revenue

	Federal or central government			State or Länder government			Local government			Social security funds		
	1975	1985	1998	1975	1985	1998	1975	1985	1998	1975	1985	1998
Federal countries												
Australia	80.1	81.4	**78.4**	15.7	14.9	**18.0**	4.2	3.7	**3.5**	–	–	**–**
Austria	51.7	48.9	**52.7**	10.6	13.1	**9.3**	12.4	10.7	**10.2**	25.3	27.2	**27.8**
Belgium	64.3	62.6	**36.7**			**23.3**	4.8	5.1	**4.9**	30.9	32.2	**35.1**
Canada	47.6	41.2	**41.0**	32.5	36.0	**36.3**	9.9	9.3	**8.9**	10.0	13.5	**13.7**
Germany	33.9	31.9	**29.4**	22.6	22.2	**22.0**	9.1	9.0	**8.0**	34.4	36.9	**40.6**
Mexico		87.7	**82.0**		0.4			0.6			11.3	**18.0**
Switzerland	27.4	28.9	**30.1**	24.2	22.7	**19.5**	19.6	16.8	**14.8**	28.9	31.6	**35.7**
United States	45.4	42.1	**45.1**	19.5	20.2	**19.2**	14.7	12.6	**12.0**	20.5	25.2	**23.7**
Unweighted average	50.1	53.1	**49.4**	17.9	16.2	**18.5**	10.7	8.5	**7.8**	21.4	22.2	**24.3**
Unitary countries												
Czech Republic			**43.9**						**11.9**			**44.1**
Denmark	68.8	68.9	**64.9**				29.9	28.6	**32.0**	1.2	2.5	**3.1**
Finland	56.6	55.8	**52.6**				23.6	22.4	**22.2**	19.8	21.8	**25.2**
France	51.5	47.5	**43.6**				7.6	8.8	**10.6**	40.8	43.8	**45.8**
Greece[a]	67.1	63.1	**68.8**				3.4	1.3	**1.1**	29.5	35.6	**30.1**
Hungary			**62.5**						**4.5**			**33.0**
Iceland	81.3	81.4	**77.1**				18.7	18.6	**22.9**	–	–	**–**
Ireland	79.1	83.8	**86.8**				7.5	2.3	**2.0**	13.4	13.9	**11.2**
Italy	53.2	62.7	**58.8**				0.9	2.3	**11.7**	45.9	34.9	**29.5**
Japan	45.4	43.7	**36.2**				25.6	26.0	**25.4**	29.0	30.3	**38.4**
Korea	89.0		**71.4**				10.1		**17.6**	0.9		**11.1**
Luxembourg	64.3	67.0	**68.1**				6.6	6.6	**6.3**	29.1	26.4	**25.6**
Netherlands	59.8	52.6	**56.5**				1.2	2.4	**3.0**	39.0	44.9	**40.5**
New Zealand	92.3	93.5	**94.2**				7.7	6.5	**5.8**	–	–	**–**
Norway	50.6	59.7	**59.4**				22.4	17.7	**18.3**	27.0	22.7	**22.2**
Poland			**58.8**						**9.0**			**32.3**
Portugal	65.4	70.6	**67.0**				0.0	3.5	**6.1**	34.6	25.9	**26.9**
Spain	48.2	47.8	**48.0**				4.3	11.2	**17.0**	47.5	41.0	**35.0**
Sweden	51.3	54.1	**58.1**				29.2	30.4	**30.8**	19.5	15.6	**11.1**
Turkey		75.5	**69.1**					10.2	**16.6**		14.3	**14.3**
United Kingdom	71.1	71.1	**78.2**				11.2	10.6	**3.9**	17.7	18.3	**17.9**
Unweighted average	64.4	64.6	**63.0**				12.3	12.3	**13.3**	23.2	23.1	**23.7**

a) Figures for 1998 are based on a submission by the national authorities.
Source: OECD, *Revenue Statistics*, 1965-1999.

Figure V.5. **Attribution of tax revenues to sub-sectors of general government**

Per cent share of total tax revenue, 1998

Federal countries[1]

Social security funds 24%

Local government 8%

State or Länder government 19%

Federal government 49%

Unitary countries[1]

Social security funds 24%

Local government 13%

Central government 63%
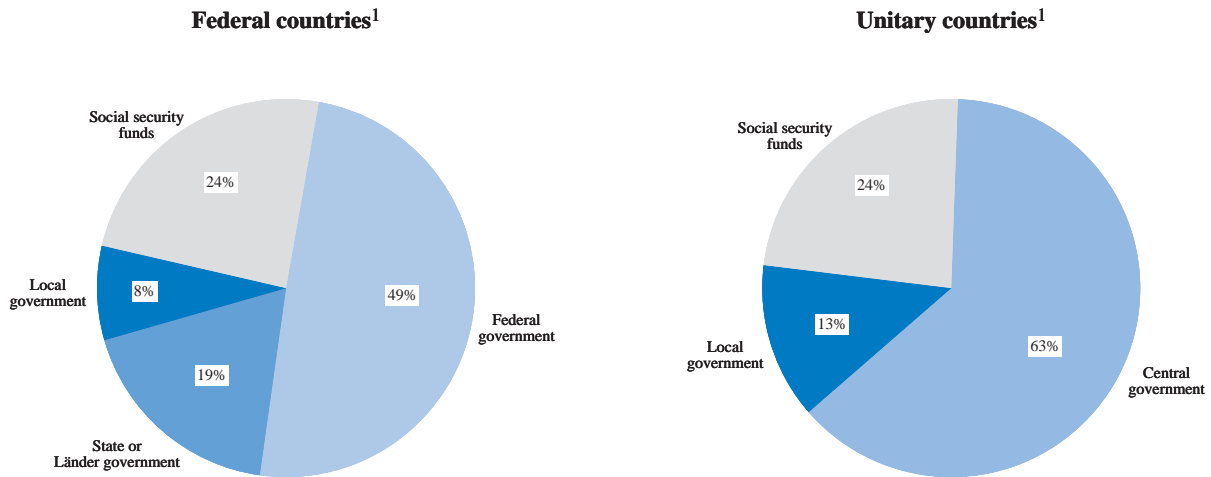
1. Unweighted average.
Source: OECD, *Revenue Statistics,* 1965-1999.

respectively, in 1998 – see Figure V.5), but variation within these categories is also wide. For example, among the unitary countries, the Nordic countries report local tax shares in the range of 20 to 30 per cent, as compared to *e.g.* 2 per cent in Ireland. However, the true fiscal autonomy for sub-central governments depends on their degree of discretion or control in adjusting their local tax revenue to the costs of the local public provision. A recent study[22] found that in several countries a substantial proportion of tax revenue of sub-central governments comes from sources over which they have no formal control. Moreover, in most countries, the tax revenues allocated to sub-central levels are redistributed across jurisdictions through tax sharing arrangements, often combined with some equalisation of differences in tax yields across jurisdictions.

Fiscal devolution may yield welfare gains, as local, rather than national, governments are best able to meet many local needs and preferences for public services. Letting local needs for services be tested by the willingness of local residents to pay is often the most efficient way to determine the size and nature of publicly funded programs. To achieve this, local governments could be allowed to exercise more flexibility in modifying public provision levels at the margin according to local preferences, as long as this is matched by local taxes to reveal the cost to local tax payers. On the other hand, a risk associated with devolution is that local governments are unable to implement tax and spending policies with a view to serving national objectives. While recognising that the vertical assignment of taxing power in many

… but careful devolution of taxing power may yield some welfare gains

22. OECD (1999*d*).

countries is rooted in a Constitution and therefore difficult to change, considerations that may help to optimise benefits of devolution of taxation and minimising disadvantages include:

– Many specific forms of taxation are unsuitable for local use;[23] sub-central governments can most effectively use resident-based tax (such as property tax) and non-tax revenues (*i.e.* user fees) levied on economic units to let them pay for the benefits they receive from the local public services. For some countries with significant devolution of expenditure powers, this is insufficient and other tax bases are used, sometimes on a shared basis with the central government. To the extent tax bases are shared by various government layers in this way, the definition of the tax base, the rate structure and the administration should be co-ordinated in order to minimise compliance and collection costs.

– Equalisation transfers of nationally collected tax across local jurisdictions could be used to ensure that some minimum or standard level of public provision is achieved no matter how strong or weak the taxing capacity of the local jurisdiction. These can take either of two forms: the direct allocation of a share in nationally collected taxes on a formula basis or direct grants from higher levels of government. However, the equalisation rule should reflect an objective assessment of the strength of the local tax base, considering *e.g.* demographic and geographic features, rather than actual taxes collected.

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23. Local governments should minimise the use of: mobile tax bases, redistributive taxes, unevenly distributed tax bases, taxes subject to economies of scale and taxes subject to sharp cyclical fluctuations.

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VI. ENCOURAGING ENVIRONMENTALLY SUSTAINABLE GROWTH: EXPERIENCE IN OECD COUNTRIES

Environmental policies, and the environmental effects of economic activity and policies, attract increasing attention. Growing priority is being given to policies to ensure that decisions affecting economic activity take into account the associated effects on the environment, helping to make economic growth more environmentally sustainable. Equally, there is a need to ensure that environmental policies are designed to minimise the economic costs of meeting their objectives. This chapter reports findings from a series of country studies assessing the extent to which economic, sectoral, environment and natural resource policies succeed in combining these aims in a set of coherent and cost-effective measures.

Policies have to address the interaction between economic and environmental developments

Studies have been completed for eight countries and each was tailored to assess important or representative issues in the country in question.[1] They were thus not comprehensive in their coverage, but four common themes nevertheless emerged: a definite trend in recent years towards the use of market-based solutions for dealing with environmental problems; concerns that competitiveness and distributional issues constitute obstacles to policy implementation; certain sectors where current policies make environmental objectives harder or more costly to achieve; attempts to design institutions or processes to achieve co-ordination across relevant policies and sectors. These are discussed in turn in the following sections.

Increased use of economic instruments in environmental policy

In most OECD countries the vast bulk of environmental legislation has been introduced in the decades since 1970. Initially legislation often took the form of controls on specific activities related to specific pollution problems, problems which were often so severe[2] that looking for quick solutions may have been more important than minimising costs over a longer period of time. The resulting policies frequently

A "command and control" approach to environmental policy has been traditional…

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1. The studies were undertaken as part of the regular OECD reviews of economic policies and developments in member countries, published as special chapters in the series OECD *Economic Surveys*. Studies which were completed at the time of writing covered Belgium, Canada, Denmark, Finland, Germany, Norway, Sweden, and the United States. Studies on Australia, Austria, Ireland, Poland and France are forthcoming. An OECD working paper, O'Brien and Vourc'h (2001), presents common themes and lessons from the completed studies, and provides more detailed background to the present paper. Further background information, more particularly on the state of the environment and environmental policy in individual countries, can be found in the series OECD *Environmental Performance Reviews*. The first OECD *Environmental Outlook* (OECD, 2001*a*) provides an overview of the main challenges facing environmental policy in OECD member countries. See also OECD (2001*b*) for coverage of a wide range of related issues from the OECD programme on Sustainable Development.

2. An example was a river which caught fire as a result of pollutants habitually dumped in it.

either banned certain activities or discharges, specified particular process or cleanup technologies, or imposed limits on discharges from enterprises either in absolute amounts or in relation to their output. These are often known as "command and control" type policies and have produced many spectacular improvements in the environment. However, as environmental problems evolve and technologies or economic activity changes, rules and regulations need to be monitored and revised as necessary in order not to get out of tune with the situation. More generally, command and control policies often give rise to unnecessarily costly solutions to environmental problems and this has stimulated the search for ways of using market mechanisms to achieve environmental ends.

… but "economic instruments" can make use of the price mechanism

One way of looking at the relationship between the economy and the environment is to treat the impact of a particular activity on the environment as a cost similar to others, with the exception that it is not borne directly by the activity that causes it, that is, the cost is "external" to the activity.[3] For example, pollution of groundwater by some economic activity may impose additional costs of purifying water for household use. From an economic perspective, such external costs can be analysed in a similar way to other costs. If a price can be put on environmental damage that represents the value to society of avoiding that damage, then an efficient policy measure would be one that forces enterprises to treat these costs in the same way as internal costs, such as those associated with energy, labour and other inputs. And, if prices reflect these environmental costs, households will take into account the related environmental effects in their spending behaviour. If externalities are thus "internalised" in decisions (including those by public authorities), market forces can help in reducing environmental damage.

Taxes on pollutant emissions, or schemes for trading emission permits, are examples of economic instruments that allow environmental externalities to be internalised and are used in many countries already (Table VI.1). Although not easy to apply in all circumstances, they have important advantages over command and control measures (see Box VI.1); most countries are increasingly looking for ways to use such instruments to reduce the economic costs of environmental policy, or to increase the environmental benefits for given costs, although it remains the case that a more traditional regulatory approach is still in use in most areas.[4]

Voluntary approaches are popular, but not always effective

Increasing use is also being made of voluntary agreements. These come in a variety of forms, frequently as undertakings by trade or industry associations on behalf of their members, though they may also be agreements made between individual enterprises and governments.[5] Although voluntary agreements can be useful ways of disseminating information and increasing environmental awareness among both enterprises and the general public, in many cases they are not very effective in promoting environmental improvements in addition to what might have been expected in the absence of the agreement.

This lack of effectiveness is often due to the natural tendency of industry associations to design the targets and programmes such that they are not too difficult to meet, or defined in vague terms that are difficult to verify. Sometimes the main

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3. See Pearce and Turner (1990) for extensive discussion of the economics of environment and natural resource policy.
4. Use of economic instruments implies the existence of a regulatory base, of course, for example to define the property rights in a tradable permit system.
5. See OECD (1999*b*) for a comprehensive survey of the use of voluntary agreements.

Table VI.1. **Use of economic instruments in OECD countries**

2000

Tax base	Australia	Austria	Canada	Belgium	Denmark	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Japan	Luxembourg	Netherlands	Norway	Portugal	Spain	Sweden	UK	US
Energy																					
CO$_2$																					
NOx																					
SO$_2$																					
Transport																					
Environmentally differentiated annual car tax																					
CFCs																					
Water effluent	*c*		*d*																		
Fertilisers and minerals[a]			*e*																		
Pesticides																					
Dangerous waste																					
Solvents			*e*																		
Lubricating oil																					*g*
Batteries																					
Tires																					
Waste disposal																					
Beverage containers			*f*																		
Raw materials																					
Packaging																					
Various consumer items[b]																					
Paper, board																					
PVC																					
Polyethylene																					
Aviation noise																					

■ Trading scheme
□ Tax

a) Minerals are phosphorus and nitrates.
b) Such as disposable razors, disposable cameras, bags, disposable tableware, light bulbs.
c) Hunter river salinity.
d) Quebec.
e) British Columbia.
f) New Brunswick and British Columbia.
g) Rhode Island.
Source: OECD (1999), European Environmental Agency (2000); Economic Instruments For Pollution Control And Natural Resources Management In OECD Countries: A Survey; OECD database on environmentally related taxes.

Box VI.1. **The advantages of economic instruments**

Minimising the overall costs of achieving a given environmental goal means that all activities that affect the goal should pay, as far as possible, the same cost for improving their performance (or penalty for not doing so). Otherwise, the task of achieving the environmental goal could be redistributed across activities in a way that reduces the overall cost.

The use of economic instruments, such as pollution taxes, ensures that all sectors of the economy (provided the measures are applied to all relevant polluters) face the same incentive to reduce pollution, and thereby encourages least-cost solutions to be found. Enterprises who can abate their emissions most easily will contribute the most to the total reduction in pollution.

In addition, economic instruments promote "dynamic efficiency" by providing permanent incentives for reducing emissions through technological improvement. Command and control type regulations generally need to be updated as technology evolves, possibly quite frequently, depending on their design.

Finally, as economic instruments work through the price system, they more effectively co-ordinate economic and environmental policies: where prices of goods and services reflect the associated environmental costs, producers and consumers automatically take them into account in spending and production decisions in all sectors of the economy.

motivation on the – industry side is to avoid legislation making action compulsory. Against this background, voluntary agreements are likely to be more effective when they provide clear quantitative targets, all relevant enterprises are required to participate, and meaningful sanctions for non-compliance are provided for. Often it is only a clear threat of legislative action by the government that will generate "voluntary" agreements of this sort.[6]

Where command and control measures are required they should be designed with cost-effectiveness in mind

There are many instances where command and control measures are necessary, nevertheless. This is the case, for example, where technical or measurement problems make it difficult to continuously monitor the environmental damage attributable to individual agents, or where – as for some hazardous substances – it is desired to reduce emissions to zero. Where command and control measures remain necessary they should be designed so as to minimise the associated economic costs. One important element here is to focus on environmental quality objectives rather than imposing site-specific technology standards which determine how the environmental policy goals should be achieved. This maintains incentives among firms and households to find cheap ways of reaching the targets.

Tax or trade?

Emission taxes and cap-and-trade systems are two types of economic instruments

A debate has opened up in recent years on the relative advantages of two kinds of policy instrument which are, on the face of it, rather different but which are in fact closely related: emission taxes and cap-and-trade systems. A tax sets the "price" of emitting a unit of a pollutant, leaving the total amount of emissions to emerge from market decisions that take the price into account. A cap-and-trade system sets a limit (the "cap") for total annual emissions, issues a number of permits each year equal to the cap and requires emitters to purchase, on a free market, sufficient permits to cover their emissions. The tax sets the price with the quantity of emissions determined by the market, the cap-and-trade system sets the quantity and the market determines the price.

Fix the price or fix the quantity?

Once a market price has been established, and provided economic conditions, technology and the overall cap are broadly stable, a cap-and-trade system will appear to enterprises very similar to a tax: emissions have a well-defined price and production decisions have to take it into account. The choice between the two then depends on what is the most appropriate in a concrete situation.[7] If it is possible to value the environmental damage caused by particular emissions, then imposing a per-unit tax equal to that damage is the optimal approach. However, it can be difficult to quantify the damage caused by emissions and often even more difficult to put a monetary value on it. In this case a tax may still be a useful instrument to change behaviour in the right direction even if the "optimal" outcome is not achieved. Frequently, governments adopt quantitative targets for emissions and under these circumstances a cap-and-trade system can be a good solution. It can be thought of as automatically calculating the tax necessary to achieve the target.

6. In the Netherlands, many so-called voluntary agreements take the form of negotiated "covenants" between the government and enterprises or industry associations. Once signed, these covenants become legally binding.
7. See O'Brien and Vourc'h (2001) for a discussion of which circumstances favour which instrument.

A complication with permit trading is that a market infrastructure has to be set up. However, a certain amount of practical experience, largely in the United States (see Box VI.2), suggests that at least in the case of energy-related emissions, markets emerge spontaneously very quickly.

Another question is how to distribute permits under a cap-and-trade scheme. Giving emission permits away free to existing emitters (in proportion to their historical emissions), as in the US schemes, a method known as "grandfathering", means that although enterprises are induced to make efforts to reduce their emissions, on average they pay no penalty beyond the actual cost of the emission reductions. An alternative is for the government to auction the permits; in principle the outcome for output and prices would be practically the same, but the government would receive the revenue.

Permits: auctioned or "grandfathered"?

This choice of how much revenue to collect, and from whom, is not in fact a distinguishing feature of cap-and-trade. The same issues arise for a tax, which can equally be designed to raise no net revenue. Thus, while the US sulphur dioxide trading scheme uses grandfathering, the Swedish charge on nitrogen oxides is refunded to emitters in aggregate (but in a manner independent of their actual individual emissions[8]) to achieve an essentially identical result, apart from the determination of the price of emissions. Other permutations are possible in both types of system.

Box VI.2. Transactions and prices in US emission trading

Two major emission trading schemes are currently operating in the United States, the SO_2 trading scheme, part of the acid rain program, and the regional NO_x trading scheme, aimed at reducing ground-level ozone.

The SO_2 emission cap was foreseen in revisions to the Clean Air Act in 1990, and was effective from 1995 onwards, with a significant tightening in 2000, through a reduction in the size of installations subject to the cap and a reduction in the overall limit. The NO_x cap was effective as from 1999, with some trading beginning the previous year. A tightening similar to that for SO_2 is due in the NO_x regime in 2003. The penalty for non-compliance is \$2 000 per ton for SO_2, whereas for NO_x the penalty is payable in permits, at a rate of three tons for each ton of overrun.

In both schemes, actual emissions have run below the level of the cap. SO_2 permit prices are significantly below levels expected before trading began (\$400-500 was thought to be a reasonable guess) (Figure VI.1). That they are not zero despite the cap being non-binding is due to the possibility of "banking": the constraint may become tighter in the future, and emission permits not required for current emissions can be held over for future use. The rise in SO_2 permit prices in 1998 might have been due to anticipation that supply would be tighter in 2000.

Banking provisions – whereby unused permits can be carried forward for use in later periods – differ between the two programmes; in the NO_x scheme banked permits are discounted to avoid emissions exceeding the overall target in any one year by more than 10 per cent. Hence permits of a different "vintage" trade at different prices; prices in the NO_x market seem generally to be more volatile than for SO_2. In the SO_2 scheme, there are no restrictions on banking.

Much of the early SO_2 trading occurred within enterprises – transfers between generating units owned by the same firm. These remain in the majority, but the share of trades between distinct organisations has tended to grow. Brokerage transactions are a minority of the total – perhaps 20 per cent of those in NO_x and 10 per cent in SO_2 – but are a higher proportion of those that occur between distinct organisations; price data is from transactions through brokers, there is no statutory requirement to report prices.

Two facts may have been important in the success of these programmes. First, the targets appear to have relatively easy to meet so far. Second, the absence of any charge for issuing the permits has prevented any serious profitability problems. Further tightening of the constraints (either through economic growth or absolute reductions in allowable emissions) and a shift to charging for permits when they are issued (desirable as a means of capturing the economic rent which otherwise accrues to emitters, but not currently planned) will provide a more severe test of this approach.

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8. The charge, applied to large electricity generators, is levied on NO_x emissions at a rate of 40 SKr per kilogram. The revenue is returned to emitters in proportion to energy produced. See Roseveare (2001).

Figure VI.1. **Emissions permit trading in the United States**

SO₂

Million tons / $ per ton

- Allowances transferred (left scale)
- Permit price (right scale)

Aug. Nov. Feb. May Aug. Nov. Feb. May Aug. Nov. Feb. May Aug. Nov. Feb. May Aug. Nov. Feb. May Aug.
1994   1995   1996   1997   1998   1999   2000

NOₓ

Thousand tons / $ per ton

- Allowances transferred (left scale)
- Permit price¹ (right scale)

February 1999 = $7 432

Feb. May Aug. Nov. Feb. May Aug. Nov. Feb. May Aug. Nov.
1998   1999   2000   2001
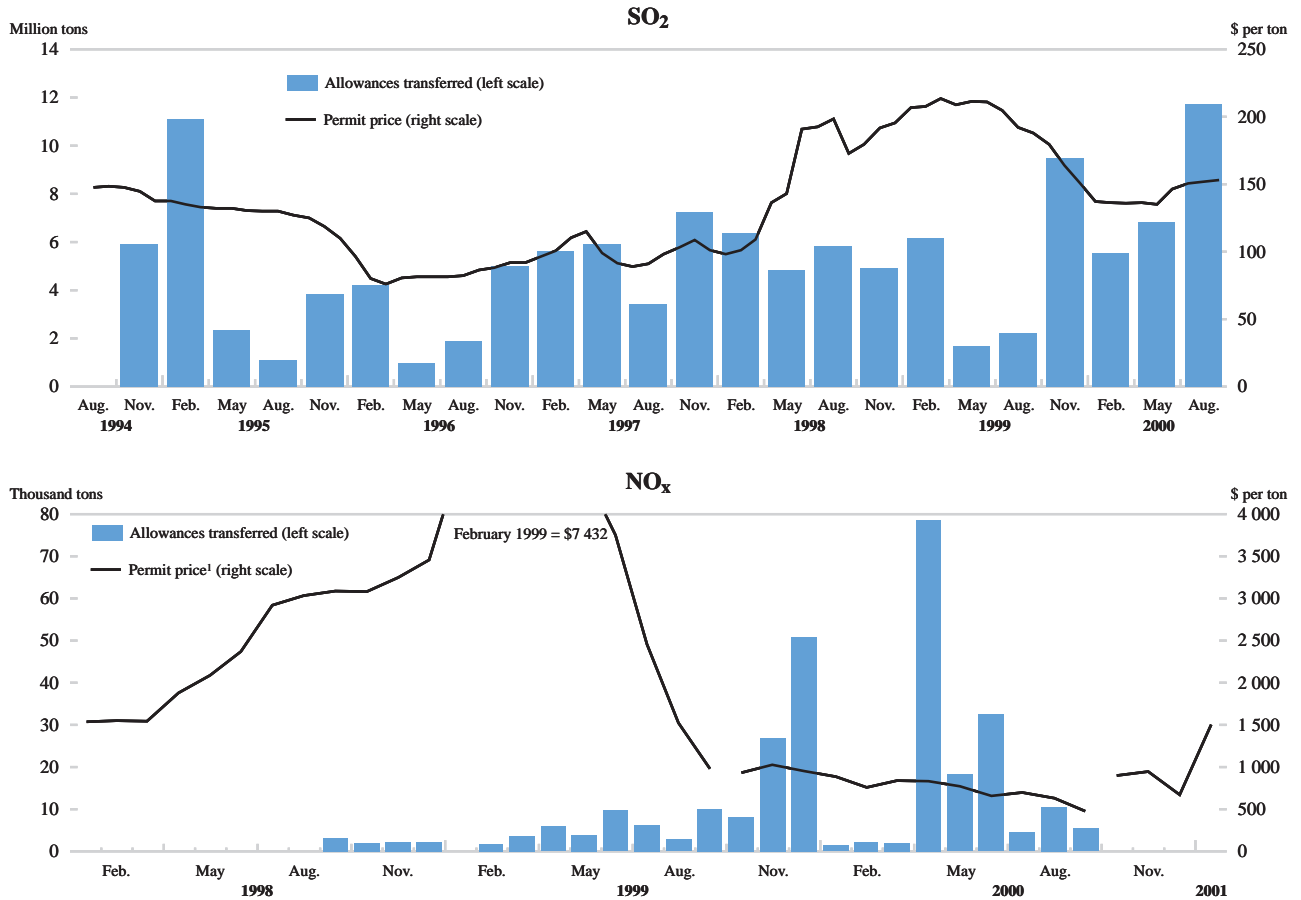
Note: In 2000 the SO₂ cap was 8.95 million tons, the NOₓ cap was 219 000 tons.
1. 1998 to September 1999: price of 1999 "vintage". October 1999 to September 2000: price of 2000 "vintage". October 2000 to January 2001: price of 2001 "vintage".
Source: Environmental Protection Agency, United States.

Full grandfathering may lead to over-compensation

Grandfathering is an attractive way to ease the burden on industry when new restrictions are being introduced. While preserving marginal incentives for pollution abatement, it limits the cost to polluters – who have sunk costs in the form of investments made when pollution damage was not recognised in legislation – and can therefore reduce their opposition to such measures. However, under some circumstances grandfathering can actually make polluters in aggregate better off: consumers pay higher prices, corresponding to the price of permits or the tax, but all the revenue accrues to the polluting industry. This revenue may exceed the costs of reducing pollution, particularly if higher output prices have only a limited impact on demand.[9] Thus, full compensation for the average enterprise may require only part of emissions to be grandfathered. In the longer run, when sunk costs and transition problems are no longer relevant, it would make sense to phase out all such compensation.

9. A recent paper argues that it might be sufficient to grandfather only a small proportion of historical emissions, auctioning the rest. See Bovenberg and Goulder (2000).

A double dividend?

In practice, new environmental taxes are often introduced as part of more general tax packages. Green tax reforms implemented in a number of European countries have combined new environmental taxes with reduced taxes on labour, as in Denmark, Finland, Germany and the Netherlands, for example; the revenue can also be used to reduce other taxes (in Norway and the Netherlands, income taxes were reduced). The availability of such revenue is sometimes thought to represent a bonus – "double dividend" – from environmental taxation or auctioning of tradable permits, but the extent to which this is justified is debatable.

On one side of the debate, it can be argued that, if the tax system is optimal, there are no efficiency gains from raising any existing taxes and reducing any others (or increasing expenditure), so the same goes for any new revenue-raising taxes. It would follow that the only benefit from a new environmental tax would be the resulting change in behaviour (a "single dividend"); the revenue itself will be redistributed, but that redistribution in itself does not improve welfare, and thus does not amount to a double dividend.

Combining environmental taxes with other measures should not be necessary…

However, tax systems are not optimal. Reforming them to improve efficiency is difficult and often politically costly. Under these circumstances, it is very likely that uses can be found for revenue from environmental taxes where the benefits exceed those from redistributing the revenue from environmental taxes either to polluters or to those suffering from pollution. This is even more the case where popular opinion supports such moves. Environmental taxation can thus ease tax reforms that probably should be undertaken anyway, but which might not be politically feasible. This double dividend – a "muted" double dividend – is perhaps a political rather than an economic one.

… but can be a useful practical approach

In some countries energy taxes are partly recycled to households or enterprises in the form of subsidies for energy-saving investment, perhaps in response to a public conception that earmarking of environmental tax revenues is a good thing. While such earmarking can be an effective way of gathering popular support, and therefore make sense from a political perspective, it is not justified on environmental or economic grounds. If such subsidy expenditure is desirable (which it may not be if energy use is appropriately taxed) there is no reason to tie it to revenue from one particular tax, nor to prevent such revenue being used for other desirable expenditure or to reduce other taxes.

Economic instruments in use

Economic instruments, whether tax or permit trading (the former being far more common) are used in a number of policy areas (see Table VI.1). In clean air policy, a number of European countries have taxes on emissions to the air of sulphur or nitrogen oxide, which are implicated in acid rain and health problems, while the United States has cap-and-trade schemes. Regulations, for example on allowed emissions per unit of electricity generated, often remain in place however, even where economic instruments are used. Some European countries have also introduced a tax on carbon dioxide, the most important "greenhouse gas". Many countries also have taxes or charges on water effluent, generally concerned with recovering the costs of treatment rather than targeted at the external costs of pollution.

Economic incentives are used in a range of environmental policies…

As part of waste policy a number of countries tax certain individual products. Examples of countries where this form of policy was expanded in tax reforms of the

… including waste…

1990s include Belgium and Denmark (the latter has the widest range of such taxes among all OECD countries). Products concerned include batteries, drinks containers and plastic bags. Such taxes are often part of schemes to encourage recycling and re-use, rather than being based on calculations of the environmental costs of the products – which are likely to depend on the way in which they are disposed of. Taxes are also imposed on waste disposal in many countries, with some practising differential taxation to discourage landfill and to encourage recycling.

However, even where waste policy makes use of economic instruments, these are usually not sufficient to meet the authorities' objectives; the latter, which do not appear to be defined only with respect to environmental externalities, are supported by other regulations and specific targets for shares of recycling, for example. Increasing use is being made of producer responsibility legislation, requiring producers to take responsibility for the waste generated from their products. This can be an effective way of forcing producers to internalise the costs that their products will eventually generate, though if producers are subject to regulations over and above those that apply to other forms of waste, excessive costs may be imposed.

… and energy,…

Almost all revenue from environmentally related taxes comes from those on energy. Other environmental taxes generate little revenue, partly because they are few, and that is not their primary purpose in any case. Many energy taxes, particularly those on motor fuels, have existed for a long time as important revenue raising measures. They have only relatively recently been used for explicitly environmental objectives, as in the case of differential taxation on unleaded petrol or on low-sulphur fuels. However, the current structure of fuel taxation (and of taxation and charging in transport more generally) is far from consistent with environmental damage (see below).

… a range which could usefully be extended

There are many areas where there is potential for extending the use of economic instruments. In natural resource policy, an example is in management of water supply or of fish stocks through the use of such instruments as tradable extraction rights or fishing quotas. The latter have been successfully used in Iceland for some time and are also in use in Canada, the Netherlands and New Zealand. In water quality policy, much more use of economic instruments could be made, for example in tackling leaching of nitrates and phosphates from fertiliser or animal manure into water courses.[10]

An area where the use of economic instruments could be better co-ordinated is renewable energy policy. In most countries targets for renewable energy supply, generally selected for their own sake rather than as a result of any calculation of an optimal share of renewables, are being pursued using a mixture of subsidies to production and to research and development. However, the main environmental problems (such as those related to emissions of sulphur and nitrogen oxides, and carbon dioxide) that renewable energy avoids are well-defined and a more integrated policy would seek to tax those externalities systematically, wherever they occur, providing incentives both for the development of alternative energy sources and also for economising energy use (whereas energy use is, in effect, encouraged by subsidies to renewables).[11]

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10. A number of countries have taxes on fertilisers, but these are usually set at very low levels or even exempt agricultural uses altogether.

11. While arbitrary targets may not be optimal, they are a popular practical approach. A good way of minimising the cost of achieving them is to use tradable "green" certificates, already planned for introduction in Denmark and Australia. These policies allow producers of renewable energy to issue certificates and force energy suppliers to purchase them in proportion to their total energy supply. Such a system can work in parallel with taxes on the identifiable externalities of non-renewable energy.

Policy implementation: competitiveness and distributional obstacles

Environmental policies that are effective must alter the structure of production; they may well also change the level and distribution of income. Economic instruments achieve these changes by shifting relative costs and prices so that market forces move resources into less environmentally-damaging uses. These cost and price changes obviously affect the competitiveness of certain industries, and their effects may well be felt more strongly by some income groups or regions than others.

Concessions granted on competitiveness grounds…

Resistance to such losses of competitiveness and (perhaps less frequently) to changes in income distribution, frequently results in calls for some industries – in recent examples usually energy-intensive industries – to be exempted or at least receive special treatment, mainly in the form of reduced tax rates.[12] Competitiveness losses are particularly sensitive in industries with a strong export orientation. The economy-wide use of an economic instrument sometimes generates substantial and visible costs for a few industries or enterprises, with much more diffuse and less visible costs for a broad range of other industries. Exemptions reduce the incentive to abate emissions in the affected sectors, and thereby throw onto others the burden of meeting any given target, increasing the overall economic cost. Cost increases can be large if, as is invariably the case, the favoured sectors are precisely those that have the highest emissions per unit of output – those are the sectors where the least costly reductions can generally be made.

… are frequently unjustified and impose real costs

Of course, regulatory instruments also have effects on competitiveness and income distribution. Meeting technological or performance standards has costs and therefore affects firms' competitive positions. These effects from regulations are perhaps less obvious than those from economic instruments, which may explain part of the policy bias in favour of regulation. Moreover, regulation may also be more prone to capture – as narrow interest groups exert pressure to shape rules that favour their interests.

Serious arguments have however been advanced to justify exemptions or reduced tax rates for exposed sectors and need to be considered. These arguments revolve mainly around two issues – "leakage" and the problems of being a "first mover" in environmental taxation. Nevertheless, it is not clear that even these arguments are sufficiently strong to motivate a deviation from the uniform use of economic instruments. This is so also because favourable treatment of some sectors is likely to stimulate attempts by others to achieve similar advantages.

Leakage

"Leakage" refers to the effect of emissions-reduction policies in one country that work partly by causing production in certain sectors – notably those in internationally competitive markets – to move abroad, where emissions may consequently *increase*. This issue is most obvious where national pollution contributes to an environmental problem with a global character such as climate change. The essence of the argument, used for example by countries which have introduced a CO_2 tax, is that the effect of reduction in domestic emissions on the environmental outcome is offset

"Leakage"…

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12. The CO_2 related taxes in Denmark, Finland, the Netherlands, Norway and the United Kingdom all have such provisions.

by leakage; some of the costs incurred by the taxing country, in the form of lost production, give no environmental benefit. That is, the marginal benefit – in terms of global emission reduction – is lower than the tax rate in the taxing country; to minimise the *domestic* cost of a given *global* emission abatement, tax rates differentiated by the degree of openness of the sector may be appropriate.

In the case of climate change, however, most OECD countries are parties to the Kyoto Protocol which, if implemented, will impose restrictions on all countries' emissions; "leakage" to another "capped" country should not then be a concern.[13] However, the problem may arise when some countries are *not* participating in such an agreement. In the Kyoto Protocol, for example, the issue arises vis-à-vis non-Annex B countries, as only Annex B countries are subject to emission caps.[14] The costs of moving production to non-Annex B countries, however, may often be particularly high, and a shift may be impractical. Empirical analysis on carbon leakage effects provides estimates of "leakage rates" ranging from around 20 per cent to as little as 2 per cent; in fact, the loss of competitiveness of energy-intensive industry is often found to be much less influential than what happens on international energy markets.[15]

… is less of a problem than often thought

Where policy is targeting a *local* or *regional* environmental problem, the case for exemptions is difficult to make, since leakage does not undermine the effectiveness of the tax or cap-and-trade scheme in addressing the domestic problem. It is nevertheless sometimes argued that leakage amounts to *imposing* pollution on receiving countries, generally in the developing world. These arguments, which are also used to justify barriers to trade based on environmental factors, assume that it is appropriate for OECD countries to attach an importance to pollution in other countries that those countries, implicitly, do not (since they could, if they wished, introduce appropriate policies themselves). Among the justifications for this approach are that political conditions in other countries may not allow populations' preferences to be adequately reflected in environmental policy. Affected domestic industry interest groups have an obvious interest in also emphasising this aspect in their lobbying.

First movers

Measures taken in environmentally leading countries…

Countries that have introduced environmental taxes or cap-and-trade schemes may see themselves as acting on faith that others will follow in implementing appropriate policies. As first movers, they may have some grounds for not imposing heavy penalties on certain sectors and perhaps forcing them to move some of their production to other countries, a move that might not be necessary if all countries introduced measures at roughly the same time. It may also be justified to have a transition period in which industries have time to make adjustments to reduce their emissions before

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13. Indeed, the Danish authorities, for example, have stated that they would revise their system of reduced CO_2 tax rates if the Kyoto Protocol comes into force. The other countries with CO_2 taxes are Finland, Norway, Sweden and the Netherlands. Recent statements by policymakers in the United States make it increasingly unlikely that the Kyoto Protocol will be ratified in anything like its existing form, however.

14. Annex B countries consist of most OECD Members and transition countries.

15. See OECD (1999*c*) and Burniaux and Oliveira Martins (2000), which provide empirical evidence using a general equilibrium model. The logic of the result mentioned in the text can be seen from the extreme case of completely inelastic energy supply: in this case, any action to reduce carbon emissions in Annex B countries will be accompanied by 100 per cent leakage, independently of any tax or permit scheme exemptions.

being hit with the full tax. This avoids what might be thought of as retrospective taxation on investments in plant and processes that were made when no such tax was in prospect. In practice, however, it will be difficult to verify whether a country acts as a leader or just follows idiosyncratic policy objectives, except in the rare cases where international agreement forces more countries to take action at some point in time.

More fundamentally, an approach which reduces the tax rate on selected industries is unlikely to be the best way to minimise costs or to maximise the environmental effectiveness of the policy. To relieve industries of tax burdens for a transitional period, or to sustain domestic production when leakage is seen as a problem, it makes more sense to give relief in the form of "lump sum" compensation which maintains equal marginal incentives to reduce pollution across all industries. This can be done using forms of grandfathering discussed earlier, and will generally result in a more cost-effective policy.

… should be more carefully designed

Distributional consequences

The changes in prices that follow the use of economic instruments will affect the distribution of real incomes. For example, higher prices of energy may hit those with low income somewhat harder than those with high incomes (Figure VI.2).

Figure VI.2. **Share of energy[1] in household consumption by level of income in selected OECD countries,[2] 1998**
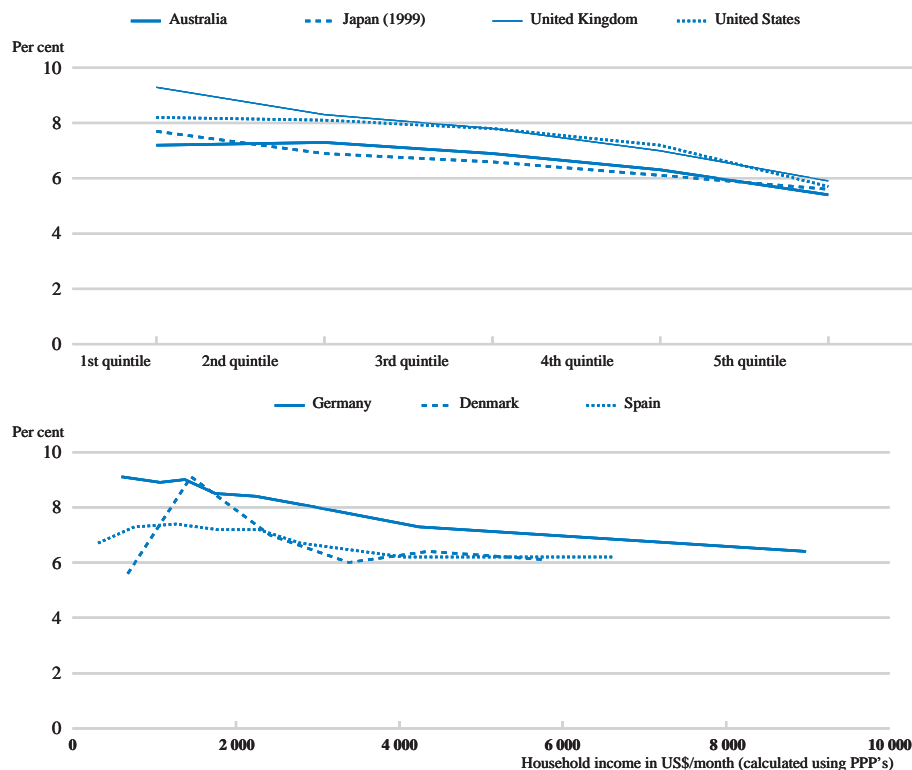
1. Including fuel used for personal transport.
2. For Denmark, Germany and Spain, consumption patterns by decile or quintile are not available.
Source: National household expenditure surveys.

When these changes result from deliberate government policy, there may be a feeling that the policy should be adjusted so as not to "penalise" certain groups too much. However, most countries have put in place social systems aimed at dealing with the hardship people may suffer as a consequence of the continuing adjustments taking place in a market economy – and it is not obvious why one particular type of adjustment should be the subject of a dedicated policy response.

If nonetheless, a response is seen to be required, it is important that it be designed so as not to blunt the environmental effectiveness of the economic instruments. This means, for example, ensuring that any compensation received for increased energy costs is largely independent of actual energy consumption. Similarly, compensation to enterprises or employees in sectors that need to contract – fisheries, for example, where overfishing has depleted the fishstock – must avoid giving incentives for resources to stay in that industry.[16]

Policy implementation: sectoral issues

Certain sectoral policies are particularly unco-ordinated with environmental concerns

The country studies that lie behind this paper looked at a number of specific economic sectors, to assess the extent to which costs were being minimised, and environmental effectiveness being maximised, by ensuring a level playing field in the approach to particular environmental problems across different sectors. Where environmental policy can be implemented through economic instruments, discrimination can be avoided simply by ensuring that the same tax rules or tradable permit schemes apply everywhere. For many problems, however, environmental policy inevitably relies to a considerable extent on a regulatory approach, and it can be more difficult to assess the extent of discrimination. Three sectors in particular stood out as being associated with some of the more difficult problems in this area: agriculture, transport and energy.

Agriculture

Agricultural policies in most OECD countries deliver substantial subsidies which, despite reforms, still mostly take the form of strong incentives to keep output high, through output price support and input subsidies. In some countries, agriculture's role is perceived as the guardian of nature and the landscape even while it exploits and alters them. Although agriculture contributes to a number of pollution problems, most notably of surface water, it is often exempted from the taxes and other measures that are applied to other sectors to deal with these problems. For example fertiliser taxes are rare (other than at very low levels) even where there are links between use of fertiliser, and other sources of nutrients, and water pollution problems.[17]

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16. See Vourc'h (2001) for a discussion of this in the context of the Canadian fishing industry.
17. Fertiliser taxes are not an ideal instrument, because water pollution from "non-point" sources such as farming is a complex process. Other economic instruments are feasible which can, as also can fertiliser taxes, be arranged in such a way as not to impose an overall tax burden on agriculture (see O'Brien and Vourc'h, 2001)

Figure VI.3. **Water prices in selected OECD countries**[1]
Mid-1990s
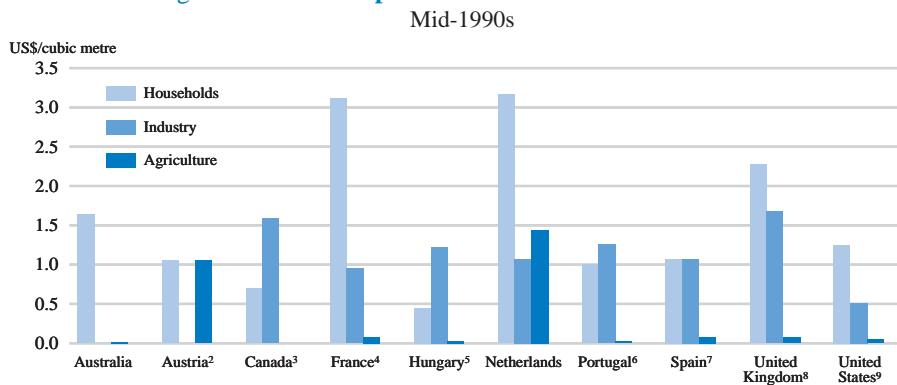
1. For agriculture, industry and households, prices are the median values for the range of prices for each category. Industry price not available for Austria and Australia.
2. Water used for livestock activities is obtained from municipal systems and priced at households rates.
3. Industry: these rates apply to commercial establishments only. While this may include small industries, the rates do not apply for major industrial operations.
4. Agriculture: data refer to the regions of Adour-Garonne and Côteaux de Gascogne; industry: the value refers to 1990-93 and excludes taxes, pollution and abstraction fees.
5. Agriculture: data refer to 1998 water abstraction charges; households and industry: the values refer to 1998 maximum and minimum user charges for public water supply.
6. Agriculture: data refer to the regions of Sorria and Vigia. When it is a two-part tariff, the values were based on the estimated water volumes and the value per cubic metre.
7. Agriculture: data refer to the regions of Andalucia, Castille and Valencia. Industry: the values refer to 1992-94.
8. Agriculture: data refer to Northumbria and Wales.
9. Agriculture: data refer to the regions of Sacramento River and Tehama.

Sources: OECD, *Environmental Indicators for Agriculture* – Volume 3: *Methods and Results*, 2001 and OECD, *The Price of Water*, 2001.

An example related to resource use rather than pollution is in water pricing, where agriculture, a major water user, generally benefits from implicit subsidies for water use, often in the very areas where water is scarce. It is difficult to make direct quantitative cross-country comparisons, but some illustration is possible. The price of water supplied to agriculture is almost always substantially less than that supplied to households or to industry (Figure VI.3). Differences in the quality and quantity of water supplied to households, industry and agriculture make this direct comparison somewhat simplistic,[18] but the difference in the cost of water to industry and to agriculture is almost certainly greater than could be explained by quality differences.

Transport and energy

A striking example is in the relative taxation levels applied to diesel and petrol. Studies of the costs of environmental damage from fuel combustion emissions show that diesel causes much more environmental damage than petrol, per litre of fuel consumed. Improvements in engine performance have reduced emissions from both types of engine, but diesel remains more polluting. Nevertheless, taxation is almost universally lower on diesel fuel (Figure VI.4). The origin of this inappropriate treatment seems to lie partly in intuitively attractive but mistaken reasoning that diesel is

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18. Systematic data on the cost of water supplied to industry and, even more so, to agriculture are sparse. The countries shown in Figure 3 are the only ones where volumetric prices were available for both as well as for households. In Austria the water price shown is that for supplies of drinking water for animals, whereas in other cases it is generally water for irrigation where quality standards can be much lower than for water supplied to households.

Figure VI.4. **Taxes on diesel and petrol as of 1.1.2000**

● Diesel ● Petrol

Euro/litre, average 1999 exchange rates
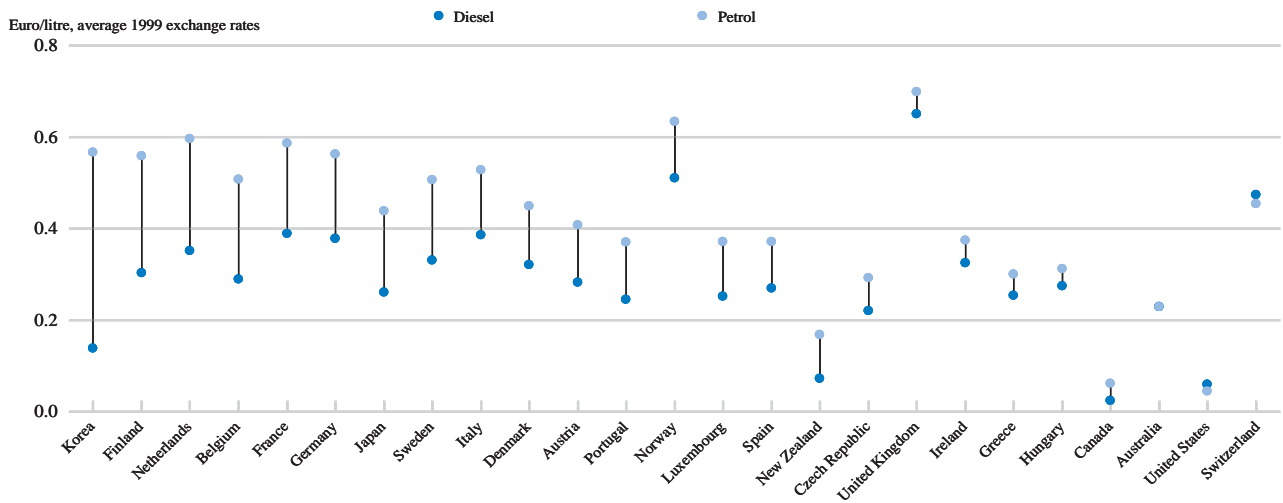
Source: OECD/EU Database on environmentally related taxes.

more economical so its use should be promoted,[19] and partly in successful lobbying from transport enterprises and the agriculture and fishing industries.[20]

Important in the transport sector, energy is more generally a key intermediate input and an important expenditure item for consumers. Energy supply generally produces a number of the most significant pollutants and is often treated differently from other sectors causing similar externalities. Although coal extraction subsidies have declined quite considerably over the past 15 years, they remain significant in some countries. In a number of countries, depreciation and other tax allowances result in more favourable treatment for investment in oil and gas extraction than investment in most other sectors. This treatment is likely to encourage overuse and depletion of exhaustible resources as well as associated harmful environmental effects.

Institutions for co-ordination

Co-ordination is easy to recommend, difficult to implement

Notwithstanding these examples of inconsistency between environmental aims and some sectoral policies, or perhaps because of them, it is not a new idea that environmental policy needs to be co-ordinated across sectors and with other policies. The effective co-ordination of environmental policy across sectors requires assessment of

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19. The relative fuel economy of diesel *versus* petrol engines is irrelevant as far as an environmental tax is concerned. Such a tax should be set in direct proportion to the environmental damage per litre consumed, which generally implies a higher tax, *per litre*, on diesel. If diesel is more efficient, it may still be used even if it is more expensive – but the consumer would only do this if the relative efficiency (*i.e.* lower fuel consumption) were enough to make the cost (including tax) per kilometre lower.

20. Reductions in emissions from fuel combustion, the dependence of emissions on traffic conditions, and the availability of sophisticated technology for road-use charging are all factors which suggest that a shift of emphasis away from fuel taxes towards road-use charging as a means both of internalising environmental externalities and contributing to the funding of road infrastructure is both feasible and desirable. See European Conference of Ministers of Transport (1998) and (2000).

the economic effects of environmental policies to ensure cost minimisation, and of the environmental impacts of other policies to ensure that these are taken into account. When policies are largely developed and implemented by specialised ministries, often with little routine contact with other ministries, a culture of co-ordination can be hard to establish.[21] Countries have implemented procedures for such assessment, some of which are discussed in this section. Table VI.2 provides an overview of arrangements for environmental impact and regulatory assessment in selected OECD countries.

Environmental impact assessment (EIA) involves looking at the likely environmental effects of public sector projects such as new roads or urban development, with a view to ensuring that these are not ignored when designing projects or choosing among alternatives. A comparative assessment of how well these procedures work in different countries is not available. Almost always drawn up by the department or agency that is proposing the project, EIAs are subject to varying degrees of cross-checking; environment ministries generally establish guidelines on what they should contain, but do not routinely check their quality.

Environmental impact assessment of infrastructure projects is now a general practice…

Less frequent are systematic procedures for assessing the environmental impacts of structural and other policies. However, such procedures – for new policy measures – are spreading, under names such as Strategic Environmental Assessments. Again, the ministry sponsoring the legislation is responsible for carrying out the assessment. Cost-benefit analysis of the environmental effects is not mandatory and rarely, if ever, included. Experience with such assessments of policies is relatively limited.

… but similar assessments of policies are rare

Just as important as evaluating the environmental costs of policies is to consider the economic costs of regulatory policy. This is true for all regulations, not just environmental ones. Such analysis is becoming a normal requirement for the introduction of new policies in most countries (see Table VI.2) but is still far from universal. Such analyses naturally evaluate the economic costs in monetary terms, but often do not consider calculating the benefits of policy in the same terms.[22]

Economic impacts need to be assessed too

Environmental and regulatory impact assessments are ways of checking that particular sectoral or environmental policies do not have undesirable consequences elsewhere. Independent or parliamentary auditing departments (for example the Canadian Commissioner of the Environment and Sustainable Development), or special commissions on particular topics, are increasingly being given the task of evaluating environmental policy implementation and their reports and recommendations are frequently quite influential. More active co-ordination of policies is being tried in certain countries through, for example, sustainable development plans which may include setting policy targets in a variety of areas at the same time, in concert with each other and with public consultation. A recent Belgian example[23] is discussed in OECD (2001*c*). Whether such plans can do much more than collect a set of essentially independent policies and group them together remains to be seen.

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21. In some cases this leads to ministries of environment being combined with other ministries, such as agriculture, transport or energy.
22. One exception is the United States, where Regulatory Impact Assessments (RIAs) do present analyses of both cost and benefits, although some benefits may not be quantified or, if quantified, not necessarily valued in monetary terms. A significant feature of recent US procedures is the regular report to Congress from the Office of Management and Budget, that compiles and tabulates the expected costs and benefits of recently introduced regulations, based on the RIAs. See O'Brien (2001).
23. *Secrétaire d'Etat à l'Energie et au Développement Durable (2000). Plan Fédéral de Développement durable 2000-2004,* Brussels.

Table VI.2. **Environmental impact and regulatory assessment in selected OECD countries**

	Environmental effects		Economic effects of environmental policies	Public domain
	of projects	of policies		
Australia: federal	Required for actions that significantly impact on matters of national environmental significance. Economic and social matters must also be considered.	No requirement.	Regulatory Impact Statements may apply	Yes
Australia: Queensland	Required, under defined procedures, for major projects. More limited EIA for others, can depend on risk and local government provisions. No CBA required.	None	Regulatory Impact Statements required for "new and revised regulations and other subordinate legislation likely to impose appreciable costs…" CBA of regulatory options	Yes, for EISs and RISs, with mandatory period for public comment.
Austria	Yes No CBA	*Ad hoc*. Some sectoral laws require it.	No (Fiscal impact only)	Yes
Belgium: Flanders	85/337/EEC implemented	Legislation for Strategic Environmental Assessments under preparation.	No (Some *ad hoc* examples)	Where 85/337/EEC applies, yes.
Canada: Alberta	Yes, with exemptions (list of exemptions includes oil wells). CBA required. Assessment often done even when EIA not formally required.	Part of normal inter-ministerial consultation	Fiscal implications only	Yes
Canada: federal	Yes, when they have important environmental effects. Can be delegated to Provinces.	Strategic Environmental Assessment required (1999 Cabinet Directive) when policy proposal may have important environmental effects. No CBA required.	Regulatory Process Management Standards recommends cost-benefit analysis regarding health, social, economic or environmental risks; CBA guide. 1999 Regulatory Process Statement requires that benefits of regulations exceed costs, and that impact on economy is minimised.	Database of EIAs in Canadian Environmental Assessment Agency. Environmental Commissioner's reports
Denmark	Obligatory for projects which may have significant environmental impact. No CBA required.	Environmental Impact Statements No CBA required. Checklist approach	Regulatory impact statements required for all bills. "The evaluation of the business economic consequences [of any bill presented to parliament] should as a minimum discuss the immediate effect of the bill on the costs for trade and industry, including administrative consequences."	Yes. Annual "Environmental Assessment of the Budget" reviews costs of environmental policy, with some evaluation of the environmental impacts of the national budget. Cost-benefit framework, but few formal analyses presented
European Union	1985 Directive 85/337/EEC, modified in 1997, requires Member states to carry out EIAs for certain kinds of project. Defines minimum standards for all EIAs. No CBA required.	85/337/EEC specifically excludes legislative action.	No EU provisions	Where 85/337/EEC applies, yes.
Finland	Obligatory for projects which may have significant environmental impact. No CBA required	Yes. No fixed procedures.	Legislative proposals are required to include "economic assessments".	Yes, for projects
Germany	EIA required for federal and Länder projects. No CBA required	Generally required for all laws and regulations. Specific procedures in some cases. No CBA required	All proposed laws must include analysis of effects on private interests. EIAs must present the economic impact of environmental measures.	Yes
Norway	Required under several laws, for major projects: 85/337/EEC implemented. No CBA required.	Assessment required by Administrative Order.	Assessment required by Administrative Order (for economic, administrative and environmental effects).	Yes, for EIAs under 85/337/EEC. Yes, with some modifications, for assessments required by Administrative Order.

Table VI.2. **Environmental impact and regulatory assessment in selected OECD countries** *(cont.)*

	Environmental effects		Economic effects of Environmental policies	Public domain
	of projects	of policies		
United States	Required for "policies, regulations, and public laws of the United States", which includes private entities seeking a federal permit. Most often associated with Federal Infrastructure and permitted projects. No CBA required, but larger projects will typically include an economic impact analysis and CBA.	Environmental Impact Statements. No CBA required.	Economic Assessments (formerly Regulatory Impact Assessments) required for any "significant" regulatory measure (*e.g.* economic impact of over $100 million). Includes inter-agency review and CBA. (Conclusions of CBA not binding). Annual publication of costs and benefits of regulations (OMB) since 1998. New legislation is pending in Congress to make this a more permanent requirement. "Regulatory flexibility analysis" (RFA), for regulations that have a "significant economic impact on a substantial number" of small entities. Numerous provisions also in the authorising environmental legislation.	Yes

Note: The information in this table was compiled on an *ad hoc* basis through bilateral contacts. The coverage and accuracy of the information presented is not uniform.
Source: OECD.

Cost-benefit analysis

Cost-benefit analysis (CBA) of the environmental impacts is not generally obligatory in environmental impact assessments – it is not required in any of the countries surveyed – and rarely undertaken. Valuation problems often arise because in most cases no direct price measures are available for environmental effects, *e.g.* the emission of a ton of sulphur dioxide; they need to be estimated, and it may even be thought that no price can, or should, be attached to them (for example, when they concern mortality). For these reasons, fully quantified CBA may not always be feasible.

Valuation problems in cost-benefit analysis…

In spite of these problems, quantitative CBA is a more accessible tool than often thought. Where precise valuations are uncertain but upper and lower bounds are known with reasonable certainty, ranges for costs and benefits that reflect the range of uncertainty about the underlying parameters, along with sensitivity analysis, can be presented. It may be that the range of values for net benefits lies entirely to one side of zero – there is no ambiguity about whether the project or policy is beneficial, even if the exact level of benefits is uncertain. For objectives or costs which cannot be valued at all, quantitative or qualitative information available is still useful. If, for example, there is a reluctance to put a value on human lives, a figure for the cost per life saved can be useful information when comparing alternative policies to achieve certain objectives; or even when comparing policies which appear quite distinct, *e.g.* clean-air versus hazardous substances, comparing costs per life saved can suggest where incremental policy or expenditure priorities should be directed.

… do not prevent its use

The fact that CBA cannot always provide complete answers does not prevent it providing useful information, therefore. Rather it will not in many cases be suitable as the sole decision criterion for governments, and it should not be a requirement for policies to be implemented that their monetised benefits exceed costs. However, a

reasoned justification of why non-quantifiable or impossible-to-value benefits are sufficient to tip the balance should be required. In fact, there is an implicit cost-benefit analysis undertaken whenever a project, regulation or policy is proposed – whoever is proposing it presumes that the benefits exceed the costs. Formalising such analysis means that assumptions that may otherwise be hidden have to be made explicit and can thus be checked for their validity, or at least for consistency of use.

A role for the courts

Other aspects of co-ordination may be more focused on policy implementation than on policy development. In some cases, and at some levels, the judicial system

Table VI.3.   **Legal liability and standing in selected OECD countries**

	Can polluted individuals take court action against polluters?	Compliance with the law a defence?	Can NGOs take court action against polluters?	Can citizens/NGOs take action against government agencies for non-enforcement or non-implementation?	Specific legislation
Belgium[a]	Yes	In some cases.	Yes	Yes	There are specific liability rules in the Flemish region for damage as a consequence of *e.g.* groundwater extraction and soil pollution.
Denmark[b]	Yes. Damages only for monetary loss or compensation for actual remedial expenditures undertaken	Basic test is negligence. Compliance with law likely to be a defence.	Yes (they must have "fixed structure" and have objectives that are relevant to the case.)		Danish Society for the Conservation of Nature has statutory right to make complaints against certain administrative decisions
Finland[c]	Yes	No (except certain types of water pollution)	No (except for destroying or impairing nature, under the NCA)	No	Environmental Damages Act (1994). NCA: Nature Conservation Act (1996)
Ireland[d]	Water and air: Yes (except for discharges by local authorities) Other: No	Water and air: Yes	Yes (at least for water, air and planning)	Yes, under judicial review of actions, not clear for in action	
Norway[e]	Yes	Usually	No	No. Specific decisions can be contested.	
European Union				Individuals and NGOs can take action in national courts to require implementation of EU provisions if incorporated in national legislation.	
UK (England and Wales)[f]	Yes	Probably no	Yes	Yes, under judicial review of actions, not clear for *in action*	
United States[g]	Yes	No (may mitigate)	Yes (under specific citizen suits provisions in environmental laws)	Yes (where agency has statutory duty to act, and where plaintiff can show "injury")	Administrative Procedures Act Various Executive orders

a) Belgium: Faure, M. (1999), "Environmental liability in Belgium", in K. Dekelelataere and M. Faure eds. *Environmental law in the United Kingdom and Belgium from a comparative perspective*, Intersentia.
b) Denmark: E.M. Basse (1999), "Denmark" in "*International Encyclopedia of Environmental Law*", Kluwer Law International, The Hague/Boston/London.
c) Finland: P. Vihervliori (1998), "Finland" in "*International Encyclopedia of Environmental Law*", Kluwer Law International, The Hague/Boston/London.
d) Ireland: Y. Scannel (1994),"Ireland" in "*International Encyclopedia of Environmental Law*", Kluwer Law International, The Hague/Boston/London.
e) Norway: Ministry of Environment.
f) UK: Faure, M. (1999), "Environmental liability in the UK" in K. Dekelelataere and M. Faure eds *Environmental law in the United Kingdom and Belgium from a comparative perspective*, Intersentia.
g) US: Information provided by Professor Richard Stewart, New York University Law School.

may play an important role in the application of environmental policy, and to some extent in its formation. Table VI.3 provides a schematic comparison of the role of legal liability and the courts in some OECD countries.

In most countries it is possible for individuals or entities that have suffered material damage through pollution to take the polluter to court for compensation; in some countries parties with no material interest may also take court action, although without expecting to recover damages. This in itself may act to deter polluters, to a degree which depends in part on whether polluter liability is "strict" or whether polluters may avoid liability for pollution caused so long as they were in compliance with the law. But the extent to which courts give consistent signals is unclear; legal processes can be slow and costly, and may create uncertainly.

The judicial system may also have a role in forcing governments to fulfil their legislative commitments, which have a tendency to exceed their capacity for enforcement. Some nevertheless fear that too much reliance on the courts may lead to insufficient attention being paid by the government to policy design. In fact a significant role for the courts in overseeing implementation of legislation is largely restricted to the United States, where some environmental legislation includes provisions for just this kind of action.

Conclusions

This survey of aspects of environmental policy and its links with economic policies reveals a number of common themes across countries and environmental issues. In assessing the extent to which policy instruments chosen succeed in achieving an integrated approach and in generating least-cost solutions, the paper does not assess the objectives themselves, but many of the examples in the country studies suggest that more systematic assessment of measurable costs and benefits of many targets (and careful assessment of any non-measurable benefits) would be beneficial.

Taking the themes in turn, the trend towards increasing use of economic instruments is to be encouraged; increasing the extent to which prices and costs faced by consumers and producers reflect the full costs of the products and activities concerned will be highly beneficial. In some areas environmental costs can not easily be quantified, or a command and control approach seems necessary; even in these cases, however, a focus on environmental performance rather than technical standards and, where possible, use of economic incentives is to be encouraged. As for competitiveness, it should always be emphasised that, for a given domestic environmental target, giving exemptions or other special treatment to protect the competitiveness of particular sectors can only increase overall costs – damaging *national* welfare rather than protecting it. The conditions under which special treatment is justified are rather narrow, certainly narrower than the range of contexts in which it is actually invoked. When special treatment is desired, and this applies to distributional concerns too, it is important to use measures that maintain appropriate incentives at the margin.

Special treatment for certain sectors such as agriculture or transport is often claimed to be justified on social or regional grounds, and energy policy is often focused more on the role of energy as a vital intermediate input than on the environmental consequences of its use. However, most countries have social and regional

policies that should deal with these concerns without requiring special attention to these matters in environmental or sectoral policy. Again, measures to deal with these problems need to preserve appropriate marginal incentives in environmental policy.

As far as institutional means to improve co-ordination and coherence are concerned, a variety of approaches exists, with most countries recognising that there is room for improvement in co-ordination. Procedures such as environmental impact assessments and economic or regulatory impact assessments are now widespread. It is perhaps too early to judge the impact of these and of other methods such as cross-sector sustainable development plans, public information access policies and audit office reports, for example. The effects should be positive but will be difficult to assess.

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VII. PRODUCTIVITY AND FIRM DYNAMICS: EVIDENCE FROM MICRODATA

Introduction and summary

Chapters in the two previous issues of the *OECD Economic Outlook* (Nos. 67 and 68) discussed growth patterns in the OECD countries at the macroeconomic and sectoral levels. But growth of output and productivity takes place in individual firms, whose behaviour and decisions are influenced not only by market forces but also by policies and institutions. Understanding the underlying forces generating differences in performance at the firm level thus helps to formulate growth-oriented policies.

This chapter looks at the role of resource reallocation and firm dynamics in aggregate productivity growth

There is by now a sizeable body of evidence on firm performance, but international comparisons have been difficult to make. This chapter reports evidence on productivity growth and firm dynamics[1] for ten countries (United States, Germany, France, Italy, United Kingdom, Canada, Denmark, Finland, Netherlands and Portugal) on the basis of a common analytical framework and, to the extent possible, harmonised data.[2]

The main conclusions of this analysis are the following:

– A large fraction of aggregate *labour* productivity growth is driven by what happens in each individual firm, while shifts in market shares from incumbents in decline to those who are growing seem to play only a modest role.

Aggregate productivity growth largely depends on the performance of incumbents…

– Labour productivity growth is also boosted by the exit of low productivity units, especially in mature industries. In other industries – in particular those experiencing rapid technological changes (*e.g.* ICT-related industries) – the entry of new units is important in fostering overall productivity growth.

… but also on the entry and exit of firms…

– Within-firm growth makes a relatively smaller contribution to multifactor productivity growth – a proxy for overall efficiency in the production process – than it does to labour productivity. This suggests that incumbents often raise labour productivity by increasing capital intensity and/or shedding labour. By contrast, new firms provide a relatively larger contribution to multifactor productivity, possibly because they enter the market with a more "efficient" mix of capital and labour and likely new technologies.

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1. Firm dynamics includes firms starting up (entry) and firms going out of business, for whatever reason (exit).
2. The chapter draws from an ongoing project on firm-level data which is itself part of the OECD project on growth. The analysis has been conducted in close co-operation with country experts, who have contributed to the definition of a common analytical framework and the standardisation of key concepts. The institutions and research centres involved in the study are the following: Canada: Statistics Canada; Denmark: Ministry of Finance and Aarhus School of Business; Finland: Statistics Finland and Research Institute of the Finnish Economy; France: INSEE; Germany: consultants; Italy: Bank of Italy; Netherlands: Free University Amsterdam; Portugal: Banco de Portugal; United Kingdom: Queen Mary and Westfield College; United States: Center for Economic Studies, US Census Bureau. The full set of results from this project will be published in due course in the Economics Department Working Papers series.

– A large number of firms enter and exit most markets every year. The early years are the most difficult for entrants: 20 to 40 per cent of entering firms do not survive the first two years. Young firms that fail are often very small, while those surviving tend to be larger and experience further increases in the initial years.

The chapter is divided into four separate sections. The first section discusses the contribution of firm-level data to the analysis of productivity growth in OECD countries. The second section presents evidence on the importance for aggregate productivity dynamics of developments within individual firms as well as entry and exit of firms in markets. A decomposition of productivity growth is performed for manufacturing and for some service sectors and refers to estimates of both labour and multifactor productivity. The third section characterises entry and exit of firms across industries and countries and sheds some light on post-entry growth. Lastly, a short final section offers some preliminary policy considerations.

The role of firm-level data for the analysis of productivity dynamics

Aggregate patterns hide significant differences in performance of individual firms…

Analysis of micro data points to a marked heterogeneity in the distribution of output, employment, investment and productivity growth across firms and establishments.[3] Even in expanding industries, many firms experience substantial decline, and in contracting industries it is not uncommon to find rapidly expanding units. Likewise, business-cycle upturns and downturns do not necessarily involve a synchronised movement of all, or even most, firms or establishments.

There are a number of possible explanations for this. Heterogeneity may reflect certain conditions in the product market, *e.g.* product differentiation, which can, at least partially, be related to regulatory and institutional conditions. At the same time, uncertainty about market conditions and profitability may lead firms to make different choices concerning technologies, goods and production facilities.[4] This process of "experimentation", in turn, is associated with high entry rates but also high failure rates, especially amongst relatively young firms, and more generally widens differences in outcomes. Finally, it has been argued that new technologies are often embodied in new capital, which, however, requires a retooling or remodelling process in existing plants adopting these technologies, as well as changing work practices in some cases. Insofar as new firms do not have to go through this process, they may better harness new technologies and growth will then tend to be associated with new entrants who displace obsolescent establishments, and this process of "creative destruction" contributes to the observed heterogeneity in firms' performance.

… and this could affect the orientation of growth-enhancing policies

Policy orientations to enhance growth may depend crucially on how growth is generated at the level of individual firms. Importantly, the expansion or contraction of existing units or the creation and failure of firms impose costs on all those involved (*e.g.* entrepreneurs, workers, financing institutions). The magnitude of these costs is influenced by institutional and regulatory settings in the product and labour markets, such as administrative regulations on start-ups, bankruptcy laws and regulations affecting the

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3. For a survey of recent empirical studies see Caves (1998) and Bartelsman and Doms (2000).
4. Individual firms experiment to some extent with different production processes and technologies as they learn more about their markets, but a more important process of "experimentation" (in the sense of a natural experiment) occurs because different firms try different approaches to production and technologies. See, amongst others, Aghion and Howitt (1992); Caballero and Hammour (1994, 1996); Erickson and Pakes (1995) and Jovanovic (1982).

reallocation of labour and capital across firms and sectors. Identifying policy barriers that increase adjustment costs at the level of the individual firm is thus an important role for firm-level analysis. More generally, knowledge of the determinants of heterogeneity across firms, and how they are affected by policy interventions, may contribute to the understanding of how the aggregate economy evolves and reacts to exogenous shocks.

The growing number of empirical studies based on firm-level data have often focussed on the United States. Results for other countries have typically not been immediately comparable, because of differences in the underlying data and/or in the methodology used by researchers. The analysis presented in this chapter refers to ten OECD countries and, to the extent possible, is based on comparable data. Notwithstanding the efforts made to harmonise the data, there remain some differences that have to be taken into account in assessing cross-country differences (see Box VII.1).

New data permit international comparisons

Box VII.1. The firm-level data

Sources of the data and definitions

Available data at the firm level are usually compiled for fiscal and other purposes and, unlike macroeconomic data, there are few internationally agreed definitions and sources, though harmonisation has improved over the years. The data used for this project come from different sources.

The *analysis of firm entry and exit* has been based on *business registers* (Canada, Denmark, France, Finland, Netherlands, United Kingdom and United States) or social security databases (Germany and Italy). Data for Portugal are drawn from an employment-based register containing information on both establishments and firms. These databases allow firms to be tracked through time because addition or removal of firms from the registers (at least in principle) reflects the actual entry and exit of firms.

In this chapter, the entry rate is defined as the number of new firms divided by the total number of incumbent and entrant firms in a given year; the exit rate is defined as the number of firms exiting the market in a given year divided by the population of origin, *i.e.* the incumbents in the previous year.

The *decomposition of aggregate productivity growth* required a wider set of variables and was based on *production survey data* in combination with business registers. Production surveys are based on representative samples and often exclude firms below a given size threshold. The decomposition follows the approach proposed by Griliches and Regev (1995) that identifies three components: *i)* within-firm productivity growth; *ii)* gains in productivity that come from high-productivity firms' expanding market shares; and *iii)* productivity growth due to the entry of high productive firms or the exit of low-productive firms. Each term of the decomposition is weighted by the average market shares (over the time interval considered). An alternative approach proposed by Foster *et al.* (1998) weights each term by the base-year market shares and include an additional term (the so-called "covariance" or "cross" term) that combines changes in market shares and changes in productivity (it is positive if enterprises with growing productivity also experience an increase in market share).

In this chapter, *labour productivity growth* is defined as the difference between the rate of growth of output and the rate of growth of employment and, whenever possible, controls for material inputs. *Multifactor productivity* (MFP) *growth* is the residual from a growth accounting in which labour is measured by the number of employed persons, the capital stock is based on the perpetual inventory method and material inputs are also considered. Real values for output are calculated by applying 2-4 digit industry deflators.

Comparability issues

Two prominent aspects of the data have to be borne in mind while comparing firm-level data across countries:[1]

Unit of observation: The unit of reference in this study is the firm, with the exception of Germany where data are available only with reference to establishments. Firm-based data are likely to more closely represent entities that are responsible for key aspects of decision making compared with plant-level data. However, business registers may define firms at different points in ownership structures; for example some registers consider firms that are effectively controlled by a "parent" firm as separate units, whilst other registers record the parent company only.

Size threshold: While some registers include even single-person businesses, others omit firms smaller than a certain size, usually in terms of the number of employees but sometimes in terms of other measures such as sales (as is the case in the data for France and Italy). Data used in this chapter exclude single-person businesses. However, because smaller firms tend to have more volatile firm dynamics, remaining differences in the threshold across different country datasets should be taken into account in the international comparison.[2]

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1. For more detail on the comparability of the firm-level data, see Scarpetta *et al.* (2001).
2. However, a sensitivity analysis on Finnish data, where cut-off points were set at 5 and 20 employees, reveals broadly similar results for the productivity decomposition and aggregate entry and exit rates.

Productivity developments: the role of reallocation and within-firm growth

Productivity growth stems from growth within firms and from reallocation of resources between firms

At the industry level, productivity growth is the result of different combinations of growth within existing firms; increases in market shares of high-productivity firms; and the entry of new firms that displace less productive firms. Productivity growth within firms depends on changes in the efficiency and intensity with which inputs are used in production. Thus, this source of aggregate productivity growth is associated with the process of technological progress. Shifts in market shares between high and low productive units also affect aggregate productivity trends, as does the reallocation of resources across entering and exiting firms. The overall contribution of reallocation to productivity growth is generally identified with a competitive process taking place in the market, although it may also reflect changes in demand conditions and, as argued above, may also be an aspect of technological progress. It should be stressed that this simple taxonomy hides important interactions. The entry of highly productive firms in a given market may stimulate productivity-enhancing investment by incumbents trying to preserve their market shares. Moreover, firms experiencing higher than average productivity growth are likely to gain market shares if their improvement is the result of a successful upsizing, while they will lose market shares if their improvement was driven by a process of restructuring associated with downsizing.

The decomposition of labour productivity

Within-firm growth explains much of labour productivity growth, as does the exit of low productive units

Figure VII.1 presents a decomposition of labour productivity growth rates in manufacturing into a within-firm component and the different components due to the reallocation of resources across firms (see Box VII.1 above). Such a decomposition will give different results depending on the time horizon considered (see below). Concretely, the decomposition in Figure VII.1 concerns productivity growth over five-year periods. In the eight countries for which data are available, labour productivity growth was largely accounted for by gains within individual firms. In the second half of the 1980s, the within component accounted for three-quarters or more of total productivity growth in all but one country (Italy), with a somewhat smaller, though still predominant, role in the first half of the 1990s. The impact on productivity *via* the reallocation of output across existing enterprises (the "between" effect) varies significantly across countries and over time, but is generally small and in a few instances even negative. The net contribution to overall labour productivity growth of the entry and exit of firms (net entry) is positive in most countries (with the exception of western Germany over the 1990s), accounting for between 10 per cent and 40 per cent of total productivity growth. Evidence also suggests that in most of the cases in which the net entry effect is positive and sizeable, exits made most of this contribution to overall productivity growth, *i.e.* exits involve low-productivity units.

Within-firm patterns also largely drive aggregate fluctuations in productivity

In countries where a sufficiently long time series is available, evidence suggests that year-to-year changes in the within-firm component are the main drivers of fluctuations in aggregate growth; the *between* and *net entry* components show only modest fluctuations. Moreover, in years of expansion (the second half of the 1980s in most countries), within-firm growth makes a stronger contribution to overall

Figure VII.1. **Decomposition of labour productivity growth in manufacturing**[1]

Percentage share of total annual productivity growth of each component[2]
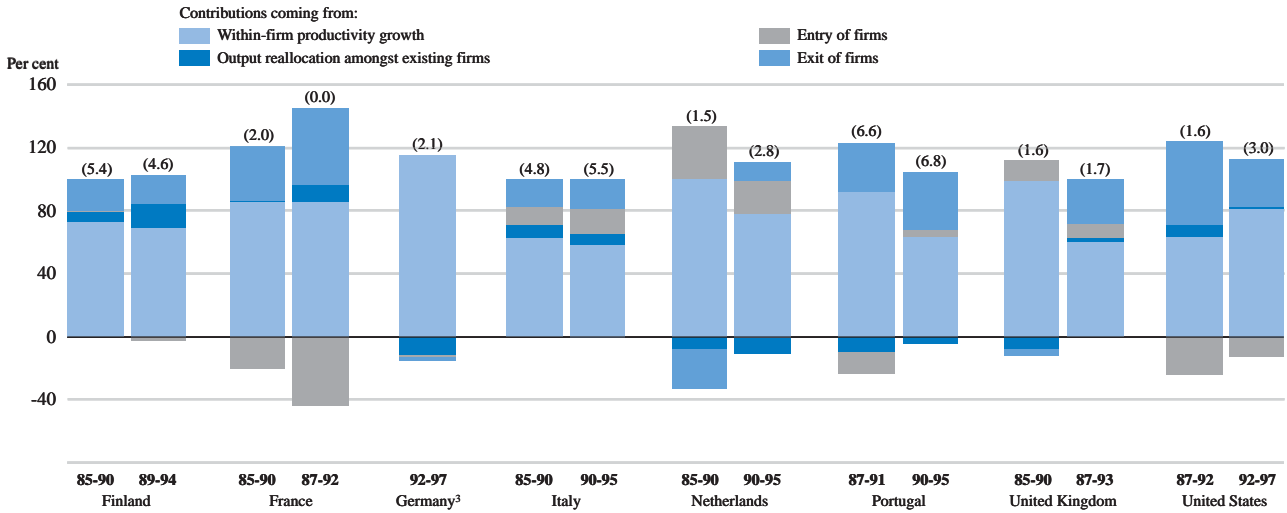
Note: Figures in brackets are overall productivity growth rates (annual percentage change).
1. Decomposition based on the Griliches and Regev (1995) approach.
2. Components may not add up to 100 because of rounding.
3. Data refer to western Germany.
Source: OECD.

productivity growth, whilst in slowdowns (the early 1990s) the contribution from the exit of low-productive units increases in relative importance.[5]

The entry of new firms has variable effects on overall productivity growth: positive in Italy, the Netherlands and the United Kingdom; negative in France and the United States; and, on balance, small in Finland, western Germany and Portugal. The contribution of entry to productivity is, however, significantly influenced by the horizon over which productivity growth is measured: by construction, the contribution of entering firms is greater the longer the horizon considered.[6] Moreover, if new entrants undergo a significant process of learning and selection, the time horizon is likely to affect the comparison between entering and other firms. For example, US studies focussing on long time horizons generally found a significantly higher contribution of entry to aggregate productivity growth than those using short time periods as in this chapter.[7]

Although the driving forces of aggregate labour productivity growth differ significantly across countries, a few common patterns can be identified. In particular, in the industries more closely related to information and communication technologies (ICT), the entry component makes a stronger contribution to labour productivity

In some countries, new firms also boost overall productivity…

… especially in some sectors, e.g. ICT-related industries

5. The results are also broadly consistent with findings in Baily *et al.* (1992) and Haltiwanger (1997) for the decomposition of MFP growth in the US manufacturing sector: during a period of robust productivity growth (1982-87), the within-firm contribution is large and positive, while in a low growth period (1977-82) the contribution is negative.
6. The share of activity (the weighting factor in the decomposition, see Box VII.1) of entrants in the end year increases with the horizon over which the end year are measured (see Foster *et al.*, 1998).
7. See Baily *et al.* (1996, 1997) and Haltiwanger (1997).

growth than on average,[8] suggesting an important role for new (high-tech) firms in an area characterised by a strong wave of technological changes. The opposite seems to be the case in more mature industries, where a more significant contribution comes from either within-firm growth or the exit of obsolete firms.

The decomposition of labour productivity growth in service sectors is more varied

The decomposition of labour productivity growth in service sectors gives far more varied results than that for manufacturing, no doubt because of the difficulties in properly measuring output in this area of the economy.[9] But in two broad sectors, transport storage and communication and trade, the results are qualitatively in line with those for manufacturing (Figure VII.2). The within-firm component is generally

Figure VII.2. **Decomposition of labour productivity growth in selected service sectors**[1]
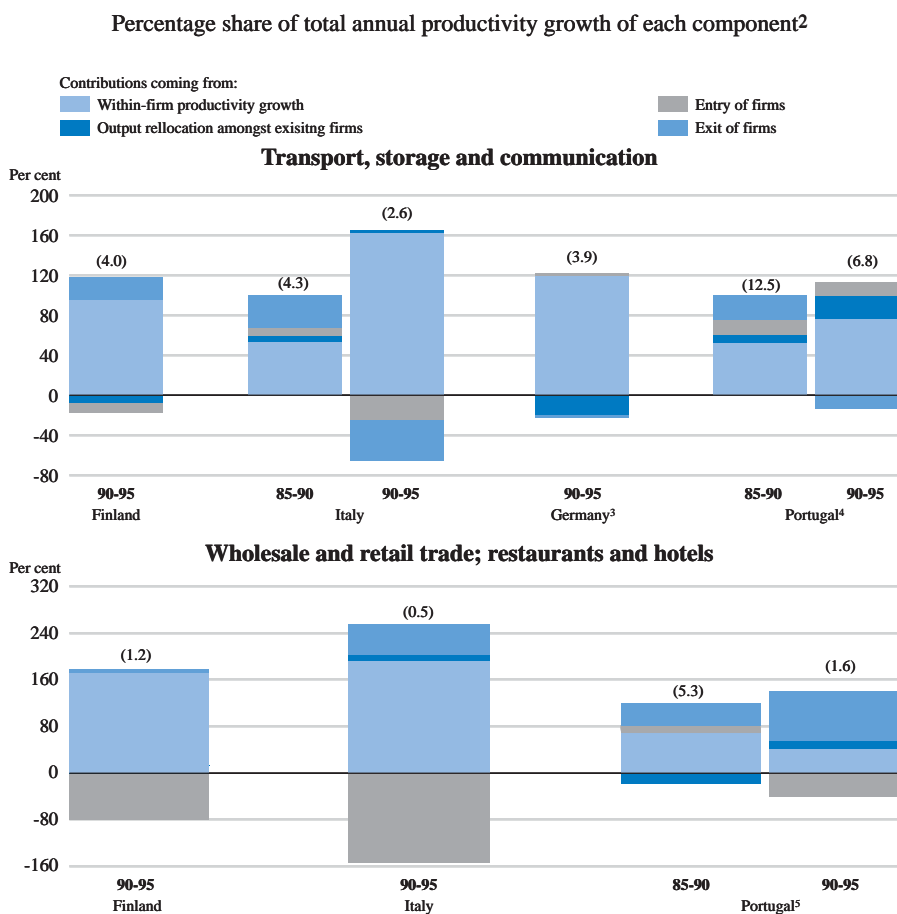
Percentage share of total annual productivity growth of each component[2]

Note: Figures in brackets are overall productivity growth rates (annual percentage change).
1. Decomposition based on the Griliches and Regev (1995) approach.
2. Components may not add up to 100 because of rounding.
3. Data refer to western Germany.
4. Transport and storage.
5. Wholesale and retail trade; repairs.
Source: OECD.

8. The industry group is "*electrical and optical equipment*". In the United States, most 3-4 digit industries within this group had a positive contribution to productivity stemming from entry, contrary to the result for total manufacturing (see Figure VII.1). In the other countries, there are cases where, within this group, the contribution from entry is very high, including the "*office, accounting and computing machinery*" industry in the United Kingdom and "*precision instruments*" in France, Italy and the Netherlands.
9. See *e.g.* Scarpetta *et al.* (2000) for more details on measurement issues in service sectors.

larger than the component related to net-entry and reallocation across existing firms, although in the trade sector entering firms seem to have a lower than average productivity growth in general, driving down aggregate growth.

The decomposition of multifactor productivity

The decomposition of multifactor productivity (MFP) growth in the manufacturing sector of five countries suggests a somewhat different picture than that shown with respect to labour productivity (Figure VII.3). Thus, within-firm MFP growth provides a comparatively smaller contribution to overall MFP growth (although it still drives overall fluctuations), while the reallocation of resources across incumbents (*i.e.* the between effect) plays a somewhat stronger role. More important, a strong contribution to MFP growth generally comes from net entry. Indeed, the (limited) information available suggests that the entry of new high-productive firms has made a marked impact on aggregate trends in the more recent period. Combining the information on labour and MF productivity decompositions it could be tentatively hypothesised that in a number of European countries, incumbent firms were able to increase labour productivity mainly by substituting capital for labour (or by exiting the market altogether), but not necessarily by markedly improving overall efficiency in production processes.[10] By contrast, new firms entered the market with the "appropriate" combination of factor inputs, and possibly new technologies, thus leading to faster growth of MFP.

The decomposition of MFP growth yields a stronger role of entry in total productivity growth

———— Figure VII.3. **Decomposition of multifactor productivity growth in manufacturing**[1] ————

Percentage share of total annual productivity growth of each component[2]
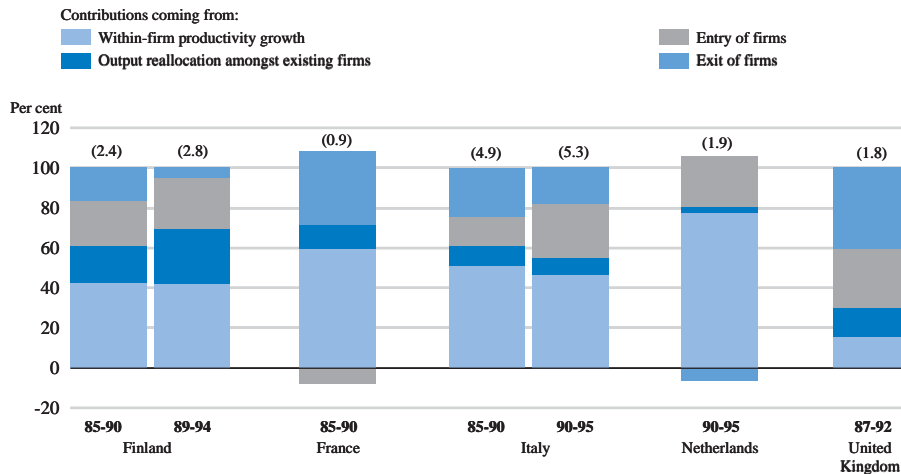
Note: Figures in brackets are overall productivity growth rates (annual percentage change).
1. Decomposition based on the Griliches and Regev (1995) approach.
2. Components may not add up to 100 because of rounding.
Source: OECD.

10. This finding is consistent with aggregate data for a number of European countries (see Scarpetta *et al.*, 2000). In particular, in many Continental European countries, high labour productivity growth in the 1990s was accompanied by significant falls in employment, especially in manufacturing, leading to low (as compared to the 1980s) GDP per capita growth rates. Moreover, the relatively high labour productivity growth was accompanied by significant falls in MFP growth with respect to the previous decade.

Firm dynamics and survival

Many firms enter and exit every year

Since entry and exit of firms makes a significant contribution to aggregate productivity growth, it is of interest to see how frequently new firms are created and others close down across countries and sectors. In fact, a large number of firms enter and exit most markets every year (Figure VII.4). Data covering the first part of the 1990s show firm turnover rates (entry plus exit rates) to be around 20 per cent in the business sector of most countries: *i.e.* a fifth of firms are either recent entrants, or will close down within the year. Turnover rates vary significantly across detailed industries in each OECD country, and differences in the industry composition across them influence the international comparison of average turnover. Controlling for the sectoral composition suggests that Germany (western) and Italy have somewhat smaller turnover rates than the United States, while turnover is consistently higher in the United Kingdom (manufacturing sector) and especially in Finland.

Entry and exit are highly correlated across industries…

The industry dimension also makes it possible to compare entry and exit rates and characterise turnover. If entries were driven by relatively high profits in a given industry and exits occurred primarily in sectors with relatively low profits, there

Figure VII.4. **Turnover rates in broad sectors of OECD countries, 1989-94**

Entry plus exit rates, annual average
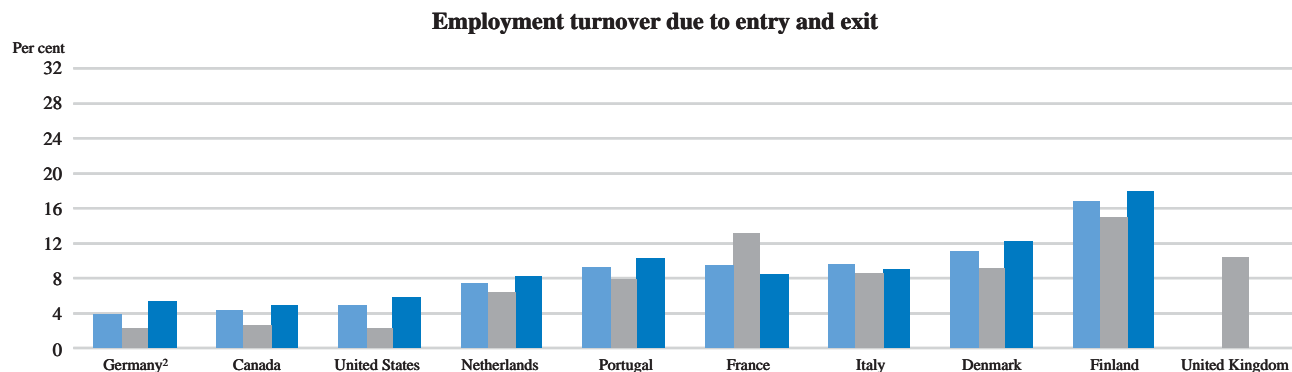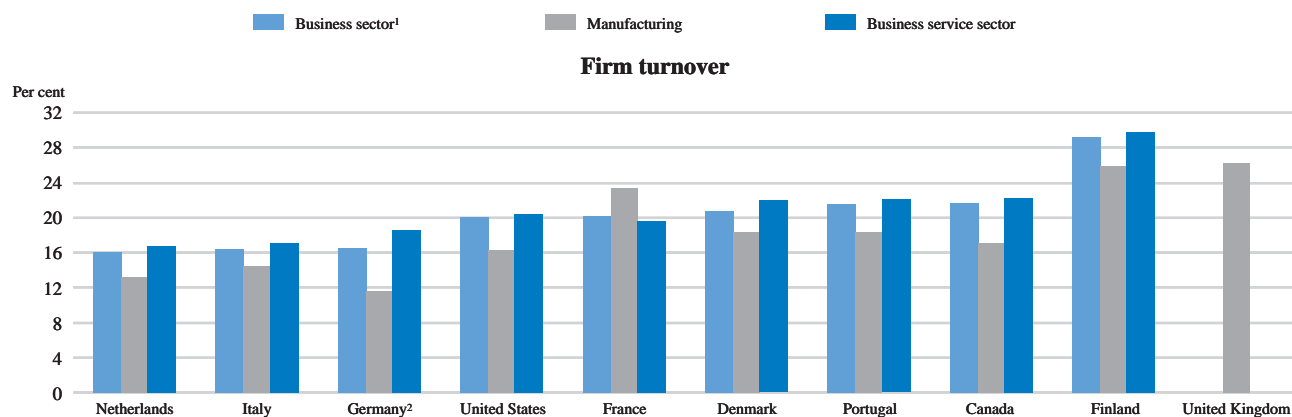
1. Total economy minus agriculture and community services.
2. Data refer to western Germany.
Source: OECD.

would be a negative cross-sectoral correlation between entry and exit rates. However, confirming previous evidence,[11] entry and exit rates are generally highly correlated across industries in OECD countries (this is particularly so when the rates are weighted by employment). This suggests that in every period, a large number of new firms displace a large number of obsolete firms, without affecting significantly the total number of firms or employment in the market at each point in time.

The high correlation between entry and exit across industries may be the result of new firms displacing old obsolete units, as well as high failure rates amongst newcomers in the first years of their life. This can be assessed by looking at survival rates, *i.e.* the probability that new firms will live beyond a given age (Figure VII.5). The survival probability for cohorts of firms that entered their respective market in the late 1980s declines steeply in the initial phases of their life: about 20 to 40 per cent of entering firms fail within the first two years. Conditional on overcoming the

… because of the high failure rates in the early phases of a firm's life

Figure VII.5. **Firm survival rates at different lifetimes,[1] 1990s**
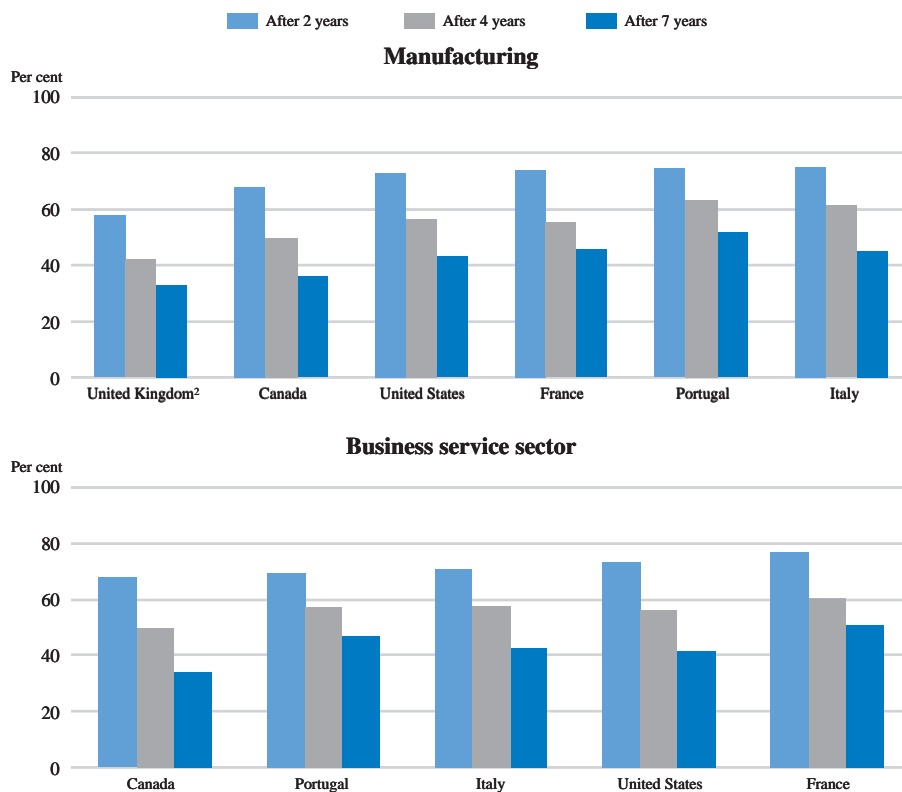
1. The survival rate at duration (j) is calculated as the probability that a firm from a population of entrants has a lifetime in excess of (j) years. Figures refer to average survival rates estimated for different cohorts of firms that entered the market from the late 1980s to the 1990s.
2. Data for the United Kingdom refer to cohorts of firms that entered the market in the 1985-90 period.
Sources: OECD, and Baldwin *et al.* (2000) for Canada.

11. See, amongst others Geroski (1991) and Baldwin and Gorecki (1991).

initial years, the prospects of firms improve in the subsequent period: firms that remain in the business after the first two years have a 60 to 70 per cent chance of surviving for five more years. Nevertheless, only about 30-50 per cent of total entering firms in a given year survive beyond the seventh year. The survival rates of new firms vary substantially across countries: the three English-speaking countries for which data are available show lower survival rates in manufacturing than the three continental European countries. It is important to note that a low survival rate is not necessarily a cause of concern. As argued above, entry by new firms can be seen as a process of experimentation and it is in the nature of this process that the failure rate will be high. This is particularly so if new entry leads incumbent firms to increase their efficiency and profitability.

There is substantial variation in survival rates at different life spans across manufacturing industries and the entire business sector. Overall, the variance of "infant mortality" (or failure within the first years) across industries is typically much higher than the variance of entry rates across industries. Furthermore, these industry differences in initial failure are also reflected in the variability of long-term survival rates (*i.e.* five-seven years of age) which remains substantial. This evidence points to the fact that industry characteristics such as those that are generally considered to create barriers for firms to enter the market, are likely to condition initial survival even more.[12] However, the impact of these barriers on survival is not permanent, but rather declines rapidly as entrants gain experience in the market.

Entrant firms are generally smaller than incumbents…

The process of entry and exit of firms involves a disproportionally low number of workers: in all but two countries (Finland and Denmark), less than 10 per cent of employment is involved in firm turnover, and in the United States, Germany and Canada, employment-based turnover rates are less than 5 per cent (bottom Panel of Figure VII.4). The difference between firm turnover rates and employment-based turnover rates arises from the fact that entrants (and exiting firms) are generally smaller than incumbents. New firms are only 20 to 50 per cent the average size of existing firms, and their relative size is less than a fifth of that of incumbents in the United States and Canada (Figure VII.6).

The relatively small size of entrants in Canada and especially the United States reflects both the large size of incumbents (in the United States, twice that of most other countries, see Box VII.2) and the small average size of entrants compared to that in most other countries (in the United States, about three employees in the total economy and about six in manufacturing). In other words, entrant firms are further away from the average (or "optimal") size in the United States than in most other countries for which data are available. There are a number of different possible explanations for this. First, the larger market of the United States may partly explain the larger average size of incumbents.[13] Second, the wider gap between entry size and "optimal" size in the United States may reflect economic and institutional factors, *e.g.* the relatively low entry and exit costs may increase incentives to start up relatively small businesses.[14]

… as are exiting firms

The likelihood of failure in the early years of activity is highly skewed towards small units, while surviving firms are not only larger but also tend to grow rapidly. Thus, the size of exiting firms is similar to the size of entering firms in most

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12. See also Geroski (1995) and Audretsch and Mahmood (1994).
13. Geographical considerations may also affect the average size of firms: firms with plants spreading into different US states are recorded as single units, while establishments belonging to the same firm but located in different EU states are recorded as separate units.
14. As discussed in Nicoletti *et al.* (1999), regulations affecting the start up of firms are generally much less stringent in the United States than in most of Europe, with the notable exception of the United Kingdom.

Figure VII.6. **Average firm size of entering and exiting firms relative to incumbent firms**

Firm size based on the number of employees per firm
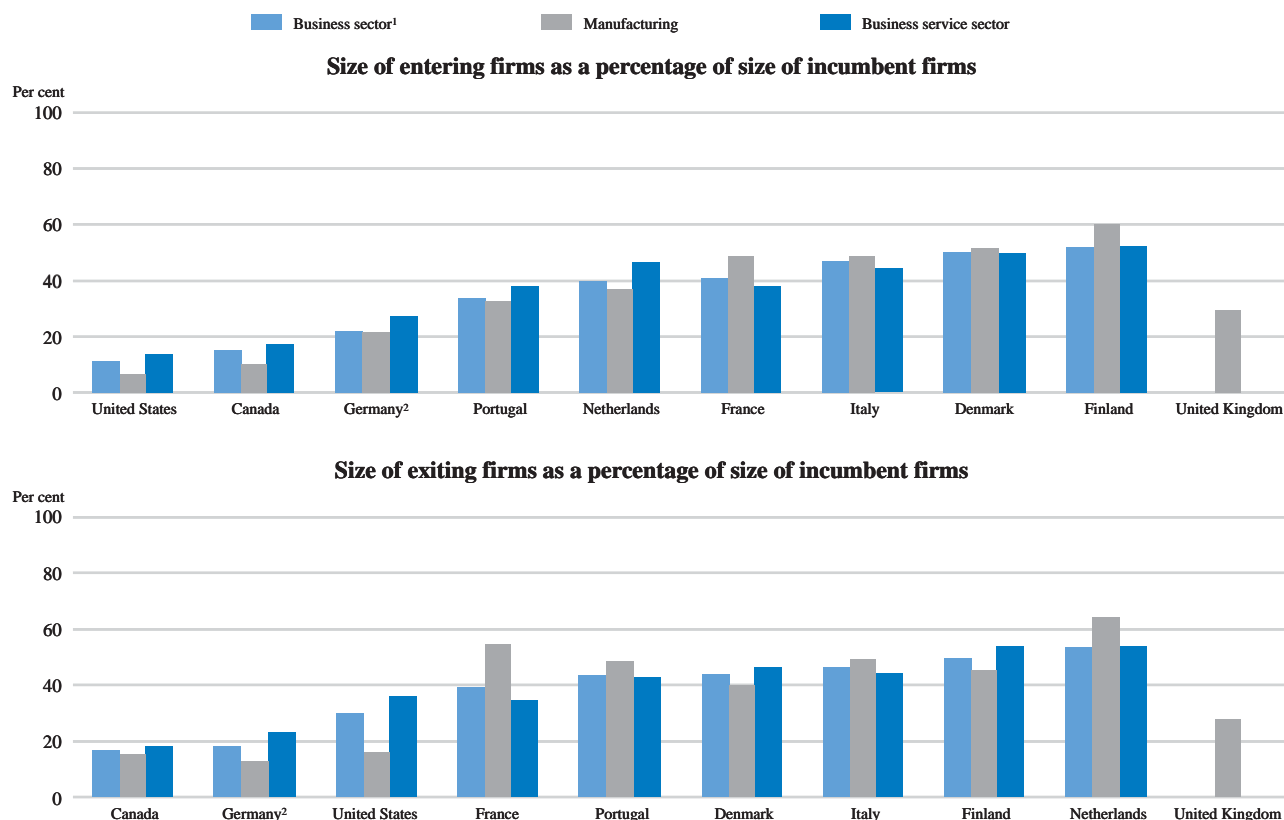
■ Business sector[1]   ■ Manufacturing   ■ Business service sector

Size of entering firms as a percentage of size of incumbent firms

Size of exiting firms as a percentage of size of incumbent firms

1. Total economy minus agriculture and community services.
2. Data refer to western Germany.
Source: OECD.

countries (Figure VII.6, bottom Panel), and the average size of surviving firms increases rapidly to approach the average size of incumbents in the market in which they operate. The combined effect of exits being concentrated among the smallest members of a cohort and the growth of survivors makes the average size of the cohort almost double in the first seven years. Post-entry growth in average size is stronger in services than in manufacturing, given the smaller initial size and the higher failure of small businesses there. Moreover, both failure of small units and growth of survivors are stronger in the United States than in the other OECD countries, leading the average size of a given cohort to increase three-fold in the first three years. This could reflect the greater opportunities offered to small firms to enter the market in the United States, even though their failure rate is high. This greater experimentation of small firms in the US market may also contribute to explain the evidence discussed above of a lower than average productivity of US firms at entry.

Different turnover rates partly reflect different degrees of maturity across industries

As stressed above, turnover rates also show large variation across individual sectors of each economy and previous studies have related this to differences in product cycles. They indicate that, after commercial introduction of a specific new product, there is an initial phase of rapid firm entry, which is followed by a levelling

Box VII.2.   **The size of firms across sectors and countries**

Firm-level data indicate marked differences in the average size of firms in the different countries considered in this chapter. In all countries, the distribution of firms is highly skewed towards small units (fewer than 20 employees), although the average size of firms ranges from about 9-10 employees in Finland and Italy to about 30 in the United States (see table below). Differences across countries are only marginally affected by different size threshold in the datasets. Average firm size differs markedly across sectors of the economy. The incidence of small firms is higher in services than in manufacturing. Notably, the *"trade and restaurants"* sector has a particularly low average firm size.

There is also a positive association between average sectoral size and within-industry size dispersion: in both the US and UK manufacturing industries, average size is well above that of the other countries, but also the within-sector variability is much larger.

Average size of firms

Number of employees per firm, 1989-94

	Total economy	Non-agricultural business sector[a]	Manufacturing	Business services
Canada	13	15	41	14
Denmark	13	15	30	13
Finland	9	9	17	7
France	24	24	24	25
Germany[b]	17	18	45	12
Italy	10	10	15	7
Netherlands	12	10	24	9
Portugal	17	18	31	12
United Kingdom	. .	. .	51	. .
United States	29	29	86	24

a) Total economy excluding agriculture and community services.
b) Wertern Germany.
Source: OECD.

off and then a contraction in the number of firms.[15] Thus, for example the observation of 'waves' of entry at different points in time across industries may reflect initial phases in the product cycle. Available data for this study do not permit specific products to be followed over time. Rather they cover industries at a relatively disaggregated level, but one which still includes a variety of products and markets within each sector. Nevertheless, the correlation between ranks of industries (according to their turnover rate) at different points in time is generally low and declines as yearly observations are further apart. Moreover, the correlation of employment-based turnover rates is even lower and declines more rapidly over longer time spans. Hence, high turnover industries at a point in time are not necessarily at the top of the turnover ranking ten or even five years later. Albeit indirect, this observation is interesting because it throws additional light on cross-sectoral differences in market conditions. It suggests, in particular, that competitive forces in each market may vary over time, quite independently of changes in institutional factors, but rather because of the maturing of the market in which firms operate.

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15. For example, a study of 46 products in the United States by Gort and Klepper (1982) found a typical initial phase of entry of about 10 years and a phase of contraction of about 5 years.

Some policy considerations

There are a number of policy implications that can be derived from the evidence presented in this chapter. In particular, the significant role that entry and exit play in productivity growth suggests that technology-driven strategies to enhance growth within firms need to be accompanied by moves to remove restrictions that unduly reduce the process of experimentation and "creative destruction". The cost of experimentation varies depending on market characteristics (concentration, product diversification, advertising costs etc.) but also because of regulations and institutions affecting start-up costs and the financing of new ventures. Allowing low-productive units to exit is an important part of this process, insofar as it frees resources which can be better used by other firms. The evidence shows that the brisk turnover of firms in OECD countries implies that resources will not remain unemployed for long. Policies that foster market contestability and entrepreneurship as well as appropriate bankruptcy rules play a role in this context, as do social programmes that cushion the transition period, without preventing the reallocation occurring in the first place.

Policy and institutions should not harm the process of "experimentation" and "creative destruction"…

The wide heterogeneity in firm performances also suggests the need for better understanding of why some firms do so well and why other fail. There is evidence in the micro-literature pointing to the importance of investing in human and physical capital as well as in R&D activities, and there is an important role for policy here through education and training, financial market reforms and innovation policy. However, much remains to be examined. Work by the OECD is continuing in these areas.

… though an appropriate framework for within-firm growth is also important

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Statistical Annex

This annex contains data on some main economic series which are intended to provide a background to the recent economic developments in the OECD area described in the main body of this report. Data for 2001-2002 are OECD estimates and projections. The data on some of the tables have been adjusted to internationally agreed concepts and definitions in order to make them more comparable as between countries, as well as consistent with historical data shown in other OECD publications. Regional totals and sub-totals are based on those countries in the table for which data are shown. Aggregate measures contained in the Annex, except the series for the euro area (see below), are computed on the basis of 1995 GDP weights expressed in 1995 purchasing power parities (see following page for weights). Aggregate measures for external trade and payments statistics, on the other hand, are based on current year exchange rate for values and base-year exchange rates for volumes.

Given the uneven progress in the transition of the Member countries to the new system of National Accounts (SNA93) and the European System of Accounts (ESA95) (see Table "National accounts reporting systems and base-years" below), the publication of three Annex tables have been temporarily suspended: Annex Table 24, "Capital income shares in the business sector"; Annex Table 25, "Rates of return on capital in the business sector"; Annex Table 58, "Productivity in the business sector". When data homogeneity and country coverage become comprehensive enough to arrive at reasonably consistent data series across countries the OECD will resume their publication.

The OECD projection methods and underlying statistical concepts and sources are described in detail in documentation that can be downloaded from the OECD Internet site:

– *OECD Economic Outlook* Sources and Methods (*www.oecd.org/eco/sources-and-methods/index.htm*);
– *OECD Economic Outlook* Database Inventory (*www.oecd.org/eco/data/eoinv.pdf*);
– The construction of macroeconomic series of the euro area (*www.oecd.org/eco/data/euroset.htm*).

NOTE ON STATISTICAL TREATMENT OF GERMANY,
THE CZECH REPUBLIC, HUNGARY, POLAND,
THE SLOVAK REPUBLIC AND THE EURO AREA AGGREGATE

In this publication, the following should be noted:

– Data up to end-1990 are for western Germany only; unless, otherwise indicated, they are for the whole Germany from 1991 onwards. In tables showing percentage changes from previous year, data refer to the whole Germany from 1992 onwards. When data are available for western Germany only, a special mention is made in a footnote to the table.

– For the Czech Republic, Hungary, Poland and Slovak Republic data are available from 1993 onwards. In tables showing percentage changes from previous year, the Czech Republic, Hungary, Poland and the Slovak Republic are included from 1994 onwards.

– Greece has entered the euro area on 1 January 2001. In order to ensure comparability of the euro area data over time, Greece has been included in the calculation of the euro area throughout.

Country classification

OECD

Seven major OECD countries	Canada, France, Germany, Italy, Japan, United Kingdom and United States.
European Union	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and United Kingdom.
Euro area	Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.

Non-OECD

Africa and the Middle East	Africa and the following countries (Middle East): Bahrain, Cyprus, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Yemen.
Dynamic Asian Economies (DAEs)	Chinese Taipei; Hong Kong, China; Indonesia; Malaysia; the Philippines; Singapore and Thailand.
Other Asia	Non-OECD Asia and Oceania, excluding China, the DAEs and the Middle East.
Latin America	Central and South America.
Central and Eastern Europe	Albania, Bulgaria, Romania, the Newly Independent States of the former Soviet Union, and the Baltic States.

Weighting scheme for aggregate measures

Per cent

Australia	1.80	Mexico	2.95
Austria	0.82	Netherlands	1.56
Belgium	1.05	New Zealand	0.29
Canada	3.23	Norway	0.48
Czech Republic	0.60	Poland	1.28
Denmark	0.57	Portugal	0.65
Finland	0.46	Slovak Republic	0.22
France	5.69	Spain	2.83
Germany	8.28	Sweden	0.83
Greece	0.64	Switzerland	0.86
Hungary	0.44	Turkey	1.65
Iceland	0.03	United Kingdom	5.17
Ireland	0.31	United States	35.04
Italy	5.46		
Japan	13.87	Total OECD	100.00
Korea	2.90	*Memorandum items:*	
Luxembourg	0.07	European Union	34.36
		Euro area	27.78

Note: Based on 1995 GDP and purchasing power parities (PPPs).

National account reporting systems and base-years

Many countries are changing from the SNA68/ESA79 methodology to the SNA93/ESA95 methodology for the national accounts data.
In the present edition of the OECD Economic Outlook, *the status of national accounts in the OECD countries is as follows:*

	Expenditure accounts	Household accounts	Government accounts	Use of chain-weighted price indices	Benchmark/ base year
Australia	SNA93 starting in 1959	SNA93 starting in 1959	SNA93 starting in 1959	YES	1998/99
Austria	ESA95 starting in 1995	ESA95 starting in 1995	ESA95 starting in 1995	NO	1995[a]
Belgium	ESA95 starting in 1970	ESA95 starting in 1995	ESA95 starting in 1970	NO	1995
Canada	SNA93 starting in 1955	SNA93 starting in 1955	SNA93 starting in 1955	NO	1992
Czech Republic	SNA93 starting in 1994	Partial SNA93 starting in 1994	GFS adjusted by OECD	NO	1995
Denmark	ESA95 starting in 1988	ESA95 starting in 1988	ESA95 starting in 1988	NO	1995
Finland	ESA95 starting in 1988	ESA95 starting in 1988	ESA95 starting in 1988	NO	1995
France	ESA95 starting in 1978	ESA95 starting in 1978	ESA95 starting in 1978	NO	1995
Germany[b]	ESA95 starting in 1991	ESA95 starting in 1991	ESA95 starting in 1991	NO	1995
Greece	ESA95 starting in 1960	Not available	ESA95 starting in 1995 or 1960	NO	1995[a]
Hungary	SNA93 starting in 1995	Partial SNA93 starting in 1995	GFS adjusted by OECD to broadly match SNA93	NO	1995
Iceland	SNA93	Not available	(Estimated) SNA93 starting in 1989	NO	1990[a]
Ireland	ESA95 starting in 1990	ESA95 starting in 1990	ESA95 starting in 1990	NO	1995
Italy	ESA95 starting in 1982	ESA79	ESA95 starting in 1995	NO	1995
Japan	SNA93 starting in 1980	SNA93 starting in 1990	SNA93 starting in 1990	NO	1995
Korea	SNA93 starting in 1970	SNA93 starting in 1975	SNA93 starting in 1975	NO	1995
Luxembourg	ESA95 starting in 1995	Not available	SNA93 starting in 1970	NO	1995
Mexico	SNA93 starting in 1980	Not available	Not available	NO	1993
Netherlands	ESA95 starting in 1995	ESA95 starting in 1995	ESA95 starting in 1995	YES	1995
New Zealand	SNA93 starting in 1992	SNA68	SNA68	NO	1995/96[a]
Norway	SNA93 starting in 1978	SNA93 starting in 1978	SNA93 starting in 1978	NO	1997[a]
Poland	SNA93 starting in 1991	SNA93 starting in 1991	Partial SNA93 starting in 1991	YES	1995
Portugal	ESA95 starting in 1995	ESA79	ESA95 starting in 1995	NO	1995
Slovak Republic	SNA93 starting in 1993	Not available	Not available	NO	1995
Spain	ESA95 starting in 1995	ESA95 starting in 1995	ESA95 starting in 1995	NO	1995
Sweden	ESA95 starting in 1980	ESA95 starting in 1993	SNA95 starting in 1980	YES	1995
Switzerland	SNA68	Not available	Not available	NO	1990
Turkey	SNA68	SNA68	SNA68	NO	1987
United Kingdom	ESA95 starting in 1987	ESA95 starting in 1987	ESA95 starting in 1987	NO	1995
United States	NIPA tables (SNA93) starting 1959q1	NIPA table s(SNA93) starting 1959q1	NIPA tables (SNA93) starting 1960q1	YES	1996

Note: SNA: System of National Accounts. ESA: European Standardised Accounts. NIPA: National Income and Product Accounts. GFS: Government Financial Statistics.
a) Change in benchmark/base year since the last edition of *OECD Economic Outlook.*
b) Data prior to 1991 refer to western Germany and are spliced to accord with the new SNA93/ESA95 accounts.

Annex Tables

Interest Rates and Exchange Rates

External Trade and Payments

Other Background Data

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	2.4	6.9	5.1	2.0	4.9	4.6	4.5	1.4	-0.9	2.6	3.8	5.0	4.4	3.7	3.8	5.6	4.7	3.7	2.0	3.8
Austria	2.4	0.3	2.2	2.3	1.7	3.2	4.2	4.6	3.4	1.3	0.5	2.4	1.7	2.0	1.3	3.3	2.8	3.2	2.3	2.5
Belgium	1.9	2.7	1.9	1.8	2.7	4.6	3.6	2.8	1.9	1.6	-1.5	3.0	2.6	1.2	3.4	2.4	2.7	4.0	2.8	2.7
Canada	2.8	5.7	5.4	2.6	4.1	4.9	2.5	0.3	-1.9	0.9	2.3	4.7	2.8	1.5	4.4	3.3	4.5	4.7	2.3	3.2
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	2.6	5.9	4.8	-1.0	-2.2	-0.8	3.1	3.0	3.5
Denmark	1.5	4.4	4.3	3.6	0.3	1.2	0.2	1.0	1.1	0.6	0.0	5.5	2.8	2.5	3.0	2.8	2.1	2.9	2.0	2.0
Finland	2.6	3.4	3.1	2.5	4.2	4.7	5.1	0.0	-6.3	-3.3	-1.1	4.0	3.8	4.0	6.3	5.3	4.2	5.7	4.0	3.7
France	2.3	1.6	1.6	2.2	2.5	4.2	4.3	2.6	1.0	1.3	-0.9	1.8	1.9	1.0	1.9	3.3	3.2	3.2	2.6	2.7
Germany	1.6	2.8	2.0	2.3	1.5	3.7	3.6	5.7	5.0	2.2	-1.1	2.3	1.7	0.8	1.4	2.1	1.6	3.0	2.2	2.4
Greece	2.5	2.8	3.1	1.6	-0.5	4.5	3.8	0.0	3.1	0.7	-1.6	2.0	2.1	2.4	3.5	3.1	3.4	4.1	4.0	4.4
Hungary	..	..	..	..	..	..	..	..	..	..	..	2.9	1.5	1.3	4.6	4.9	4.5	5.1	5.1	4.7
Iceland	4.2	4.1	3.3	6.3	8.5	0.0	0.2	1.1	0.7	-3.3	0.6	4.5	0.1	5.2	4.8	4.5	4.1	3.6	1.5	2.4
Ireland	3.8	4.4	3.1	-0.4	4.7	5.2	5.8	8.5	1.9	3.3	2.7	5.8	9.7	7.7	10.7	8.6	9.8	11.0	7.8	7.8
Italy	2.7	2.8	3.0	2.5	3.0	3.9	2.9	2.0	1.4	0.8	-0.9	2.2	2.9	1.1	2.0	1.8	1.6	2.9	2.3	2.5
Japan	3.2	3.8	4.4	3.0	4.5	6.5	5.3	5.3	3.1	0.9	0.4	1.0	1.6	3.5	1.8	-1.1	0.8	1.7	1.0	1.1
Korea	7.5	8.7	6.5	11.6	11.5	11.3	6.4	7.8	9.2	5.4	5.5	8.3	8.9	6.8	5.0	-6.7	10.9	8.8	4.2	5.5
Luxembourg	1.2	6.2	2.9	7.7	2.3	10.4	9.8	2.2	6.1	4.5	8.7	4.2	3.8	2.9	7.3	5.0	7.5	8.5	5.6	5.5
Mexico	4.8	3.5	2.5	-3.6	1.8	1.3	4.2	5.1	4.2	3.6	2.0	4.5	-6.2	5.1	6.8	4.9	3.8	6.9	3.7	4.7
Netherlands	1.7	3.3	3.1	2.8	1.4	2.6	4.7	4.1	2.3	2.0	0.8	3.2	2.3	3.0	3.8	4.1	3.9	3.9	3.0	2.8
New Zealand	1.3	8.5	1.6	0.6	0.8	2.1	0.5	1.0	-2.5	0.5	5.1	6.2	4.0	3.6	2.8	-0.7	4.0	3.0	2.2	3.0
Norway	3.8	5.9	5.2	3.6	2.0	-0.1	0.9	2.0	3.1	3.3	3.1	5.5	3.8	4.9	4.7	2.0	0.9	2.2	2.0	2.0
Poland	..	..	..	..	..	..	..	..	..	..	..	5.2	7.0	6.0	6.8	4.8	4.0	4.1	3.8	3.9
Portugal	2.5	-1.9	2.8	4.1	6.4	7.5	5.1	4.4	2.3	2.5	-1.1	2.2	2.9	3.6	3.7	3.6	3.0	3.2	2.6	2.8
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	4.9	6.7	6.2	6.2	4.1	1.9	2.2	2.8	3.6
Spain	1.8	1.8	2.3	3.3	5.5	5.1	4.8	3.8	2.5	0.9	-1.0	2.4	2.8	2.4	3.9	4.3	4.0	4.1	2.9	2.9
Sweden	1.5	4.3	2.2	2.7	3.3	2.6	2.7	1.1	-1.1	-1.7	-1.8	4.1	3.7	1.1	2.1	3.6	4.1	3.6	2.8	3.0
Switzerland	0.9	3.0	3.4	1.6	0.7	3.1	4.3	3.7	-0.8	-0.1	-0.5	0.5	0.5	0.3	1.7	2.3	1.5	3.4	2.1	2.0
Turkey	3.8	6.7	4.2	7.0	9.5	2.1	0.3	9.3	0.9	6.0	8.0	-5.5	7.2	7.0	7.5	3.1	-4.7	7.2	-4.2	5.2
United Kingdom	1.1	2.4	3.8	4.2	4.4	5.2	2.1	0.7	-1.5	0.1	2.3	4.4	2.8	2.6	3.5	2.6	2.3	3.0	2.5	2.6
United States	2.2	7.3	3.8	3.4	3.4	4.2	3.5	1.8	-0.5	3.1	2.7	4.0	2.7	3.6	4.4	4.4	4.2	5.0	1.7	3.1
Euro area	2.1	2.4	2.3	2.4	2.5	4.0	3.9	3.6	2.4	1.4	-0.8	2.3	2.2	1.4	2.3	2.8	2.6	3.4	2.6	2.7
European Union	1.9	2.4	2.6	2.8	2.9	4.2	3.6	3.0	1.8	1.2	-0.4	2.7	2.4	1.6	2.6	2.8	2.6	3.3	2.6	2.7
Total OECD	2.6	4.9	3.6	3.1	3.7	4.6	3.8	3.1	1.2	2.1	1.4	3.2	2.5	3.0	3.5	2.7	3.2	4.1	2.0	2.8

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)*.
Source: OECD.

Annex Table 2. **Nominal GDP**
Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	13.9	13.4	11.1	8.5	13.0	13.6	11.8	6.4	1.5	4.0	5.4	5.8	6.0	6.0	5.4	5.6	5.7	7.1	4.7	6.5
Austria	8.6	5.0	5.4	5.1	3.8	4.8	7.1	8.2	7.3	5.7	3.3	5.3	4.1	3.3	2.6	4.0	3.7	4.5	3.8	4.2
Belgium	9.1	8.0	6.6	4.8	4.1	7.0	8.8	5.8	4.8	5.3	2.2	4.9	4.4	2.4	4.8	4.1	3.8	5.3	5.4	4.8
Canada	12.3	9.3	8.0	5.5	9.0	9.6	7.3	3.3	0.8	2.2	3.8	5.9	5.2	3.2	5.4	2.7	6.2	8.4	4.5	5.3
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	13.9	16.8	13.8	6.1	7.8	1.9	4.2	7.6	8.2
Denmark	11.5	10.3	8.8	8.4	5.0	4.6	5.4	4.6	3.9	3.5	1.4	7.3	4.6	5.1	5.2	4.7	5.1	6.7	4.6	4.3
Finland	14.2	12.2	8.8	6.9	8.6	13.2	11.6	5.5	-4.5	-2.5	1.2	6.0	8.1	3.8	8.5	8.5	4.7	8.7	5.6	5.1
France	13.4	8.9	7.1	7.5	5.5	7.5	7.7	5.6	4.0	3.3	1.5	3.6	3.6	2.5	3.2	4.0	3.4	3.8	4.2	4.6
Germany	6.2	4.9	4.1	5.6	3.4	5.3	6.1	9.1	9.1	7.4	2.5	4.9	3.8	1.8	2.2	3.2	2.5	2.6	3.4	3.9
Greece	20.3	23.6	21.3	19.4	13.7	20.7	18.9	20.6	23.5	15.7	12.6	13.5	12.1	9.9	10.6	8.4	6.3	7.3	7.2	7.3
Hungary	..	..	..	..	..	..	..	..	..	..	..	23.0	27.4	22.8	23.9	18.1	13.9	13.4	14.7	12.2
Iceland	52.0	30.6	35.6	33.3	29.7	22.8	20.0	18.2	8.4	0.3	2.9	6.5	2.9	7.2	8.4	10.0	8.0	7.3	5.2	7.4
Ireland	18.5	11.0	8.4	6.1	7.0	8.6	11.7	7.7	3.8	6.2	8.0	7.5	13.1	10.2	15.6	14.8	14.0	16.4	12.7	11.9
Italy	20.7	14.6	12.2	10.6	9.4	11.0	9.5	10.4	9.1	5.3	3.0	5.8	8.1	6.4	4.5	4.5	3.3	5.2	5.2	5.0
Japan	9.6	6.8	6.9	4.7	4.4	7.2	7.3	7.9	6.2	2.6	1.0	1.1	1.2	2.6	2.2	-1.2	-0.6	0.0	-0.2	0.7
Korea	28.0	14.7	11.5	16.7	17.1	18.7	12.0	19.7	21.1	13.5	12.9	16.5	16.7	10.9	8.3	-1.9	8.6	7.1	5.8	7.2
Luxembourg	8.6	10.9	6.0	8.5	5.2	11.1	14.6	7.5	8.6	7.1	9.3	9.1	4.1	4.7	10.8	6.6	9.9	12.9	9.2	8.0
Mexico	37.8	64.4	60.4	67.0	145.2	103.7	31.8	34.6	28.5	18.6	11.6	13.3	29.4	37.3	25.7	21.1	19.2	18.4	12.1	10.9
Netherlands	8.1	4.7	4.9	2.9	0.7	3.8	6.0	6.5	5.0	4.3	2.7	5.6	4.1	4.2	5.9	6.1	5.6	7.1	7.8	5.5
New Zealand	14.2	15.1	17.2	16.0	14.1	10.3	5.7	3.9	-1.3	2.2	7.5	7.6	6.4	5.7	3.0	0.6	3.8	5.5	5.6	5.2
Norway	13.3	12.6	10.7	2.6	9.1	4.9	6.7	5.9	5.7	2.8	4.9	5.3	7.1	9.4	7.8	1.2	7.5	17.7	9.2	3.5
Poland	..	..	..	..	..	..	..	..	..	..	..	44.5	36.9	25.9	21.8	17.2	11.2	15.6	11.6	10.1
Portugal	23.4	22.3	25.2	25.4	17.1	19.5	18.2	17.7	14.8	12.8	5.5	8.7	8.1	7.0	6.9	7.6	6.6	6.0	6.5	6.2
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	19.4	17.1	11.0	13.2	9.4	8.6	8.8	8.5	9.0
Spain	18.2	12.8	11.1	14.5	11.8	11.3	12.1	11.4	9.7	7.7	3.4	6.3	7.8	6.0	6.2	6.7	7.0	7.7	6.5	6.0
Sweden	12.1	12.2	8.9	9.5	8.3	9.1	10.9	10.0	6.1	-0.8	0.8	6.6	7.3	2.5	3.8	4.5	4.7	4.4	3.9	5.2
Switzerland	4.8	6.6	5.9	4.8	3.5	6.0	7.5	8.2	5.2	2.6	2.2	2.2	1.6	0.7	1.5	2.6	2.1	4.7	3.8	3.7
Turkey	43.2	58.2	59.5	45.5	46.3	72.9	75.9	72.9	60.3	73.5	81.3	95.2	100.7	90.3	95.2	81.1	48.2	61.4	49.5	51.5
United Kingdom	15.1	7.1	9.6	7.5	9.9	11.5	9.7	8.4	5.1	4.0	5.1	6.0	5.4	5.9	6.5	5.7	4.6	4.9	4.8	5.0
United States	9.8	11.3	7.1	5.7	6.5	7.7	7.5	5.7	3.2	5.6	5.1	6.2	4.9	5.6	6.5	5.7	5.8	7.1	4.1	5.0
Euro area	12.2	9.2	7.8	8.0	6.1	8.0	8.3	8.6	7.2	5.8	2.8	5.2	5.2	3.6	4.0	4.6	3.8	4.7	4.9	4.9
European Union	13.5	9.4	8.6	8.4	7.0	8.8	8.8	8.8	7.3	5.5	3.2	5.5	5.5	4.2	4.5	4.8	4.0	4.8	4.8	4.9
Total OECD	13.3	12.5	10.4	9.6	11.9	12.7	10.1	9.4	7.2	6.7	5.4	7.9	7.9	7.4	7.4	6.0	5.6	6.7	5.1	5.5

Memorandum item
OECD *less* high inflation

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
countries [a]	11.9	10.0	7.9	6.9	6.9	8.6	8.2	7.6	5.6	5.2	4.0	5.5	5.1	4.8	5.1	4.0	4.2	5.3	3.9	4.5

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*

a) High inflation countries are defined as countries which have had 10 per cent or more inflation in terms of the GDP deflator on average during the last 10 years based on historical data. Consequently, Hungary, Mexico, Poland and Turkey are excluded from the aggregate.

Source: OECD.

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	3.1	1.9	4.6	2.1	2.1	3.8	5.8	2.9	0.6	2.7	1.8	4.0	5.0	3.3	3.9	4.6	5.2	3.5	2.4	3.2
Austria	2.8	-1.3	1.9	2.2	2.9	3.3	3.7	3.8	2.8	3.0	0.7	1.8	2.9	3.2	1.4	2.9	2.3	2.7	2.0	2.3
Belgium	2.0	1.1	2.2	3.1	1.8	3.7	3.9	3.2	3.0	2.2	-1.0	2.0	1.0	0.7	2.1	3.3	1.9	3.1	2.5	2.4
Canada	2.8	4.5	5.2	4.0	4.1	4.4	3.6	1.3	-1.4	1.8	1.8	3.1	2.1	2.5	4.4	2.9	3.5	4.0	2.7	2.7
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	5.3	5.9	6.9	1.9	-2.6	0.5	1.4	2.4	2.5
Denmark	0.9	3.4	5.0	5.7	-1.5	-1.0	-0.1	0.1	1.6	1.9	0.5	6.5	1.2	2.5	2.9	3.6	0.5	-0.2	1.4	1.7
Finland	2.4	3.2	3.8	4.0	5.1	5.3	4.6	-0.6	-3.8	-4.4	-3.1	2.6	4.4	4.2	3.5	5.1	3.7	3.0	2.9	2.6
France	2.3	0.8	1.5	3.2	2.7	2.3	3.4	2.5	0.8	0.7	-0.1	0.6	1.6	1.3	0.1	3.6	2.7	2.4	2.6	3.0
Germany	2.0	1.8	1.7	3.5	3.4	2.7	2.8	5.4	5.6	2.7	0.1	1.0	2.0	1.0	0.7	2.0	2.6	1.6	2.2	2.2
Greece	3.0	1.7	3.9	0.7	1.2	3.6	6.1	2.6	2.8	2.4	-0.8	2.0	2.7	2.4	2.8	3.1	2.9	3.0	2.9	3.1
Hungary	..	..	..	..	..	..	..	..	..	..	..	0.2	-7.1	-4.3	1.9	4.8	5.1	3.8	5.0	5.0
Iceland	3.7	3.7	4.2	6.9	16.2	-3.8	-4.2	0.5	2.9	-3.1	-4.7	2.9	2.2	5.4	5.5	10.0	6.9	4.0	1.8	2.4
Ireland	2.1	2.0	4.6	2.0	3.3	4.5	6.5	1.4	1.8	2.9	3.0	4.4	4.3	6.3	7.4	7.8	7.7	8.5	8.0	8.0
Italy	3.2	3.0	3.1	4.0	3.8	4.0	3.7	2.1	2.9	1.9	-3.7	1.5	1.7	1.2	3.2	3.1	2.3	2.9	2.3	2.5
Japan	3.2	2.4	3.8	3.2	4.1	5.1	4.7	4.4	2.7	2.6	1.8	2.6	1.4	2.4	0.8	0.1	1.2	0.5	0.5	1.2
Korea	6.1	7.9	6.4	8.1	8.1	9.0	10.8	8.0	8.0	5.5	5.6	8.2	9.6	7.1	3.5	-11.7	11.0	7.1	2.5	4.5
Luxembourg	2.7	1.4	2.7	5.7	4.6	4.6	5.1	5.7	6.3	-0.9	1.7	2.4	2.4	4.4	3.8	2.3	4.1	3.5	4.5	4.3
Mexico	4.1	3.3	3.3	-2.6	-0.1	1.8	7.3	6.4	4.7	4.7	1.5	4.6	-9.5	2.2	6.5	5.4	4.3	9.5	4.0	5.0
Netherlands	2.0	1.2	2.8	2.6	2.7	0.8	3.5	4.2	3.1	2.5	1.0	2.2	1.8	4.0	3.0	4.4	4.4	3.9	4.0	3.8
New Zealand	0.7	5.7	0.5	4.0	2.4	2.7	1.1	0.1	-1.5	0.1	2.7	5.8	4.0	4.4	2.1	1.6	3.5	1.7	1.8	1.7
Norway	2.9	3.2	9.4	5.0	-0.8	-2.0	-0.6	0.7	1.5	2.2	2.3	4.0	3.4	5.3	3.6	3.3	2.4	2.1	1.7	2.4
Poland	..	..	..	..	..	..	..	..	..	..	..	4.5	3.2	8.6	6.9	4.8	5.4	2.6	2.7	2.3
Portugal	1.8	-3.0	0.6	5.7	5.3	6.8	2.6	5.8	3.8	4.4	1.5	2.2	1.6	3.9	3.3	6.0	4.6	2.8	2.1	2.4
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	1.0	3.4	8.0	5.4	5.8	-0.2	-3.4	1.2	3.0
Spain	1.6	-0.2	2.3	3.4	6.0	4.9	5.4	3.5	2.9	2.2	-1.9	1.1	1.7	2.2	3.1	4.5	4.7	4.0	2.9	2.9
Sweden	0.8	1.7	3.2	5.2	5.3	2.6	1.2	-0.4	1.0	-1.3	-3.0	1.8	0.6	1.4	2.0	2.7	3.8	4.1	2.5	2.9
Switzerland	0.2	1.3	1.6	2.3	2.2	1.7	2.3	1.2	1.6	0.1	-0.9	1.0	0.6	0.7	1.4	2.2	2.2	2.0	2.0	1.9
Turkey	3.9	8.1	-0.6	5.8	-0.3	1.2	-1.0	13.1	2.7	3.2	8.6	-5.4	4.8	8.5	8.4	0.6	-2.6	6.4	-6.0	1.1
United Kingdom	1.3	1.9	3.9	6.6	5.3	7.5	3.2	0.7	-1.7	0.5	2.9	2.9	1.7	3.6	3.9	4.0	4.4	3.7	3.0	2.6
United States	2.6	5.4	5.0	4.2	3.3	4.0	2.7	1.8	-0.2	2.9	3.4	3.8	3.0	3.2	3.6	4.7	5.3	5.3	2.8	3.1
Euro area	2.3	1.4	2.2	3.4	3.4	3.2	3.6	3.4	3.0	1.9	-0.9	1.3	1.9	1.6	1.6	3.2	2.9	2.6	2.6	2.7
European Union	2.1	1.5	2.5	4.0	3.7	3.8	3.5	2.9	2.3	1.7	-0.3	1.6	1.8	2.0	2.1	3.4	3.2	2.8	2.6	2.7
Total OECD	2.7	3.5	3.8	3.9	3.5	4.1	3.6	3.1	1.5	2.5	1.8	2.8	2.2	2.9	2.9	2.9	3.9	3.7	2.3	2.7

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
Source: OECD.

Annex Table 4. **Real public consumption expenditure**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	3.8	5.6	5.9	4.5	1.1	2.9	3.1	3.2	2.3	0.6	0.3	4.0	3.6	2.6	1.6	4.0	4.8	4.6	2.6	3.1
Austria	2.5	0.8	1.3	1.8	0.2	1.1	1.4	1.3	2.2	2.0	2.7	2.5	0.0	1.2	-1.4	2.8	3.2	2.3	1.5	1.0
Belgium	2.7	0.2	2.9	1.3	2.7	-0.7	1.1	-0.3	3.6	1.5	-0.1	1.4	1.2	2.4	0.1	1.4	3.4	2.0	1.4	1.3
Canada	3.1	1.1	4.3	1.9	1.4	4.6	2.8	3.7	2.8	1.0	0.1	-1.2	-0.5	-1.4	-1.2	1.6	1.3	2.4	1.7	1.5
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	-2.4	-4.2	3.5	0.8	-0.9	-0.1	-0.2	1.6	1.0
Denmark	3.4	-0.4	2.5	0.5	2.5	0.9	-0.8	-0.2	0.6	0.8	4.1	3.0	2.1	3.4	0.8	3.1	1.4	0.6	1.9	1.5
Finland	4.1	2.0	4.3	3.4	4.4	1.9	2.2	4.0	2.1	-2.4	-4.2	0.3	2.0	2.5	4.1	1.7	2.0	0.4	1.1	0.9
France	3.3	2.9	2.1	2.4	2.2	3.1	1.7	2.5	2.6	3.6	4.2	0.6	-0.1	2.2	2.1	0.3	2.6	1.8	1.6	1.5
Germany	2.2	2.5	2.1	2.5	1.5	2.1	-1.6	2.2	0.4	5.0	0.1	2.4	1.5	1.8	-0.9	0.5	-0.1	1.4	0.5	0.5
Greece	5.6	3.0	3.2	-0.8	0.9	5.7	5.5	0.6	-1.5	-3.1	2.6	-1.1	5.6	0.9	3.0	1.7	-0.1	0.8	0.5	0.5
Hungary	..	..	..	..	..	..	..	..	..	..	..	-7.4	-5.7	-1.9	3.1	2.8	2.5	1.5	4.1	4.0
Iceland	5.8	0.6	6.5	7.3	6.5	4.7	3.0	4.4	3.1	-0.7	2.3	4.0	1.8	1.2	2.5	3.4	5.1	3.7	2.5	2.0
Ireland	4.3	-0.7	1.8	2.6	-4.8	-5.0	-1.3	5.4	2.8	3.0	-0.4	4.1	2.8	3.1	5.7	5.1	5.2	4.8	4.7	3.8
Italy	2.7	1.8	3.0	2.6	4.8	4.0	0.2	2.5	1.7	0.6	-0.2	-0.9	-2.2	1.0	0.2	0.3	1.5	1.6	1.4	1.4
Japan	4.9	3.2	0.1	4.8	3.5	3.4	2.9	2.5	3.2	2.7	3.2	2.9	4.3	2.8	1.3	1.9	4.0	3.6	3.1	2.7
Korea	5.3	1.3	4.8	8.4	6.1	8.0	8.5	3.6	7.2	5.9	4.6	1.9	0.8	8.2	1.5	-0.4	1.3	1.3	1.0	0.8
Luxembourg	2.5	2.2	2.0	2.7	4.7	4.9	3.9	3.1	3.9	1.5	3.7	2.0	2.2	4.4	2.1	2.8	12.8	4.9	3.6	3.9
Mexico	6.9	6.5	1.0	1.4	-1.2	-0.5	2.2	3.3	5.4	1.9	2.4	2.9	-1.3	-0.7	2.9	2.3	3.9	3.5	1.7	2.6
Netherlands	3.0	0.0	2.4	3.6	2.6	1.4	1.5	1.6	1.5	1.7	1.5	0.6	0.6	-0.4	3.2	3.4	2.5	3.1	2.0	2.1
New Zealand	2.6	2.2	1.5	2.1	0.4	0.2	2.4	5.0	-1.6	0.9	1.2	1.2	4.4	2.6	7.0	-1.0	5.4	-3.3	0.8	1.0
Norway	4.8	0.8	2.4	1.9	4.6	-0.1	1.9	4.9	4.3	5.3	3.5	1.4	0.3	2.8	1.9	3.8	2.7	1.4	2.4	2.7
Poland	..	..	..	..	..	..	..	..	..	..	..	2.3	3.7	2.0	3.0	1.4	1.0	1.5	1.8	2.2
Portugal	7.4	0.2	6.4	7.2	3.8	8.6	6.6	5.4	10.3	1.1	0.9	2.1	2.2	-0.3	2.6	3.0	3.8	3.8	1.4	2.4
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	-11.4	2.1	21.0	4.0	4.0	-6.9	-0.9	1.0	2.5
Spain	5.1	1.9	4.3	4.6	9.2	3.6	8.3	6.3	6.0	3.5	2.7	0.5	2.4	1.3	2.9	3.7	2.9	2.6	2.3	1.7
Sweden	2.8	2.1	1.7	1.8	1.2	1.1	3.0	2.5	3.4	0.2	-0.1	-0.9	-0.6	0.9	-1.2	3.2	1.7	-1.7	1.0	2.0
Switzerland	1.9	1.7	3.4	3.4	1.7	4.5	5.4	5.4	3.5	0.7	-0.1	2.0	-0.1	2.0	0.0	0.7	-0.4	0.2	0.3	0.3
Turkey	6.7	1.9	14.1	9.2	9.4	-1.1	0.8	8.0	3.7	3.6	8.6	-5.5	6.8	8.6	4.1	7.8	6.5	7.1	-3.0	-1.3
United Kingdom	1.6	1.2	-0.2	1.6	0.0	0.0	0.8	2.5	2.9	0.5	-0.8	1.4	1.6	1.7	-1.4	1.1	4.0	2.7	4.3	3.3
United States	1.8	1.8	5.0	4.6	2.4	1.6	2.5	2.6	1.4	0.4	-0.3	0.2	0.0	0.5	1.8	1.5	2.1	2.0	1.7	2.4
Euro area	3.0	2.0	2.5	2.7	2.9	2.7	0.9	2.6	2.1	2.9	1.3	1.0	0.5	1.6	0.9	1.1	1.7	1.8	1.3	1.2
European Union	2.9	1.8	2.2	2.5	2.7	2.3	1.2	2.6	2.3	2.4	1.0	1.0	0.7	1.6	0.5	1.2	2.0	1.9	1.8	1.6
Total OECD	3.1	2.2	3.3	3.9	2.7	2.3	2.3	2.8	2.4	1.8	1.1	0.9	1.0	1.6	1.3	1.6	2.4	2.3	1.8	2.0

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods (*http://www.oecd.org/eco/sources-and-methods/index.htm*).

Source: OECD.

Annex Table 5. **Real total gross fixed capital formation**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	1.3	10.6	11.1	-2.8	4.8	9.1	10.3	-7.6	-8.5	3.2	4.9	11.6	3.2	4.9	11.0	7.5	6.4	1.1	-1.7	5.7
Austria	0.2	0.1	6.9	2.4	4.4	6.8	6.3	6.6	6.3	0.1	-2.0	8.4	1.2	2.2	1.0	2.7	3.2	2.9	2.2	2.6
Belgium	-1.2	2.7	6.9	3.2	6.2	15.7	12.6	8.5	-4.1	1.7	-3.1	-0.1	4.9	0.8	6.7	4.6	4.8	4.4	3.0	3.0
Canada	3.9	2.5	10.3	5.4	10.7	9.8	5.9	-3.6	-3.5	-1.3	-2.7	7.4	-1.9	5.8	15.4	3.4	10.1	11.2	3.7	5.8
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	17.0	19.8	8.2	-2.9	-3.9	-4.4	5.2	6.5	6.5
Denmark	-3.4	12.9	12.6	17.1	-3.8	-6.6	-0.6	-2.2	-3.4	-2.1	-3.8	7.7	11.6	3.9	10.9	7.8	1.4	11.1	2.1	1.6
Finland	1.1	-1.7	2.8	1.0	4.9	11.0	13.0	-4.6	-18.6	-16.7	-16.6	-2.7	10.6	8.4	11.9	9.3	2.7	4.8	4.5	4.6
France	-0.1	-1.1	2.9	4.4	5.7	8.9	7.7	3.2	-1.6	-1.7	-6.5	1.5	2.1	-0.1	0.0	6.6	7.3	6.7	5.0	3.8
Germany	-0.4	0.1	-0.5	3.3	1.8	4.4	6.3	8.5	6.0	4.5	-4.5	4.0	-0.7	-0.8	0.6	3.0	3.3	2.4	2.1	2.9
Greece	-1.9	-5.7	5.2	-6.2	-5.1	8.9	7.1	5.0	4.8	-3.2	-3.5	-2.7	4.2	8.4	7.8	11.8	7.3	8.1	9.0	9.5
Hungary	..	..	..	..	..	..	..	..	..	..	..	12.5	-4.3	6.7	9.2	13.3	6.6	6.7	6.7	6.8
Iceland	0.0	9.4	1.0	-1.6	18.8	-0.2	-7.9	3.0	3.3	-11.1	-10.7	0.6	-1.1	25.7	9.6	26.6	-0.8	9.0	-1.4	1.0
Ireland	2.2	-2.5	-7.7	-2.8	-1.1	5.2	10.1	13.4	-6.2	-1.8	-3.5	12.0	12.7	16.4	17.9	15.5	13.0	11.3	10.6	9.3
Italy	-0.1	3.4	0.4	2.3	4.2	6.7	4.2	4.0	1.0	-1.4	-10.9	0.1	6.0	3.6	2.1	4.3	4.6	6.1	3.0	4.2
Japan	0.9	4.4	5.1	5.1	9.4	12.0	8.6	8.8	2.2	-2.5	-3.1	-1.4	0.3	6.8	1.0	-4.0	-0.9	1.1	1.1	-1.4
Korea	12.2	10.0	4.3	10.6	17.0	13.7	15.9	28.2	13.3	-0.7	6.3	10.7	11.9	7.3	-2.2	-21.2	3.7	11.0	-0.9	4.0
Luxembourg	-2.3	0.1	-9.5	31.0	17.9	15.0	7.0	2.7	31.6	-9.0	28.4	-14.9	3.5	-3.5	10.5	1.5	26.6	0.5	5.7	5.4
Mexico	2.0	6.4	7.9	-11.8	-0.1	5.8	5.8	13.1	11.0	10.8	-2.5	8.4	-29.0	16.4	21.0	10.3	7.7	10.0	6.5	7.8
Netherlands	-1.3	5.8	7.0	6.9	0.9	4.5	4.9	1.6	0.2	0.6	-2.8	2.2	5.0	6.3	6.6	4.1	6.5	4.0	2.8	1.9
New Zealand	-0.4	11.5	4.0	-1.8	-0.1	-0.7	4.4	0.1	-17.9	-0.3	14.2	15.4	12.2	9.3	1.6	-3.7	5.7	7.4	4.1	4.4
Norway	2.7	1.0	-4.0	7.6	0.3	-1.8	-6.9	-10.8	-0.4	-3.1	3.8	4.5	3.4	9.9	13.9	5.8	-5.6	-2.7	-0.1	1.6
Poland	..	..	..	..	..	..	..	..	..	..	..	9.2	16.5	19.7	21.7	14.2	6.5	3.1	4.5	5.6
Portugal	0.6	-17.4	-3.5	10.9	18.0	14.8	4.4	7.6	3.5	4.8	-6.0	3.4	4.8	6.2	10.6	8.8	5.4	5.2	6.0	5.3
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	-5.0	5.3	32.0	12.0	11.1	-18.8	-0.7	8.5	6.5
Spain	-0.9	-4.8	6.7	10.5	12.2	13.6	12.0	6.5	1.7	-4.1	-8.9	1.9	7.7	2.1	5.0	9.7	8.9	5.9	4.1	3.9
Sweden	-0.3	7.5	7.0	1.1	8.0	6.4	12.1	0.2	-8.6	-11.6	-15.0	6.1	9.4	5.0	-1.1	8.5	8.1	4.5	6.1	6.4
Switzerland	0.4	4.7	2.8	5.4	4.0	8.1	5.3	3.8	-2.9	-6.6	-2.7	6.5	1.8	-2.4	1.5	4.5	1.8	6.8	5.2	4.3
Turkey	2.9	0.9	11.5	8.4	45.1	-1.0	2.2	15.9	0.4	6.4	26.4	-16.0	9.1	14.1	14.8	-3.9	-15.7	16.5	-17.6	-3.0
United Kingdom	-0.2	9.3	4.0	2.1	8.9	14.8	5.9	-2.3	-8.7	-0.7	0.8	3.6	2.9	4.9	7.5	10.1	5.4	2.6	3.3	3.0
United States	1.8	16.0	6.7	2.7	1.1	2.9	2.9	-0.2	-5.4	5.3	5.9	7.4	5.5	8.4	8.9	10.7	9.2	8.8	0.9	2.7
Euro area	-0.4	0.1	2.0	3.9	4.4	7.6	7.1	5.2	1.2	0.1	-6.4	2.4	2.6	1.3	2.4	5.2	5.4	4.8	3.5	3.7
European Union	-0.3	1.7	2.7	4.0	5.3	8.6	6.9	4.0	-0.3	-0.3	-5.6	2.6	3.5	2.3	3.4	6.2	5.5	4.6	3.5	3.6
Total OECD	1.5	7.9	5.3	3.4	5.4	6.9	5.8	3.8	-1.4	1.8	0.3	4.4	3.2	6.4	6.3	5.5	5.5	6.3	1.9	2.8

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*

Source: OECD.

Annex Table 6. **Real gross private non-residential fixed capital formation**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	2.0	7.0	14.1	-3.0	8.6	9.3	10.3	-7.6	-11.2	0.4	2.1	12.3	7.7	9.0	10.8	6.8	4.8	-0.1	2.0	5.3
Austria	0.9	0.8	13.0	1.5	8.3	9.4	9.6	11.1	7.7	-3.3	-6.5	10.1	-1.7	4.0	9.2	4.3	4.0	4.7	2.1	3.5
Belgium	-1.1	8.2	8.8	6.4	8.9	13.9	17.6	10.6	-3.7	0.2	-6.8	-2.4	6.8	4.0	7.3	5.9	5.7	4.6	4.7	3.6
Canada	6.6	3.1	10.4	1.6	9.6	16.8	6.0	-1.6	0.5	-5.9	-2.4	9.2	5.7	6.4	20.7	6.1	10.5	14.0	3.8	6.7
Denmark	0.5	11.7	18.5	18.0	-4.7	-7.2	3.7	2.0	-1.2	-5.5	-7.7	7.6	13.6	2.3	13.9	10.5	1.4	11.0	4.0	2.0
Finland	1.0	-1.6	5.8	4.7	5.3	10.7	16.3	-7.4	-23.1	-18.8	-17.5	-2.9	20.9	9.8	8.1	13.0	1.2	7.0	5.2	5.3
France	0.5	0.6	4.4	6.6	7.6	9.6	8.3	5.5	-1.2	-2.4	-7.9	0.7	3.2	-0.3	1.3	9.0	8.3	7.8	7.4	5.4
Germany	0.8	-0.4	5.0	4.3	3.8	5.6	7.4	10.1	7.5	0.7	-9.0	0.7	1.0	-0.8	2.3	5.2	5.0	6.1	4.3	4.6
Greece	0.9	-0.6	9.9	-19.5	-7.7	17.0	18.7	7.6	5.1	3.8	1.9	0.6	3.0	15.1	8.2	13.0	5.4	9.2	10.9	12.0
Iceland	1.7	11.1	7.0	3.9	22.0	-9.3	-14.0	6.1	5.5	-16.5	-21.9	1.2	8.7	46.1	17.3	38.0	-2.5	11.3	-3.0	1.0
Ireland	3.1	-3.0	-15.1	-4.4	6.5	19.6	9.6	19.0	-10.6	-5.3	-3.1	8.4	12.9	17.7	20.6	20.7	10.6	10.7	8.4	7.7
Italy	-0.9	5.7	0.7	5.7	7.6	10.9	5.3	5.5	0.2	-1.2	-14.7	4.0	10.3	5.0	4.0	5.1	5.6	8.7	3.6	4.9
Japan	2.0	11.9	12.2	4.9	6.2	15.5	15.0	11.5	4.4	-7.3	-11.6	-6.5	2.4	4.2	13.2	-2.3	-4.2	4.4	4.3	1.1
Korea	..	16.1	4.6	13.0	20.5	12.7	15.6	18.9	13.4	0.1	5.3	15.1	14.1	7.3	-3.0	-29.2	10.2	18.4	-3.6	4.3
Mexico	..	10.5	15.9	-17.1	8.7	20.3	7.1	19.6	22.6	22.8	-5.6	-0.4	-38.9	45.8	34.0	18.3	9.8	12.0	7.5	9.2
Netherlands	-0.4	5.6	14.8	12.0	0.3	1.2	8.1	2.5	2.2	-3.4	-4.3	0.1	7.7	7.0	9.2	5.4	8.6	5.0	3.4	2.2
New Zealand	0.7	28.1	3.0	-5.2	13.5	-3.1	6.4	-7.3	-17.3	9.8	23.9	17.5	15.6	11.4	-5.2	3.1	6.3	10.4	8.6	5.5
Norway	3.3	1.6	-5.4	6.7	-2.1	-1.6	-7.4	-10.3	1.8	-3.5	6.5	2.5	2.3	13.3	14.2	7.1	-7.5	-5.5	-0.1	1.4
Spain	0.2	-7.9	0.1	17.3	19.6	14.0	12.1	3.9	3.7	-1.0	-13.5	3.5	12.4	3.3	7.5	9.7	9.5	6.0	4.0	3.8
Sweden	0.5	7.6	14.0	3.1	8.6	5.3	14.5	-2.3	-14.6	-15.2	-10.9	18.5	20.0	8.0	2.6	9.6	6.8	6.4	6.0	6.5
Switzerland	2.0	3.8	5.2	8.7	4.6	9.7	4.7	6.3	-2.6	-10.6	-5.9	2.0	4.9	2.3	4.3	6.8	2.0	9.0	6.3	4.9
United Kingdom	1.8	11.1	9.2	-3.2	12.0	16.7	12.9	1.0	-7.9	-2.9	-2.9	3.7	7.7	8.8	11.8	13.8	7.5	2.4	3.3	2.6
United States	3.0	17.6	6.7	-2.7	-0.1	5.4	5.5	0.7	-4.9	3.4	8.4	8.9	9.8	10.0	12.2	13.0	10.1	12.6	0.8	2.8
Euro area	0.2	0.7	4.4	6.3	7.0	8.9	8.5	6.5	1.8	-1.1	-9.8	1.6	4.9	2.1	4.4	6.9	6.5	6.8	4.9	4.7
European Union	0.6	2.9	5.6	4.9	7.6	10.0	9.4	5.6	0.0	-1.9	-8.7	2.6	6.4	3.6	5.5	8.1	6.6	6.3	4.7	4.4
Total OECD	2.3	10.5	7.5	1.4	5.0	9.6	8.6	4.9	-0.3	-0.1	-1.7	4.3	5.9	7.7	10.3	7.4	6.5	9.0	2.9	3.6

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. Some countries, United States, Canada and France use hedonic price indices to deflate current-price values of investment in certain information and communication technology products such as computers. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex. National account data do not always have a sectoral breakdown of investment expenditures, and for some countries data are estimated by the OECD. See also *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)*.

Source: OECD.

Annex Table 7. **Real gross private residential fixed capital formation**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	0.5	20.6	2.6	-7.6	-2.5	19.8	8.8	-11.2	-6.1	13.1	13.3	11.9	-5.9	-7.7	13.5	13.7	7.2	0.5	-16.0	8.0
Austria	0.1	-1.3	-0.8	2.1	2.8	7.2	0.4	-1.1	4.7	8.6	4.4	7.6	11.5	2.4	-2.0	1.0	2.0	0.8	1.5	2.0
Belgium	-5.5	2.7	20.4	0.0	8.5	25.2	17.6	8.0	-8.9	4.9	1.8	5.3	5.6	-4.1	5.0	2.3	0.2	2.8	1.9	1.5
Canada	1.8	0.6	9.2	12.8	14.7	2.2	4.2	-10.2	-14.5	7.2	-3.5	4.2	-15.1	9.7	12.6	-2.0	6.6	1.6	2.8	4.2
Denmark	-7.9	20.3	-2.1	21.3	-3.2	-9.4	-8.4	-11.3	-10.1	0.1	6.3	8.9	8.5	5.8	7.1	4.5	2.1	13.5	-5.9	0.2
Finland	0.4	-1.5	-4.2	-7.8	0.9	15.8	17.4	-5.6	-16.6	-20.6	-14.3	-4.5	-2.7	2.6	21.5	7.8	10.3	2.2	4.8	5.1
France	-0.9	-4.4	-2.7	1.6	2.9	5.6	7.4	-1.7	-6.9	-3.7	-5.2	4.4	2.1	0.4	0.9	3.6	8.3	5.7	1.3	0.9
Germany	-1.3	2.0	-10.0	-0.6	-1.3	3.6	4.8	8.4	4.2	10.8	4.7	12.0	0.4	-0.2	0.4	0.3	-0.2	-2.9	-1.7	0.2
Greece	-3.8	-19.7	-0.5	14.6	3.4	2.9	-1.8	5.4	-0.6	-16.7	-10.5	-11.3	2.6	-1.2	6.6	9.8	6.9	4.8	6.3	6.1
Iceland	-2.3	10.4	-13.6	-13.9	14.2	14.9	2.8	-0.6	-4.1	-3.4	-5.2	4.1	-8.7	7.1	-9.7	1.1	0.3	1.4	2.0	-1.1
Ireland	0.9	8.3	-0.7	8.1	6.2	0.3	13.2	-0.6	1.1	8.1	-11.7	23.6	14.9	18.4	16.1	5.8	14.5	13.5	14.7	12.0
Italy	-0.4	0.6	-3.1	-3.0	-2.1	2.2	3.0	3.7	3.3	1.3	-1.5	-2.3	-0.1	-1.4	-2.8	-0.6	1.8	2.5	1.5	2.3
Japan	-1.8	-2.1	2.6	8.1	22.4	11.4	0.9	4.8	-6.7	-5.8	1.7	7.4	-6.1	13.7	-15.7	-13.7	1.1	1.5	-2.5	-1.3
Korea	11.9	-9.3	0.8	16.2	9.0	22.7	19.7	62.1	10.8	-7.3	11.2	-1.7	8.3	1.5	-6.3	-7.9	-16.5	-10.9	-0.5	1.5
Mexico	3.0	5.0	8.1	-1.6	4.4	-1.2	5.8	4.4	7.6	2.9	5.2	4.0	-7.9	2.5	4.5	3.4	2.9	5.2	5.2	6.0
Netherlands	-2.0	4.4	-0.8	4.2	1.6	11.3	0.7	-2.5	-5.4	6.4	-0.3	6.2	0.9	3.9	6.4	-0.9	3.3	-0.3	1.1	1.0
New Zealand	-4.1	18.5	-0.5	-3.1	-4.9	7.2	11.5	5.0	-16.5	1.3	14.8	13.2	2.4	4.8	7.1	-16.1	11.4	0.2	-5.1	2.0
Norway	1.8	-0.7	-0.9	7.8	3.2	-6.9	-12.5	-17.8	-21.7	-10.6	3.1	24.6	9.1	-0.1	7.4	-0.9	-2.2	10.7	5.0	5.0
Spain	-3.2	-5.4	6.5	2.1	6.3	11.4	3.3	6.4	-3.7	-4.0	-4.1	0.4	7.1	10.0	0.8	9.6	10.4	7.2	2.7	3.6
Sweden	-1.8	11.2	-2.5	-2.2	8.8	8.4	4.8	7.2	-2.4	-11.6	-33.5	-34.1	-23.9	8.9	-11.5	3.2	22.3	7.9	12.0	10.0
Switzerland	-1.7	9.4	0.5	-1.6	2.7	4.9	5.8	-3.4	-7.7	-1.6	5.8	19.3	0.0	-10.2	-4.0	-0.6	0.8	2.5	3.2	3.3
United Kingdom	-0.3	6.7	-2.7	12.0	8.1	19.0	-11.6	-17.5	-15.1	0.2	8.1	2.5	-3.1	9.7	2.5	-0.3	0.6	0.4	1.6	2.9
United States	-1.2	14.6	1.4	12.0	0.2	-0.5	-4.1	-8.6	-12.8	16.3	7.3	9.7	-3.6	7.4	2.0	8.3	6.4	-0.5	-1.7	0.6
Euro area	-1.4	-1.3	-3.8	0.3	1.1	6.1	5.1	3.3	-1.1	2.7	-0.1	6.2	1.8	1.0	1.0	1.9	3.4	1.5	0.9	1.8
European Union	-1.1	0.9	-2.7	2.5	2.4	8.0	2.2	0.1	-3.3	1.8	-0.1	3.6	0.7	2.7	1.0	1.9	3.8	2.1	1.2	2.0
Total OECD	-0.1	5.9	0.6	7.3	5.1	5.4	0.5	-1.1	-7.2	6.1	3.6	6.7	-2.5	5.9	-0.5	1.7	3.9	0.7	-0.6	1.3

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)*.
Source: OECD.

Annex Table 8. **Real total domestic demand**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	5.5	6.0	5.3	0.8	3.0	5.7	7.0	-0.7	-2.3	3.0	3.0	5.3	4.8	3.2	3.4	7.0	5.7	2.5	1.3	4.0
Austria	2.1	1.3	2.0	2.2	2.4	3.2	3.3	4.4	3.6	1.4	0.8	3.3	2.0	1.9	1.0	2.8	2.4	2.7	2.0	2.1
Belgium	1.4	2.5	2.0	2.6	3.5	4.8	4.3	2.9	1.7	1.8	-1.5	2.1	1.9	0.9	2.6	3.9	2.1	3.4	2.3	2.3
Canada	2.9	4.7	5.8	3.4	4.7	5.3	4.1	0.0	-1.4	0.9	1.4	3.2	1.7	1.4	6.2	2.2	4.2	5.5	2.5	3.2
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	6.3	8.4	7.9	-0.9	-3.0	-0.9	4.1	3.4	4.2
Denmark	0.7	5.0	5.1	5.6	-1.7	-0.7	-0.1	-0.7	-0.1	0.9	-0.3	7.0	4.2	2.2	4.9	4.5	-0.7	2.8	1.6	1.6
Finland	2.4	2.0	3.3	2.9	5.1	6.4	6.7	-1.2	-8.5	-5.8	-5.7	3.7	4.4	2.9	6.0	5.8	2.5	3.0	2.6	2.6
France	2.0	0.9	2.0	3.4	3.3	4.2	3.9	2.7	0.5	0.6	-1.6	1.8	1.8	0.7	0.6	4.0	3.2	3.3	2.9	2.9
Germany	1.3	1.9	1.0	3.3	2.4	3.5	2.8	5.2	4.6	2.8	-1.1	2.3	1.7	0.3	0.6	2.4	2.4	2.0	2.0	2.0
Greece	2.2	0.9	4.7	0.5	0.1	4.4	5.0	2.4	3.6	-1.5	-0.9	1.2	4.0	3.3	3.6	4.7	2.9	3.8	3.9	4.3
Hungary	..	..	..	..	..	..	..	..	..	..	..	2.0	-3.0	0.6	4.0	7.8	4.3	5.1	5.7	5.4
Iceland	3.1	6.3	2.8	4.6	15.7	-0.7	-4.4	1.5	4.5	-4.6	-4.2	2.5	2.2	7.2	5.7	12.3	4.7	5.4	1.0	1.9
Ireland	2.7	1.5	1.5	1.0	0.8	2.8	6.9	5.9	0.1	-0.3	1.1	5.6	7.2	7.8	9.8	9.4	6.3	7.0	8.2	8.2
Italy	2.3	3.3	3.2	3.1	4.3	4.1	3.1	2.7	2.1	0.9	-5.1	1.7	2.0	0.9	2.7	3.1	3.0	2.3	2.0	2.7
Japan	2.7	3.3	3.9	3.8	5.3	7.3	5.6	5.3	2.7	0.6	0.3	1.2	2.1	4.0	0.9	-1.5	0.9	1.3	1.2	0.7
Korea	7.2	8.9	5.5	8.2	10.6	11.4	12.6	11.6	10.4	3.2	4.6	9.6	9.3	7.8	-0.8	-19.8	14.7	6.7	2.4	4.0
Luxembourg	1.6	1.3	0.4	8.9	7.2	6.8	4.9	4.7	11.6	-2.6	8.3	-2.8	2.6	2.7	5.6	2.3	11.5	3.0	4.6	4.5
Mexico	4.0	4.3	4.1	-4.9	1.1	3.9	5.6	7.0	5.7	6.0	1.1	5.6	-14.0	5.6	9.6	6.1	4.3	8.8	4.2	5.3
Netherlands	1.4	1.7	3.7	3.9	1.4	1.9	4.4	3.2	1.7	1.5	-1.1	2.9	1.9	2.8	3.9	4.2	4.2	3.6	3.1	3.0
New Zealand	0.6	10.3	0.0	1.3	1.2	0.8	4.0	0.4	-6.2	1.7	5.1	6.9	5.5	4.8	2.5	-0.5	5.5	1.4	2.1	2.2
Norway	2.8	4.5	5.4	7.1	-0.7	-3.0	-2.0	-0.4	0.8	1.7	3.5	4.0	4.1	4.2	6.3	5.4	-1.0	1.6	1.4	2.2
Poland	..	..	..	..	..	..	..	..	..	..	..	4.8	6.9	9.7	9.3	6.5	4.9	3.5	3.0	3.1
Portugal	2.2	-4.9	1.7	6.0	8.8	9.8	3.6	5.5	3.7	4.3	-1.2	2.7	2.8	3.0	4.6	6.1	4.7	3.3	2.8	3.1
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	-5.0	10.6	16.1	4.3	9.5	-4.6	-1.3	2.7	3.9
Spain	1.3	-0.2	3.2	5.3	7.9	6.8	7.3	4.6	3.0	1.0	-3.3	1.5	3.1	1.9	3.4	5.6	5.5	4.1	2.9	2.9
Sweden	1.0	3.4	4.3	3.0	4.3	3.0	3.7	0.7	-1.6	-1.9	-4.6	3.0	1.9	0.7	0.9	4.3	3.4	3.2	2.5	3.3
Switzerland	0.9	3.2	1.9	4.5	2.0	2.6	4.1	3.9	-0.6	-2.7	-1.0	2.7	1.8	0.4	1.3	4.3	1.4	3.1	2.6	2.3
Turkey	3.8	6.4	3.2	7.0	8.9	-1.3	1.5	14.6	-0.6	5.6	14.2	-12.5	11.4	7.6	9.0	0.6	-3.7	9.6	-12.1	-0.1
United Kingdom	0.9	2.8	3.1	4.7	4.9	8.0	2.8	-0.3	-2.7	0.8	2.2	3.4	1.8	3.0	3.8	4.6	3.8	3.7	3.1	2.8
United States	2.2	8.7	4.2	3.6	3.1	3.2	2.8	1.4	-1.1	3.1	3.2	4.4	2.5	3.7	4.7	5.5	5.2	5.7	1.9	3.1
Euro area	1.8	1.7	2.2	3.3	3.5	4.2	3.9	3.6	2.3	1.4	-2.1	2.1	2.0	1.1	1.8	3.5	3.1	2.8	2.5	2.6
European Union	1.6	1.9	2.5	3.7	3.8	4.8	3.7	2.9	1.5	1.2	-1.6	2.4	2.1	1.4	2.2	3.8	3.2	3.0	2.6	2.7
Total OECD	2.4	5.1	3.6	3.6	3.9	4.6	4.0	3.1	0.9	2.1	1.2	3.1	2.3	3.2	3.4	3.0	3.9	4.2	1.9	2.7

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*

Source: OECD.

Annex Table 9. **Real exports of goods and services**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	3.0	16.1	11.1	4.3	12.2	3.5	2.9	8.5	13.1	5.4	8.0	9.0	5.1	10.6	11.5	-0.3	4.5	10.4	7.0	7.1
Austria	5.1	6.3	7.1	-2.3	3.1	10.2	11.3	7.9	5.9	1.7	-1.3	5.6	6.5	6.2	9.9	5.5	7.6	9.8	6.0	6.5
Belgium	2.7	6.5	0.4	2.8	5.0	9.6	8.3	4.6	3.1	3.7	-0.4	8.4	5.7	1.2	6.7	4.4	5.2	11.8	7.7	6.5
Canada	3.3	18.6	5.5	5.2	3.3	9.5	1.3	4.7	2.3	7.9	10.9	13.1	9.0	5.9	8.8	8.9	10.0	9.6	4.0	6.8
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	0.2	16.7	9.2	8.1	10.7	4.8	18.8	15.9	14.9
Denmark	4.0	3.5	5.0	0.0	5.1	7.8	4.2	6.2	6.1	-0.9	-1.5	7.0	2.9	4.3	4.1	2.4	9.7	9.8	7.1	6.3
Finland	4.6	5.2	0.7	0.7	2.9	3.5	1.6	1.2	-7.3	10.3	16.7	13.1	8.6	5.8	14.1	8.9	7.1	17.7	7.9	7.4
France	4.5	7.3	2.1	-0.8	2.8	8.5	10.8	4.8	5.5	5.2	-0.1	7.9	7.8	3.1	12.1	7.7	4.0	13.6	7.4	6.5
Germany	4.1	8.2	7.6	-0.6	0.4	5.5	10.2	11.0	12.6	-0.8	-5.5	7.6	5.7	5.1	11.3	7.0	5.1	13.2	8.7	7.4
Greece	5.1	16.9	1.3	14.0	16.0	9.0	4.6	-4.0	3.7	10.5	-3.5	6.3	0.5	3.5	18.2	5.9	6.5	12.3	9.4	8.9
Hungary	..	..	..	..	..	..	..	..	..	..	..	13.7	13.4	8.4	26.4	16.7	13.2	21.8	15.0	11.1
Iceland	4.9	2.4	11.1	5.9	3.3	-3.6	2.9	0.0	-5.9	-1.9	7.0	9.9	-2.1	9.9	5.7	2.2	4.4	5.1	0.0	4.0
Ireland	7.3	16.6	6.6	2.9	13.7	9.0	10.3	8.7	5.7	13.9	9.7	15.1	20.0	12.2	17.4	21.4	12.4	20.0	11.9	10.6
Italy	4.8	7.7	3.9	0.8	4.5	5.1	7.8	7.5	-1.4	7.3	9.0	9.8	12.6	0.6	6.4	3.6	0.0	10.2	8.2	6.1
Japan	8.6	14.8	5.5	-5.5	-0.5	5.9	9.1	7.0	4.1	3.9	-0.1	3.5	4.1	6.5	11.2	-2.3	1.4	12.0	3.4	8.3
Korea	13.6	7.7	4.6	26.5	21.7	12.5	-4.1	3.8	11.2	11.3	11.3	16.1	24.6	11.2	21.4	14.1	15.8	21.6	11.0	12.0
Luxembourg	0.9	18.0	9.5	3.3	4.4	11.7	8.1	3.4	6.7	4.8	2.8	4.4	4.4	4.0	10.5	9.9	7.9	14.3	8.0	7.5
Mexico	9.7	5.8	-4.5	4.5	9.5	5.8	5.7	5.3	5.1	5.0	8.1	17.8	30.2	18.2	10.7	12.1	12.4	16.0	8.1	9.0
Netherlands	2.4	7.5	5.1	1.8	4.0	9.0	6.6	5.3	4.7	2.9	1.5	6.7	7.1	4.6	8.8	7.4	5.6	9.1	7.0	6.0
New Zealand	4.3	7.4	8.0	-0.4	6.0	5.0	-2.6	4.6	9.6	2.7	5.9	10.2	3.2	3.8	3.8	0.8	7.3	6.4	3.9	7.4
Norway	4.2	7.9	7.2	2.2	1.1	6.4	11.0	8.6	6.1	5.2	3.5	8.7	4.3	9.3	6.1	0.3	1.7	2.8	3.8	3.5
Poland	..	..	..	..	..	..	..	..	..	..	..	13.1	22.8	12.0	12.2	14.3	-2.6	12.8	10.0	11.0
Portugal	2.4	11.6	6.7	6.8	11.2	8.2	13.0	10.0	2.6	4.9	-3.6	8.7	9.1	7.1	8.5	7.6	2.5	7.0	7.7	8.1
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	14.2	3.0	0.7	17.6	12.2	3.4	15.9	14.2	13.2
Spain	6.0	12.0	0.7	0.2	5.3	3.8	1.4	4.7	8.2	7.5	7.8	16.7	9.4	10.4	15.3	8.3	6.6	10.8	8.2	7.4
Sweden	3.3	7.1	1.2	3.4	4.3	2.8	3.2	1.8	-1.9	2.2	8.3	14.1	11.3	3.5	13.7	8.4	5.9	9.8	6.5	7.3
Switzerland	2.4	7.5	8.0	-0.4	2.3	6.5	6.6	2.1	-2.1	3.0	1.5	1.8	1.6	2.5	8.6	5.0	5.9	9.5	4.4	5.7
Turkey	8.6	25.4	-1.9	-5.1	26.4	18.4	-0.3	2.6	3.7	11.0	7.7	15.2	8.0	22.0	19.1	12.0	-7.0	19.3	15.0	22.0
United Kingdom	2.7	6.6	6.0	4.5	5.9	0.6	4.8	4.9	-0.2	4.1	3.9	9.2	9.5	7.5	8.6	2.6	4.0	8.4	6.6	7.0
United States	3.8	8.4	2.7	7.4	11.2	16.1	11.8	8.7	6.5	6.2	3.3	8.9	10.3	8.2	12.3	2.3	2.9	9.0	4.3	7.6
Total OECD	5.3	9.9	3.8	3.4	7.1	10.0	8.5	7.2	5.5	5.3	3.1	9.0	9.7	7.3	11.6	4.2	4.0	11.2	6.1	7.9

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
Source: OECD.

Annex Table 10. **Real imports of goods and services**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	3.2	22.1	3.5	-3.3	2.7	17.1	20.6	-4.0	-2.4	7.1	4.2	14.1	8.1	8.2	10.3	5.9	9.3	7.4	3.7	7.5
Austria	3.7	10.1	6.2	-2.9	5.4	10.4	8.4	7.3	6.5	1.8	-0.7	8.3	7.0	5.8	9.7	3.7	7.1	9.2	5.5	5.9
Belgium	1.8	6.4	0.4	4.5	6.7	10.4	9.6	4.8	2.8	4.1	-0.4	7.2	5.0	0.8	5.7	6.5	4.5	11.4	7.4	6.3
Canada	3.9	18.1	8.8	8.5	5.6	13.7	6.3	2.3	3.2	6.2	7.4	8.3	6.2	5.8	15.1	6.1	9.4	12.0	4.7	7.0
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	7.6	21.2	14.3	7.2	7.9	4.0	18.7	15.3	14.8
Denmark	0.7	5.5	8.1	6.8	-2.0	1.5	4.1	1.2	3.0	-0.4	-2.7	12.3	7.3	3.5	10.0	7.4	2.2	10.2	6.5	5.8
Finland	2.9	1.9	6.2	1.5	9.2	10.9	9.0	-0.8	-13.5	0.6	1.3	12.8	7.8	6.4	11.3	8.5	4.3	12.8	6.2	6.1
France	2.8	3.1	4.7	6.3	7.5	8.6	8.4	5.2	2.6	1.7	-3.8	8.5	7.8	1.5	7.1	11.3	4.0	14.7	8.7	7.5
Germany	3.0	5.2	4.5	2.7	4.2	5.1	8.3	10.3	13.1	1.5	-5.5	7.4	5.6	3.1	8.4	8.6	8.1	10.2	8.4	6.4
Greece	2.5	0.2	12.8	3.8	16.6	8.0	10.6	8.7	6.0	-2.8	0.2	1.2	9.2	7.0	13.9	11.3	3.9	8.7	7.5	7.2
Hungary	..	..	..	..	..	..	..	..	..	..	..	8.8	-0.7	6.2	24.6	22.8	12.3	21.1	15.4	11.7
Iceland	1.8	9.1	9.4	0.9	23.3	-4.6	-10.3	1.0	5.3	-5.9	-7.7	4.2	4.0	16.7	8.5	23.3	5.7	9.3	-1.0	2.5
Ireland	4.0	9.9	3.2	5.6	6.2	4.9	13.5	5.1	2.4	8.2	7.5	15.5	16.4	12.5	16.8	25.8	8.7	18.5	13.0	11.5
Italy	2.4	12.4	5.3	4.0	12.2	5.9	8.9	11.5	2.3	7.4	-10.9	8.1	9.7	-0.3	10.1	9.0	5.1	8.3	7.7	7.1
Japan	1.0	10.5	-2.5	3.2	11.3	19.5	15.7	7.0	-1.1	-0.7	-1.4	7.8	12.8	13.2	1.2	-6.8	3.0	9.7	5.7	5.3
Korea	11.6	7.4	-0.6	17.9	19.6	12.9	16.3	13.0	19.2	5.3	6.2	21.6	22.4	14.2	3.2	-22.1	28.8	20.0	9.8	12.0
Luxembourg	1.2	13.9	7.0	3.8	7.5	8.2	6.6	4.5	9.0	-0.8	2.8	-0.1	3.8	4.0	9.3	8.3	11.2	10.5	7.6	7.1
Mexico	1.0	17.8	11.0	-7.6	5.1	36.7	18.0	19.7	15.2	19.6	1.9	21.3	-15.0	22.9	22.7	16.6	13.8	21.4	9.0	10.4
Netherlands	1.7	5.0	6.3	3.5	4.2	7.6	6.7	4.2	4.1	2.1	-2.1	6.7	7.2	4.4	9.5	8.0	6.3	9.1	7.5	6.5
New Zealand	0.8	16.5	0.6	2.8	8.6	-0.7	12.4	2.1	-5.4	8.3	5.8	13.2	8.5	7.7	2.7	1.3	12.3	1.2	3.5	5.0
Norway	2.0	5.8	8.9	11.8	-6.5	-2.4	2.2	2.5	0.2	0.7	4.4	4.9	5.6	8.0	11.3	9.3	-3.1	1.2	2.7	4.3
Poland	..	..	..	..	..	..	..	..	..	..	..	11.2	24.3	28.0	21.4	18.5	1.0	9.1	6.0	7.3
Portugal	0.9	-4.4	1.4	16.9	23.1	18.0	6.1	14.0	7.3	10.7	-3.3	9.0	7.8	4.9	10.6	13.8	7.0	6.5	7.0	7.5
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	-3.4	9.2	17.2	13.1	19.8	-6.0	10.2	14.0	13.5
Spain	2.4	-1.3	7.5	17.2	24.8	16.1	17.7	9.6	10.3	6.8	-5.2	11.4	11.1	8.0	13.3	13.4	11.9	10.4	8.0	7.3
Sweden	1.7	5.7	8.0	3.8	7.6	4.5	7.7	0.7	-4.9	1.5	-2.2	12.2	7.2	3.0	12.5	11.2	4.3	9.7	6.3	8.3
Switzerland	2.5	8.3	3.7	8.1	6.2	5.2	5.9	2.6	-1.6	-4.2	0.1	7.9	5.1	2.7	7.6	9.6	5.5	8.6	5.5	6.0
Turkey	7.3	19.7	-6.6	-3.5	23.0	-4.5	6.9	33.0	-5.2	10.9	35.8	-21.9	29.6	20.5	22.4	2.3	-3.7	25.4	-8.5	9.0
United Kingdom	1.9	9.9	2.5	6.9	7.9	12.8	7.4	0.5	-5.0	6.8	3.2	5.4	5.5	9.1	9.2	8.8	8.1	9.6	7.7	7.0
United States	3.1	24.3	6.5	8.4	6.1	3.8	3.9	3.8	-0.5	6.6	9.1	12.0	8.2	8.6	13.7	11.9	10.7	13.5	4.8	6.7
Total OECD	3.1	14.7	4.3	6.1	8.4	9.4	8.7	6.4	2.1	4.9	2.9	9.8	8.8	8.6	10.6	7.3	8.3	12.3	6.2	7.0

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
Source: OECD.

Deviations of actual GDP from potential GDP as a percentage of potential GDP

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	-5.5	-1.9	-0.4	-2.0	-0.9	-0.3	0.2	-2.0	-5.6	-5.6	-4.4	-2.2	-1.2	-0.7	-0.5	0.8	1.2	0.8	-1.0	-1.0
Austria	-0.6	-2.4	-2.4	-2.0	-2.0	-0.8	1.1	2.7	3.0	1.9	-0.8	-0.8	-1.0	-1.0	-1.3	-0.4	-0.1	0.6	0.4	0.5
Belgium	-4.3	-3.5	-3.1	-2.9	-1.6	1.1	2.5	3.1	2.4	1.4	-2.5	-2.4	-2.2	-3.4	-2.2	-2.1	-1.7	-0.4	-0.3	-0.2
Canada	-5.4	-2.0	1.1	0.9	2.2	4.0	3.3	1.0	-3.7	-5.0	-5.0	-2.5	-2.0	-2.9	-1.8	-1.6	-0.3	0.8	-0.3	-0.1
Denmark	-2.5	-0.2	1.6	3.2	1.4	-0.2	-2.0	-3.2	-3.5	-4.1	-5.5	-2.5	-2.1	-1.5	-0.6	0.2	0.4	1.0	0.7	0.4
Finland	-1.4	-1.1	-0.9	-1.1	0.3	2.4	4.6	2.7	-4.9	-9.0	-11.4	-9.5	-7.8	-6.6	-4.1	-2.7	-2.1	0.1	0.4	0.4
France	-3.0	-3.7	-4.2	-3.7	-3.2	-1.3	0.7	1.3	0.4	0.0	-2.4	-2.3	-2.2	-3.1	-3.3	-2.1	-1.1	0.3	0.6	0.9
Germany	-5.2	-4.2	-3.7	-2.9	-3.1	-1.4	-0.5	2.2	1.6	1.0	-2.0	-1.4	-1.2	-2.0	-2.2	-1.8	-2.0	-1.0	-0.7	-0.4
Greece	-2.7	-1.7	-0.3	-0.2	-2.0	1.0	3.2	1.2	2.0	0.7	-2.2	-2.5	-2.6	-2.3	-1.2	-2.1	-1.6	-0.6	-0.1	0.5
Iceland	..	..	..	..	..	..	1.6	0.9	-0.8	-5.9	-6.4	-3.5	-4.6	-1.7	0.6	1.4	2.2	2.5	1.2	0.9
Ireland	-3.7	-3.2	-3.2	-6.4	-5.2	-3.3	-0.8	3.0	-0.3	-2.5	-5.2	-5.5	-3.2	-3.0	-0.4	1.5	2.9	5.5	5.2	4.8
Italy	-1.8	-2.2	-1.7	-1.3	-0.7	1.0	1.7	1.5	0.7	-0.6	-3.0	-2.3	-0.8	-1.4	-1.5	-1.7	-2.0	-1.2	-1.1	-0.9
Japan	-1.7	-1.5	-1.6	-2.6	-2.4	-0.2	1.1	3.0	2.9	1.0	-0.7	-1.4	-1.8	0.0	0.4	-2.3	-3.1	-3.0	-3.4	-3.8
Netherlands	-3.1	-1.3	0.1	0.2	-0.7	-1.0	0.7	2.1	1.4	0.5	-1.1	-0.4	-0.8	-0.7	-0.4	0.2	0.7	1.1	0.9	0.6
New Zealand	-1.7	2.9	2.7	2.7	1.7	-0.1	-0.6	-2.4	-5.2	-5.6	-2.6	0.3	1.1	1.2	0.6	-1.9	-0.2	0.5	0.0	0.1
Norway [a]	-1.9	-1.2	2.1	2.5	1.7	-1.4	-4.3	-3.9	-3.8	-3.1	-2.5	-0.9	-0.4	0.7	2.1	2.9	1.1	0.7	0.2	0.3
Portugal	-0.4	-4.7	-4.7	-3.7	-0.9	0.7	2.4	3.6	2.9	2.6	-1.2	-1.6	-1.5	-0.9	-0.2	0.3	0.3	0.3	-0.2	-0.5
Spain	-5.6	-5.4	-4.9	-5.1	-2.8	-0.4	1.1	2.0	1.8	-0.2	-3.9	-4.2	-4.6	-5.4	-4.2	-2.3	-0.5	0.3	0.3	0.4
Sweden	-3.8	-1.1	-0.4	1.0	2.5	3.5	4.2	3.4	0.4	-3.1	-5.6	-3.3	-1.6	-2.4	-2.5	-1.5	-0.1	0.5	0.5	0.7
Switzerland	0.7	1.8	3.6	3.0	1.1	1.5	3.3	4.5	1.8	-0.1	-1.8	-2.3	-2.4	-3.2	-2.5	-1.8	-2.0	-0.5	-0.3	0.0
United Kingdom	-5.4	-4.7	-3.1	-0.7	1.7	4.7	4.6	2.8	-1.4	-3.6	-3.8	-1.8	-1.3	-1.1	0.1	0.2	0.2	0.7	0.5	0.5
United States	-5.6	-1.7	-1.0	-0.9	-0.5	0.8	1.6	0.4	-2.5	-1.8	-1.8	-0.5	-0.7	-0.4	0.4	1.0	1.3	2.2	0.0	-0.4
Total of above Euro area countries	-3.4	-3.3	-3.0	-2.6	-2.1	-0.5	0.9	2.0	1.1	0.2	-2.6	-2.2	-1.9	-2.5	-2.3	-1.7	-1.3	-0.3	-0.1	0.1
Total of above European Union countries	-3.8	-3.5	-3.0	-2.2	-1.5	0.4	1.5	2.0	0.7	-0.5	-2.9	-2.2	-1.8	-2.2	-1.9	-1.4	-1.0	-0.2	0.0	0.1
Total of above OECD countries	-4.2	-2.3	-1.7	-1.6	-1.0	0.6	1.5	1.4	-0.5	-1.1	-2.2	-1.4	-1.4	-1.1	-0.6	-0.5	-0.4	0.4	-0.6	-0.7

Note: Potential output for all countries except Portugal is calculated using the "production function method" described in Giorno et al, "Potential Output, Output Gaps, and Structural Budget Balances", *OECD Economic Studies,* No. 24, 1995/I. Potential output for Portugal is calculated using a Hodrick-Prescott filter of actual output. See also *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
a) Mainland Norway.
Source: OECD.

Annex Table 12. **Compensation per employee in the business sector**

Percentage change from previous period

	Average 1973-83[a]	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	9.4	10.0	5.0	6.5	5.2	6.4	7.5	8.2	2.8	3.2	3.3	2.0	3.5	5.6	3.3	3.0	2.4	3.0	4.0	3.7
Austria	8.6	5.6	5.5	5.7	4.1	4.3	4.8	5.6	5.7	4.2	3.7	3.2	3.5	0.8	2.3	2.7	1.6	2.2	2.7	3.0
Belgium	10.5	6.7	6.7	4.4	2.5	2.8	3.0	8.1	6.9	5.6	2.9	3.2	1.8	1.1	2.8	1.9	2.0	2.7	3.3	3.2
Canada	9.7	4.8	5.5	2.9	6.9	7.1	4.9	5.0	4.9	3.2	2.3	0.5	2.3	2.9	6.0	3.0	2.6	3.6	3.2	3.4
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	17.1	17.1	17.5	8.2	4.8	4.9	7.0	7.1	6.5
Denmark	11.8	6.1	4.9	5.1	7.4	11.3	4.7	4.1	4.0	4.4	2.5	3.2	3.4	2.9	3.8	3.7	3.8	3.8	3.8	3.9
Finland	14.4	10.0	10.4	7.4	8.0	9.6	10.3	9.3	4.9	1.8	1.3	4.6	4.1	2.1	2.8	4.4	3.1	4.7	4.5	4.4
France	13.9	9.4	5.6	4.1	4.7	4.2	4.0	3.6	4.5	4.0	2.1	1.4	1.1	2.1	1.9	1.8	2.3	1.4	2.7	2.9
Germany	6.5	3.8	3.1	3.7	3.3	3.2	3.0	4.2	4.8	10.4	3.7	3.0	3.3	1.0	0.7	1.0	0.9	1.3	1.9	2.3
Greece	21.6	18.6	21.9	12.9	10.7	17.3	22.6	16.3	16.3	12.7	8.7	11.7	12.4	10.6	11.2	8.3	4.2	5.1	5.0	5.2
Hungary	..	..	..	..	..	..	..	..	..	..	..	..	25.0	24.4	21.4	16.7	11.4	13.1	18.0	11.9
Iceland	45.4	31.9	39.9	29.1	44.3	28.3	13.2	16.9	25.5	1.7	-2.4	3.7	8.1	4.7	2.8	7.2	4.5	5.7	7.0	7.0
Ireland	18.3	10.5	4.1	6.2	6.1	5.3	6.8	3.3	3.2	7.8	4.9	1.7	2.5	1.8	6.1	-0.3	4.0	8.3	7.8	7.6
Italy	19.8	11.8	10.3	6.9	7.4	7.3	9.1	8.1	8.9	6.3	5.3	3.0	4.8	4.9	3.2	-0.6	2.1	2.9	2.6	3.0
Japan	9.3	4.3	3.4	2.5	2.0	3.0	3.8	4.1	4.4	0.8	0.6	1.4	1.0	0.2	1.6	-0.8	-1.1	0.1	0.3	0.4
Korea	21.7	7.6	4.9	10.5	10.2	17.5	10.0	16.3	19.1	11.1	10.8	11.2	15.0	11.2	3.4	2.0	12.2	8.0	6.6	6.8
Luxembourg	..	..	..	..	..	..	27.0	27.9	29.9	24.1	15.2	..	..	1.6	2.9	1.0	3.6	4.9	3.6	3.2
Mexico	..	..	..	..	..	..	27.0	27.9	29.9	24.1	15.2	11.4	17.6	23.1	21.0	18.0	13.5	12.0	9.0	7.0
Netherlands	8.1	0.8	1.8	2.7	1.5	1.3	0.9	3.3	4.5	4.2	3.0	2.8	1.3	1.7	2.1	2.8	2.9	4.1	4.4	4.2
New Zealand	13.6	3.5	12.3	18.8	14.2	11.2	6.8	0.9	1.3	1.1	1.9	1.9	-0.2	1.7	2.6	2.4	2.4	3.1	3.7	3.2
Norway	10.4	7.5	7.1	9.8	9.1	8.6	4.5	5.1	5.5	4.4	2.2	2.9	2.9	2.5	2.4	7.5	5.7	4.5	4.5	4.8
Poland	..	..	..	..	..	..	..	..	..	..	..	45.1	30.8	29.4	20.5	15.3	15.2	8.4	8.1	7.1
Portugal	24.1	20.5	19.3	18.8	13.7	9.4	12.8	17.3	18.4	15.7	6.7	5.8	6.3	5.5	5.0	4.5	4.2	5.8	5.5	5.3
Spain	19.8	10.8	8.7	8.7	1.9	5.6	6.7	10.6	11.7	12.0	10.7	4.3	4.3	4.3	2.4	2.7	3.0	3.5	4.3	4.3
Sweden	11.9	9.8	8.5	8.3	7.5	8.1	12.3	9.8	6.2	3.2	8.5	5.7	2.4	6.2	3.7	3.4	2.8	3.7	3.7	4.3
Switzerland	5.5	3.3	3.9	4.3	3.2	3.6	4.5	5.0	7.2	6.3	1.8	1.3	2.4	0.7	2.7	1.9	1.3	1.9	2.6	2.7
United Kingdom	15.5	6.5	5.9	8.4	4.8	6.8	9.1	9.9	8.2	5.6	3.3	5.0	2.6	3.1	4.1	5.3	4.9	4.4	4.8	4.9
United States	8.0	5.0	4.0	3.9	4.5	4.7	3.2	4.9	3.9	5.7	2.8	2.3	1.9	2.5	3.2	4.9	4.3	4.5	4.7	4.4
Euro area	12.8	7.9	6.6	5.8	4.6	5.6	4.7	5.5	6.1	8.1	5.6	3.2	3.8	1.9	1.7	1.2	1.5	1.8	2.5	2.9
European Union	13.8	8.0	6.7	6.2	4.8	5.5	6.3	7.0	7.1	7.2	4.4	3.4	3.2	2.9	2.6	2.1	2.5	2.8	3.2	3.5
Total OECD	11.3	6.9	5.7	5.3	5.2	6.3	7.9	8.2	8.6	7.0	4.8	4.9	5.2	4.8	4.8	4.8	4.5	4.3	4.6	4.3
Memorandum item *OECD less* high inflation countries[b]	10.8	6.2	5.0	4.8	4.6	5.3	4.8	5.9	5.7	5.5	3.3	2.9	2.8	2.7	2.9	2.8	3.0	3.3	3.5	3.5

Note: The business sector is in the OECD terminology defined as total economy less the public sector. Hence business sector employees are defined as total employees less public sector employees. See also *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*

a) Average 1975-83 in the case of Korea.

b) High inflation countries are defined as countries which have had 10 per cent or more inflation in terms of the GDP deflator on average during the last 10 years based on historical data. Consequently, Hungary, Mexico, Poland and Turkey are excluded from the aggregate.

Source: OECD.

Percentage change from previous period

	Average 1973-83[a]	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	11.2	4.5	3.5	7.9	3.1	5.6	8.4	7.5	1.8	0.3	-0.5	2.0	2.7	2.8	1.2	0.4	0.9	3.0	3.2	1.8
Austria	6.5	5.2	3.7	3.7	2.4	1.2	2.1	3.2	4.9	5.2	3.6	1.4	1.8	-1.0	0.2	0.7	0.8	0.2	0.6	0.8
Belgium	7.7	3.9	3.7	2.6	-0.2	-0.5	1.4	5.5	5.3	3.4	4.0	0.6	0.4	0.3	0.5	1.4	1.2	0.9	2.0	1.7
Canada	9.3	1.9	2.3	3.9	4.4	4.6	5.2	4.9	4.7	1.4	-0.5	-2.1	0.6	0.8	1.2	1.4	0.5	2.4	2.6	1.6
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	15.7	11.3	12.5	7.9	4.3	4.4	2.4	4.6	2.9
Denmark	10.2	3.5	3.7	3.9	8.9	8.7	3.8	2.7	2.3	2.4	1.2	-1.9	2.0	2.3	1.9	2.7	2.7	1.8	2.6	2.5
Finland	11.8	7.4	8.1	4.5	4.3	5.6	6.2	9.5	7.0	-2.3	-4.5	-2.1	2.4	0.3	-0.9	2.1	0.7	0.2	2.2	2.3
France	12.2	5.7	4.3	2.7	1.7	1.5	2.0	4.0	3.4	2.3	2.5	0.2	1.5	1.8	0.9	0.5	0.7	1.1	1.7	1.9
Germany	4.7	0.8	1.8	2.8	2.7	0.2	0.8	2.0	2.8	6.1	3.5	0.2	0.2	-1.0	-0.1	0.8	0.0	0.5	0.6
Greece	20.9	19.0	20.9	10.5	13.0	16.1	21.4	21.6	11.0	11.4	14.1	10.6	13.9	5.7	9.9	9.0	2.6	3.5	2.6	2.3
Hungary	..	..	..	..	..	..	..	..	..	..	..	..	17.2	17.9	18.5	16.0	10.2	8.7	13.6	8.6
Iceland	44.3	24.8	41.9	24.5	36.1	23.9	12.4	12.8	13.8	4.7	-1.0	-0.5	6.1	5.1	2.0	8.2	5.3	5.2	5.7	4.3
Ireland	15.1	4.0	4.0	7.3	0.5	-0.9	0.9	-0.3	4.2	3.9	4.9	0.6	-1.6	0.4	-0.2	3.2	1.9	2.1	5.5	3.9
Italy	17.2	8.6	8.4	5.4	5.3	5.5	6.5	9.7	7.9	4.3	3.2	-0.1	1.0	5.2	2.7	-2.0	2.0	1.5	1.7	2.0
Japan	7.6	1.7	0.3	1.4	-1.3	-0.8	1.8	1.9	4.6	2.4	1.8	0.9	0.2	-1.8	0.9	0.1	-2.3	-1.1	-0.7	-0.5
Korea	19.3	5.3	4.5	3.0	7.7	10.4	11.8	13.7	13.6	7.4	6.6	7.4	9.5	6.4	-0.3	0.7	3.3	4.3	2.2	3.3
Luxembourg	..	..	..	..	..	..	25.5	28.1	28.9	21.9	15.7	10.1	..	2.2	-0.6	0.5	1.0	2.1	3.0	2.0
Mexico	..	..	..	..	..	..	25.5	28.1	28.9	21.9	15.7	10.1	21.3	21.4	17.1	14.9	11.6	9.4	6.9	4.8
Netherlands	5.9	-2.8	0.4	1.6	1.9	0.0	-1.7	1.7	3.7	3.7	2.1	-1.2	1.0	0.8	1.7	2.4	2.6	2.9	3.1	2.7
New Zealand	11.2	0.2	14.7	18.5	13.4	6.4	2.6	2.2	0.8	0.5	-1.1	0.2	1.8	2.1	1.8	0.8	-0.8	0.9	2.6	1.4
Norway	8.2	3.1	5.4	9.0	10.3	6.5	0.2	1.6	1.5	0.6	-1.3	-0.4	2.0	2.0	3.4	7.5	5.5	3.1	3.2	3.5
Poland	..	..	..	..	..	..	..	..	..	..	..	..	32.4	28.7	22.6	16.1	12.0	6.3	2.6	3.9	2.7
Portugal	21.5	20.5	17.4	15.2	9.3	8.5	12.3	16.0	18.0	11.9	6.2	1.1	3.1	1.2	3.0	6.0	5.3	4.9	3.6	3.4
Spain	16.2	5.1	6.1	9.7	6.5	6.7	8.2	11.3	9.7	7.9	5.5	0.9	3.3	3.2	2.3	2.7	3.4	4.1	3.6	3.2
Sweden	10.9	5.0	6.7	6.6	4.8	6.4	9.8	11.3	6.3	0.5	0.0	-0.2	0.7	5.1	0.5	1.0	-0.4	2.0	2.6	2.4
Switzerland	4.6	1.1	2.5	4.4	4.1	2.7	2.5	4.9	8.2	3.5	1.4	0.5	1.9	0.1	0.3	0.4	0.1	-0.5	1.2	1.4
United Kingdom	13.3	4.3	4.6	3.5	3.8	6.2	9.0	9.6	7.5	3.9	0.4	-0.6	1.3	2.4	3.3	4.3	4.0	2.7	2.8	2.6
United States	7.3	3.0	3.5	2.5	3.7	3.6	2.4	4.5	3.6	2.4	1.9	1.2	1.9	1.0	1.3	2.7	2.0	1.3	3.5	2.1
Euro area	10.5	4.4	4.7	4.5	3.4	3.3	3.0	5.3	5.0	5.0	4.4	0.4	2.3	1.3	0.5	0.4	1.4	1.2	1.6	1.7
European Union	11.6	4.8	5.1	4.4	3.8	3.6	4.7	6.7	5.8	4.7	3.0	0.2	1.8	2.1	1.4	1.2	1.9	1.6	1.9	1.9
Total OECD	9.4	3.5	3.6	3.3	3.2	3.2	6.8	7.4	7.5	4.9	3.7	3.1	4.2	3.3	3.2	3.4	2.9	2.2	3.4	2.4
Memorandum item																				
OECD less high inflation countries[b]	9.4	3.5	3.6	3.3	3.2	3.2	3.6	5.2	4.9	3.3	2.3	1.0	1.9	1.3	1.3	1.6	1.3	1.2	2.2	1.7

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)*.
a) Average 1975-83 in the case of Korea.
b) High inflation countries are defined as countries which have had 10 per cent or more inflation in terms of the GDP deflator on average during the last 10 years based on historical data. Consequently, Hungary, Mexico, Poland and Turkey are excluded from the aggregate.
Source: OECD.

Annex Table 14. **GDP deflators**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	11.3	6.0	5.7	6.3	7.7	8.6	7.0	4.9	2.4	1.3	1.6	0.8	1.5	2.2	1.6	0.1	1.0	3.3	2.7	2.6
Austria	6.1	4.6	3.1	2.7	2.1	1.6	2.7	3.4	3.7	4.3	2.8	2.8	2.3	1.3	1.2	0.8	0.9	1.2	1.5	1.7
Belgium	7.1	5.1	4.6	3.0	1.4	2.3	4.9	3.0	2.8	3.6	3.7	1.8	1.8	1.2	1.3	1.6	1.0	1.2	2.5	2.1
Canada	9.3	3.4	2.5	2.8	4.8	4.5	4.6	3.1	2.7	1.3	1.5	1.1	2.3	1.7	1.0	-0.6	1.6	3.6	2.1	2.1
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	11.0	10.2	8.6	7.2	10.2	2.7	1.1	4.4	4.5
Denmark	9.8	5.7	4.3	4.6	4.7	3.4	5.2	3.6	2.8	2.9	1.4	1.7	1.8	2.5	2.2	1.9	3.0	3.7	2.5	2.3
Finland	11.3	8.5	5.5	4.3	4.2	8.1	6.1	5.4	1.8	0.9	2.3	2.0	4.1	-0.2	2.1	3.0	0.5	2.9	1.5	1.3
France	10.9	7.2	5.5	5.1	2.9	3.2	3.3	2.9	3.0	2.0	2.4	1.8	1.7	1.4	1.2	0.7	0.2	0.5	1.5	1.9
Germany	4.5	2.1	2.1	3.2	1.9	1.5	2.4	3.2	3.9	5.0	3.7	2.5	2.0	1.0	0.8	1.1	0.9	-0.4	1.1	1.4
Greece	17.4	20.3	17.7	17.5	14.3	15.5	14.5	20.6	19.8	14.8	14.5	11.2	9.8	7.4	6.8	5.2	2.9	3.1	3.1	2.8
Hungary	..	..	..	..	..	..	..	..	..	..	..	19.5	25.6	21.2	18.5	12.6	9.0	7.8	9.1	7.2
Iceland	45.9	25.4	31.3	25.5	19.5	22.9	19.8	16.9	7.6	3.7	2.3	1.9	2.7	1.9	3.5	5.3	3.8	3.6	3.7	4.9
Ireland	14.2	6.4	5.2	6.6	2.2	3.2	5.5	-0.7	1.8	2.8	5.2	1.7	3.0	2.3	4.4	5.8	3.8	4.8	4.6	3.8
Italy	17.5	11.5	8.9	7.9	6.2	6.8	6.5	8.2	7.6	4.5	3.9	3.5	5.0	5.3	2.4	2.7	1.6	2.2	2.8	2.5
Japan	6.2	2.8	2.4	1.6	-0.1	0.7	2.0	2.4	3.0	1.7	0.6	0.1	-0.4	-0.8	0.4	-0.1	-1.4	-1.7	-1.2	-0.4
Korea	19.1	5.5	4.6	4.6	5.0	6.7	5.3	11.1	10.9	7.7	7.0	7.6	7.1	3.9	3.1	5.1	-2.1	-1.5	1.5	1.6
Luxembourg	7.3	4.4	3.0	0.7	2.8	0.6	4.3	5.2	2.3	2.6	0.6	4.7	0.3	1.7	3.3	1.5	2.3	4.1	3.4	2.4
Mexico	31.5	58.8	56.5	73.4	140.7	101.1	26.5	28.1	23.3	14.4	9.5	8.5	38.0	30.6	17.7	15.4	14.8	10.8	8.0	6.0
Netherlands	6.2	1.4	1.8	0.1	-0.7	1.2	1.2	2.3	2.7	2.3	1.9	2.3	1.8	1.2	2.0	2.0	1.6	3.2	4.6	2.6
New Zealand	12.8	6.1	15.4	15.3	13.2	8.1	5.1	2.9	1.2	1.7	2.3	1.3	2.3	2.0	0.2	1.3	-0.2	2.4	3.3	2.1
Norway	9.1	6.3	5.2	-0.9	6.9	5.0	5.7	3.8	2.5	-0.4	1.8	-0.2	3.1	4.3	3.0	-0.8	6.6	15.1	7.1	1.5
Poland	..	..	..	..	..	..	..	..	..	..	..	37.3	27.9	18.7	14.0	11.8	6.9	11.0	7.5	6.0
Portugal	20.3	24.7	21.7	20.5	10.1	11.2	12.4	12.8	12.2	10.0	6.7	6.3	5.1	3.3	3.1	3.8	3.5	2.8	3.8	3.3
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	13.8	9.7	4.5	6.6	5.1	6.6	6.5	5.6	5.3
Spain	16.1	10.9	8.6	10.9	5.9	5.9	6.9	7.3	6.9	6.7	4.5	3.9	4.9	3.5	2.2	2.3	2.9	3.5	3.5	3.0
Sweden	10.4	7.5	6.5	6.5	4.8	6.4	8.0	8.8	7.3	1.0	2.7	2.4	3.5	1.4	1.7	0.9	0.5	0.8	1.1	2.2
Switzerland	3.9	3.5	2.4	3.1	2.7	2.8	3.1	4.3	6.0	2.7	2.7	1.6	1.1	0.4	-0.2	0.6	1.3	1.7	1.6
Turkey	38.0	48.2	53.1	36.0	33.6	69.3	75.5	58.3	58.8	63.7	67.8	106.5	87.2	77.8	81.5	75.7	55.6	50.7	56.1	44.0
United Kingdom	13.9	4.6	5.6	3.1	5.2	6.0	7.5	7.7	6.7	4.0	2.7	1.5	2.5	3.3	2.9	3.0	2.3	1.8	2.2	2.4
United States	7.4	3.7	3.2	2.2	3.0	3.4	3.8	3.9	3.6	2.4	2.4	2.1	2.2	1.9	1.9	1.3	1.5	2.0	2.3	1.9
Euro area	10.0	6.6	5.4	5.5	3.5	3.8	4.3	4.9	4.7	4.3	3.6	2.8	2.9	2.1	1.6	1.7	1.2	1.2	2.2	2.1
European Union	11.3	6.8	5.9	5.5	4.0	4.5	5.1	5.6	5.4	4.3	3.5	2.7	3.0	2.5	1.9	1.9	1.4	1.4	2.2	2.1
Total OECD	10.5	7.2	6.6	6.2	7.9	7.7	6.0	6.2	5.9	4.5	4.0	4.6	5.2	4.2	3.7	3.2	2.4	2.5	3.0	2.6

Memorandum item
OECD *less* high inflation

| countries [a] | 9.2 | 4.8 | 4.1 | 3.5 | 3.2 | 3.6 | 4.1 | 4.5 | 4.4 | 3.1 | 2.6 | 2.2 | 2.3 | 1.8 | 1.7 | 1.4 | 1.0 | 1.3 | 1.8 | 1.7 |

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*

a) High inflation countries are defined as countries which have had 10 per cent or more inflation in terms of the GDP deflator on average during the last 10 years based on historical data. Consequently, Hungary, Mexico, Poland and Turkey are excluded from the aggregate.

Source: OECD.

Annex Table 15. **Private consumption deflators**

Percentage change from previous period

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	11.4	6.4	6.8	7.7	8.6	7.6	5.5	6.3	4.4	2.3	2.4	1.0	2.0	2.0	1.6	1.0	0.6	2.5	3.0	2.3
Austria	6.1	5.3	3.3	1.7	0.7	1.6	2.7	3.5	3.0	3.9	3.3	3.3	1.5	2.0	1.5	0.5	0.7	1.8	1.7	1.7
Belgium	7.8	5.3	5.7	-0.1	2.1	1.0	3.9	2.8	2.6	1.9	2.7	2.5	1.7	2.2	1.6	1.0	1.2	2.5	1.7	1.7
Canada	9.3	4.3	3.8	4.1	3.9	3.9	4.3	4.1	4.8	1.5	2.3	0.9	1.2	1.7	1.8	1.0	1.3	1.8	2.4	2.0
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	10.7	9.2	8.1	7.7	9.6	2.2	4.3	4.2	4.8
Denmark	10.5	6.4	4.3	2.9	4.6	4.0	4.7	2.9	2.8	1.9	2.0	3.0	1.9	2.1	2.2	1.8	2.6	3.1	2.2	2.0
Finland	11.6	6.9	5.5	2.8	3.1	4.8	5.3	5.5	5.9	4.1	3.9	0.9	0.4	1.4	1.3	1.7	1.3	3.2	2.3	2.1
France	11.4	8.0	6.0	2.8	3.4	2.9	3.8	3.1	3.5	2.5	2.5	2.2	2.0	1.9	1.4	0.5	0.4	1.2	1.4	1.5
Germany	4.8	2.5	1.8	-0.6	0.5	1.3	2.9	2.7	3.7	4.4	3.9	2.6	1.9	1.7	2.0	1.1	0.3	1.4	1.8	1.5
Greece	17.3	17.9	18.3	22.1	15.7	14.2	13.5	19.9	19.7	15.7	14.2	11.0	8.9	8.2	5.5	4.5	2.4	3.0	2.8	2.5
Hungary	..	..	..	..	..	..	..	..	..	..	..	19.4	27.7	23.4	18.0	13.3	10.5	9.7	9.4	8.0
Iceland	47.4	31.4	32.6	20.1	15.9	25.5	23.2	16.7	6.7	3.6	3.6	1.4	1.9	2.4	1.9	1.0	3.3	5.0	4.3	3.9
Ireland	15.2	7.4	5.0	4.6	2.4	3.8	4.1	2.1	2.7	3.0	2.2	2.8	2.8	2.6	2.6	3.8	3.3	6.5	4.8	3.8
Italy	17.1	11.6	9.1	6.4	5.2	5.9	6.7	6.4	7.0	5.5	5.5	4.9	6.0	4.4	2.2	2.1	2.1	2.9	2.7	2.2
Japan	7.4	2.7	1.8	0.7	0.4	0.6	2.1	2.6	2.7	1.6	1.0	0.5	-0.3	-0.1	1.0	-0.1	-0.7	-1.2	-0.7	-0.5
Korea	19.0	3.6	3.9	1.7	3.3	5.6	5.4	9.4	12.1	8.9	8.0	9.7	7.0	5.7	5.5	7.9	0.5	2.0	4.0	3.5
Luxembourg	7.8	6.5	4.3	-2.4	1.0	0.7	2.0	1.6	2.8	2.6	2.5	3.6	1.1	1.7	1.7	1.7	1.4	3.1	2.3	1.8
Mexico	29.9	65.5	59.2	82.0	135.1	109.0	25.1	27.8	24.4	15.4	10.1	7.6	34.1	30.4	16.5	20.7	13.8	8.9	7.8	5.8
Netherlands	6.5	1.9	2.4	0.3	0.2	0.5	1.2	2.2	3.2	3.1	2.1	2.8	1.6	1.9	2.0	1.8	1.9	2.8	4.0	2.3
New Zealand	13.7	7.2	17.3	12.8	12.9	6.4	6.3	5.7	2.3	1.1	1.2	1.3	2.7	2.1	1.2	1.8	0.2	2.0	3.2	2.0
Norway	9.3	6.3	5.9	6.7	7.8	6.1	4.8	4.7	3.8	2.7	1.9	1.2	2.4	1.5	2.5	2.7	2.2	3.3	3.0	1.9
Poland	..	..	..	..	..	..	..	..	..	..	..	37.1	27.9	20.0	14.7	11.5	7.2	10.2	6.5	5.0
Portugal	22.0	28.4	19.5	13.8	9.9	11.5	13.1	12.4	12.3	9.7	6.5	5.6	4.5	3.2	2.2	2.6	2.5	2.9	3.7	3.3
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	13.0	10.2	5.2	6.0	6.1	10.2	11.3	7.5	7.0
Spain	16.5	10.6	8.1	9.3	5.5	4.8	6.7	6.6	6.4	6.6	5.3	4.8	4.8	3.5	2.4	2.0	2.4	3.6	3.2	2.8
Sweden	11.0	7.6	6.9	4.6	5.2	5.9	6.8	9.8	10.5	2.1	5.8	2.8	2.9	1.4	2.3	1.0	0.8	0.9	1.6	2.2
Switzerland	4.3	3.0	3.3	1.3	1.5	1.9	2.9	5.2	6.0	4.2	3.4	1.1	1.7	1.1	0.6	-0.3	0.3	1.5	1.0	1.2
Turkey	38.1	49.0	50.9	30.4	48.8	58.9	83.7	59.8	60.7	65.6	65.9	108.9	92.4	67.8	82.1	83.0	59.0	49.5	63.2	48.9
United Kingdom	13.4	5.1	5.2	4.0	4.2	5.0	6.2	7.8	7.9	4.7	3.5	2.2	2.9	3.2	2.5	2.4	1.6	0.8	1.9	2.2
United States	7.6	3.7	3.5	2.4	3.8	3.9	4.4	4.6	3.8	3.1	2.4	2.0	2.3	2.1	1.9	1.1	1.8	2.4	1.9	1.6
Euro area	10.4	7.2	5.7	3.4	3.1	3.4	4.6	4.5	4.7	4.6	4.1	3.4	3.0	2.5	2.0	1.4	1.1	2.2	2.2	1.9
European Union	11.5	7.2	5.8	3.8	3.5	3.8	5.0	5.2	5.7	4.5	4.1	3.3	3.1	2.7	2.1	1.6	1.3	2.0	2.2	2.0
Total OECD	10.7	7.5	6.7	5.7	8.1	7.7	6.3	6.3	6.2	4.9	4.2	4.9	5.2	4.4	4.0	3.4	2.6	2.8	3.0	2.5
Memorandum item OECD *less* high inflation countries [a]	9.5	4.9	4.2	2.9	3.3	3.5	4.3	4.7	4.6	3.5	3.0	2.5	2.4	2.1	2.0	1.4	1.1	1.7	1.7	1.5

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)*.

a) High inflation countries are defined as countries which have had 10 per cent or more inflation in terms of the GDP deflator on average during the last 10 years based on historical data. Consequently, Hungary, Mexico, Poland and Turkey are excluded from the aggregate.

Source: OECD.

Annex Table 16. **Consumer price index**[a]

Percentage change from previous period

	Average 1971-81	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Australia	10.8	11.2	10.1	3.9	6.7	9.1	8.5	7.3	7.5	7.3	3.2	1.0	1.8	1.9	4.6	2.6	0.3	0.9	1.5	4.5
Austria	6.4	5.4	3.3	5.7	3.2	1.7	1.5	1.9	2.6	3.3	3.3	4.0	3.6	3.0	2.2	1.5	1.3	0.9	0.6	2.4
Belgium	7.7	8.7	7.7	6.3	4.9	1.3	1.6	1.2	3.1	3.4	3.2	2.4	2.8	2.4	1.5	2.1	1.6	1.0	1.1	2.5
Canada	9.0	10.8	5.9	4.3	4.0	4.2	4.3	4.0	5.0	4.8	5.6	1.5	1.9	0.2	2.2	1.6	1.6	1.0	1.7	2.7
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	..	..	10.0	9.1	8.8	8.5	10.7	2.1	3.9
Denmark	10.4	10.1	6.9	6.3	4.7	3.7	4.0	4.5	4.8	2.6	2.4	2.1	1.3	2.0	2.1	2.1	2.2	1.8	2.5	2.9
Finland	11.6	9.6	8.4	7.1	5.2	2.9	4.1	5.1	6.6	6.1	4.3	2.9	2.2	1.1	0.8	0.6	1.2	1.4	1.2	3.4
France	10.4	12.0	9.5	7.7	5.8	2.5	3.3	2.7	3.5	3.6	3.2	2.4	2.1	1.7	1.8	2.0	1.2	0.8	0.5	1.7
Germany	5.2	5.2	3.3	2.4	2.1	-0.1	0.2	1.3	2.8	2.7	3.6	5.1	4.4	2.8	1.7	1.4	1.9	0.9	0.6	1.9
Greece	16.4	21.0	20.2	18.5	19.3	23.0	16.4	13.5	13.7	20.4	19.5	15.9	14.4	10.9	8.9	8.2	5.5	4.8	2.6	3.2
Hungary	..	..	..	..	..	..	..	..	..	..	..	..	..	18.9	28.3	23.5	18.3	14.2	10.0	9.8
Iceland[b]	37.5	50.0	85.2	28.9	32.5	21.2	17.8	25.7	20.8	15.9	6.8	3.7	4.1	1.5	1.7	2.3	1.8	1.7	3.4	5.0
Ireland	14.8	17.1	10.5	8.6	5.5	3.8	3.1	2.1	4.1	3.3	3.2	3.1	1.4	2.3	2.5	1.7	1.4	2.4	1.6	5.6
Italy[c]	15.2	16.5	14.6	10.8	9.2	5.8	4.7	5.1	6.3	6.5	6.3	5.3	4.6	4.1	5.2	4.0	2.0	2.0	1.6	2.6
Japan	8.8	2.7	1.9	2.3	2.0	0.6	0.1	0.7	2.3	3.1	3.3	1.7	1.2	0.7	-0.1	0.1	1.7	0.6	-0.3	-0.6
Korea	..	..	..	..	..	..	..	..	..	8.6	9.3	6.2	4.8	6.3	4.5	4.9	4.4	7.5	0.8	2.3
Luxembourg	7.0	9.4	8.7	6.4	4.1	0.3	-0.1	1.4	3.4	3.3	3.1	3.2	3.6	2.2	1.9	1.3	1.4	1.0	1.0	3.2
Mexico	18.8	59.0	102.3	65.3	57.8	86.2	131.8	114.2	20.0	26.7	22.7	15.5	9.8	7.0	35.0	34.4	20.6	15.9	16.6	9.5
Netherlands	7.2	5.9	2.7	3.3	2.3	0.1	-0.7	0.7	1.1	2.5	3.2	3.2	2.6	2.8	1.9	2.0	2.2	2.0	2.2	2.5
New Zealand	13.0	16.2	7.3	6.2	15.4	13.2	15.7	6.4	5.7	6.1	2.6	1.0	1.3	1.7	3.8	2.3	1.2	1.3	-0.1	2.6
Norway	9.1	11.3	8.4	6.3	5.7	7.2	8.7	6.7	4.5	4.1	3.4	2.3	2.3	1.4	2.4	1.2	2.6	2.3	2.3	3.1
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	32.2	27.8	19.9	14.9	11.6	7.3	10.1
Portugal	20.0	22.7	25.1	28.9	19.6	11.8	9.4	9.7	12.6	13.4	10.5	9.4	6.7	5.4	4.2	3.1	2.3	2.8	2.3	2.9
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	..	..	13.4	9.9	5.8	6.1	6.7	10.6	12.0
Spain	15.9	14.4	12.2	11.3	8.8	8.8	5.2	4.8	6.8	6.7	5.9	5.9	4.6	4.7	4.7	3.6	2.0	1.8	2.3	3.4
Sweden	9.7	8.6	8.9	8.0	7.4	4.2	4.2	6.1	6.6	10.4	9.7	2.6	4.7	2.4	2.9	0.8	0.9	0.4	0.3	1.3
Switzerland	5.0	5.7	2.9	2.9	3.4	0.8	1.4	1.9	3.2	5.4	5.9	4.0	3.3	0.9	1.8	0.8	0.5	0.0	0.8	1.6
Turkey[d]	35.4	29.1	31.4	48.4	45.0	34.6	38.9	68.8	63.3	60.3	66.0	70.1	66.1	105.2	89.1	80.4	85.7	84.6	64.9	54.9
United Kingdom	13.9	8.6	4.6	5.0	6.1	3.4	4.1	4.9	7.8	9.5	5.9	3.7	1.6	2.5	3.4	2.4	3.1	3.4	1.6	2.9
United States[e]	8.4	6.1	3.2	4.3	3.5	1.9	3.7	4.1	4.8	5.4	4.2	3.0	3.0	2.6	2.8	2.9	2.3	1.6	2.2	3.4
European Union	11.1	10.6	8.3	7.2	6.1	3.7	3.3	3.7	5.2	5.8	5.1	4.5	3.6	3.1	3.1	2.5	2.1	1.8	1.3	2.5
Total OECD	10.2	9.6	8.7	7.7	6.8	5.9	8.1	8.3	6.2	7.0	6.2	4.9	4.3	4.9	5.5	5.0	4.4	3.7	3.1	3.8

Memorandum item
OECD *less* high inflation

| countries[f] | 9.5 | 7.6 | 5.1 | 5.0 | 4.4 | 2.6 | 3.3 | 3.6 | 4.7 | 5.4 | 4.6 | 3.4 | 3.0 | 2.6 | 2.6 | 2.5 | 2.2 | 1.7 | 1.5 | 2.6 |

a) Aggregates were computed using weights based on 1999 consumer expenditure expressed in private consumption purchasing power parities.

b) Excluding rent, but including imputed rent.

c) Index for households of wage and salary earners.

d) Until 1981: Istanbul index (154 items); from 1982, Turkish index.

e) The methodology for calculating the Consumer Price Index has changed considerably over the past years, lowering measured inflation substantially.

f) High inflation countries are defined as countries which have had 10 per cent or more inflation in terms of the GDP deflator on average during the last 10 years based on historical data. Consequently, Hungary, Mexico, Poland and Turkey are excluded from the aggregate.

Source: OECD.

Annex Table 17. **Oil and other primary commodity markets**

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Oil market conditions[a]																		
(in million barrels per day)																		
Demand																		
OECD[b]	37.7	38.6	39.4	40.7	41.3	41.6	41.9	42.9	43.2	44.4	44.9	45.9	46.7	46.8	47.6	47.6	48.2	..
of which: North America	19.3	19.6	20.1	20.8	21.0	20.8	20.5	20.8	21.1	21.7	21.6	22.2	22.7	23.1	23.9	24.0	24.4	..
Europe[c]	12.7	13.2	13.3	13.5	13.5	13.7	14.0	14.2	14.2	14.3	14.6	14.9	15.0	15.3	15.1	15.0	15.2	..
Pacific	5.7	5.8	6.0	6.4	6.8	7.2	7.5	7.9	8.0	8.4	8.7	8.8	9.0	8.4	8.6	8.6	8.7	..
Non-OECD[d]	22.4	23.0	23.7	24.3	24.8	24.7	24.8	24.4	24.4	23.7	24.4	25.3	26.5	26.7	27.2	27.8	28.5	..
Total	60.2	61.6	63.1	65.0	66.1	66.4	66.7	67.2	67.6	68.2	69.3	71.2	73.1	73.5	74.8	75.4	76.7	..
Supply																		
OECD[b]	20.1	19.7	19.8	19.6	18.9	19.0	19.5	19.8	20.0	20.8	21.1	21.7	22.1	21.9	21.4	21.9	22.0	..
OPEC total	17.2	19.5	19.3	21.3	23.3	24.5	24.7	25.9	26.7	27.0	27.6	28.4	29.9	30.8	29.4	30.8	..	..
Former USSR	11.9	12.3	12.5	12.5	12.2	11.5	10.4	8.9	7.9	7.2	7.1	7.1	7.2	7.3	7.5	7.9	8.3	..
Other non-OECD[d]	10.0	10.5	10.7	11.3	11.7	12.0	12.2	12.7	12.9	13.5	14.3	14.8	15.2	15.6	15.8	16.0	15.8	..
Total	59.3	62.0	62.4	64.8	66.1	66.9	66.8	67.2	67.5	68.6	70.2	72.0	74.4	75.5	74.1	76.7	..	..
Trade																		
OECD net imports[b]	17.4	19.3	19.9	20.9	22.5	22.9	22.4	23.1	23.5	23.8	23.4	24.2	24.9	25.3	25.4	25.8	26.2	..
Former USSR net exports	3.0	3.4	3.6	3.6	3.5	3.1	2.2	2.0	2.0	2.7	2.8	3.1	3.4	3.6	4.0	4.4	4.9	..
Other non-OECD net exports[d]	14.3	15.8	16.3	17.3	19.0	19.8	20.1	21.1	21.4	21.1	20.7	21.1	21.4	21.7	21.4	21.4	21.4	..
Prices[e,f]																		
OECD crude oil import price																		
(cif, $ per bl)	27.5	15.0	17.9	14.9	17.5	22.3	19.3	18.4	16.4	15.6	17.2	20.5	19.1	12.6	17.3	28.0	25.8	24.8
Prices of other primary commodities[e,f]																		
(US$ indices)																		
Food and tropical beverages	94	97	80	94	88	79	74	72	73	98	100	99	104	91	74	67	61	61
of which: Food	87	73	71	99	96	85	83	87	88	95	100	118	104	91	77	73	67	68
Tropical beverages	98	114	86	90	82	75	68	62	63	100	100	86	103	91	72	62	57	57
Agricultural raw materials	50	58	72	80	82	90	78	79	75	86	100	86	83	71	71	74	71	72
Minerals, ores and metals	69	69	78	112	107	99	88	85	74	85	100	90	91	78	75	83	83	84
Total	67	71	76	94	92	90	80	79	74	89	100	90	91	78	73	75	72	73
Memorandum item																		
Export prices of OECD																		
manufactures (dollar index)	59	70	79	84	84	91	90	93	89	91	100	97	90	86	84	79	79	79

a) Based on data published in International Energy Agency, *Oil Market Report* , April 2001 ; *Annual Statistical Supplement* , August 2000.
b) Excluding Czech Republic, Hungary, Korea, Mexico and Poland.
c) European Union countries and Iceland, Norway, Switzerland and Turkey.
d) Including Czech Republic, Hungary, Korea, Mexico and Poland.
e) Indices through 2000 are based on data compiled by IEA for oil and by Hamburg Institute for Economic Research for the prices of other primary commodities; OECD estimates and projections for 2000 to 2002.
f) By technical assumption, prices are projected to rise broadly in line with OECD manufactured export prices for 2001 and 2002.
Source: OECD.

Annex Table 18. **Labour force**

Percentage change from previous period

	1997 Labour force (thousands)	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	9 251	1.8	2.7	3.5	2.2	2.6	3.6	2.4	0.6	0.7	0.6	1.7	2.8	1.3	0.9	1.2	1.4	2.2	1.8	1.7
Austria	4 163	0.0	0.5	0.7	0.3	0.4	1.2	2.3	2.3	1.6	0.4	0.0	-0.3	-0.2	0.6	0.8	0.9	0.3	0.3	0.4
Belgium	4 204	0.1	-0.3	0.5	0.3	0.6	-0.4	0.0	0.0	0.2	1.0	0.9	0.6	0.2	0.5	1.4	0.5	-0.2	0.8	0.7
Canada	15 151	2.0	2.1	1.9	1.9	2.0	1.8	0.7	0.6	0.2	1.0	0.8	0.9	1.0	1.7	1.8	2.0	1.8	1.6	1.4
Czech Republic	5 133	..	..	..	..	..	..	..	..	..	..	1.1	0.6	0.0	0.3	0.4	0.2	-0.7	-0.2	-0.3
Denmark	2 832	2.2	1.3	1.3	0.2	1.9	0.1	0.9	0.3	0.4	-1.2	-2.7	0.9	0.6	0.3	0.0	0.8	0.3	0.6	0.5
Finland	2 476	0.7	0.8	0.1	-0.6	-0.3	1.5	0.0	-1.6	-1.8	-0.9	-0.5	0.8	0.3	-0.2	0.9	2.0	1.2	0.9	1.0
France	25 796	0.6	0.5	0.6	0.5	0.5	0.8	0.3	0.6	0.4	0.3	0.7	0.1	1.0	0.7	0.6	0.7	0.6	0.5	0.9
Germany	41 082	0.2	0.8	1.0	0.7	0.8	0.7	2.2	1.7	-0.5	0.0	0.5	-0.1	0.4	0.8	0.4	0.3	1.0	0.4	0.2
Greece	4 201	0.7	0.6	-0.1	-0.1	2.0	0.2	0.8	-1.7	2.5	2.1	1.8	1.3	-0.7	-0.4	5.1	0.2	0.4	0.4	0.6
Hungary	3 916	..	..	..	..	..	..	..	..	..	..	-4.6	-2.5	-0.9	-1.0	0.4	2.6	0.3	1.1	1.0
Iceland	134	1.6	3.3	2.9	5.6	-2.8	-0.4	-0.9	-0.3	0.1	0.6	0.9	1.1	1.6	1.3	2.2	1.8	1.4	1.0	1.0
Ireland	1 539	0.0	0.8	0.0	0.4	-0.7	-1.5	1.8	1.7	1.3	2.3	2.1	1.9	3.3	2.1	6.9	4.0	3.3	3.2	3.1
Italy	22 715	1.1	0.4	1.8	0.1	0.8	-0.4	0.0	0.1	-0.8	-1.6	-0.5	0.0	0.5	0.5	1.2	0.8	0.9	0.8	0.8
Japan	67 873	0.7	0.6	1.0	1.0	1.4	1.7	1.8	1.9	1.1	0.6	0.5	0.3	0.7	1.1	0.1	-0.2	-0.2	0.1	0.2
Korea	21 663	-0.8	4.0	3.4	4.7	2.6	4.1	2.9	3.1	2.0	2.0	2.6	2.2	1.9	2.0	-1.0	0.8	1.5	0.6	1.8
Luxembourg	177	0.6	0.9	0.9	1.5	0.8	1.3	1.3	1.5	0.4	0.2	1.4	1.2	1.2	1.5	1.5	2.3	2.6	1.7	1.6
Mexico[a]	18 433	..	..	..	..	4.3	2.9	1.7	5.4	2.2	2.2	2.3	2.3	5.6	3.4	2.1	0.7	3.1	2.2	2.6
Netherlands	6 775	0.1	-0.2	1.6	1.2	2.0	1.0	2.0	2.0	1.6	1.9	1.0	1.9	1.6	2.2	1.8	1.9	1.7	1.5	1.4
New Zealand	1 859	1.9	2.5	0.1	0.9	-1.6	-1.0	1.6	1.5	0.9	1.7	3.1	3.1	3.5	1.0	0.3	0.7	0.8	0.6	1.0
Norway	2 287	1.0	1.7	2.9	2.0	0.5	-1.3	-0.6	-0.7	0.2	0.1	0.9	1.7	2.4	2.1	1.6	0.4	0.7	0.6	0.6
Poland	17 100	..	..	..	..	..	..	..	..	..	..	-1.1	-0.4	0.0	0.1	0.4	-0.1	1.0	0.6	0.8
Portugal	4 922	0.7	-0.3	0.1	1.0	1.2	1.5	1.8	2.4	0.7	-0.6	1.3	-0.2	0.6	1.3	0.6	1.2	1.2	1.1	1.1
Spain[b]	16 119	0.6	0.8	1.7	2.4	1.6	1.3	1.4	0.4	0.5	1.1	1.0	0.5	0.9	1.1	0.9	1.0	2.6	1.9	1.5
Sweden	4 263	0.4	-0.5	0.4	0.6	1.0	1.2	1.1	-0.7	-1.9	-2.7	-1.2	1.3	-0.2	-1.1	-0.2	1.2	1.2	1.0	0.8
Switzerland	3 989	1.2	1.8	2.1	2.4	2.5	2.5	3.2	2.4	-0.2	1.1	-0.1	-0.2	0.7	0.2	-0.2	-0.4	0.3	0.7	0.7
Turkey[c]	22 324	1.4	1.1	2.7	2.7	1.6	2.7	-1.1	2.6	0.6	-4.9	6.9	1.5	1.4	0.1	2.6	3.4	-4.9	-1.5	1.8
United Kingdom	28 872	2.2	1.3	0.3	0.9	1.5	0.5	0.1	-0.5	0.1	-0.3	-0.1	0.4	0.4	0.4	0.5	1.4	0.5	0.5	0.5
United States	136 300	1.8	1.7	2.1	1.7	1.5	1.8	1.6	0.4	1.4	0.8	1.4	1.0	1.2	1.8	1.0	1.2	1.1	1.0	0.9
Euro area	134 170	0.5	0.5	1.1	0.7	0.9	0.6	1.1	0.9	0.1	0.1	0.5	0.2	0.6	0.8	1.0	0.8	1.1	0.8	0.8
European Union	170 137	0.9	0.6	0.9	0.7	1.0	0.6	0.9	0.5	0.0	-0.1	0.3	0.3	0.6	0.7	0.9	0.9	1.0	0.8	0.7
Total OECD	495 550	1.1	1.2	1.5	1.4	1.5	1.5	1.3	1.1	0.8	0.3	1.0	0.7	1.0	1.2	0.8	1.0	0.7	0.7	0.9

Note: Labour market data are subject to differences in definitions across countries and to many series breaks, though the latter are often of a minor nature. The labour force includes all employed plus all unemployed persons. Unemployment is recorded on the basis of commonly used definitions. (See Annex Table 21). For information about definitions, sources, data coverage, break in series and rebasings, see *OECD Economic Outlook* Sources and Methods *(http: www.oecd.org/eco/sources-and-methods/index.htm).*

a) Data based on the National Survey of Urban Employment; see *OECD Economic Outlook* Sources and Methods.

b) Rebased; see *OECD Economic Outlook* Sources and Methods.

c) The figures incorporate important revisions to Turkish data; see *OECD Economic Outlook* Sources and Methods.

Source: OECD.

Annex Table 19. **Labour force participation rate**

	Average 1973-83	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	70.2	69.9	70.6	71.7	71.9	72.5	73.8	74.4	74.0	73.7	73.5	74.0	75.2	75.2	74.8	74.7	74.6	75.3	75.8	76.2
Austria	78.3	74.6	74.5	74.8	74.9	75.1	75.8	76.6	77.4	78.2	77.1	76.9	76.6	76.3	76.5	77.0	77.5	77.5	77.5	77.6
Belgium	62.0	60.9	60.7	60.9	61.0	61.2	60.9	60.9	60.9	61.0	61.5	62.0	62.3	62.4	62.7	63.5	63.8	63.7	64.1	64.6
Canada	70.4	74.2	75.1	75.8	76.5	77.3	77.8	77.7	77.2	76.4	76.1	76.0	75.8	75.6	75.9	76.3	76.9	77.4	77.6	77.7
Czech Republic	..	..	..	..	..	..	..	..	..	..	80.9	81.1	81.1	80.7	80.7	80.6	80.4	79.7	79.4	79.1
Denmark	77.1	80.1	80.9	81.7	81.4	82.7	82.5	82.9	82.8	82.8	81.6	79.2	79.6	79.7	79.8	79.8	80.3	80.5	80.8	81.2
Finland	73.9	76.3	76.6	76.6	76.1	75.9	77.0	76.8	75.3	73.6	72.7	72.1	72.5	72.6	72.3	72.6	73.7	74.5	75.0	75.7
France	68.0	66.6	66.4	66.5	66.5	66.4	66.6	66.6	66.8	66.9	66.9	67.2	67.1	67.6	67.9	68.2	68.5	68.6	68.7	69.0
Germany	68.2	66.9	67.4	67.9	68.3	68.6	68.5	69.1	73.9	73.1	72.7	72.9	72.8	72.9	73.4	73.6	73.9	74.7	75.0	75.2
Greece	57.1	59.8	59.6	59.1	58.7	59.5	59.2	59.2	57.3	58.1	58.9	59.6	60.1	59.6	59.2	61.8	61.8	61.8	61.9	62.0
Hungary	..	..	..	..	..	..	..	..	..	..	61.8	59.0	57.6	57.2	56.7	57.1	58.7	58.8	59.4	59.9
Iceland	74.0	77.7	79.4	81.0	84.2	80.2	78.9	77.5	76.2	75.5	75.4	75.4	75.7	76.3	76.6	77.1	77.5	77.6	77.7	77.9
Ireland	63.0	62.7	62.7	62.5	62.4	61.8	61.1	62.0	62.2	62.0	62.7	63.0	63.1	64.1	64.2	67.2	68.6	69.6	70.8	71.9
Italy	59.8	59.5	59.2	60.2	60.0	60.3	59.9	59.6	59.5	59.0	57.9	57.4	57.4	57.7	58.0	58.8	59.3	60.0	60.7	61.4
Japan	71.4	72.5	72.3	72.2	72.3	72.5	73.1	74.1	75.2	75.7	76.0	76.4	76.5	77.0	78.0	78.2	78.1	78.1	78.4	78.8
Korea	60.4	57.4	58.3	58.9	60.3	60.5	61.9	62.4	63.4	63.7	64.1	64.9	65.4	65.6	66.1	64.7	64.7	65.2	65.0	65.5
Luxembourg	..	60.2	60.4	60.5	61.1	61.3	61.7	61.7	62.1	61.8	61.4	61.7	61.8	62.2	62.5	62.8	63.5	64.3	64.7	65.1
Mexico[a]	..	..	..	..	51.1	51.6	51.8	51.8	53.3	53.8	55.2	54.7	55.3	55.3	56.2	56.5	55.7	56.3	56.4	56.7
Netherlands	58.3	56.8	56.0	56.4	56.5	57.2	57.4	58.2	59.0	59.6	60.5	60.8	61.7	62.5	63.7	64.5	65.5	66.4	67.2	68.0
New Zealand	65.7	65.5	66.5	66.2	66.1	64.6	63.5	63.8	63.8	63.3	63.3	64.1	64.9	65.8	65.6	65.2	65.3	65.4	65.1	65.0
Norway	73.7	76.7	77.5	79.2	80.2	80.1	78.7	78.0	77.1	76.9	76.5	76.8	77.7	79.2	80.4	81.1	80.7	80.9	80.9	80.9
Poland	..	..	..	..	..	..	..	..	..	..	68.8	67.6	66.9	66.5	66.1	65.8	65.1	65.3	65.4	65.6
Portugal	66.9	68.7	68.1	67.9	68.4	69.0	69.9	71.1	72.4	72.6	71.7	72.4	72.0	72.2	72.8	73.3	74.3	75.0	75.5	76.0
Spain[b]	62.7	60.6	60.2	60.3	61.2	61.8	61.8	62.2	62.2	62.1	62.3	62.6	62.4	62.2	62.7	63.3	64.2	65.6	66.8	67.7
Sweden	79.4	81.4	81.0	81.2	81.5	82.0	82.5	82.9	82.0	80.1	77.6	76.3	76.9	76.5	75.5	75.2	75.7	76.2	76.6	76.9
Switzerland	74.7	74.7	75.5	76.5	77.7	79.0	80.5	82.3	83.3	82.4	82.8	82.1	81.8	82.2	82.2	81.9	81.3	81.2	81.3	81.4
Turkey[c]	73.3	66.2	64.8	64.6	64.4	63.5	63.4	60.7	60.6	59.3	54.9	57.2	56.7	56.1	54.9	55.1	55.8	51.7	49.7	49.4
United Kingdom	73.8	74.0	74.8	74.8	75.2	76.3	76.6	76.5	76.0	76.0	75.7	75.4	75.3	75.3	75.3	75.3	76.0	76.1	76.2	76.4
United States	62.7	64.4	64.8	65.3	65.6	65.9	66.4	66.5	66.2	66.4	66.3	66.6	66.6	66.8	67.1	67.1	67.1	67.2	67.1	67.0
Euro area	64.8	63.8	63.7	64.1	64.2	64.5	64.5	64.8	66.4	66.1	65.9	66.0	66.0	66.2	66.5	67.1	67.6	68.3	68.8	69.3
European Union	66.9	66.2	66.2	66.5	66.7	67.1	67.2	67.4	68.4	68.2	67.9	67.9	67.8	68.0	68.3	68.8	69.3	69.9	70.3	70.7
Total OECD	66.5	66.5	66.7	67.0	66.6	66.9	67.2	67.3	67.8	67.8	67.6	67.7	67.8	67.8	68.1	68.2	68.4	68.4	68.4	68.6

Note: Labour market data are subject to differences in definitions across countries and to many series breaks, though the latter are often of a minor nature. Labour force participation rates are not fully comparable across countries mainly because of different definitions of the working-age population. In most countries, the working-age population is defined as all persons of the age of 16 to 64 years, except for Sweden, where it is 15 to 64 years, New Zealand and Turkey, where it is 15 years more, and the United States where it is 16 years of age and more. For information about definitions, sources, data coverage, break in series and rebasings, see *OECD Economic Outlook* Sources and Methods *(http: www.oecd.org/eco/sources-and-methods/index.htm).*

a) Data based on the National Survey of Urban Employment; see *OECD Economic Outlook* Sources and Methods.
b) Rebased; see *OECD Economic Outlook* Sources and Methods.
c) The figures incorporate important revisions to Turkish data; see *OECD Economic Outlook* Sources and Methods.
Source: OECD.

Annex Table 20. **Employment**

Percentage change from previous period

	1997 Employment (thousands)	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	8 458	2.9	3.5	3.6	2.2	3.7	4.7	1.5	-2.1	-0.7	0.4	3.1	4.2	1.3	0.8	1.8	2.3	2.9	1.0	1.8
Austria	3 926	-0.1	0.2	0.4	0.0	0.6	1.5	1.9	1.9	1.5	-0.3	0.2	-0.4	-0.5	0.5	0.8	1.4	1.0	0.3	0.6
Belgium	3 808	0.0	0.5	0.6	0.6	1.7	1.2	0.9	0.1	-0.5	-0.7	-0.3	0.7	0.3	0.8	1.2	1.3	1.7	1.1	0.9
Canada	13 774	2.7	3.0	3.0	2.7	3.2	2.1	0.0	-1.8	-0.7	0.8	2.0	1.9	0.8	2.3	2.6	2.8	2.6	1.2	1.3
Czech Republic	4 884	..	..	..	..	..	..	..	..	..	..	1.1	0.9	0.1	-0.6	-1.4	-2.3	-0.7	0.2	0.1
Denmark	2 673	2.7	2.9	3.2	0.1	1.2	-1.3	0.5	-0.6	-0.5	-2.3	-0.6	2.0	1.1	1.6	0.4	0.9	0.8	0.6	0.5
Finland	2 162	1.0	1.0	-0.2	-0.3	0.3	3.1	0.0	-5.1	-7.1	-6.1	-0.8	2.2	1.4	2.0	2.4	3.3	1.7	1.7	1.6
France	22 587	-0.9	-0.1	0.5	0.4	1.0	1.5	0.8	0.0	-0.1	-1.2	0.1	0.8	0.1	0.5	1.4	1.4	2.4	1.6	1.5
Germany	37 194	0.2	0.7	1.4	0.7	0.8	1.5	3.0	2.5	-1.5	-1.4	-0.2	0.2	-0.3	-0.2	0.9	1.1	1.5	0.9	0.8
Greece	3 792	0.4	1.0	0.4	-0.1	1.6	0.4	1.3	-2.3	1.5	0.9	1.9	0.9	-0.5	-0.3	3.4	-0.7	1.2	1.1	1.4
Hungary	3 567	..	..	..	..	..	..	..	..	..	..	-3.4	-1.9	-0.5	0.3	1.5	3.6	0.9	1.3	1.2
Iceland	129	1.4	3.6	3.1	5.8	-3.0	-1.4	-1.1	-0.1	-1.4	-0.8	0.5	0.9	2.3	1.8	3.4	2.7	2.0	0.1	0.6
Ireland	1 380	-1.8	0.6	-0.5	0.7	-0.1	0.0	4.4	-0.2	0.5	1.5	3.2	4.9	3.9	3.6	10.2	6.3	4.7	3.7	3.1
Italy	20 027	0.3	0.3	0.4	-0.3	0.5	-0.1	1.2	0.7	-1.0	-3.1	-1.6	-0.6	0.5	0.4	1.1	1.2	1.9	1.6	1.7
Japan	65 568	0.6	0.7	0.8	1.0	1.7	2.0	2.0	1.9	1.1	0.2	0.1	0.1	0.4	1.1	-0.7	-0.8	-0.2	-0.1	0.2
Korea	21 106	-0.5	3.7	3.6	5.5	3.2	4.1	3.0	3.3	1.9	1.6	3.0	2.6	1.9	1.4	-5.3	1.4	3.8	0.5	2.0
Luxembourg	170	0.5	1.0	1.1	1.3	1.0	1.5	1.4	1.4	0.2	-0.3	0.8	0.9	0.9	1.2	2.0	2.5	2.9	1.8	1.6
Mexico[a]	17 743	..	..	..	..	4.7	3.5	1.9	5.5	2.0	1.5	2.1	-0.6	6.5	5.5	2.7	1.3	3.4	2.0	2.5
Netherlands	6 400	0.5	1.3	2.5	1.6	2.3	1.8	3.0	2.6	1.6	0.7	-0.1	2.4	2.0	3.4	3.3	3.0	2.5	1.7	1.3
New Zealand	1 736	2.7	3.5	-0.4	0.8	-3.1	-2.6	0.9	-1.3	0.8	2.6	4.7	5.2	3.7	0.4	-0.6	1.5	1.6	1.0	1.0
Norway	2 195	1.2	2.3	3.5	1.9	-0.6	-3.0	-0.9	-1.0	-0.3	0.0	1.5	2.2	2.5	3.0	2.5	0.4	0.5	0.6	0.7
Poland	15 177	..	..	..	..	..	..	..	..	..	..	-1.6	0.9	1.2	1.4	1.2	-3.9	-1.6	0.0	0.0
Portugal	4 589	0.0	-0.4	0.2	2.6	2.6	2.2	2.2	3.0	0.9	-2.0	-0.1	-0.6	0.5	1.9	2.5	1.9	1.7	1.0	1.0
Spain[b]	12 763	-1.8	-0.9	2.2	3.1	2.9	4.1	2.6	0.2	-1.9	-4.3	-0.9	1.8	1.5	2.9	3.5	4.6	4.8	2.9	2.2
Sweden	3 921	0.7	-0.3	0.7	1.0	1.4	1.5	1.0	-2.0	-4.3	-5.8	-0.9	1.6	-0.6	-1.1	1.5	2.2	2.2	1.6	1.0
Switzerland	3 801	1.0	2.0	2.3	2.5	2.6	2.7	3.2	1.9	-1.6	-0.8	-0.3	0.3	0.3	-0.3	1.1	0.7	1.0	0.7	0.7
Turkey[c]	20 861	1.5	1.7	1.8	2.2	1.5	2.6	-0.2	2.5	0.3	-5.3	7.3	2.5	2.4	-0.1	2.4	2.5	-3.8	-2.0	2.0
United Kingdom	26 999	2.0	1.1	0.1	2.6	4.3	2.4	0.3	-3.0	-2.1	-0.4	1.0	1.4	1.1	2.0	1.1	1.3	1.0	0.6	0.4
United States	129 572	4.1	2.0	2.3	2.6	2.3	2.0	1.3	-0.9	0.7	1.5	2.3	1.5	1.5	2.3	1.5	1.5	1.3	0.4	0.4
Euro area	118 799	-0.3	0.3	0.9	0.8	1.2	1.5	1.9	1.0	-0.9	-1.8	-0.3	0.5	0.3	0.8	1.7	1.8	2.2	1.5	1.3
European Union	152 393	0.2	0.4	0.8	1.1	1.8	1.6	1.5	0.1	-1.2	-1.7	-0.1	0.7	0.5	0.9	1.6	1.7	2.0	1.3	1.2
Total OECD	460 964	1.6	1.3	1.6	1.9	2.1	2.0	1.5	0.4	0.0	-0.2	1.1	1.1	1.2	1.5	1.0	1.1	1.2	0.6	0.9

Note: Labour market data are subject to differences in definitions across countries and to many series breaks, though the latter are often of a minor nature. Employment is measured as the number of persons employed full or part time and covers in most cases civilian and military employments. For the United States, only civilian employment is reported. For information about definitions, sources, data coverage, break in series and rebasings, see *OECD Economic Outlook Sources* and Methods *(http: www.oecd.org/eco/sources-and-methods/index.htm)*.

a) Data based on the National Survey of Urban Employment; see *OECD Economic Outlook* Sources and Methods.

b) Rebased; see *OECD Economic Outlook* Sources and Methods.

c) The figures incorporate important revisions to Turkish data; see *OECD Economic Outlook* Sources and Methods.

Source: OECD.

	1997 Unemployment (thousands)	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	793	8.9	8.2	8.1	8.1	7.1	6.1	7.0	9.5	10.7	10.9	9.7	8.5	8.5	8.6	8.0	7.2	6.6	7.4	7.2
Austria	236	3.5	3.7	4.0	4.4	4.2	3.9	4.2	4.6	4.8	5.4	5.3	5.3	5.6	5.7	5.7	5.3	4.6	4.6	4.4
Belgium	396	11.1	10.4	10.3	10.0	9.0	7.5	6.7	6.6	7.2	8.8	10.0	9.9	9.7	9.4	9.5	8.8	7.0	6.8	6.5
Canada	1 377	11.3	10.5	9.6	8.8	7.8	7.5	8.1	10.3	11.2	11.4	10.3	9.4	9.6	9.1	8.3	7.6	6.8	7.2	7.2
Czech Republic	248	..	..	..	..	..	..	..	..	..	4.3	4.4	4.1	3.9	4.8	6.5	8.8	8.8	8.4	8.1
Denmark	159	8.5	7.1	5.4	5.4	6.1	7.3	7.7	8.4	9.2	10.2	8.2	7.2	6.8	5.6	5.2	5.2	4.8	4.7	4.8
Finland	314	5.2	5.0	5.4	5.1	4.6	3.1	3.1	6.7	11.8	16.4	16.7	15.5	14.6	12.7	11.4	10.2	9.8	9.1	8.6
France	3 209	9.7	10.2	10.4	10.5	10.0	9.3	8.9	9.4	10.4	11.7	12.2	11.6	12.3	12.4	11.8	11.2	9.7	8.6	8.1
Germany	3 888	7.9	8.0	7.7	7.6	7.6	6.9	6.2	5.4	6.3	7.6	8.2	7.9	8.6	9.5	8.9	8.3	7.8	7.3	6.8
Greece	409	8.1	7.8	7.4	7.4	7.7	7.5	7.0	7.7	8.7	9.7	9.6	10.0	9.8	9.7	11.2	12.0	11.3	10.8	10.0
Hungary	349	..	..	..	..	..	..	..	..	..	12.1	11.0	10.4	10.1	8.9	8.0	7.1	6.5	6.3	6.1
Iceland	5	1.3	0.9	0.7	0.4	0.6	1.7	1.8	1.5	3.0	4.4	4.8	5.0	4.4	3.9	2.8	1.9	1.3	2.2	2.6
Ireland	159	16.4	16.5	17.0	16.7	16.2	14.9	12.8	14.4	15.1	15.7	14.7	12.2	11.7	10.4	7.6	5.6	4.3	3.9	3.9
Italy	2 688	8.5	8.6	9.9	10.2	10.5	10.2	9.1	8.6	8.8	10.2	11.2	11.7	11.7	11.8	11.9	11.5	10.7	10.0	9.2
Japan	2 306	2.7	2.6	2.8	2.8	2.5	2.3	2.1	2.1	2.2	2.5	2.9	3.1	3.4	3.4	4.1	4.7	4.7	4.9	4.8
Korea	556	3.8	4.0	3.8	3.1	2.5	2.6	2.4	2.3	2.4	2.8	2.4	2.0	2.0	2.6	6.8	6.3	4.1	4.1	4.0
Luxembourg	6	1.8	1.7	1.5	1.7	1.6	1.4	1.3	1.4	1.6	2.1	2.7	3.0	3.3	3.6	3.1	2.9	2.6	2.5	2.5
Mexico[a]	690	..	..	..	3.8	3.4	2.9	2.7	2.6	2.9	3.5	3.7	6.4	5.7	3.7	3.2	2.6	2.3	2.5	2.6
Netherlands	375	10.6	9.2	8.4	8.0	7.7	6.9	6.0	5.4	5.4	6.6	7.6	7.1	6.6	5.5	4.2	3.2	2.4	2.2	2.3
New Zealand	124	4.5	3.5	4.0	4.1	5.6	7.1	7.8	10.3	10.3	9.5	8.1	6.3	6.1	6.6	7.5	6.8	6.0	5.6	5.6
Norway	92	3.2	2.6	2.0	2.1	3.2	4.9	5.2	5.5	5.9	6.0	5.4	4.9	4.8	4.0	3.2	3.2	3.4	3.4	3.3
Poland	1 923	..	..	..	..	..	..	..	..	..	14.0	14.4	13.3	12.3	11.2	10.6	13.9	16.1	16.6	17.3
Portugal	333	8.7	8.8	8.8	7.3	6.0	5.2	4.9	4.3	4.1	5.5	6.9	7.2	7.3	6.8	5.0	4.4	4.0	4.1	4.2
Slovak Republic	..	..	..	..	..	..	..	..	..	..	12.2	13.7	13.1	11.1	11.6	12.1	16.4	18.8	18.3	17.5
Spain[b]	3 356	19.6	20.9	20.5	20.0	19.0	16.7	15.7	15.8	17.9	22.2	23.7	22.7	22.2	20.8	18.8	15.9	14.1	13.2	12.6
Sweden	342	3.1	2.8	2.5	2.1	1.7	1.5	1.7	3.0	5.3	8.2	8.0	7.7	8.0	8.0	6.5	5.6	4.7	4.1	3.9
Switzerland	188	1.1	1.0	0.8	0.8	0.7	0.6	0.5	1.1	2.5	4.5	4.7	4.2	4.7	5.2	3.9	2.7	2.0	1.9	1.9
Turkey[c]	1 463	7.7	7.2	8.0	8.4	8.5	8.6	7.8	7.9	8.1	8.5	8.2	7.3	6.4	6.6	6.7	7.5	6.4	6.9	6.7
United Kingdom	1 873	11.4	11.6	11.8	10.2	7.8	6.1	5.9	8.2	10.2	10.3	9.4	8.5	7.9	6.5	5.9	6.0	5.5	5.4	5.5
United States	6 727	7.5	7.2	7.0	6.2	5.5	5.3	5.6	6.8	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.6	5.0
Euro area	15 370	10.0	10.2	10.3	10.3	10.0	9.2	8.4	8.1	9.0	10.7	11.5	11.2	11.4	11.5	10.8	9.9	9.0	8.3	7.8
European Union	17 745	10.0	10.2	10.3	10.0	9.3	8.3	7.8	8.0	9.1	10.6	11.0	10.6	10.7	10.4	9.8	9.1	8.2	7.7	7.3
Total OECD	34 586	7.7	7.6	7.5	7.0	6.5	6.0	5.8	6.4	7.1	7.9	7.7	7.4	7.3	7.0	6.9	6.7	6.3	6.3	6.3

Note: Labour market data are subject to differences in definitions across countries and to many series breaks, though the latter are often of a minor nature. For information about definitions, sources, data coverage, break in series and rebasings, see *OECD Economic Outlook* Sources and Methods *(http: www.oecd.org/eco/sources-and-methods/index.htm).*
a) Data based on the National Survey of Urban Employment; see *OECD Economic Outlook* Sources and Methods.
b) Rebased; see *OECD Economic Outlook* Sources and Methods.
c) The figures incorporate important revisions to Turkish data; see *OECD Economic Outlook* Sources and Methods.
Source: OECD.

Annex Table 22. **Standardised unemployment rates**[a]

Per cent of civilian labour force

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Australia	7.2	10.0	9.0	8.3	8.1	8.1	7.2	6.2	6.9	9.6	10.8	10.9	9.7	8.5	8.5	8.5	8.0	7.2	6.6
Austria	..	..	..	..	..	..	..	..	..	..	..	4.0	3.8	3.9	4.3	4.4	4.5	4.0	3.7
Belgium	10.1	11.0	11.1	10.4	10.3	10.1	9.0	7.5	6.7	6.6	7.2	8.8	10.0	9.9	9.7	9.4	9.5	8.8	7.0
Canada	11.0	11.9	11.3	10.7	9.6	8.8	7.8	7.5	8.1	10.3	11.2	11.4	10.4	9.4	9.6	9.1	8.3	7.6	6.8
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	4.4	4.4	4.1	3.9	4.8	6.5	8.8	8.9
Denmark	8.4	9.0	8.5	7.1	5.4	5.4	6.1	7.3	7.7	8.4	9.2	10.2	8.2	7.2	6.8	5.6	5.2	5.2	4.7
Finland	..	..	5.9	6.0	6.7	4.9	4.2	3.1	3.2	6.6	11.6	16.4	16.7	15.2	14.5	12.6	11.4	10.2	9.8
France	7.7	8.1	9.7	10.2	10.3	10.5	10.0	9.4	9.0	9.5	10.4	11.7	12.3	11.7	12.4	12.3	11.8	11.2	9.5
Germany[b]	5.7	6.9	7.1	7.2	6.5	6.3	6.2	5.6	4.8	4.2	4.5	7.9	8.4	8.2	8.9	9.9	9.3	8.6	7.9
Hungary	..	..	..	..	..	..	..	..	..	..	9.9	12.1	11.0	10.4	10.1	8.9	8.0	7.1	6.5
Ireland	11.4	13.9	15.5	16.8	16.8	16.6	16.2	14.7	13.4	14.8	15.4	15.6	14.4	12.3	11.7	9.9	7.5	5.6	4.2
Italy	6.4	7.5	8.0	8.3	9.0	9.8	9.8	9.8	9.0	8.6	8.9	10.2	11.2	11.6	11.7	11.7	11.8	11.3	10.5
Japan	2.4	2.7	2.7	2.6	2.8	2.8	2.5	2.3	2.1	2.1	2.2	2.5	2.9	3.1	3.4	3.4	4.1	4.7	4.7
Luxembourg	3.0	3.5	3.1	2.9	2.6	2.5	2.0	1.8	1.7	1.7	2.1	2.6	3.2	2.9	3.0	2.7	2.7	2.4	2.4
Netherlands	8.1	9.7	9.3	8.3	8.3	8.1	7.6	6.9	6.2	5.8	5.6	6.6	7.1	6.9	6.3	5.2	4.1	3.3	2.7
New Zealand	3.5	5.7	5.7	4.2	4.0	4.1	5.6	7.1	7.8	10.3	10.3	9.5	8.2	6.3	6.1	6.6	7.5	6.8	6.0
Norway	2.6	3.5	3.2	2.7	2.0	2.1	3.2	5.0	5.3	5.6	6.0	6.1	5.5	5.0	4.9	4.1	3.3	3.2	3.5
Poland	..	..	..	..	..	..	..	..	..	..	..	14.0	14.4	13.3	12.3	11.2	10.6	..	16.1
Portugal	..	8.3	8.9	9.2	8.8	7.3	5.9	5.2	4.8	4.2	4.3	5.7	7.0	7.3	7.3	6.8	5.2	4.5	4.2
Spain	14.9	17.5	20.2	21.6	21.2	20.6	19.5	17.2	16.3	16.4	18.4	22.7	24.1	22.9	22.2	20.8	18.8	15.9	14.1
Sweden	3.3	3.7	3.3	2.9	2.7	2.2	1.8	1.5	1.7	3.1	5.6	9.1	9.4	8.8	9.6	9.9	8.3	7.2	5.9
Switzerland	..	..	..	..	..	..	..	..	..	2.0	3.1	4.0	3.8	3.5	3.9	4.2	3.5	3.0	..
United Kingdom	10.3	11.1	11.2	11.5	11.6	10.6	8.7	7.3	7.1	8.9	10.0	10.5	9.6	8.7	8.2	7.0	6.3	6.1	5.5
United States	9.7	9.6	7.5	7.2	7.0	6.2	5.5	5.3	5.6	6.8	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0
Euro area	..	..	..	..	..	..	..	..	..	8.3	9.2	10.9	11.6	11.3	11.5	11.6	10.9	10.0	9.0
European Union	..	..	..	..	..	..	..	..	..	8.2	9.2	10.7	11.1	10.7	10.8	10.6	9.9	9.2	8.2
Total OECD	..	..	..	..	..	..	..	..	..	..	..	8.0	7.9	7.5	7.4	7.2	7.1	6.8	6.4

Note: In so far as possible, the data have been adjusted to ensure comparability over time and to conform to the guidelines of the International Labour Office. All series are benchmarked to labour-force-survey-based estimates. In countries with annual surveys, monthly estimates are obtained by interpolation/extrapolation and by incorporating trends in administrative data, where available. The annual figures are then calculated by averaging the monthly estimates (for both unemployed and the labour force). For countries with monthly or quarterly surveys, the annual estimates are obtained by averaging the monthly or quarterly estimates, respectively. For several countries, the adjustment procedure used is similar to that of the Bureau of Labor Statistics, U.S. Department of Labor. For EU countries, the procedures are similar to those used in deriving the Comparable Unemployment Rates (CURs) of the Statistical Office of the European Communities. Minor differences may appear mainly because of various methods of calculating and applying adjustment factors, and because EU estimates are based on the civilian labour force.

a) See technical notes in OECD *Quarterly Labour Force Statistics.*
b) Prior to 1993 data refers to Western Germany.
Source: OECD.

Annex Table 23. **Labour force, employment and unemployment**

Millions

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Labour force																			
Major seven countries	288.2	291.6	295.8	299.2	303.1	307.0	311.0	323.1	325.4	326.6	329.1	330.8	333.7	337.8	340.2	343.0	345.6	347.8	350.1
Total of smaller countries$a$	94.8	96.1	97.9	113.4	115.6	118.0	119.5	121.9	123.1	149.8	152.2	154.0	156.2	157.8	159.5	161.4	162.4	163.7	166.0
European Union	149.4	150.3	151.7	152.8	154.3	155.2	156.6	167.2	167.2	167.1	167.6	168.0	169.0	170.1	171.6	173.1	174.8	176.1	177.4
Euro area	114.8	115.4	116.6	117.4	118.4	119.1	120.4	131.2	131.3	131.4	132.0	132.3	133.1	134.2	135.5	136.5	138.0	139.1	140.2
Total OECDa	383.0	387.7	393.7	412.7	418.7	425.1	430.6	445.0	448.5	476.4	481.3	484.8	489.9	495.5	499.7	504.4	507.9	511.5	516.1
Employment																			
Major seven countries	267.0	270.4	274.2	278.9	284.4	289.6	293.6	302.8	302.7	303.1	306.1	308.7	311.2	315.7	318.7	322.0	325.7	327.6	329.7
Total of smaller countries$a$	86.6	87.9	89.7	104.8	107.3	110.1	112.0	113.8	114.0	136.0	138.2	140.3	143.0	145.2	146.8	148.8	150.7	151.9	154.2
European Union	134.4	135.0	136.1	137.6	140.0	142.3	144.5	153.8	152.0	149.4	149.2	150.3	151.0	152.4	154.8	157.4	160.5	162.6	164.5
Euro area	103.3	103.6	104.6	105.3	106.6	108.2	110.3	120.5	119.4	117.3	116.9	117.5	117.9	118.8	120.8	123.0	125.7	127.5	129.2
Total OECDa	353.6	358.3	364.0	383.6	391.7	399.7	405.6	416.5	416.6	439.1	444.2	449.0	454.2	461.0	465.5	470.7	476.4	479.5	483.9
Unemployment																			
Major seven countries	21.2	21.2	21.5	20.4	18.7	17.5	17.4	20.4	22.8	23.5	23.0	22.1	22.5	22.1	21.5	21.0	19.9	20.2	20.4
Total of smaller countries$a$	8.2	8.1	8.2	8.6	8.4	7.9	7.6	8.1	9.1	13.8	14.1	13.7	13.2	12.5	12.7	12.7	11.6	11.8	11.8
European Union	15.0	15.3	15.6	15.2	14.3	13.0	12.1	13.4	15.2	17.7	18.4	17.8	18.0	17.7	16.8	15.7	14.3	13.5	13.0
Euro area	11.5	11.8	12.1	12.1	11.8	10.9	10.2	10.6	11.8	14.1	15.1	14.8	15.2	15.4	14.6	13.6	12.4	11.6	11.0
Total OECDa	29.4	29.3	29.7	29.0	27.0	25.4	25.0	28.5	31.8	37.3	37.1	35.8	35.7	34.6	34.2	33.7	31.5	32.0	32.2

Note: See Annex Tables 18 to 20.
a) The aggregate measures include Mexico as of 1987. There is a potential bias in the aggregates thereafter because of the limited coverage of the Mexican National Survey of Urban Employment.
Source: OECD.

Annex Table 26. **Household saving rates**

Percentage of disposable household income

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	12.3	13.7	11.1	10.5	8.2	6.9	8.5	9.1	6.2	5.3	3.5	5.2	4.5	4.8	3.1	2.1	1.9	2.7	3.6	4.4
Belgium	15.4	14.4	12.1	14.5	13.3	14.4	14.4	15.6	17.1	18.4	18.1	17.6	17.4	16.2	14.5	14.0	14.5	14.1	14.4	14.7
Canada	19.6	19.3	18.4	16.0	14.3	15.0	15.8	16.0	15.9	15.1	13.6	11.1	11.3	9.0	6.2	6.1	5.4	5.2	5.6	5.9
Czech Republic	..	..	..	..	..	..	..	..	..	..	15.3	12.3	15.8	17.5	16.4	14.9	16.5	17.5	18.0	17.6
Denmark	..	..	..	..	..	7.4	8.4	11.2	10.8	9.7	8.3	4.2	6.9	5.6	3.6	3.6	1.6	3.0	3.8	4.0
Finland	3.7	3.0	2.7	1.6	3.2	-0.4	0.2	2.9	7.8	10.0	7.6	2.6	6.0	2.0	4.4	3.1	3.7	0.7	2.3	3.3
France	15.8	14.1	13.4	12.7	11.2	12.3	12.4	13.0	13.8	14.7	15.2	14.9	15.8	14.8	16.0	15.6	15.5	16.1	16.3	16.0
Germany	9.0	9.5	9.5	10.4	10.7	10.9	10.5	12.0	13.0	12.9	12.4	11.6	11.2	10.8	10.4	10.2	9.9	9.8	10.2	9.9
Ireland	12.4	12.7	10.6	8.8	9.6	6.8	4.8	6.5	7.7	7.2	9.9	6.1	8.5	7.0	8.0	10.4	9.0	6.0	7.1	7.5
Italy	24.7	22.8	21.0	20.2	19.5	18.4	17.0	18.4	18.7	18.4	17.2	17.2	16.6	16.0	14.5	12.8	11.5	10.3	9.7	9.5
Japan	19.6	19.4	19.0	19.0	16.5	15.5	15.7	13.9	15.3	14.6	14.7	12.6	12.3	11.3	10.6	11.8	11.1	11.1	11.7	12.8
Korea	11.6	14.1	14.8	20.0	23.2	25.1	23.6	22.0	24.0	22.8	20.6	19.4	16.8	15.9	15.4	22.9	22.9	22.5	21.0	19.9
Netherlands	5.8	5.6	5.6	8.2	8.3	8.1	9.8	11.6	7.2	8.3	6.8	7.1	14.9	13.6	14.1	13.4	10.6	9.4	10.1	9.7
New Zealand	6.9	6.6	5.7	4.4	7.2	5.8	5.5	3.3	5.5	3.4	3.3	0.4	0.6	0.6	-0.7	-1.5	-2.0	-1.9	-1.0	-0.4
Norway	4.2	5.0	-1.8	-4.7	-4.6	-1.2	1.1	2.2	4.2	5.9	6.9	5.9	5.7	4.7	4.8	6.6	6.7	6.3	6.5	7.0
Portugal	22.4	23.2	24.3	21.8	21.4	16.4	15.1	16.4	17.0	14.8	12.6	12.1	12.1	11.3	10.0	8.2	7.5	7.7	8.1	8.4
Spain	12.8	11.6	11.1	12.1	10.6	11.0	10.2	12.3	13.4	11.9	14.4	11.9	14.3	14.1	13.4	12.7	12.0	11.6	12.1	12.3
Sweden	5.2	4.8	4.5	3.3	-1.1	-3.0	-2.9	1.5	4.8	9.3	11.5	11.3	8.6	7.1	3.8	2.4	2.0	2.0	4.0	4.2
Switzerland	2.7	2.9	2.8	3.8	5.5	7.9	9.3	10.3	10.5	10.1	10.8	9.1	9.5	8.5	8.9	9.1	8.6	8.1	8.1	8.2
United Kingdom	8.3	9.7	9.1	7.5	5.5	3.9	5.6	7.4	9.3	11.4	10.9	9.4	10.3	9.4	9.3	5.8	5.2	4.7	4.8	4.9
United States	8.8	10.6	9.2	8.2	7.3	7.8	7.5	7.8	8.3	8.7	7.1	6.1	5.6	4.8	4.2	4.2	2.2	-0.1	0.0	1.0

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)*. Countries differ in the way household disposable income is reported (in particular whether private pension benefits less pension contributions are included in disposable income or not), but the calculation of household saving is adjusted for this difference. Most countries are reporting household saving on a net basis (i.e. excluding consumption of fixed capital by households and unincorporated businesses). Six countries, Belgium, Denmark, France, Italy, Spain and the United Kingdom are reporting gross household saving. In most countries the households saving include saving by non-profit institutions (in some cases referred to as personal saving). Other countries (Czech Republic, Finland, France, Japan and New Zealand) report saving of households only.

Source: OECD.

As a percentage of nominal GDP

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Australia	20.9	18.6	20.6	20.2	19.0	19.5	21.3	22.6	21.4	17.7	15.8	16.6	18.0	17.7	18.1	19.3	19.7	20.1	..
Austria	24.9	24.2	22.7	23.6	23.6	23.7	23.9	23.9	24.4	25.0	24.8	23.9	22.4	22.3	21.8	21.5	22.0	22.0	21.4
Belgium	17.3	16.3	16.7	17.6	17.4	19.0	19.5	21.8	22.3	22.9	22.1	22.9	24.0	24.7	24.9	24.5	24.9	24.7	24.5
Canada	22.6	19.8	19.7	20.5	19.9	18.4	19.6	20.4	19.6	17.0	14.3	13.1	13.6	15.8	17.9	18.5	19.3	18.5	20.2
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	27.9	28.1	27.3	29.9	27.4	26.1	26.5	..
Denmark	9.0	8.5	11.7	16.2	16.0	19.0	18.2	19.2	19.5	20.7	20.0	20.3	19.2	19.1	20.4	20.4	21.2	20.9	22.4
Finland	26.1	24.7	24.2	25.4	24.4	23.8	23.7	26.1	26.1	24.5	16.8	14.0	14.9	18.4	21.6	20.7	24.1	24.9	25.4
France	20.0	18.8	18.6	18.3	18.1	19.4	19.6	20.8	21.6	21.5	20.9	20.5	19.0	19.2	19.5	19.2	20.4	21.1	21.3
Germany	20.3	20.2	21.2	21.7	22.0	23.8	23.5	24.3	25.7	24.9	23.3	23.1	22.0	22.0	21.9	21.3	21.5	21.6	21.4
Greece	24.0	24.0	21.9	23.0	22.6	22.4	18.9	21.3	19.0	19.1	20.7	20.0	18.5	19.4	18.0	17.4	17.8	18.0	19.1
Iceland	24.2	21.0	20.1	17.8	15.8	19.2	16.8	16.5	16.3	17.5	16.8	16.7	18.4	18.9	18.0	18.2	19.1	17.9	15.9
Ireland	12.1	14.4	14.3	14.1	13.5	13.4	14.5	14.7	15.0	18.0	17.7	15.6	17.7	18.0	20.4	22.0	23.8	24.8	23.9
Italy	23.3	22.8	23.1	23.1	22.6	22.4	21.9	21.8	21.0	20.7	19.6	18.3	19.2	19.7	21.6	21.9	21.7	21.4	21.2
Japan	31.5	30.6	29.8	30.8	31.7	31.9	32.5	33.4	33.6	33.6	34.5	33.9	32.7	31.3	30.8	31.6	31.0	29.6	..
Korea	24.0	25.1	28.8	30.6	30.6	34.6	38.4	40.7	37.6	37.6	37.4	36.5	36.2	35.6	35.4	33.7	33.3	33.8	33.5
Mexico	25.4	26.3	28.4	25.7	25.8	19.1	24.5	21.3	20.3	20.3	18.7	16.6	15.1	14.8	19.3	22.5	24.0	20.5	..
Netherlands	24.3	24.3	24.9	26.3	26.9	26.9	25.4	26.9	28.7	28.6	27.5	26.5	26.3	27.2	27.4	26.7	28.6	27.9	27.1
New Zealand	20.4	19.4	20.4	19.4	17.1	18.9	17.9	17.8	15.6	14.0	13.7	16.4	19.2	19.1	17.4	15.1	15.1	12.4	..
Norway	30.6	29.1	29.6	32.1	31.2	25.5	25.7	25.1	26.2	25.8	25.1	24.2	24.6	25.4	27.0	29.3	30.7	27.1	28.3
Poland	..	..	..	..	..	..	..	..	..	..	15.9	15.4	15.8	20.0	21.2	20.8	21.0	22.0	..
Portugal	6.4	5.7	5.5	5.0	5.8	7.1	7.9	7.8	8.0	7.6	6.5	6.2	5.3	4.9	5.3	4.3	4.0	3.5	2.3
Spain	20.3	20.7	20.9	22.0	22.0	22.7	22.7	23.6	22.9	22.6	22.0	20.1	20.1	20.0	22.3	22.1	22.6	22.6	22.3
Sweden	17.6	16.1	18.2	20.4	19.8	20.6	20.7	21.3	21.8	20.0	17.9	15.1	13.4	17.1	20.3	19.4	19.9	20.6	20.9
Switzerland	29.5	28.3	27.4	30.0	30.4	30.0	29.8	31.8	32.5	32.3	30.2	28.4	28.9	27.9	28.5	27.9	30.3	31.0	..
Turkey	19.2	18.4	15.5	16.3	20.7	23.9	24.3	28.9	26.4	21.5	17.7	18.5	18.7	18.9	20.1	22.6	21.6	20.6	13.2
United Kingdom	18.0	18.0	18.3	19.0	19.0	17.6	17.7	17.7	17.6	16.7	15.6	14.5	14.2	16.2	16.4	16.8	18.0	18.0	16.3
United States	20.4	18.4	16.3	18.5	17.2	15.4	15.9	17.2	16.6	15.8	16.1	15.1	14.9	15.8	16.4	16.7	17.9	18.4	18.1
European Union	20.1	19.7	20.1	20.7	20.6	21.2	20.9	21.6	22.0	21.6	20.5	19.7	19.2	19.8	20.5	20.3	21.0	21.1	20.7
Total OECD	22.3	21.3	20.7	21.8	21.5	21.0	21.5	22.5	22.2	21.5	21.1	20.3	19.9	20.3	20.9	21.2	21.8	21.7	..

Note: Based on SNA93 or ESA95 except for Japan, New Zealand, Switzerland and Turkey that report on SNA68 basis.
Source: OECD.

Annex Table 28. **General government total outlays**

As a percentage of nominal GDP

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Prévisions 2001	2002
Australia	36.7	37.8	37.4	36.2	33.2	32.2	33.0	34.7	36.2	36.2	35.4	35.4	34.7	33.5	33.4	32.8	32.7	33.1	32.9
Austria	49.3	50.2	51.0	51.5	50.5	49.1	48.6	49.7	50.4	53.2	52.6	52.5	52.0	49.7	50.1	49.4	47.6	47.5	46.6
Belgium	58.0	57.3	56.4	54.5	52.4	50.8	50.8	51.8	51.9	53.3	51.3	50.3	50.3	48.8	48.2	47.9	47.0	45.9	45.4
Canada	47.6	48.1	47.6	46.2	45.5	46.0	48.9	52.3	53.4	52.2	49.9	48.5	46.6	43.9	44.2	41.8	40.9	40.8	40.3
Czech Republic	..	..	..	..	..	..	..	..	..	44.2	45.4	44.4	43.0	42.4	42.3	45.2	47.7	48.2	47.6
Denmark	..	..	..	..	54.2	54.3	53.6	54.5	55.5	58.1	58.0	56.6	56.3	54.4	53.4	51.8	50.2	50.2	50.1
Finland	40.6	42.3	43.3	43.8	42.7	41.0	44.4	52.7	57.7	59.1	57.5	54.3	54.0	51.3	48.1	46.8	43.6	42.8	42.0
France	51.6	51.9	51.2	50.2	49.8	48.9	49.5	50.0	51.7	54.0	53.8	53.5	53.8	52.8	52.3	52.1	51.4	50.1	50.0
Germany [a]	46.1	45.6	45.0	45.3	44.9	43.5	43.8	44.2	45.0	46.2	45.9	46.3	47.3	46.4	45.8	45.9	42.9	44.7	44.1
Greece	40.4	43.9	43.0	42.8	41.4	43.1	47.5	43.9	45.9	48.1	46.0	54.6	52.4	50.9	50.6	52.0	50.9	49.8	48.9
Hungary	..	..	..	..	..	..	..	..	..	58.1	59.0	53.4	48.9	48.6	47.9	47.2	46.5	46.0	45.0
Iceland	..	..	..	..	..	41.5	39.0	40.1	40.5	40.4	39.9	39.2	38.6	37.2	37.8	38.9	38.9	40.0	38.9
Ireland	49.6	50.5	50.2	48.5	44.9	38.6	39.5	40.7	41.2	40.8	40.6	37.6	35.8	34.0	31.8	32.8	30.0	29.7	29.4
Italy	48.7	49.8	49.5	49.5	49.7	50.5	52.4	52.2	52.4	55.4	52.8	51.1	51.3	48.5	47.3	46.7	44.4	44.7	44.3
Japan [b]	38.2	38.1	38.7	39.9	39.3	38.7	38.3	37.5	38.5	40.3	40.8	42.2	42.8	41.7	42.8	44.6	45.3	46.0	46.1
Korea	17.6	17.6	16.9	16.0	16.2	17.3	18.3	19.4	20.6	20.1	19.7	19.3	20.7	21.5	24.1	24.0	23.8	24.8	24.8
Luxembourg	..	..	..	..	..	..	41.0	42.8	43.1	43.7	42.1	42.9	43.3	41.2	41.1	40.7	39.5	39.0	38.4
Netherlands	53.8	51.9	52.0	53.3	51.3	48.9	49.4	49.5	50.0	49.9	47.6	47.7	45.6	44.4	43.3	42.7	41.5	40.8	40.6
New Zealand	..	..	51.6	48.0	49.1	47.8	48.3	45.4	45.0	41.7	39.4	38.5	37.7	38.1	38.9	40.2	40.2	39.8	39.4
Norway	42.1	41.5	45.4	47.7	49.5	49.1	49.7	50.6	52.0	51.0	49.9	47.6	45.4	43.8	46.4	46.2	41.4	40.0	40.9
Poland	..	..	..	..	..	..	..	..	..	54.3	49.4	47.0	46.1	45.6	43.8	43.7	42.4	41.3	40.7
Portugal	40.3	39.5	40.5	39.8	37.4	36.6	39.5	41.9	42.5	44.1	42.6	41.1	41.4	40.0	40.2	40.9	41.6	41.5	41.7
Spain	37.4	39.7	40.6	39.6	39.0	40.7	41.6	42.7	43.9	47.2	45.1	44.0	42.8	41.3	40.6	39.4	38.7	38.5	38.5
Sweden	59.1	60.4	58.6	54.8	55.2	55.1	55.9	58.9	64.3	67.5	64.8	62.1	60.2	58.2	55.9	55.2	52.7	52.3	51.6
United Kingdom	..	..	..	43.0	40.6	39.9	41.9	43.5	45.3	45.5	44.7	44.4	43.0	40.9	39.7	39.2	39.2	39.7	39.9
United States [c]	33.1	33.8	34.2	33.9	32.9	32.8	33.6	34.2	34.8	34.1	33.1	32.9	32.4	31.4	30.5	30.0	29.4	29.6	29.5
Euro area	47.4	47.7	47.4	47.2	47.1	46.4	47.1	47.5	48.3	50.4	49.3	49.0	49.2	47.8	47.0	46.6	44.7	44.8	44.4
Total of above European Union countries	47.9	48.3	48.0	46.9	46.2	45.7	46.7	47.4	48.5	50.3	49.2	48.7	48.5	46.9	46.1	45.7	44.2	44.4	44.1
Total of above OECD countries	38.9	39.3	39.5	39.6	38.8	38.5	39.3	39.9	40.8	41.7	40.8	40.6	40.4	39.2	38.8	38.6	37.9	38.1	38.0

Note: Total outlays are defined as current outlays plus net capital outlays. Data refer to the general government sector, which is a consolidation of accounts for the central, state and local governments plus social security.
   One-off revenues from the sale of mobile telephone licenses are recorded as negative capital outlays. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and
   OECD Economic Outlook Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
a) The 1995 outlays are net of the debt taken on this year from the Inherited Debt funds.
b) The 1998 outlays would be 5.4 percentage points of GDP higher if account were taken of the assumption by the central government of the debt of the Japan Railway Settlement Corporation and the National Forest
   Special Account.
c) Net of operating surpluses of public enterprises.
Source: OECD.

As a percentage of nominal GDP

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Prévisions 2001	2002
Australia	31.5	32.7	33.2	34.0	32.9	32.2	31.8	30.9	30.3	30.7	30.8	31.7	32.5	33.0	33.9	33.8	32.5	33.2	33.3
Austria	46.7	47.6	47.2	47.1	47.0	46.0	46.2	46.7	48.4	49.0	47.6	47.3	48.1	48.0	47.9	47.3	46.4	46.9	46.6
Belgium	47.1	47.0	46.3	46.5	45.1	43.2	44.1	44.4	43.9	46.0	46.2	46.0	46.6	46.9	47.3	47.2	47.0	46.6	46.1
Canada	39.8	39.5	40.5	40.7	41.2	41.4	43.1	43.9	44.2	43.5	43.1	43.2	43.8	44.1	44.4	44.0	44.3	43.4	42.5
Czech Republic	..	..	..	..	..	..	..	..	..	43.5	43.5	42.8	41.1	40.4	39.9	41.1	41.3	40.7	40.0
Denmark	..	..	..	..	55.7	54.6	52.5	52.1	53.3	55.2	55.6	54.3	55.3	54.8	54.5	54.9	52.7	53.1	53.0
Finland	43.9	45.6	47.0	45.1	46.5	46.9	49.6	51.6	52.0	51.8	51.8	50.6	50.9	49.8	49.4	48.6	50.3	48.1	47.6
France	48.7	48.9	48.0	48.3	47.4	47.1	47.4	47.6	47.5	47.9	48.2	48.0	49.7	49.7	49.6	50.5	50.0	49.6	49.2
Germany	44.2	44.5	43.8	43.5	42.8	43.6	41.8	41.2	42.5	43.0	43.5	43.0	43.9	43.7	43.8	44.5	44.4	43.0	42.9
Greece	32.0	32.3	33.4	33.3	30.0	28.9	31.6	32.5	33.3	34.5	36.1	44.5	44.9	46.9	48.1	50.2	49.9	49.8	49.7
Hungary	..	..	..	..	..	..	..	..	..	51.6	48.0	45.8	43.3	41.6	41.8	41.9	43.4	42.0	40.6
Iceland	..	..	..	..	..	37.0	35.8	37.2	37.7	35.9	35.2	36.2	37.0	37.1	38.3	41.0	42.0	42.4	41.7
Ireland	40.6	40.2	40.0	40.3	40.7	36.9	36.7	37.8	38.2	38.1	38.7	35.4	35.7	34.8	34.0	35.0	34.7	34.2	33.9
Italy	37.3	37.5	38.2	38.6	39.0	40.7	41.3	42.2	42.9	46.0	43.7	43.5	44.2	45.8	44.5	44.9	44.1	43.4	43.1
Japan [a]	36.6	37.5	38.0	40.3	40.4	40.5	40.2	39.3	39.3	37.9	38.0	38.0	37.9	37.9	37.3	37.6	39.0	39.7	39.2
Korea	19.2	18.8	18.4	18.6	19.7	20.8	21.8	21.3	22.0	22.6	22.8	23.5	24.5	25.2	26.1	26.9	30.8	30.8	30.9
Luxembourg	..	..	..	..	..	..	45.7	44.3	45.8	48.8	46.7	46.2	45.8	44.8	44.3	45.4	44.8	42.5	41.8
Netherlands	47.6	47.9	46.3	46.7	46.2	43.6	43.7	46.3	45.6	46.3	43.4	43.6	43.8	43.3	42.7	43.7	43.7	42.1	42.2
New Zealand	..	..	45.2	45.8	44.4	44.1	43.6	41.6	41.7	41.1	42.3	41.5	40.6	40.0	40.3	40.5	40.7	40.8	40.6
Norway	49.1	51.4	51.3	52.3	52.1	51.0	52.3	50.7	50.2	49.6	50.3	51.1	52.0	51.7	50.0	51.0	57.2	55.3	54.7
Poland	..	..	..	..	..	..	..	..	..	49.8	45.9	44.5	43.3	42.8	41.5	40.9	39.5	38.7	38.4
Portugal	33.8	32.5	34.0	33.4	34.0	34.3	34.6	36.1	39.6	38.1	36.8	36.6	37.4	37.4	37.9	38.9	40.2	40.3	40.5
Spain	32.9	34.1	34.5	35.9	35.7	37.2	37.5	38.3	39.9	40.5	39.0	37.4	37.8	38.1	38.1	38.2	38.4	38.5	38.6
Sweden	56.2	56.5	57.3	58.7	58.1	60.0	59.7	57.0	56.5	55.6	54.0	54.2	56.8	56.5	57.7	56.9	56.8	55.9	55.0
United Kingdom	..	..	..	41.2	41.2	40.8	40.4	40.7	38.8	37.5	37.9	38.6	38.6	38.9	40.2	40.5	41.1	40.9	40.8
United States [b]	28.3	28.7	28.9	29.6	29.3	29.5	29.3	29.2	28.9	29.2	29.4	29.8	30.2	30.5	30.8	31.0	31.6	31.7	30.9
Euro area	42.5	42.8	42.6	42.7	42.7	42.9	42.6	42.8	43.5	44.7	44.2	44.0	44.9	45.1	44.8	45.4	45.1	44.2	44.0
Total of above European Union countries	42.8	43.1	42.9	42.8	42.7	42.9	42.7	43.0	43.3	44.0	43.6	43.4	44.2	44.5	44.5	45.0	44.8	44.2	44.0
Total of above OECD countries	34.7	35.1	35.3	36.3	36.2	36.5	36.4	36.3	36.4	36.8	36.7	36.8	37.2	37.4	37.5	37.8	38.3	38.2	37.7

Note: Current receipts exclude capital receipts. Non-tax current receipts include operating surpluses of public enterprises, property income, fees, charges, fines, etc. Data refer to the general government sector, which is a consolidation of accounts for central, state and local governments plus social security. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
a) Includes deferred tax payments on postal savings accounts in 2000 and 2001.
b) Excludes the operating surpluses of public enterprises.
Source: OECD.

Annex Table 30. **General government financial balances**

Surplus (+) or deficit (-) as a percentage of nominal GDP

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	-5.2	-5.1	-4.2	-2.2	-0.4	0.0	-1.2	-3.8	-6.0	-5.5	-4.6	-3.7	-2.1	-0.5	0.6	1.0	-0.2	0.1	0.3
Austria	-2.6	-2.6	-3.8	-4.4	-3.5	-3.1	-2.4	-3.0	-2.0	-4.2	-5.0	-5.2	-3.8	-1.7	-2.2	-2.1	-1.1	-0.6	0.0
Belgium	-10.9	-10.3	-10.1	-7.9	-7.3	-7.6	-6.7	-7.4	-8.0	-7.3	-5.0	-4.3	-3.8	-1.9	-0.9	-0.7	0.0	0.7	0.7
Canada	-7.8	-8.6	-7.2	-5.4	-4.3	-4.6	-5.8	-8.4	-9.2	-8.7	-6.7	-5.4	-2.8	0.2	0.2	2.2	3.4	2.6	2.2
Czech Republic	..	..	..	..	..	..	..	..	..	-0.7	-1.9	-1.6	-1.9	-2.0	-2.4	-4.0	-6.3	-7.5	-7.5
Denmark	..	..	..	..	1.5	0.3	-1.0	-2.4	-2.2	-2.9	-2.4	-2.3	-1.0	0.4	1.1	3.1	2.4	2.9	2.9
Finland	3.3	3.3	3.7	1.3	3.8	6.0	5.3	-1.1	-5.6	-7.3	-5.7	-3.7	-3.2	-1.5	1.3	1.8	6.7	5.3	5.6
France	-2.8	-3.0	-3.2	-2.0	-2.4	-1.8	-2.1	-2.5	-4.2	-6.0	-5.5	-5.6	-4.1	-3.0	-2.7	-1.6	-1.3	-0.5	-0.8
Germany *a*	-1.9	-1.1	-1.3	-1.8	-2.1	0.1	-2.0	-3.0	-2.5	-3.1	-2.4	-3.3	-3.4	-2.7	-2.1	-1.4	1.5	-1.7	-1.2
Greece	-8.4	-11.6	-9.6	-9.5	-11.4	-14.2	-15.9	-11.4	-12.6	-13.6	-9.9	-10.2	-7.4	-4.0	-2.5	-1.8	-0.9	0.0	0.7
Hungary	..	..	..	..	..	..	..	..	..	-6.6	-11.0	-7.6	-5.7	-7.0	-6.1	-5.3	-3.1	-4.0	-4.4
Iceland	..	..	..	..	..	-4.5	-3.3	-2.9	-2.8	-4.5	-4.7	-3.0	-1.6	0.0	0.5	2.2	3.0	2.4	2.8
Ireland	-9.0	-10.3	-10.2	-8.2	-4.2	-1.7	-2.8	-2.9	-3.0	-2.7	-2.0	-2.2	-0.1	0.7	2.2	2.1	4.7	4.5	4.5
Italy	-11.4	-12.2	-11.4	-11.0	-10.7	-9.8	-11.0	-10.0	-9.5	-9.4	-9.1	-7.6	-7.1	-2.7	-2.8	-1.8	-0.3	-1.3	-1.2
Japan *b*	-1.5	-0.6	-0.7	0.3	1.1	1.8	1.9	1.8	0.8	-2.4	-2.8	-4.2	-4.9	-3.7	-5.5	-7.0	-6.3	-6.3	-6.9
Korea	1.5	1.1	1.6	2.6	3.5	3.4	3.5	1.8	1.4	2.5	3.1	4.2	3.8	3.6	1.9	2.9	6.9	6.0	6.1
Luxembourg	..	..	..	..	..	..	4.7	1.4	2.6	5.0	4.6	3.3	2.5	3.6	3.2	4.7	5.3	3.6	3.4
Netherlands	-6.2	-4.1	-5.7	-6.6	-5.1	-5.3	-5.7	-3.2	-4.4	-3.6	-4.2	-4.2	-1.8	-1.1	-0.7	1.0	2.2	1.3	1.6
New Zealand	..	..	-6.4	-2.2	-4.7	-3.7	-4.7	-3.7	-3.2	-0.6	2.9	3.0	2.9	1.9	1.4	0.3	0.5	1.0	1.2
Norway	7.0	9.9	5.9	4.6	2.7	1.8	2.6	0.1	-1.7	-1.4	0.4	3.5	6.6	7.9	3.6	4.8	15.7	15.3	13.9
Poland	..	..	..	..	..	..	..	..	..	-4.5	-3.5	-2.5	-2.9	-2.8	-2.3	-2.7	-3.0	-2.5	-2.2
Portugal	-6.9	-7.3	-6.2	-5.4	-3.4	-2.3	-4.9	-5.9	-2.9	-5.9	-5.9	-4.6	-4.0	-2.6	-2.3	-2.0	-1.4	-1.2	-1.1
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	1.8	-1.5	-4.4	-4.6	-3.6	-3.4	-4.9	-4.0
Spain	-4.4	-5.6	-6.1	-3.7	-3.3	-3.6	-4.2	-4.3	-4.0	-6.7	-6.1	-6.6	-4.9	-3.2	-2.6	-1.2	-0.3	0.0	0.1
Sweden	-3.0	-3.9	-1.4	3.9	3.0	4.9	3.8	-2.0	-7.8	-11.9	-10.8	-7.9	-3.4	-1.8	1.7	1.8	4.1	3.6	3.4
United Kingdom *c*	-4.0	-2.9	-2.6	-1.9	0.6	0.9	-1.5	-2.8	-6.5	-8.0	-6.8	-5.8	-4.4	-2.0	0.4	1.3	1.9	1.2	0.9
United States *d*	-4.7	-5.0	-5.3	-4.3	-3.6	-3.2	-4.3	-5.0	-5.9	-5.0	-3.6	-3.1	-2.2	-0.9	0.3	1.0	2.2	2.1	1.4
Euro area	-4.8	-4.8	-4.9	-4.5	-4.4	-3.5	-4.5	-4.7	-4.9	-5.6	-5.0	-5.0	-4.3	-2.6	-2.2	-1.3	0.3	-0.6	-0.4
Total of above European Union countries	-4.9	-4.8	-4.7	-4.1	-3.5	-2.7	-4.0	-4.4	-5.2	-6.3	-5.6	-5.3	-4.3	-2.5	-1.6	-0.7	0.6	-0.2	-0.1
Total of above OECD countries	-4.2	-4.1	-4.1	-3.3	-2.6	-2.0	-3.0	-3.6	-4.5	-4.9	-4.1	-3.9	-3.2	-1.7	-1.3	-0.8	0.4	0.0	-0.3

Memorandum items
General government financial balances excluding social security

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
United States	-4.9	-5.3	-5.4	-4.8	-4.4	-4.2	-5.4	-5.9	-6.7	-5.7	-4.5	-3.9	-3.1	-2.0	-0.9	-0.4	0.7	0.5	-0.3
Japan *e*	-4.0	-3.1	-3.5	-2.5	-2.0	-1.4	-1.5	-0.7	-1.6	-4.5	-4.7	-6.0	-6.5	-5.3	-6.7	-7.8	-7.0	-6.7	-7.1

Note: Financial balances include one-off revenues from the sale of the mobile telephone licenses. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and OECD Economic *Outlook Sources and Methods* (http://www.oecd.org/eco/sources-and-methods/index.htm).
a) The 1995 outlays are net of the debt taken on this year from the Inherited Debt Funds.
b) The 1998 outlays would be 5.4 percentage points of GDP higher if account were taken of the assumption by the central government of the debt of the Japan Railway Settlement Corporation and the National Forest Special Account. Deferred tax payments on postal savings accounts are included in 2000 and 2001.
c) Includes only rents for the use of spectrum for the third generation mobile telephone in 2000 and onwards, as the lump-sum prepayment made in 2000 will be amortised over the next 20 years.
d) The general government sector includes public enterprises.
e) As of year 1991 data are based on SNA93 and exclude private pension funds.
Source: OECD.

<p style="text-align:center">Annex Table 31. **General government structural balances**</p>
<p style="text-align:center">Surplus (+) or deficit (-) as a percentage of potential GDP</p>

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	-4.6	-5.0	-3.6	-1.9	-0.3	-0.1	-0.7	-2.2	-4.3	-4.3	-3.9	-3.4	-2.0	-0.4	0.4	0.8	-0.6	0.2	0.6
Austria	-1.9	-1.9	-3.2	-3.7	-3.2	-3.4	-3.2	-3.8	-2.5	-4.0	-4.7	-4.8	-3.5	-1.3	-2.1	-2.1	-1.7	-0.7	-0.2
Belgium	-8.4	-8.0	-8.1	-6.8	-8.0	-9.2	-8.7	-8.9	-8.9	-5.7	-3.5	-2.9	-1.6	-0.5	0.3	0.4	0.3	0.7	0.9
Canada	-6.9	-9.1	-7.6	-6.4	-6.1	-6.0	-6.3	-6.5	-6.6	-6.2	-5.6	-4.4	-1.6	1.0	0.9	2.3	3.1	2.7	2.3
Denmark	..	..	..	..	1.6	1.8	1.3	0.2	0.9	1.5	-0.4	-0.6	0.2	0.8	1.0	2.8	1.7	2.4	2.6
Finland	3.9	3.9	4.3	1.1	2.4	3.3	3.6	2.3	1.2	1.5	1.7	1.9	1.6	1.3	3.0	3.1	6.6	5.1	5.4
France	-1.3	-1.3	-1.6	-0.7	-1.9	-2.1	-2.6	-2.6	-4.2	-5.0	-4.6	-4.6	-2.8	-1.6	-1.8	-1.2	-1.4	-1.3	-1.2
Germany	0.2	0.7	0.1	-0.4	-1.4	0.3	-3.0	-3.3	-3.1	-2.1	-1.7	-2.7	-2.4	-1.6	-1.1	-0.4	-0.5	-1.3	-1.0
Greece	-7.7	-11.5	-9.5	-8.7	-11.8	-15.6	-16.5	-12.3	-12.9	-12.5	-8.7	-8.9	-6.4	-3.5	-1.5	-1.0	-0.6	0.0	0.5
Iceland	..	..	..	..	..	-5.2	-3.6	-2.6	-0.5	-1.9	-3.3	-1.2	-1.0	-0.2	-0.1	1.3	2.1	1.9	2.5
Ireland	-7.6	-8.9	-7.3	-5.9	-2.9	-1.4	-3.9	-2.7	-2.0	-0.8	0.1	-1.0	0.9	0.8	1.8	1.3	3.3	3.1	3.2
Italy	-10.4	-11.4	-10.8	-10.6	-11.2	-10.6	-11.8	-10.4	-9.2	-7.8	-7.9	-7.2	-6.4	-2.0	-2.0	-0.8	-0.9	-0.8	-0.8
Japan [a]	-1.1	-0.2	-0.1	0.9	1.1	1.5	1.3	1.4	0.6	-2.3	-2.5	-3.8	-4.9	-3.8	-4.9	-6.2	-5.5	-5.4	-5.9
Netherlands	-5.2	-4.1	-5.8	-6.1	-4.4	-5.9	-7.3	-4.3	-4.8	-2.7	-3.9	-3.6	-1.4	-0.9	-0.8	0.5	0.9	0.8	1.2
New Zealand	..	..	-8.0	-3.2	-4.7	-3.3	-3.3	-0.8	-0.1	0.8	2.8	2.5	2.3	1.6	2.4	0.4	0.2	1.0	1.1
Norway [b]	-1.3	-0.8	1.2	0.4	1.1	0.5	-1.2	-4.1	-6.1	-6.4	-5.3	-2.1	-2.1	-1.5	-2.6	-2.2	-1.3	-1.4	-1.8
Portugal	-4.0	-4.3	-3.8	-4.1	-3.0	-3.1	-6.2	-6.9	-3.8	-5.5	-5.2	-4.0	-3.6	-2.5	-2.4	-2.1	-1.9	-1.1	-0.9
Spain	-2.5	-3.7	-4.0	-2.6	-3.1	-4.0	-5.0	-5.1	-3.9	-5.0	-4.3	-4.6	-2.7	-1.5	-1.6	-1.0	-0.5	-0.1	-0.1
Sweden	-2.2	-3.6	-2.0	2.2	0.6	2.1	1.5	-2.2	-5.5	-7.5	-8.3	-6.7	-1.6	0.0	2.8	1.9	3.8	3.2	2.9
United Kingdom	..	..	..	-2.7	-1.8	-1.3	-3.0	-2.0	-4.5	-5.9	-5.7	-5.0	-3.8	-2.0	0.3	1.2	1.6	1.0	0.7
United States	-4.2	-4.7	-5.0	-4.2	-3.9	-3.7	-4.5	-4.3	-5.3	-4.4	-3.5	-2.8	-2.1	-1.0	0.1	0.7	1.7	2.1	1.5
Euro area	-3.2	-3.4	-3.6	-3.5	-4.2	-3.9	-5.5	-5.2	-4.9	-4.3	-3.9	-4.1	-3.0	-1.5	-1.3	-0.6	-0.6	-0.7	-0.5
Total of above European Union countries	-3.6	-3.8	-3.9	-3.5	-3.8	-3.5	-5.0	-4.6	-4.9	-4.7	-4.5	-4.5	-3.2	-1.6	-1.0	-0.3	-0.1	-0.3	-0.2
Total of above OECD countries	-3.6	-3.8	-3.9	-3.1	-3.0	-2.8	-3.7	-3.5	-4.2	-4.3	-3.8	-3.7	-2.9	-1.6	-1.1	-0.7	-0.2	0.0	-0.3

Note: Structural balances exclude one-off revenues from the sale of the mobile telephone license. See *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)* for details on the methodology used for estimating the structural component of government balances and Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex.
a) Includes deferred tax payments on postal savings accounts in 2000 and 2001.
b) As a percentage of mainland potential GDP. The financial balances shown exclude revenues from oil production.
Source: OECD.

Annex Table 32. **General government primary balances**

Surplus (+) or deficit (-) as a percentage of nominal GDP

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	-2.3	-1.7	-0.5	1.4	2.9	3.3	1.8	-1.2	-2.8	-2.9	-0.9	-0.1	0.8	1.9	2.3	2.7	1.3	1.5	1.6
Austria	0.1	0.2	-0.9	-1.3	-0.2	0.0	0.8	0.4	1.4	-0.7	-1.5	-1.6	-0.2	1.9	1.3	1.4	2.4	2.9	3.3
Belgium	-1.6	0.0	0.6	2.2	2.6	3.2	4.5	3.3	2.7	3.3	4.2	4.6	4.7	5.8	6.4	6.2	6.6	7.1	6.9
Canada	-4.3	-4.6	-3.0	-1.3	-0.1	0.1	-0.6	-3.3	-4.1	-3.8	-1.7	0.2	2.4	5.1	5.2	6.7	6.9	6.0	5.4
Denmark	..	..	..	..	5.8	4.3	2.8	1.6	1.0	0.6	0.9	0.9	1.9	3.3	3.6	5.4	4.2	4.3	4.0
Finland	2.4	2.4	2.6	0.4	2.9	4.7	3.6	-3.1	-7.6	-7.7	-4.6	-2.8	-1.7	0.4	3.0	3.3	7.9	6.5	6.5
France	-1.0	-1.0	-1.0	0.2	-0.3	0.4	0.3	0.1	-1.5	-3.0	-2.4	-2.3	-0.6	0.2	0.5	1.3	1.6	2.3	2.0
Germany [a]	0.4	1.1	1.0	0.4	0.2	2.2	-0.1	-0.8	0.0	-0.5	0.3	-0.2	-0.3	0.3	1.0	1.6	4.3	1.0	1.5
Greece	-4.1	-6.6	-4.2	-2.8	-4.0	-6.7	-5.9	-2.1	-1.1	-1.0	4.1	2.6	4.6	5.6	6.6	7.0	7.4	7.8	8.1
Iceland	..	..	..	..	..	-3.1	-1.1	-0.8	-0.6	-2.1	-2.2	-0.1	1.0	2.5	2.9	4.2	4.6	4.0	4.0
Ireland	-4.8	-5.5	-5.3	-3.2	2.1	4.3	3.4	2.8	2.2	2.1	2.6	1.9	3.1	3.7	4.5	2.6	4.7	4.4	4.3
Italy	-3.8	-4.9	-3.6	-3.6	-3.1	-1.4	-1.9	-0.2	1.7	2.4	1.7	3.5	4.1	6.4	4.9	4.8	6.0	4.6	4.7
Japan [b]	0.9	1.8	1.6	2.5	2.9	3.5	3.2	2.9	1.9	-1.3	-2.6	-3.5	-3.8	-2.6	-4.2	-5.7	-5.0	-5.0	-5.6
Korea	1.7	1.2	1.7	2.7	3.5	3.2	3.2	1.4	1.0	2.1	2.7	3.8	3.2	2.8	0.6	2.3	6.4	5.8	5.9
Netherlands	-2.0	0.3	-1.2	-1.9	-0.5	-1.2	-1.6	1.1	0.0	0.8	0.2	0.6	2.9	3.3	3.5	4.8	5.5	4.1	4.1
New Zealand	..	..	-2.0	1.8	-1.4	0.2	-0.5	-0.8	-0.3	1.8	4.2	4.5	3.7	2.7	1.7	0.2	0.5	1.0	1.1
Norway	6.0	8.7	4.2	2.8	0.3	-0.4	0.4	-2.0	-3.5	-2.7	-0.2	2.9	6.1	7.5	3.3	3.8	14.0	13.6	12.3
Portugal	0.2	0.9	2.2	2.2	3.3	3.7	2.9	1.8	4.1	0.1	0.2	1.7	1.4	1.6	1.2	1.2	1.8	1.9	2.0
Spain	-4.3	-4.8	-3.4	-0.5	-0.6	-0.3	-1.0	-1.2	-0.3	-2.2	-1.9	-1.8	0.0	1.2	1.4	2.2	2.7	3.0	3.0
Sweden	-0.6	-0.9	0.8	5.6	3.9	5.4	3.9	-1.8	-7.5	-11.0	-8.9	-5.0	-0.1	1.8	5.0	4.8	6.2	5.1	4.5
United Kingdom	-0.6	0.5	0.6	1.2	3.3	3.4	0.8	-0.7	-4.5	-5.8	-4.2	-2.8	-1.5	0.9	3.2	3.5	4.1	3.3	2.9
United States	-1.6	-1.8	-2.0	-1.0	-0.3	0.2	-0.8	-1.3	-2.2	-1.4	-0.2	0.6	1.3	2.4	3.5	3.8	4.8	4.4	3.5
Euro area	-1.4	-1.3	-1.0	-0.7	-0.5	0.6	-0.3	-0.2	0.1	-0.6	-0.2	0.0	0.9	2.1	2.2	2.7	4.1	2.9	3.0
Total of above European Union countries	-1.4	-1.2	-0.8	-0.3	0.2	1.1	0.0	-0.3	-0.7	-1.5	-0.9	-0.4	0.7	2.0	2.5	2.9	4.1	3.1	3.1
Total of above OECD countries	-1.1	-1.0	-0.9	0.0	0.6	1.2	0.3	-0.3	-1.0	-1.4	-0.8	-0.3	0.4	1.6	1.9	2.1	3.2	2.6	2.1

Note: The primary balance is the difference between the financial balance and net interest payments. For more details see footnotes of Annex Tables 30 and 33, *OECD Economic Outlook* Sources and Methods
   (http://www.oecd.org/eco/sources-and-methods/index.htm) and Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex.
Source: OECD.

Annex Table 33. **General government net debt interest payments**
As a percentage of nominal GDP

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	2.9	3.4	3.7	3.6	3.3	3.3	3.0	2.6	3.1	2.6	3.7	3.6	3.0	2.4	1.8	1.7	1.5	1.4	1.3
Austria	2.7	2.8	2.9	3.1	3.2	3.1	3.2	3.3	3.4	3.6	3.4	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.4
Belgium	9.3	10.3	10.7	10.1	9.8	10.8	11.2	10.7	10.6	10.6	9.3	8.9	8.5	7.7	7.4	6.8	6.6	6.3	6.2
Canada	3.5	4.0	4.1	4.2	4.3	4.7	5.3	5.1	5.1	4.9	5.0	5.6	5.2	4.8	5.0	4.5	3.5	3.4	3.2
Denmark	..	..	..	..	4.3	4.0	3.8	4.0	3.2	3.5	3.3	3.1	2.9	2.9	2.5	2.3	1.8	1.4	1.2
Finland	-0.9	-0.9	-1.0	-0.9	-0.9	-1.2	-1.7	-1.9	-1.9	-0.3	1.1	0.9	1.5	1.9	1.7	1.6	1.2	1.1	0.9
France	1.9	2.1	2.2	2.2	2.1	2.2	2.4	2.6	2.7	3.0	3.1	3.3	3.4	3.3	3.2	3.0	2.9	2.8	2.8
Germany [a]	2.2	2.2	2.3	2.3	2.3	2.1	1.9	2.2	2.5	2.6	2.7	3.1	3.1	3.1	3.1	3.0	2.8	2.7	2.7
Greece	4.3	5.0	5.4	6.7	7.4	7.5	10.0	9.3	11.5	12.6	13.9	12.7	12.0	9.6	9.0	8.8	8.3	7.8	7.3
Iceland	0.2	0.1	0.6	0.4	1.2	1.4	2.2	2.1	2.2	2.4	2.5	2.9	2.6	2.5	2.4	2.0	1.6	1.6	1.2
Ireland	5.9	7.0	6.9	7.6	6.4	6.0	6.2	5.7	5.2	4.8	4.5	4.0	3.2	3.0	2.3	0.5	-0.1	-0.1	-0.2
Italy	7.6	7.4	7.7	7.3	7.6	8.4	9.1	9.8	11.2	11.8	10.7	11.1	11.2	9.1	7.7	6.5	6.3	5.9	5.9
Japan [b]	2.5	2.4	2.2	2.1	1.8	1.7	1.2	1.0	1.1	1.1	0.2	0.7	1.1	1.2	1.3	1.3	1.3	1.3	1.4
Korea	0.2	0.1	0.1	0.1	0.0	-0.2	-0.4	-0.5	-0.5	-0.4	-0.4	-0.4	-0.6	-0.9	-1.3	-0.6	-0.6	-0.2	-0.2
Netherlands	4.2	4.4	4.4	4.7	4.6	4.1	4.1	4.3	4.4	4.4	4.4	4.7	4.7	4.4	4.2	3.8	3.3	2.8	2.5
New Zealand	..	..	4.4	4.0	3.3	3.9	4.2	2.9	2.9	2.4	1.3	1.5	0.8	0.7	0.3	-0.1	0.0	0.0	-0.1
Norway	-1.0	-1.2	-1.7	-1.8	-2.4	-2.3	-2.1	-2.2	-1.8	-1.3	-0.6	-0.6	-0.5	-0.4	-0.3	-1.0	-1.7	-1.7	-1.6
Portugal	7.1	8.1	8.4	7.6	6.8	6.0	7.9	7.6	7.0	6.1	6.1	6.2	5.3	4.2	3.5	3.2	3.2	3.2	3.2
Spain	0.2	0.8	2.7	3.2	2.7	3.3	3.2	3.1	3.7	4.5	4.2	4.9	5.0	4.4	4.0	3.4	3.1	3.0	3.0
Sweden	2.3	2.9	2.2	1.7	0.9	0.5	0.1	0.1	0.2	1.0	1.9	2.9	3.2	3.5	3.2	3.0	2.1	1.5	1.1
United Kingdom	3.4	3.4	3.2	3.1	2.7	2.4	2.3	2.0	2.0	2.2	2.6	3.0	2.8	2.9	2.8	2.2	2.2	2.1	2.0
United States	3.1	3.2	3.3	3.3	3.3	3.4	3.5	3.7	3.7	3.5	3.5	3.6	3.5	3.3	3.2	2.8	2.6	2.3	2.1
Euro area	3.4	3.6	3.9	3.9	3.9	4.1	4.3	4.5	4.9	5.1	4.8	5.0	5.2	4.7	4.3	3.9	3.7	3.5	3.4
Total of above European Union countries	3.5	3.7	3.9	3.9	3.8	3.9	4.0	4.1	4.5	4.8	4.7	5.0	5.0	4.5	4.2	3.7	3.5	3.3	3.2
Total of above OECD countries	3.0	3.2	3.3	3.2	3.2	3.2	3.3	3.3	3.5	3.5	3.3	3.6	3.6	3.3	3.1	2.8	2.6	2.4	2.3

Note: In the case of Japan, Ireland and New Zealand where net interest payments are not available, net property income paid is used as a proxy. For Denmark, net interest payments including dividends received are used.
See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
a) Includes interest payments on the debt of the Inherited Debt Funds from 1995 onwards.
b) Includes interest payments on the debt of the Japan Railway settlement Corporation and the National Forest Special Account from 1998 onwards.
Source: OECD.

Annex Table 34. **General government gross financial liabilities**

As a percentage of nominal GDP

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	..	..	..	..	25.9	23.8	22.6	23.8	28.2	31.4	41.2	42.9	40.1	38.3	33.0	26.1	26.6	26.9	26.3
Austria	46.9	48.9	53.3	57.2	58.5	57.8	57.0	57.2	57.1	61.8	64.7	69.2	69.2	64.7	63.9	64.7	62.9	61.4	59.1
Belgium	113.9	118.5	123.5	127.9	127.9	124.4	124.9	126.7	128.1	134.8	132.7	129.8	130.5	125.3	119.8	116.4	110.8	104.4	98.9
Canada	78.9	84.3	89.1	89.5	89.0	90.2	93.3	102.4	110.3	116.9	117.5	120.6	120.9	117.4	116.2	111.6	104.9	99.8	95.0
Denmark	77.5	74.9	71.8	68.6	66.7	65.0	65.8	66.7	70.6	83.8	77.7	73.9	68.1	64.4	59.3	54.5	49.8	45.8	42.0
Finland	..	..	..	..	..	..	14.3	22.7	45.3	56.0	58.0	57.2	57.1	54.1	48.8	46.9	44.0	39.5	35.4
France	36.3	37.9	38.8	40.1	40.0	39.9	39.5	40.3	44.7	51.6	55.3	59.3	62.3	64.7	65.1	64.8	64.4	64.1	63.2
Germany [a]	40.6	41.6	41.5	42.2	42.2	39.9	42.0	38.8	41.8	47.4	47.9	57.1	60.3	61.7	63.0	60.6	59.7	58.0	57.7
Greece	40.3	47.2	47.8	52.6	62.7	65.7	89.0	91.2	97.5	110.2	108.0	108.7	111.3	108.3	105.5	104.6	103.8	100.7	96.7
Iceland	33.0	32.7	30.2	27.8	31.1	36.8	36.5	38.6	46.3	53.4	55.8	59.3	56.7	53.3	48.6	43.6	42.1	40.6	37.6
Ireland	96.6	99.5	110.6	111.8	108.2	98.9	92.4	92.1	89.7	93.7	87.7	80.0	74.3	65.1	55.0	50.1	39.3	29.5	21.9
Italy	75.2	81.9	86.2	90.4	92.5	95.3	103.7	107.4	116.1	117.9	124.0	123.1	121.8	119.6	117.2	115.7	110.8	107.3	103.9
Japan [b]	67.4	67.7	71.2	71.6	69.6	66.7	64.6	61.1	63.5	69.0	73.9	80.4	86.5	92.0	103.0	115.3	122.9	130.5	138.3
Korea	16.7	16.3	14.4	12.6	9.8	9.1	8.2	7.2	6.9	5.9	6.1	6.3	6.3	9.2	8.3	9.3	6.0	3.5	1.5
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	..	6.2	6.0	6.4	6.0	5.3	4.4	3.7
Netherlands	64.2	68.7	70.6	73.1	76.0	76.0	75.6	75.7	76.4	77.6	74.0	75.5	75.2	70.0	66.8	63.2	56.3	52.8	48.7
Norway	29.9	32.5	40.9	33.9	33.0	33.0	29.5	27.8	32.4	40.8	37.2	34.8	31.4	27.9	26.8	27.9	28.0	26.6	26.3
Portugal	53.5	56.5	54.6	61.5	61.7	59.4	55.9	57.5	55.1	61.3	62.1	64.1	62.6	59.3	55.6	55.4	54.4	53.2	51.8
Spain	44.3	49.0	49.8	49.0	45.3	46.9	48.8	49.9	52.4	63.5	66.5	71.7	78.7	77.7	78.3	72.4	69.5	66.6	64.3
Sweden	65.1	64.7	64.1	57.0	51.2	46.5	42.7	51.5	69.0	73.7	77.9	76.9	74.5	73.6	73.0	68.1	62.3	56.5	51.0
United Kingdom	60.7	59.2	58.4	56.1	49.7	43.1	44.5	44.4	49.4	58.4	56.1	61.1	60.6	60.9	62.0	57.0	54.4	52.6	50.2
United States	54.0	59.0	62.6	64.1	64.7	65.0	66.6	71.4	74.1	75.8	75.0	74.5	73.9	71.4	68.3	65.2	58.8	55.0	51.7
Euro area	50.2	53.2	54.9	56.9	57.9	57.8	60.3	60.4	64.3	68.8	70.6	74.3	77.6	77.7	76.9	74.8	72.4	70.1	68.1
Total of above European Union countries	54.7	57.1	58.2	59.2	58.4	57.0	58.8	58.9	63.6	69.9	71.3	75.2	76.4	76.0	75.5	72.8	70.2	67.9	65.7
Total of above OECD countries	55.9	59.0	61.6	62.5	61.3	60.5	61.4	63.0	66.6	70.7	71.9	74.3	75.4	75.0	75.1	74.5	71.9	70.5	69.3

Note: Gross debt measures are not always comparable across countries due to different definition or treatment of debt components by countries. Notably, the treatment of government liabilities in respect of their employee pension plans may differ depending on the degree to which the pension liabilities are explicit in the government's balance sheet. These liabilities can be substantial, as for example in Canada they amounted to 19 per cent of GDP in 1999. Such liabilities are included in government debt whereas unfunded liabilities are treated as a memorandum item in the ESA95/SNA93. General government financial liabilities presented here are defined according to ESA95/SNA93 for all countries with the exception of Austria, Belgium, Finland, Greece, Ireland, Luxembourg, Netherlands and Portugal where debt measures follow the definition of debts applied under the Maastricht Treaty as of 1996. Maastricht debt for EU countries is shown in Annex Table 60. For more details see "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook Sources and Methods* (http://www.oecd.org/eco/sources-and-methods/index.htm).
a) Includes the debt of the Inherited Debt Fund from 1995 onwards.
b) Includes the debt of the Japan Railway Settlement Corporation and the National Forest Special Account from 1998 onwards.
Source: OECD.

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	..	..	..	..	15.3	11.3	10.7	11.6	16.2	22.0	26.5	27.1	21.6	21.7	16.5	13.8	12.3	12.4	12.0
Austria	28.3	29.9	33.1	36.0	38.2	37.9	37.3	37.3	38.6	43.5	45.7	50.5	50.2	47.8	47.7	48.1	47.2	46.0	44.2
Belgium	105.2	108.5	113.7	117.8	118.2	114.9	116.7	118.0	120.1	126.7	126.2	125.4	122.2	118.0	112.6	108.8	103.0	96.6	91.1
Canada	46.8	52.7	57.7	57.3	56.0	58.8	61.5	69.5	78.9	84.3	86.8	88.5	88.2	83.4	81.4	75.3	66.0	60.6	55.3
Denmark	48.8	45.3	37.9	33.7	35.4	33.2	33.0	37.5	41.2	45.2	45.8	46.2	42.4	38.4	35.6	30.7	26.4	22.3	18.5
Finland	-25.8	-27.1	-28.0	-27.9	-29.2	-33.3	-35.5	-34.2	-25.8	-17.3	-17.4	-13.3	-15.5	-16.1	-27.1	-28.2	-32.6	-36.3	-40.1
France	7.3	10.6	13.6	12.8	13.9	14.6	16.1	16.3	18.4	26.7	29.4	35.9	41.5	41.4	42.5	42.8	42.5	41.4	40.4
Germany[a]	18.7	18.7	19.0	20.4	20.7	18.0	17.8	20.1	24.4	27.9	29.0	39.3	42.0	42.6	44.9	42.3	41.8	40.1	39.8
Iceland	5.7	6.0	8.9	8.1	9.8	17.7	19.1	19.9	26.6	34.7	37.7	39.7	39.6	37.5	31.3⁻	24.1	22.9	22.5	20.8
Italy	72.7	79.6	84.0	88.3	90.6	93.5	83.7	88.6	97.3	105.4	110.7	108.7	108.8	106.8	105.0	103.5	98.7	95.1	91.7
Japan[b]	35.8	35.0	33.7	27.9	23.7	19.4	12.4	6.4	7.3	10.1	12.1	16.9	21.6	27.9	38.0	44.4	50.7	57.1	63.7
Korea	-5.3	-6.5	-8.1	-10.2	-13.6	-16.3	-17.2	-15.9	-15.3	-15.5	-15.2	-18.0	-19.4⁻	-22.5	-24.9	-25.8	-31.0	-35.3	-39.0
Netherlands	37.8	40.6	43.7	27.1	30.9	34.5	35.4	36.2	39.6	40.6	41.9	53.2	53.7	55.3	53.7	49.9	44.4	39.9	36.2
Norway	-30.1	-36.9	-41.4	-42.8	-43.0	-42.2	-42.0	-38.3	-35.9	-32.7	-31.2	-32.9	-36.9	-43.4	-47.9	-54.0	-61.6	-71.7	-83.1
Spain	23.4	26.1	29.3	29.9	30.6	30.7	31.8	33.2	35.4	42.3	43.3	49.2	53.2	52.1	51.9	45.9	43.0	40.4	38.0
Sweden	13.3	13.9	12.5	6.4	0.2	-6.0	-7.8	-5.0	4.6	10.7	21.0	22.7	19.5	18.1	15.6	13.1	8.4	4.5	0.9
United Kingdom	30.2	30.8	31.2	29.5	23.9	19.2	15.1	15.3	21.7	31.0	31.3	37.2	39.0	40.3	42.3	37.1	33.5	30.7	28.3
United States	38.7	41.9	45.4	47.4	48.5	48.7	49.9	53.6	57.1	59.1	59.7	59.2	58.8	56.7	53.0	48.5	43.0	39.2	35.9
Euro area	29.6	32.4	35.2	35.9	38.4	38.6	37.5	39.4	43.5	48.2	50.0	55.3	59.0	59.0	59.0	57.0	54.9	52.6	50.7
Total of above European Union countries	32.0	34.3	36.3	36.2	36.1	35.1	33.1	34.5	39.3	45.8	47.9	53.5	55.5	55.2	55.5	52.8	50.3	47.7	45.7
Total of above OECD countries	34.2	36.4	38.4	38.2	37.3	36.3	35.0	36.4	40.1	44.0	45.5	48.0	49.2	48.9	48.8	46.7	44.1	42.3	40.9

Note: Net debt measures are not always comparable across countries due to different definition or treatment of debt (and asset) components by countries. First, the treatment of government liabilities in respect of their employee pension plans may be different (see footnote of Annex Table 34). Second while general government financial liabilities presented here for most countries are defined by ESA95/SNA93, for some EU countries, i.e. Austria, Belgium, Finland, Greece, Ireland, Luxembourg, Netherlands and Portugal as of 1996, debt measures follow the definition of debts applied under the Maastricht Treaty. Third, a range of items included as general government assets differs across countries. For example, equity participation is excluded from government assets in some countries, whereas foreign exchange, gold and SDR holdings are considered as assets of the government in the United States and the United Kingdom. For details see "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)* .

a) Includes the debt of the Inherited Debt Fund from 1995 onwards.
b) Includes the debt of the Japan Railway Settlement Corporation and the National Forest Special Account from 1998 onwards.

Source: OECD.

Annex Table 36. **Short-term interest rates**

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	12.1	12.2	16.2	16.4	13.5	12.9	17.7	14.4	10.2	6.5	5.2	5.7	7.7	7.2	5.4	5.0	5.0	6.2	4.3	4.1
Austria	5.4	6.5	6.2	5.3	4.3	4.6	7.5	9.0	9.5	9.5	7.0	5.1	4.6	3.4	3.5	3.6	3.0	4.4	4.4	4.3
Belgium	10.4	11.4	9.5	8.1	7.1	6.7	8.8	9.6	9.4	9.4	8.2	5.7	4.8	3.2	3.4	3.6	3.0	4.4	4.4	4.3
Canada	8.3	10.0	8.6	8.1	7.8	9.5	12.1	12.7	8.8	6.6	5.0	5.5	7.1	4.4	3.5	5.0	4.9	5.7	4.7	4.6
Czech Republic	..	..	..	..	..	..	..	..	..	..	13.1	9.1	10.9	12.0	15.9	14.3	6.9	5.4	5.4	6.6
Denmark	12.7	11.7	10.2	9.1	10.1	8.5	9.8	10.8	9.7	11.5	10.3	6.2	6.0	3.9	3.7	4.1	3.3	5.0	4.8	4.6
Finland	14.6	16.5	13.5	12.7	10.0	10.0	12.6	14.0	13.1	13.3	7.8	5.4	5.8	3.6	3.2	3.6	3.0	4.4	4.4	4.3
France	12.5	11.7	9.9	7.7	8.3	7.9	9.4	10.3	9.6	10.3	8.6	5.8	6.6	3.9	3.5	3.6	3.0	4.4	4.4	4.3
Germany	5.8	6.0	5.4	4.6	4.0	4.3	7.1	8.5	9.2	9.5	7.3	5.4	4.5	3.3	3.3	3.5	3.0	4.4	4.4	4.3
Greece	15.3	17.8	18.4	18.5	19.0	19.2	19.0	23.0	23.3	21.7	21.3	19.3	15.5	12.8	10.4	11.6	8.9	6.1	4.4	4.3
Hungary	..	..	..	..	..	..	..	..	..	..	17.2	26.9	32.0	24.0	20.1	18.0	14.7	11.0	11.1	10.8
Iceland	..	..	..	..	..	31.0	27.9	14.8	14.6	10.5	8.8	4.9	7.0	7.0	7.1	7.4	8.6	11.2	11.0	11.0
Ireland	13.2	13.2	11.9	12.5	10.8	8.0	10.0	11.3	10.4	14.3	9.1	5.9	6.2	5.4	6.1	5.4	3.0	4.4	4.4	4.3
Italy	18.3	17.3	15.2	13.4	11.3	10.8	12.6	12.2	12.2	14.0	10.2	8.5	10.5	8.8	6.9	5.0	3.0	4.4	4.4	4.3
Japan	6.7	6.5	6.6	5.2	4.2	4.5	5.4	7.7	7.4	4.5	3.0	2.2	1.2	0.6	0.6	0.7	0.2	0.2	0.3	0.2
Korea	..	..	..	..	..	..	..	..	18.3	16.4	13.0	13.3	14.1	12.7	13.4	15.2	6.8	7.1	5.9	6.0
Luxembourg	10.4	11.4	9.5	8.1	7.1	6.7	8.8	9.6	9.4	9.4	8.2	5.7	4.8	3.2	3.4	3.6	3.0	4.4	4.4	4.3
Mexico	59.4	49.7	64.2	90.6	103.8	62.1	44.6	35.0	19.8	15.9	15.5	14.5	47.8	32.9	21.3	26.1	22.4	16.2	14.3	12.0
Netherlands	5.6	6.1	6.3	5.7	5.4	4.8	7.4	8.7	9.3	9.4	6.9	5.2	4.4	3.0	3.3	3.5	3.0	4.4	4.4	4.3
New Zealand	13.1	15.0	23.3	19.1	21.1	15.4	13.5	13.9	10.0	6.7	6.3	6.7	9.0	9.3	7.7	7.3	4.8	6.5	6.2	6.2
Norway	13.3	13.0	12.5	14.4	14.7	13.5	11.4	11.5	10.6	11.8	7.3	5.9	5.5	4.9	3.7	5.8	6.5	6.7	7.4	7.3
Poland	..	..	..	..	..	..	..	..	..	..	34.9	31.8	27.7	21.3	23.1	19.9	14.7	18.9	16.8	15.0
Portugal	22.7	24.9	22.4	15.6	13.9	13.0	14.9	16.9	17.7	16.1	12.5	11.1	9.8	7.4	5.7	4.3	3.0	4.4	4.4	4.3
Spain	20.0	14.9	12.2	11.7	15.8	11.7	15.0	15.2	13.2	13.3	11.7	8.0	9.4	7.5	5.4	4.2	3.0	4.4	4.4	4.3
Sweden	11.4	11.9	14.2	9.8	9.4	10.1	11.5	13.7	11.6	12.9	8.4	7.4	8.7	5.8	4.1	4.2	3.1	4.0	4.1	4.1
Switzerland	4.1	4.3	4.9	4.2	3.8	3.1	7.0	8.9	8.2	7.8	4.9	4.2	2.9	2.0	1.6	1.5	1.4	3.2	3.1	3.1
Turkey	..	..	..	..	..	60.6	40.7	51.9	109.6	97.8	90.3	150.6	136.3	143.6	119.2	92.3	89.2	47.0	91.1	46.7
United Kingdom	10.1	9.9	12.2	10.9	9.7	10.3	13.9	14.8	11.5	9.6	5.9	5.5	6.7	6.0	6.8	7.3	5.4	6.1	5.4	5.3
United States	9.6	10.8	8.3	6.8	7.1	7.9	9.2	8.2	5.9	3.8	3.2	4.7	6.0	5.4	5.7	5.5	5.4	6.5	4.6	4.4
Euro area	11.6	11.1	9.9	8.5	8.2	7.7	9.9	10.7	10.6	11.2	8.6	6.3	6.6	4.9	4.2	3.8	3.0	4.4	4.4	4.3

Note : Three-month money market rates where available, or rates on proximately similar financial instruments. See *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)*.
Source: OECD.

Annex Table 37. **Long-term interest rates**

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	13.9	13.5	14.0	13.4	13.2	12.1	13.4	13.2	10.7	9.2	7.3	9.0	9.2	8.2	6.9	5.5	6.1	6.3	5.3	5.5
Austria	8.2	8.0	7.8	7.3	6.9	6.7	7.1	8.7	8.5	8.1	6.7	7.0	7.1	6.3	5.7	4.7	4.7	5.6	5.1	5.0
Belgium	11.9	12.2	11.0	8.6	8.2	8.0	8.6	10.1	9.3	8.7	7.2	7.7	7.4	6.3	5.6	4.7	4.7	5.6	5.1	5.0
Canada	11.8	12.7	11.1	9.5	9.9	10.2	9.9	10.8	9.8	8.8	7.9	8.6	8.4	7.5	6.5	5.5	5.7	5.9	5.4	5.3
Denmark	15.1	14.5	11.6	10.1	11.3	9.6	9.8	10.6	9.3	8.9	7.2	7.9	8.3	7.1	6.2	4.9	5.0	5.6	5.1	5.1
Finland	10.8	11.1	10.7	8.9	7.9	10.3	12.1	13.2	11.9	12.1	8.8	9.0	8.8	7.1	6.0	4.8	4.7	5.5	5.0	4.9
France	14.4	13.4	11.9	9.1	10.2	9.2	9.2	10.3	9.0	8.6	6.8	7.2	7.5	6.3	5.6	4.7	4.6	5.4	4.9	4.8
Germany	8.2	8.1	7.2	6.3	6.4	6.6	7.1	8.7	8.5	7.9	6.5	6.9	6.9	6.2	5.7	4.6	4.5	5.3	4.8	4.7
Greece	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9.8	8.5	6.3	6.1	5.4	5.3
Iceland	..	..	..	..	..	33.2	29.5	16.4	17.7	13.1	13.4	7.0	9.7	9.2	8.7	7.7	8.5	11.2	10.5	11.0
Ireland	..	..	12.8	11.2	11.3	9.4	9.2	10.3	9.4	9.3	7.6	8.0	8.2	7.2	6.3	4.7	4.8	5.5	5.0	4.9
Italy	18.3	15.6	13.7	11.5	10.6	10.9	12.8	13.5	13.3	13.3	11.2	10.5	12.2	9.4	6.9	4.9	4.7	5.6	5.1	5.0
Japan	7.8	7.3	6.5	5.1	5.0	4.8	5.1	7.0	6.3	5.3	4.3	4.4	3.4	3.1	2.4	1.5	1.7	1.7	1.4	1.6
Korea	13.8	14.3	13.9	11.9	12.4	13.0	14.2	15.1	16.5	15.1	12.1	12.3	12.4	10.9	11.8	12.8	8.7	8.5	7.0	7.6
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	7.2	7.2	6.3	5.6	4.7	4.7	5.5	5.0	5.0
Mexico	..	..	64.2	90.6	103.8	62.1	44.6	34.8	19.7	16.1	15.5	13.8	39.8	34.4	22.5	24.8	24.1	16.9	15.1	12.9
Netherlands	8.2	8.1	7.3	6.3	6.4	6.4	7.2	8.9	8.7	8.1	6.4	6.9	6.9	6.2	5.6	4.6	4.6	5.4	5.0	5.0
New Zealand	12.2	12.6	17.7	16.4	15.7	13.1	12.8	12.4	10.1	8.4	6.9	7.6	7.8	7.9	7.2	6.3	6.4	6.9	6.0	6.0
Norway	12.9	12.2	12.6	13.3	13.3	12.9	10.8	10.7	10.0	9.6	6.9	7.4	7.4	6.8	5.9	5.4	5.5	6.3	6.0	5.9
Portugal	..	..	..	..	..	..	..	..	..	..	..	10.4	11.5	8.6	6.4	4.9	4.8	5.6	5.2	5.1
Spain	16.9	16.5	13.4	11.4	12.8	11.7	13.8	14.6	12.8	11.7	10.2	10.0	11.3	8.7	6.4	4.8	4.7	5.5	5.0	4.9
Sweden	12.6	12.5	13.2	10.5	11.7	11.4	11.2	13.2	10.7	10.0	8.5	9.5	10.2	8.0	6.6	5.0	5.0	5.4	4.9	4.9
Switzerland	4.2	4.6	4.7	4.2	4.0	4.0	5.2	6.4	6.2	6.4	4.6	5.0	4.5	4.0	3.4	2.8	3.0	4.0	3.5	3.5
Turkey	..	..	..	55.0	47.0	62.4	58.3	51.9	71.9	79.6	86.6	138.5	111.5	124.9	106.0	112.2	97.4	38.7	96.2	45.7
United Kingdom	11.3	11.1	11.0	10.1	9.6	9.7	10.2	11.8	10.1	9.1	7.5	8.2	8.2	7.8	7.0	5.5	5.1	5.3	5.0	5.0
United States	11.1	12.4	10.6	7.7	8.4	8.8	8.5	8.6	7.9	7.0	5.9	7.1	6.6	6.4	6.4	5.3	5.6	6.0	5.1	5.3
Euro area	..	..	10.8	9.0	9.1	8.9	9.8	11.2	10.5	10.0	8.3	8.2	8.6	7.1	6.0	4.8	4.7	5.4	4.9	4.9

Note: 10-year benchmark government bond yields where available or yield on proximately similar financial instruments (for Korea a 5-year bond is used). See also *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
Source: OECD.

Annex Table 38. **Nominal exchange rates (*vis-à-vis* the US dollar)**

Average of daily rates

	Monetary unit	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Estimates and assumptions[a] 2001	2002
Australia	*Dollar*	1.281	1.265	1.282	1.284	1.362	1.473	1.369	1.350	1.277	1.348	1.592	1.550	1.727	1.955	1.975
Austria	*Schilling*	12.34	13.23	11.37	11.67	10.99	11.63	11.42	10.08	10.58	12.20	12.38	12.91	14.93	15.30	15.43
Belgium	*Franc*	36.77	39.40	33.42	34.16	32.15	34.55	33.46	29.50	30.98	35.76	36.30	37.86	43.77	44.85	45.22
Canada	*Dollar*	1.231	1.184	1.167	1.146	1.209	1.290	1.366	1.372	1.364	1.385	1.483	1.486	1.485	1.553	1.561
Czech Republic	*Koruny*	..	..	..	29.47	28.26	29.15	28.79	26.54	27.15	31.70	32.28	34.59	38.64	38.62	38.95
Denmark	*Krone*	6.730	7.310	6.186	6.393	6.038	6.482	6.360	5.604	5.798	6.604	6.699	6.980	8.088	8.327	8.415
Finland	*Markka*	4.186	4.288	3.823	4.043	4.486	5.721	5.223	4.367	4.592	5.187	5.345	5.580	6.452	6.610	6.666
France	*Franc*	5.957	6.380	5.446	5.641	5.294	5.662	5.552	4.991	5.116	5.837	5.899	6.157	7.118	7.292	7.354
Germany	*Deutschemark*	1.756	1.880	1.616	1.659	1.562	1.653	1.623	1.433	1.505	1.734	1.759	1.836	2.122	2.174	2.193
Greece	*Drachma*	141.7	162.1	158.2	182.1	190.5	229.1	242.2	231.6	240.7	272.9	295.3	305.7	365.5	378.8	382.0
Hungary	*Forint*	..	..	..	74.8	79.0	91.9	105.1	125.7	152.6	186.6	214.3	237.1	282.3	299.5	308.1
Iceland	*Krona*	43.05	57.11	58.38	59.10	57.62	67.64	69.99	64.77	66.69	70.97	71.17	72.43	78.84	91.16	92.85
Ireland	*Pound*	0.657	0.706	0.605	0.622	0.588	0.683	0.670	0.624	0.625	0.660	0.703	0.739	0.855	0.876	0.883
Italy	*Lira*	1 302	1 372	1 198	1 241	1 232	1 572	1 613	1 629	1 543	1 703	1 736	1 817	2 101	2 153	2 171
Japan	*Yen*	128.1	138.0	144.8	134.5	126.7	111.2	102.2	94.1	108.8	121.0	130.9	113.9	107.8	122.0	123.3
Korea	*Won*	730.0	669.2	708.0	733.2	780.0	802.4	804.3	771.4	804.4	950.5	1 400.5	1 186.7	1 130.6	1 310.8	1 323.0
Luxembourg	*Franc*	36.77	39.40	33.42	34.16	32.15	34.55	33.46	29.50	30.98	35.76	36.30	37.86	43.77	44.85	45.22
Mexico	*Peso*	2.281	2.495	2.841	3.022	3.095	3.115	3.389	6.421	7.601	7.924	9.153	9.553	9.453	9.391	9.290
Netherlands	*Guilder*	1.977	2.121	1.821	1.870	1.759	1.857	1.820	1.605	1.686	1.951	1.983	2.068	2.391	2.450	2.471
New Zealand	*Dollar*	1.529	1.674	1.678	1.729	1.860	1.851	1.687	1.524	1.454	1.513	1.869	1.892	2.205	2.447	2.492
Norway	*Krone*	6.517	6.903	6.258	6.484	6.214	7.094	7.057	6.337	6.457	7.072	7.545	7.797	8.797	9.042	9.095
Poland	*Zloty*	0.471	0.618	0.812	1.058	1.363	1.814	2.273	2.425	2.695	3.277	3.492	3.964	4.346	4.052	4.040
Portugal	*Escudo*	143.9	157.1	142.3	144.4	134.8	160.7	166.0	149.9	154.2	175.2	180.1	188.2	217.5	222.9	224.8
Slovak Republic	*Koruna*	..	..	..	..	..	30.8	32.0	29.7	30.7	33.6	35.2	41.4	46.2	48.4	48.8
Spain	*Peseta*	116.5	118.4	101.9	103.9	102.4	127.2	134.0	124.7	126.7	146.4	149.4	156.2	180.5	185.0	186.5
Sweden	*Krona*	6.129	6.446	5.918	6.045	5.823	7.785	7.716	7.134	6.707	7.635	7.947	8.262	9.161	10.040	10.132
Switzerland	*Franc*	1.463	1.635	1.389	1.434	1.406	1.477	1.367	1.182	1.236	1.450	1.450	1.503	1.688	1.696	1.707
Turkey	*Lira*	1 421	2 120	2 606	4 169	6 861	10 964	29 778	45 738	81 281	151 595	260 473	418 984	624 325	1 381 167	1 755 045
United Kingdom	*Pound*	0.562	0.611	0.563	0.567	0.570	0.666	0.653	0.634	0.641	0.611	0.604	0.618	0.661	0.693	0.695
United States	*Dollar*	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Euro area	*Euro*	..	..	..	..	..	..	..	..	..	..	..	0.939	1.085	1.112	1.121
	SDR	0.742	0.780	0.738	0.731	0.710	0.716	0.699	0.659	0.689	0.726	0.737	0.731	0.759	0.786	0.790

Note: Greece became a member of the euro area on the 1st of January 2001. In order to ensure comparability of the euro data over time, Greece has been included in the calculation of the euro data throughout.
a) On the technical assumption that exchange rates remain at their levels of 12 April 2001, except for Hungary and Turkey, where exchange rates vary according to official exchange rate policy.
Source: OECD.

Effective exchange rates[a]

Indices 1995 = 100, average of daily rates

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Estimates and assumptions[b]	
															2001	2002
Australia	92.2	99.4	106.7	106.9	107.7	100.9	95.7	103.1	100.0	109.7	111.0	103.5	103.6	96.2	89.4	89.0
Austria	84.2	84.5	84.5	88.0	88.2	90.3	93.3	95.5	100.0	99.1	97.2	99.1	99.8	97.6	98.3	98.4
Belgium	79.6	79.4	79.6	85.1	86.0	88.7	90.6	94.7	100.0	98.4	94.4	96.7	96.3	92.4	93.4	93.4
Canada	95.4	102.5	109.7	113.2	116.5	110.7	105.6	100.8	100.0	101.9	102.2	97.4	97.0	98.0	94.7	94.4
Czech Republic	..	..	..	..	..	..	95.9	99.3	100.0	101.6	98.6	100.3	100.0	101.4	104.3	104.3
Denmark	82.2	81.3	80.0	86.4	86.0	88.7	92.9	95.1	100.0	99.1	96.8	99.3	98.7	94.6	95.7	95.5
Finland	89.9	91.9	96.1	99.9	97.0	85.2	76.7	87.0	100.0	97.6	95.4	98.2	101.2	96.6	98.3	98.3
France	81.4	80.6	80.5	86.4	85.9	89.5	93.2	96.1	100.0	100.4	97.6	100.0	99.3	95.6	96.5	96.5
Germany	71.9	72.7	73.2	79.4	80.0	83.9	88.6	92.9	100.0	98.6	95.2	98.7	98.6	94.3	95.7	95.8
Greece	161.9	151.4	141.9	133.4	120.4	113.3	105.7	101.1	100.0	98.4	96.7	94.0	94.9	88.6	89.5	89.7
Hungary	..	..	..	..	..	..	137.8	125.1	100.0	85.2	78.9	71.5	69.0	65.5	63.6	62.3
Iceland	150.4	142.9	121.9	110.4	110.9	110.5	104.0	99.6	100.0	99.5	101.6	104.4	106.2	107.4	97.0	96.0
Ireland	93.2	91.4	90.8	98.6	97.5	101.7	96.6	98.2	100.0	102.6	102.4	99.4	96.4	89.6	90.8	90.6
Italy	115.6	114.5	118.6	126.1	127.3	126.2	108.7	108.6	100.0	110.0	111.5	113.9	113.6	109.4	110.8	110.9
Japan	49.1	55.3	53.9	53.2	59.9	64.9	80.4	93.4	100.0	87.2	83.3	86.6	99.4	108.2	99.2	98.6
Korea	92.6	99.4	114.9	111.5	107.6	100.3	98.7	99.7	100.0	101.6	94.1	68.1	77.9	83.4	75.8	75.5
Luxembourg	79.6	79.4	79.6	85.1	86.0	88.7	90.6	94.7	100.0	98.4	94.4	96.7	96.3	92.4	93.4	93.4
Mexico	374.5	220.4	212.4	193.5	186.8	187.1	196.5	190.3	100.0	84.9	83.3	74.0	70.6	72.1	73.6	74.6
Netherlands	74.9	75.4	75.7	81.4	81.9	85.2	89.3	93.6	100.0	98.6	93.9	97.2	97.1	92.1	93.4	93.4
New Zealand	92.9	96.8	91.9	92.0	89.5	83.3	87.3	93.6	100.0	106.3	108.9	97.8	94.4	85.6	82.7	81.8
Norway	93.4	93.8	94.5	95.9	95.0	96.8	95.7	96.4	100.0	100.1	101.0	98.0	97.8	95.7	97.6	97.8
Poland	..	..	..	..	..	..	139.0	113.5	100.0	93.2	86.6	84.8	79.1	81.5	90.8	91.9
Portugal	95.8	92.3	91.8	93.3	95.8	101.3	97.7	96.9	100.0	99.6	98.3	98.2	97.7	95.3	96.2	96.3
Slovak Republic	..	..	..	..	..	..	103.3	99.7	100.0	100.6	105.2	104.9	97.4	99.2	96.5	96.6
Spain	99.3	103.6	109.6	116.8	118.2	117.0	104.5	99.6	100.0	101.0	96.9	98.1	97.3	94.3	95.3	95.3
Sweden	112.2	113.3	115.2	115.7	116.7	119.5	98.4	99.6	100.0	110.1	106.6	106.3	106.0	106.2	100.2	100.1
Switzerland	77.1	77.3	74.3	80.5	80.2	79.7	83.5	91.9	100.0	98.7	93.1	97.1	97.9	96.1	99.0	99.2
Turkey	4 693.9	2818.9	2010.1	1548.5	1024.7	611.5	428.0	173.5	100.0	58.6	34.9	21.1	14.1	10.3	5.3	3.8
United Kingdom	103.2	110.3	108.1	109.1	111.2	108.4	100.3	103.4	100.0	102.3	119.2	127.0	127.4	130.7	129.3	130.0
United States	75.3	73.7	79.1	83.3	85.4	87.0	92.6	98.0	100.0	105.6	113.1	124.8	124.3	127.4	134.1	134.8
Euro area	67.2	67.3	69.4	82.4	82.9	88.3	87.2	92.6	100.0	101.9	95.6	101.2	100.0	91.1	93.7	93.8

Note: Greece became a member of the euro area on the 1st of January 2001. In order to ensure comparability of the euro data over time, Greece has been included in the calculation of the euro data throughout.

a) For details on the method of calculation, see the section on exchange rates and competitiveness indicators in *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*

b) On the technical assumption that exchange rates remain at their levels of 12 April 2001, except for Hungary and Turkey, where exchange rates vary according to official exchange rate policy.

Source: OECD.

Annex Table 40. **Export volumes**

Total goods, customs basis, percentage changes from previous year

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	-2.8	17.7	9.0	3.1	8.1	0.1	4.8	7.2	16.2	6.3	6.2	6.3	3.0	12.7	7.4	0.2	4.9	9.7	7.1	7.4
Austria	4.5	9.5	9.5	1.2	2.0	7.6	15.0	10.7	7.1	3.7	-2.8	10.7	6.5	-1.0	17.0	8.4	5.7	10.4	6.2	6.9
Belgium[a]	4.1	5.0	4.1	7.9	6.9	4.6	8.1	3.1	4.0	0.0	7.5	9.0	6.2	2.2	7.4	5.6	5.0	11.1	7.8	6.6
Canada	7.4	18.6	6.4	5.8	3.6	9.7	1.2	4.7	2.6	7.9	11.3	13.2	9.5	5.6	9.1	8.5	11.0	10.4	3.9	6.9
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	5.7	15.0	2.6	15.0	13.3	7.7	16.0	15.8	15.1
Denmark	7.6	5.5	4.6	1.4	2.4	7.6	7.4	6.5	7.1	5.3	0.1	7.5	5.5	3.7	6.1	0.9	6.9	6.6	4.7	6.4
Finland	3.8	9.7	1.0	0.6	1.4	3.2	-0.2	2.8	-8.7	9.0	18.6	13.9	7.0	6.0	12.0	7.0	6.1	18.6	8.8	8.0
France[b]	4.4	7.3	2.6	0.1	4.2	9.6	10.2	5.0	5.3	4.8	-0.0	9.9	9.6	2.2	12.1	8.8	4.0	14.0	7.2	6.7
Germany	-0.3	9.1	5.9	1.3	2.9	6.6	8.1	1.4	1.4	0.8	-6.3	9.0	6.7	7.1	10.7	5.7	6.3	12.5	7.4	7.5
Hungary	..	..	..	..	..	..	..	..	..	..	..	16.7	9.9	24.2	29.7	21.9	16.3	21.7	16.0	11.6
Iceland[c]	9.4	-3.6	12.7	34.5	25.2	0.6	-2.1	13.5	-1.2	-2.8	-4.7	10.8	11.7	5.3	-0.3	-3.0	5.2	0.3	-3.5	3.8
Ireland	12.0	18.4	6.5	4.0	14.2	7.1	11.2	8.5	5.6	13.7	11.1	14.8	20.1	9.9	14.9	24.4	14.9	21.2	11.9	10.9
Italy	3.1	6.7	7.4	1.8	2.4	5.7	8.6	3.2	0.2	3.8	9.0	11.7	13.2	1.2	3.8	2.6	1.8	10.2	8.2	6.2
Japan	8.5	15.8	5.0	-0.5	0.4	4.4	4.5	5.5	2.5	1.5	-2.1	1.7	4.4	0.8	11.8	-1.2	2.1	9.4	1.5	8.7
Korea	19.5	18.1	10.7	24.5	23.2	19.3	-0.1	8.2	11.1	8.7	12.1	13.7	21.9	19.6	15.3	22.0	10.5	19.9	11.3	12.3
Mexico	15.5	10.4	-3.2	18.0	11.7	16.8	5.9	8.1	14.3	8.1	16.6	8.6	23.9	18.4	16.3	13.3	11.4	13.6	7.6	9.1
Netherlands	4.5	7.4	5.9	2.1	4.5	9.2	6.4	5.2	4.8	2.6	1.1	6.5	7.2	5.4	6.5	7.8	5.5	10.1	6.6	5.7
New Zealand	5.5	4.9	10.7	-2.0	2.9	3.9	-2.7	5.7	10.4	2.6	4.2	10.1	2.9	4.8	5.6	-1.0	1.6	5.7	4.4	8.3
Norway	12.6	9.1	3.5	1.8	13.9	4.4	15.0	6.7	6.7	8.0	5.3	12.4	5.5	12.9	4.6	0.2	3.0	4.8	4.7	3.3
Poland	..	..	..	..	..	..	..	..	..	..	..	19.5	17.1	9.9	13.8	8.8	2.8	22.5	10.3	11.2
Portugal	21.3	14.5	10.6	7.8	11.7	9.3	20.5	12.7	0.6	7.5	-4.2	14.4	14.2	9.6	10.0	6.6	4.0	7.3	7.8	8.5
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	5.7	15.0	6.6	3.9	16.4	6.2	12.4	14.5	13.7
Spain	8.4	17.5	2.8	-3.7	7.6	6.0	4.8	11.9	11.3	4.9	11.7	21.2	9.7	12.0	14.5	6.6	6.4	12.2	9.1	8.1
Sweden	11.4	8.2	3.4	2.9	2.7	3.7	2.1	0.2	-2.2	1.0	9.8	16.9	10.8	6.1	10.7	8.5	5.4	10.4	6.5	7.3
Switzerland	-0.5	7.9	7.8	-0.0	1.8	7.2	7.7	3.4	-2.8	3.5	1.0	3.4	2.2	2.6	7.9	4.0	4.7	9.5	4.1	5.8
Turkey	5.4	29.5	14.5	-20.8	21.9	8.8	-1.6	1.1	6.4	6.5	7.6	22.0	5.8	12.8	18.5	6.7	5.8	18.9	15.1	22.9
United Kingdom	1.8	8.6	5.7	4.0	5.5	2.5	5.4	6.5	0.5	2.2	0.1	13.0	10.6	8.3	7.6	1.5	3.7	9.2	5.4	7.2
United States[b]	-2.9	7.9	3.6	5.1	11.4	18.8	12.6	8.3	7.1	6.8	3.0	9.7	11.9	8.7	14.5	2.2	4.0	11.7	4.9	8.0
Total OECD	3.7	10.3	5.2	2.5	4.9	7.9	7.4	5.0	3.7	3.8	2.0	9.4	9.3	6.3	11.0	5.5	5.4	12.0	6.5	7.9

Note: Regional aggregates are calculated *inclusive* of intra-regional trade. Data are on a national account basis for the United States and France, otherwise from international trade statistics. See also *OECD Economic Outlook*
   Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.html).*
a) Including Luxembourg until 1994.
b) Volume data use hedonic price deflators for certain components.
c) OECD estimates.
Source: OECD.

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	-16.0	18.9	7.9	-1.3	1.5	13.2	22.8	-7.3	-1.3	6.7	4.3	11.8	10.1	6.9	6.2	7.2	7.1	5.7	2.4	7.0
Austria	8.1	8.3	5.4	5.2	5.3	7.7	10.6	11.0	3.3	2.8	-1.3	12.9	6.9	-0.2	11.3	6.3	5.7	9.9	5.9	6.3
Belgium*a*	-1.4	4.9	3.8	10.6	8.3	4.9	6.8	5.2	4.1	1.0	1.2	7.7	4.9	4.3	4.5	8.1	3.2	9.4	7.5	6.4
Canada	11.0	19.7	10.4	9.1	5.4	13.5	5.2	0.6	3.1	7.6	8.7	10.6	7.5	6.0	17.1	7.3	10.4	12.9	4.8	7.2
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	18.8	26.6	10.9	8.8	11.1	2.5	14.5	15.4	14.7
Denmark	3.0	3.4	7.9	7.0	-1.7	0.0	2.4	4.5	4.7	4.7	-3.6	12.3	7.0	1.2	9.1	3.3	1.8	6.0	4.9	6.1
Finland	3.6	-0.4	6.0	5.7	8.9	8.7	10.7	-4.0	-16.7	-2.1	-3.7	20.4	8.1	7.7	10.1	8.9	2.1	12.1	7.0	6.9
France*b*	-2.3	2.1	5.6	6.6	8.8	11.2	9.8	5.2	2.9	1.0	-4.3	10.3	8.7	0.0	7.4	12.3	4.9	15.9	8.8	7.7
Germany	4.0	5.2	4.9	5.4	5.3	6.4	7.3	12.7	11.9	1.3	-9.8	7.9	6.9	5.5	6.1	11.0	6.7	10.2	6.9	6.5
Hungary	..	..	..	..	..	..	..	..	..	..	..	14.9	-3.1	17.9	26.2	24.6	14.2	20.8	17.5	11.7
Iceland*c*	-13.4	0.7	10.1	23.4	41.8	0.6	-12.3	18.6	5.1	-3.3	-16.3	4.6	19.4	16.2	8.4	24.1	5.6	6.2	-2.7	2.7
Ireland	3.2	10.5	3.3	3.0	6.2	4.7	13.0	6.8	0.8	4.8	7.0	13.2	14.4	10.0	14.9	18.1	6.5	19.7	12.3	12.7
Italy	-0.0	9.1	8.8	4.5	10.1	7.0	8.3	4.4	4.6	3.3	-10.1	12.4	9.8	-3.0	8.9	8.5	7.9	8.3	9.9	7.5
Japan	1.1	10.6	0.7	9.7	9.0	16.9	7.7	5.5	3.9	-0.7	3.7	13.4	13.8	5.0	1.7	-5.3	9.6	10.9	5.2	5.8
Korea	12.0	18.6	5.6	1.6	17.8	18.9	15.2	17.9	17.3	2.2	7.1	19.0	23.6	28.4	5.2	-19.0	31.1	32.0	10.3	12.3
Mexico	-32.1	30.1	14.6	-6.9	8.9	41.1	18.8	17.4	19.7	23.2	3.8	18.5	-13.3	22.7	22.0	15.3	13.8	19.5	9.6	10.6
Netherlands	4.5	5.5	7.2	3.7	4.7	8.0	6.8	4.7	4.3	1.3	-2.7	7.1	7.8	6.1	7.6	7.4	6.4	9.9	7.5	6.8
New Zealand	-6.8	20.1	-0.0	-1.4	10.4	-7.8	21.7	7.3	-9.6	10.7	4.3	16.3	6.5	3.4	3.6	2.4	13.4	-2.7	2.3	5.3
Norway	-3.3	13.5	11.7	14.4	-2.0	-9.5	-5.7	10.3	2.6	3.3	0.7	16.1	8.1	10.4	7.9	10.5	-1.8	4.7	7.2	4.2
Poland	..	..	..	..	..	..	..	..	..	..	..	15.3	20.8	28.2	22.2	15.1	4.2	12.3	6.0	7.4
Portugal	-12.6	-5.7	6.6	19.2	28.0	22.2	8.4	15.8	5.9	13.0	-9.5	12.2	9.4	5.1	12.8	15.0	4.8	6.6	7.1	7.6
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	18.8	26.6	5.4	1.9	18.6	-5.5	10.7	14.4	13.8
Spain	-1.6	-1.0	8.4	20.3	27.7	19.2	16.8	9.9	11.5	6.8	-5.7	15.2	11.0	7.5	12.4	13.1	13.9	8.3	7.8	6.8
Sweden	1.9	6.7	9.2	3.7	8.9	5.4	7.1	0.2	-6.4	-0.8	2.5	14.9	9.0	2.4	10.5	10.3	2.7	12.5	6.8	8.8
Switzerland	5.9	8.5	3.8	8.5	6.0	4.5	7.0	1.9	-1.5	-4.9	-0.8	8.3	4.1	2.4	8.5	9.1	5.8	9.4	5.4	6.0
Turkey	12.0	24.0	7.9	-5.0	14.1	-0.5	5.7	34.2	-2.0	10.6	37.2	-21.1	29.8	30.8	21.9	-1.8	-5.9	34.5	-8.3	8.9
United Kingdom	6.1	11.1	3.8	7.2	6.9	13.8	8.0	0.5	-5.2	6.2	0.4	6.3	6.0	9.8	8.7	9.4	7.3	9.2	7.4	7.3
United States*b*	13.6	24.2	6.3	10.3	4.8	4.1	4.2	3.0	-0.1	9.3	10.1	13.3	9.0	9.4	14.2	11.8	12.5	13.9	4.8	6.7
Total OECD	3.8	10.9	5.8	7.3	7.1	8.5	7.7	5.7	3.5	4.1	0.5	10.9	8.8	7.3	9.7	8.2	8.8	12.6	6.7	7.4

Note: Regional aggregates are calculated *inclusive* of intra-regional trade. Data are on a national account basis for the United States and France, otherwise from international trade statistics. See also *OECD Economic Outlook*
Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.html).*
a) Including Luxembourg until 1994.
b) Volume data use hedonic price deflators for certain components.
c) OECD estimates.
Source: OECD.

Annex Table 42. **Export prices (average unit values)**

Total goods, percentage changes from previous year, national currency terms

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	7.6	0.3	12.5	1.2	4.0	11.8	5.5	1.2	-9.1	2.1	1.3	-2.8	7.4	-4.1	1.8	4.9	-7.0	15.7	6.9	2.2
Austria	-0.5	3.7	2.6	-4.2	-1.9	4.0	-2.6	-1.9	-4.1	-1.7	-1.4	-1.0	6.5	6.3	-0.0	0.0	-0.1	-0.7	2.3	2.0
Belgium[a]	7.9	7.8	1.7	-9.9	-6.1	4.7	7.9	-3.1	-1.9	-1.4	-1.4	1.1	1.8	2.7	5.4	-0.1	-0.6	9.1	4.2	2.2
Canada	-0.1	3.7	0.5	-2.4	1.4	-0.5	1.2	-1.2	-5.3	2.5	4.6	6.0	6.2	-0.0	-1.3	-1.4	0.7	4.9	2.4	1.1
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	4.7	7.2	1.0	5.5	4.0	-0.9	6.3	2.6	2.8
Denmark	4.9	6.2	3.4	-4.5	-1.0	-0.1	5.6	-1.6	-0.4	-1.7	-3.0	1.9	0.6	0.8	2.2	-0.3	0.4	8.6	2.5	1.4
Finland	6.4	5.9	2.8	-2.4	2.2	5.2	7.5	-1.2	0.5	6.1	5.3	0.8	6.9	-0.1	1.7	1.6	-4.9	5.7	-4.0	-1.8
France[b]	9.0	8.7	3.9	-4.6	-1.2	2.1	3.7	-1.9	-1.5	-2.3	-3.2	-0.6	0.4	1.7	2.1	-1.7	-0.9	1.0	1.9	1.8
Germany	1.3	3.4	3.9	-3.3	-2.7	0.9	4.4	-1.1	-0.6	0.7	0.0	1.0	1.7	0.2	1.6	0.1	-1.7	4.0	3.3	1.7
Hungary	..	..	..	..	..	..	..	..	..	..	..	18.0	31.2	18.9	15.1	13.1	3.5	9.8	7.8	6.6
Iceland[c]	102.1	27.7	30.9	-1.0	-5.9	11.6	32.1	2.2	1.4	-2.5	17.6	3.1	-7.3	3.0	4.1	7.3	0.9	2.2	8.0	2.6
Ireland	8.5	8.5	2.8	-7.2	-0.1	7.1	6.7	-9.4	-0.9	-2.6	6.8	1.0	1.3	-0.7	1.2	2.7	1.3	9.2	6.7	1.3
Italy	7.5	9.5	8.0	-4.7	1.2	5.0	6.3	2.1	2.9	0.8	11.3	3.7	9.2	0.8	0.5	0.9	-0.2	5.7	2.9	2.4
Japan	-6.6	-0.2	-0.7	-15.4	-6.0	-2.5	6.9	3.6	-0.3	-0.1	-4.6	-1.0	-1.8	6.9	1.9	0.7	-8.0	-0.7	8.0	0.6
Korea	-6.4	1.3	-6.0	-8.4	10.5	8.6	-5.4	2.1	3.1	4.3	-1.5	2.8	2.4	-9.3	7.9	17.1	-17.0	-5.3	7.2	0.8
Mexico	181.3	25.9	60.7	35.6	152.2	53.2	18.5	22.2	-2.5	2.5	-3.0	17.9	100.0	20.3	3.1	8.7	8.2	6.5	4.8	5.6
Netherlands	-0.3	5.9	1.3	-17.0	-5.7	0.5	5.0	-1.2	-0.6	-2.9	-3.4	2.0	1.5	0.7	3.0	-1.8	-0.5	9.8	4.4	1.1
New Zealand	5.6	13.1	9.3	-2.6	6.0	6.3	13.0	-1.2	-4.2	8.1	2.7	-4.1	-1.7	-3.5	-2.6	4.8	1.4	17.3	8.8	1.7
Norway	3.7	9.4	4.9	-24.8	-3.4	-0.0	12.3	4.1	-3.7	-8.4	0.6	-3.7	3.7	7.4	2.2	-11.3	12.6	40.1	8.1	-2.6
Poland	..	..	..	..	..	..	..	..	..	..	..	29.0	20.8	8.0	12.7	6.5	8.0	7.1	5.7	6.0
Portugal	30.2	30.7	15.7	3.3	8.4	10.5	5.7	2.9	0.2	-2.2	4.3	5.1	3.0	-1.1	0.4	-0.3	1.1	5.6	4.5	2.3
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	4.7	7.2	3.0	1.2	3.0	5.4	14.5	7.6	5.2
Spain	16.9	12.4	6.9	-3.9	2.5	5.4	4.6	-1.8	-0.9	1.1	5.1	4.2	6.3	1.0	3.2	0.1	-0.8	8.2	-1.0	1.9
Sweden	13.9	6.6	3.8	-1.2	3.5	4.5	6.9	2.1	0.2	-3.0	8.4	3.9	5.4	-4.3	0.4	-2.5	-1.1	2.8	0.7	1.4
Switzerland	2.4	4.7	2.0	0.5	-1.0	2.3	5.6	1.3	2.5	1.2	0.2	-0.6	-1.8	-0.1	3.8	-0.7	1.1	3.1	1.5	1.4
Turkey	32.5	51.6	35.9	25.7	45.6	59.6	50.3	35.8	58.2	66.9	55.4	163.7	72.1	69.6	77.6	64.0	50.2	22.1	64.4	34.3
United Kingdom	7.6	6.9	5.2	-10.6	3.8	0.4	8.3	3.9	0.6	1.2	9.7	0.4	3.7	1.1	-5.1	-5.6	-2.2	1.5	2.0	2.1
United States[b]	-0.7	0.9	-5.0	-3.3	2.2	6.5	1.3	-0.9	-0.1	-1.5	-0.5	1.1	2.4	-2.6	-2.7	-3.1	-1.4	1.1	-0.1	0.3
Total OECD	4.9	5.3	2.9	-5.9	1.8	3.8	5.0	0.8	-0.3	0.2	1.0	2.3	4.5	1.4	1.3	0.0	-1.9	3.7	3.5	1.6

Note: Regional aggregates are calculated *inclusive* of intra-regional trade. Data are national accounts price deflators in the case of the United States and France.
a) Including Luxembourg until 1994.
b) Certain components are estimated on a hedonic basis.
c) OECD estimates.
Source: OECD.

Annex Table 43. **Import prices (average unit values)**
Total goods, percentage changes from previous year, national currency terms

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	8.6	2.5	18.7	9.3	6.1	-2.6	-0.8	3.9	1.0	4.6	8.1	-2.4	3.6	-5.4	-0.1	8.4	-2.3	9.2	5.1	1.5
Austria	-3.0	4.2	3.9	-9.9	-4.1	1.8	3.0	-2.6	3.1	-2.4	-3.5	-1.2	-1.3	6.7	-0.0	0.0	-0.1	-2.9	1.8	1.8
Belgium[a]	13.8	8.3	-0.0	-16.2	-7.0	5.8	7.1	-1.8	-1.3	-3.2	-5.7	2.0	3.1	3.3	6.1	-1.6	1.2	11.3	2.9	1.7
Canada	-1.4	4.6	1.7	0.1	-1.8	-2.0	-0.3	0.7	-3.3	2.0	5.5	6.1	3.0	-2.5	-0.2	1.8	-2.4	-1.6	2.1	1.2
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	-0.9	5.6	1.3	5.2	-2.8	1.9	12.0	2.0	2.7
Denmark	3.2	8.7	2.4	-9.6	-4.1	1.8	7.1	-2.9	0.0	-2.9	-2.9	2.5	3.2	0.9	3.2	0.4	-0.4	8.1	2.7	1.8
Finland	6.8	4.8	3.0	-10.0	-1.9	2.2	3.5	1.7	2.2	10.5	12.8	-2.9	-1.3	2.6	2.4	-8.6	7.8	11.0	-1.3	0.2
France[b]	7.5	11.3	0.9	-14.9	-2.3	0.8	6.0	-2.1	-0.7	-3.8	-4.1	0.1	0.4	2.5	1.6	-3.1	0.2	5.6	2.1	2.0
Germany	-0.4	5.9	2.5	-15.9	-6.1	0.9	7.4	-2.5	1.9	-2.4	-1.5	0.8	0.5	0.5	3.2	-3.1	-1.6	11.0	4.5	1.4
Hungary	..	..	..	..	..	..	..	..	..	..	..	15.2	30.6	21.3	13.6	11.3	5.5	11.8	8.1	7.1
Iceland[c]	102.1	27.7	30.9	-1.0	-5.9	11.0	32.7	2.4	1.2	-2.5	17.4	3.3	-7.3	3.0	-2.9	-0.6	-2.0	5.2	7.6	-0.1
Ireland	4.6	9.5	2.6	-11.2	-0.1	6.5	6.4	-4.9	2.1	-1.9	5.4	2.4	4.5	-1.0	0.4	2.2	4.1	13.0	6.2	0.9
Italy	4.8	11.3	7.4	-17.6	-1.5	4.1	7.6	-0.7	-0.8	-0.5	11.7	4.1	12.2	-1.3	1.4	-2.7	-0.9	14.2	3.5	1.3
Japan	-9.1	-2.6	-4.4	-36.5	-8.0	-5.4	11.9	10.7	-9.1	-6.9	-12.3	-7.7	-1.4	14.6	6.0	-5.4	-12.2	4.7	12.2	0.2
Korea	-3.5	-1.4	-3.6	-0.2	10.1	4.0	-5.4	2.1	3.0	4.4	-1.5	2.8	2.5	-9.4	7.5	17.9	-17.2	-4.1	8.6	1.5
Mexico	206.3	28.4	70.7	92.1	129.8	70.0	14.1	16.2	6.6	3.3	2.0	11.7	99.7	18.9	4.8	14.7	3.3	1.9	3.6	5.3
Netherlands	0.1	5.7	0.9	-18.0	-3.1	-0.6	5.2	-1.7	-0.3	-2.7	-3.2	2.0	0.2	0.7	2.6	-2.1	0.6	9.6	3.8	0.9
New Zealand	8.3	13.7	10.5	-2.5	-4.3	-0.8	7.9	0.7	1.0	6.7	-0.6	-3.4	-0.1	-2.7	-0.9	3.8	2.3	16.7	7.5	1.2
Norway	3.7	3.1	6.5	0.0	2.8	2.8	6.1	0.9	-1.7	-2.1	1.0	0.7	0.9	-0.9	-1.0	1.4	-1.9	4.7	1.1	1.5
Poland	..	..	..	..	..	..	..	..	..	..	..	28.3	18.6	11.2	13.3	2.1	7.2	6.7	5.5	6.1
Portugal	37.3	35.3	7.3	-8.6	6.1	7.2	7.7	3.2	0.2	-5.1	5.0	3.6	1.8	2.7	0.3	-2.1	6.2	7.5	0.7	1.5
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	-0.9	5.6	5.5	2.6	-3.4	7.7	21.1	8.0	5.6
Spain	22.3	11.8	1.2	-19.1	-4.4	-2.1	2.1	-3.4	-2.7	-1.2	5.2	5.8	4.4	0.3	3.6	-2.4	0.0	12.9	2.4	2.1
Sweden	15.0	2.3	2.4	-8.3	1.7	3.5	5.2	2.2	-0.6	-2.7	12.0	4.2	0.8	-3.8	0.9	-3.3	1.8	4.5	2.3	1.9
Switzerland	-0.7	4.2	4.4	-9.3	-3.7	4.9	8.0	-0.4	-0.1	2.1	-1.9	-4.9	-2.0	-0.1	5.0	-3.6	-2.1	5.6	1.1	1.3
Turkey	29.4	56.2	44.3	8.3	37.5	63.2	56.4	29.6	54.6	61.6	50.0	171.4	82.2	65.2	71.5	62.9	53.2	42.8	83.8	43.9
United Kingdom	9.1	8.0	3.9	-5.8	2.7	-0.4	5.9	3.0	-0.5	-0.3	7.8	3.6	6.7	-0.0	-6.6	-7.2	-3.0	1.3	2.8	2.1
United States[b]	-4.2	-0.7	-4.0	-2.2	6.9	4.8	2.8	1.8	-1.4	-0.4	-1.1	0.8	2.7	-2.4	-4.1	-6.0	0.2	4.5	-1.7	-1.3
Total OECD	3.9	5.5	2.0	-10.7	1.2	3.0	5.7	1.4	-0.5	-0.9	-0.0	2.2	4.3	1.5	1.5	-2.0	-1.5	6.5	3.6	1.3

Note: Regional aggregates are calculated *inclusive* of intra-regional trade. Data are national accounts price deflators in the case of the United States and France.
a) Including Luxembourg until 1994.
b) Certain components are estimated on a hedonic basis.
c) OECD estimates.
Source: OECD.

Annex Table 44. **Competitive positions: relative unit labour costs**

Indices, 1995 = 100

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Australia	283.1	288.6	222.9	179.7	163.4	160.4	162.4	148.3	132.6	115.6	101.8	103.2	100.0	103.0	103.9	92.2	95.4	91.7
Austria	88.0	87.4	86.8	100.6	108.5	102.9	97.3	96.5	100.8	102.8	106.3	99.6	100.0	101.4	91.9	86.6	83.7	83.0
Belgium-Luxembourg	84.3	84.9	86.2	90.0	93.2	90.6	88.5	93.9	96.7	96.9	96.6	97.1	100.0	95.4	90.7	92.0	91.1	88.3
Canada	117.1	109.3	104.1	97.9	104.1	114.1	118.1	119.9	126.8	116.0	105.1	97.4	100.0	102.6	104.3	101.5	101.5	106.1
Czech Republic	..	..	..	..	..	..	..	..	..	..	90.4	98.4	100.0	106.9	104.7	114.4	116.9	115.0
Denmark	75.8	75.0	76.3	80.2	87.6	92.7	86.9	94.6	93.5	96.0	101.4	97.1	100.0	103.8	98.3	101.2	103.4	102.4
Finland	123.6	128.6	130.5	125.8	124.4	128.4	134.5	141.1	138.5	107.7	82.4	87.3	100.0	93.5	87.7	88.9	86.6	78.4
France	103.5	103.6	103.7	104.8	103.7	99.5	95.5	100.7	99.2	97.6	101.6	100.5	100.0	99.2	90.5	90.0	87.4	83.0
Germany	83.3	80.7	78.8	87.3	93.8	92.9	89.5	92.1	82.8	89.1	91.8	92.8	100.0	97.0	92.6	94.6	94.3	88.1
Greece	96.5	101.9	100.1	85.4	82.3	90.7	95.7	101.0	96.0	93.0	88.6	92.5	100.0	102.2	105.5	100.7	103.7	98.3
Hungary	..	..	..	..	..	..	..	..	..	..	122.9	121.6	100.0	92.0	91.8	84.2	85.0	77.5
Iceland	83.1	87.5	94.1	91.4	111.9	121.7	109.1	107.1	112.8	110.5	101.3	99.4	100.0	98.7	104.0	112.8	124.1	133.8
Ireland	168.6	156.4	151.2	161.9	149.2	137.0	125.9	131.1	126.9	122.4	113.1	109.0	100.0	99.0	91.6	84.6	80.7	73.5
Italy	132.6	130.7	129.3	132.0	132.7	131.6	136.8	143.9	150.1	143.9	118.7	112.7	100.0	113.5	115.8	120.1	121.6	118.6
Japan	48.4	47.8	48.9	64.9	68.5	70.8	64.1	59.9	65.9	73.2	89.3	98.8	100.0	84.1	79.5	86.8	96.6	101.0
Korea	89.5	92.3	85.5	68.1	72.2	88.4	103.4	99.0	100.2	91.7	87.5	90.2	100.0	106.4	90.8	63.4	70.7	75.5
Mexico	109.6	140.5	133.5	102.8	104.2	108.2	119.9	121.9	136.9	152.6	164.6	160.7	100.0	101.7	111.6	108.4	112.3	124.2
Netherlands	105.9	96.3	94.9	102.3	107.7	104.4	97.0	98.2	98.6	101.8	101.7	97.8	100.0	96.7	90.5	92.6	92.4	90.1
New Zealand	93.0	79.1	78.0	80.2	90.0	100.0	93.3	93.0	93.1	83.1	85.9	93.6	100.0	111.4	115.9	104.5	102.0	92.2
Norway	91.8	91.2	91.6	92.3	93.4	98.4	96.6	95.3	95.3	93.2	90.7	94.5	100.0	100.8	106.9	108.1	114.1	115.3
Poland	..	..	..	..	..	..	..	..	..	..	87.9	93.7	100.0	102.4	102.2	107.5	101.3	101.1
Portugal	94.8	83.3	86.1	84.3	80.6	83.7	90.6	85.6	89.6	98.7	91.0	94.9	100.0	91.1	92.6	93.7	96.2	98.7
Slovak Republic	..	..	..	..	..	..	..	..	..	..	82.6	89.6	100.0	108.9	127.3	134.0	131.1	141.0
Spain	84.7	87.5	86.9	85.7	87.4	93.4	100.4	111.2	115.8	118.4	106.8	100.8	100.0	103.9	103.8	106.3	108.1	107.1
Sweden	114.9	118.7	125.1	126.1	126.9	131.6	137.8	141.6	147.9	145.3	104.0	97.3	100.0	112.9	108.5	107.6	107.5	110.1
Switzerland	69.6	68.3	67.7	74.5	79.6	81.1	76.3	81.7	85.2	83.1	83.2	91.8	100.0	96.0	92.0	95.7	95.9	94.5
Turkey	102.5	89.8	92.7	73.7	67.1	61.0	92.4	109.1	143.3	134.2	136.8	95.9	100.0	99.0	101.5	109.1	117.9	130.7
United Kingdom	109.0	105.3	108.8	102.6	106.0	112.8	108.7	112.0	117.2	111.1	98.5	101.2	100.0	102.5	124.0	136.3	137.0	143.3
United States	158.9	164.3	168.9	149.0	125.9	116.3	117.1	114.1	112.2	108.2	107.0	106.0	100.0	100.9	105.7	113.5	112.0	112.5
Euro area	96.7	91.7	89.0	100.6	108.5	103.9	99.3	110.2	103.9	107.5	101.0	97.5	100.0	100.8	91.0	93.8	92.5	84.0

Note: Competitiveness-weighted relative unit labour costs in the manufacturing sector in dollar terms. Competitiveness weights take into account the structure of competition in both export and import markets of the
manufacturing sector of 41 countries. An increase in the index indicates a real effective appreciation and a corresponding deterioration of the competitive position. For details on the method of calculation see Durand, M.,
C. Madaschi and F. Terribile (1998), "Trends in OECD Countries' International Competitiveness: The Influence of Emerging Market Economies", *OECD Economics Department Working Papers,* No. 195.
Source: OECD.

Indices, 1995 = 100

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Australia	121.2	121.5	108.6	98.1	101.0	118.3	123.5	116.3	105.7	96.9	91.1	96.1	100.0	100.3	102.1	95.5	97.2	102.9
Austria	103.7	101.6	101.0	105.1	106.8	109.5	100.0	101.8	96.6	96.0	96.9	93.4	100.0	104.3	100.3	100.8	101.4	93.3
Belgium-Luxembourg	89.9	89.6	89.7	93.5	93.0	92.7	95.2	97.3	95.0	95.9	94.3	95.9	100.0	100.0	99.9	101.9	101.3	102.6
Canada	101.9	102.0	101.2	98.5	100.6	104.0	106.7	104.0	101.5	97.0	95.7	95.8	100.0	101.4	102.2	98.7	98.4	98.7
Czech Republic	..	..	..	..	..	..	..	..	..	..	94.4	98.5	100.0	101.8	102.1	107.2	105.2	106.7
Denmark	88.0	86.2	88.9	95.5	98.1	94.9	92.7	98.1	96.5	98.1	98.1	99.3	100.0	99.2	97.6	101.6	103.0	101.0
Finland	86.0	87.0	88.6	88.7	91.3	94.7	99.4	99.4	98.0	90.1	79.5	85.2	100.0	95.1	94.3	98.1	93.6	91.6
France	104.5	104.1	105.9	109.1	109.5	107.9	104.4	106.9	102.5	103.1	100.5	99.9	100.0	101.5	99.3	99.1	98.2	92.6
Germany	82.7	79.5	80.9	90.1	93.2	90.8	89.4	93.1	91.6	95.0	96.6	96.8	100.0	97.0	92.4	93.9	92.1	89.1
Hungary	..	..	..	..	..	..	..	..	..	..	103.5	102.7	100.0	99.5	103.6	105.2	103.3	104.1
Iceland	169.7	176.3	175.5	144.2	127.6	120.2	121.4	110.1	111.1	107.8	115.4	111.8	100.0	102.5	118.0	126.2	132.7	130.3
Ireland	106.7	106.0	108.8	111.1	103.8	108.5	108.9	103.9	102.0	104.6	101.0	99.6	100.0	102.3	106.3	106.8	107.1	105.6
Italy	101.4	101.9	102.4	104.5	104.9	101.0	107.8	113.2	114.1	112.7	100.8	98.6	100.0	105.4	104.7	108.2	108.4	107.3
Japan	70.3	70.2	71.7	80.8	79.4	81.5	79.4	74.8	80.4	84.1	94.5	100.7	100.0	92.7	89.6	90.0	97.9	104.7
Korea	108.5	111.0	100.7	87.0	99.5	112.5	123.9	116.6	110.0	103.4	101.2	99.0	100.0	104.0	105.1	84.3	81.1	83.7
Mexico	96.6	100.9	103.5	101.0	97.6	97.6	95.8	93.8	94.0	91.7	92.3	99.5	100.0	103.6	110.0	113.8	114.5	118.2
Netherlands	99.4	94.6	91.4	92.0	98.7	98.8	95.1	96.7	95.2	95.4	95.0	96.2	100.0	98.5	94.8	95.2	94.4	89.2
New Zealand	97.3	96.6	92.7	88.5	94.6	106.0	104.0	98.7	92.1	89.1	93.0	97.4	100.0	102.1	101.6	92.8	91.4	95.4
Norway	98.4	103.2	99.7	95.7	96.4	112.1	116.4	105.9	100.3	94.8	90.6	89.3	100.0	95.7	95.2	94.9	93.7	96.5
Poland	..	..	..	..	..	..	..	..	..	..	100.8	99.4	100.0	99.9	102.1	105.7	106.9	106.7
Portugal	107.6	110.0	111.0	108.6	106.3	106.5	101.7	102.3	103.7	105.7	101.1	99.9	100.0	98.4	95.1	94.1	95.2	92.4
Slovak Republic	..	..	..	..	..	..	..	..	..	..	103.3	99.9	100.0	101.3	103.7	105.0	100.9	110.9
Spain	82.5	84.9	87.8	95.9	98.2	102.1	102.1	107.7	112.3	111.9	102.6	98.5	100.0	100.7	99.5	101.0	99.6	98.9
Sweden	100.6	102.7	105.0	107.6	109.1	110.9	112.7	113.4	114.5	113.2	98.3	99.0	100.0	105.4	100.6	97.3	96.1	94.5
Switzerland	78.4	77.1	74.7	84.7	88.7	88.1	84.1	90.9	92.6	91.8	93.8	99.7	100.0	98.8	96.4	99.1	101.7	100.8
Turkey	162.4	157.1	142.8	112.9	120.1	109.0	106.6	105.0	104.7	102.3	101.0	98.6	100.0	97.0	98.9	96.2	94.9	79.0
United Kingdom	101.0	98.3	101.1	97.1	98.0	102.9	101.5	103.4	104.9	102.9	102.5	104.1	100.0	101.3	110.2	111.0	108.6	106.4
United States	153.6	153.5	151.2	133.9	123.3	119.1	119.4	114.7	114.3	111.1	112.5	108.6	100.0	98.8	101.3	105.3	105.5	107.2

Note: Competitiveness-weighted relative export prices in the manufacturing sector in dollar terms. Competitiveness weights take into account the structure of competition in both export and import markets of the
manufacturing sector of 41 countries. An increase in the index indicates a real effective appreciation and a corresponding deterioration of the competitive position. For details on the method of calculation see Durand, M.,
C. Madaschi and F. Terribile (1998), "Trends in OECD Countries' International Competitiveness: The Influence of Emerging Market Economies", *OECD Economics Department Working Papers,* No. 195.
Source: OECD.

Annex Table 46. **Export performance for total goods**

Total goods, percentage changes from previous year

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	-4.4	6.9	7.1	2.3	-1.9	-8.9	-1.9	2.0	11.0	0.5	2.8	-4.6	-5.4	8.1	3.1	-0.1	-0.1	-2.0	1.3	-0.3
Austria	2.7	3.2	5.1	-4.8	-3.7	0.7	6.8	3.6	1.1	2.6	-0.4	0.3	-2.7	-6.8	7.2	-2.1	-0.9	-2.0	-2.3	-0.8
Belgium[a]	2.5	-0.0	0.6	-1.0	0.3	-0.9	0.3	-3.0	-1.1	-2.7	10.2	-0.0	-2.4	-2.8	-1.1	-3.4	-1.1	-0.5	-0.0	-0.6
Canada	-4.1	-0.8	-0.7	-2.6	-1.1	2.9	-3.8	3.9	1.6	-0.4	1.6	0.9	1.5	-2.5	-3.3	-1.5	-0.9	-3.2	-1.6	0.1
Czech Republic	..	..	..	..	..	..	..	..	..	..	..	-5.2	2.7	-3.9	6.1	1.5	3.7	5.9	7.0	6.5
Denmark	5.6	-0.4	-0.0	-3.5	-2.6	2.3	1.3	1.8	2.8	2.4	-2.0	-1.4	-3.5	-1.3	-6.2	2.2	-3.8	-2.4	-0.6
Finland	2.1	1.7	-2.6	-5.1	-3.7	-2.6	-6.1	-0.3	-11.8	7.7	19.7	8.3	-10.5	-2.9	2.1	-0.1	0.3	4.7	1.1	0.3
France	4.6	0.5	1.9	-4.5	-0.9	1.1	1.2	-1.1	-0.9	1.0	1.5	-1.7	0.6	-3.4	2.0	-0.2	-2.1	1.7	-1.0	-0.6
Germany	-1.4	1.9	1.5	-4.6	-3.3	-1.9	0.3	-2.6	-1.0	-2.5	-8.0	-1.9	-2.8	0.7	0.7	-2.4	0.1	-0.2	-0.5	-0.4
Hungary	..	..	..	..	..	..	..	..	..	..	..	8.1	0.0	17.5	20.3	13.0	14.1	10.1	8.0	4.0
Iceland	7.6	-8.7	10.4	27.4	18.5	0.2	-6.4	9.5	-3.3	-6.0	-4.4	4.1	7.6	0.5	-4.8	-6.8	1.7	-6.0	-8.7	-2.0
Ireland	8.0	9.4	2.3	-1.3	9.2	-3.2	3.7	3.9	3.1	8.4	10.9	6.8	10.7	2.7	4.1	14.4	7.7	9.1	4.3	3.5
Italy	5.6	0.2	4.0	-5.0	-1.7	0.8	-1.8	-3.6	-4.1	0.1	11.9	2.2	-1.4	-1.8	-4.7	-6.5	-4.0	-2.4	0.5	-1.3
Japan	3.0	2.0	-0.5	-6.0	-6.3	-5.8	-3.7	-0.4	-5.2	-6.4	-9.6	-10.5	-6.6	-7.3	0.7	-3.1	-7.8	-7.0	-5.8	-0.1
Korea	17.8	2.7	3.8	10.7	11.9	6.8	-12.9	2.8	5.9	1.8	0.6	2.7	7.7	-2.9	1.5	25.1	2.3	-1.2	3.4	3.5
Mexico	7.7	-5.8	-7.4	1.3	5.0	9.4	3.2	7.6	10.3	-2.2	3.7	-3.9	16.6	8.3	0.5	-0.5	2.1	1.0	2.0	2.1
Netherlands	3.1	3.1	2.4	-2.0	-1.1	2.8	-0.2	-0.4	0.1	-0.2	3.5	-2.3	0.2	-0.1	-0.6	-0.3	0.9	0.3	-0.5	-1.2
New Zealand	7.2	-4.9	9.0	-1.7	-5.1	-4.5	-11.6	4.3	8.7	-3.7	-0.3	0.7	-5.4	0.1	-0.0	-1.5	-3.5	-3.4	-1.2	1.0
Norway	9.4	2.4	0.2	-5.1	6.4	-0.8	9.2	2.7	3.5	3.6	5.2	4.4	-0.2	6.7	-1.7	-4.4	-0.9	-4.2	-1.9	-3.2
Poland	..	..	..	..	..	..	..	..	..	..	..	7.9	7.1	3.8	5.6	0.0	-0.7	9.7	1.9	3.5
Portugal	16.9	8.7	6.5	1.5	4.0	-0.3	11.5	6.6	-3.8	4.0	-0.9	4.1	5.7	4.9	0.9	-3.1	-3.2	-3.4	0.1	1.3
Slovak Republic	..	..	..	..	..	..	..	..	..	..	..	-7.2	-0.5	-2.2	-5.7	4.3	5.2	-1.3	2.5	2.9
Spain	6.2	13.7	-2.1	-13.0	-0.2	-0.3	-0.1	2.3	1.2	0.7	14.5	10.8	1.2	6.9	4.6	-2.7	1.5	0.7	0.8	0.5
Sweden	9.4	0.3	-1.9	-3.7	-2.1	-2.7	-4.3	-4.3	-4.9	-2.3	9.7	5.1	1.6	-1.1	1.4	0.3	-0.1	-0.9	-0.8	0.0
Switzerland	-4.8	-2.6	6.2	-4.2	-4.7	-0.5	-0.1	-2.2	-8.8	0.9	1.7	-6.5	-5.5	-4.4	-3.1	-2.8	-2.7	-5.1	-3.4	-1.7
Turkey	6.3	25.5	15.9	-23.0	18.8	4.0	-4.7	-2.4	3.6	6.1	11.5	11.7	-4.2	7.1	11.9	-0.7	2.4	7.5	6.3	14.6
United Kingdom	-0.5	1.8	3.2	-0.9	1.3	-2.9	-1.2	0.9	-3.6	-2.0	0.8	2.5	1.1	2.5	-1.5	-6.6	-2.5	-2.9	-2.1	-0.4
United States	-1.0	-1.3	0.8	0.8	8.5	5.2	4.0	3.2	0.0	-0.6	-2.1	-2.3	3.2	1.3	3.6	-1.1	-2.5	-1.5	-2.5	-0.3
Total OECD	2.1	1.6	1.5	-3.3	-0.6	-0.4	-0.4	-0.0	-1.2	-1.2	-0.3	-1.5	-0.4	-0.8	0.8	-1.2	-1.5	-1.3	-1.0	0.1
Memorandum items																				
China	3.2	2.2	14.5	6.2	2.1	0.8	-2.9	0.5	8.2	10.1	2.8	19.2	-6.7	5.9	17.0	9.2	1.4	12.3	6.5	6.1
Dynamic Asia[b]	7.0	2.0	-4.2	15.2	10.1	4.6	2.3	4.7	5.2	3.4	3.7	2.4	0.3	-1.2	-0.2	1.5	-0.3	-0.2	-1.4	-0.9
Other Asia	1.9	-3.0	-3.1	5.1	3.9	-1.8	5.7	5.4	1.1	7.3	7.8	1.1	6.6	5.5	-4.2	2.0	1.4	2.1	1.8	0.4
Non-OECD Asia	5.6	1.4	-1.0	12.4	8.0	3.4	1.7	4.0	5.3	4.9	3.9	5.2	-0.6	0.6	2.8	3.1	0.1	2.7	0.7	0.9
Latin America	4.7	3.0	0.7	-8.6	-2.0	6.6	2.5	-2.9	-1.5	-4.1	3.4	-4.2	-6.8	1.2	-0.0	2.7	1.3	-0.2	0.8	0.6
Africa and Middle-East	-4.6	-8.0	-0.7	21.0	-8.9	-1.3	-0.7	-6.0	0.5	-0.8	1.6	-5.3	-7.0	8.7	1.6	1.2	-0.7	-2.3	0.0	-0.1
Central and Eastern Europe	3.1	2.3	-8.2	1.2	-0.8	-3.6	-3.8	-3.1	-12.7	-13.1	-0.8	12.3	0.2	-4.5	-12.0	-6.8	6.3	-4.2	-0.7	-0.8
Total of non-OECD countries	1.1	-1.6	-3.2	8.2	-0.3	0.3	-0.2	-0.9	-0.1	-0.1	2.7	2.5	-2.4	1.5	0.6	1.7	0.9	1.0	0.5	0.6
World	1.8	0.8	0.3	-0.5	-0.6	-0.2	-0.3	-0.2	-0.9	-0.9	0.4	-0.5	-0.9	-0.2	0.7	-0.4	-0.9	-0.7	-0.6	0.3

Note: Regional aggregates are calculated *inclusive* of intra-regional trade. Export performance is the ratio between export volumes and export markets for total goods. The export volume concept employed is the sum of the exports of non-manufactured goods and manufactures. The calculation of export markets is based on a weighted average of import volumes in each exporting country's markets, with weights based on trade flows in 1995. The export markets for total goods facing each country is calculated as the weighted sum of the individual export markets for non-manufactured goods and manufactures, where the weights correspond to the commodity export structure of the exporting country in 1995.
a) Including Luxembourg until 1994.
b) Dynamic Asia includes Chinese Taipei; Hong Kong, China; Indonesia; Malaysia; Philippines; Singapore and Thailand.
Source: OECD.

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
A. Exports																				
Canada	4.4	4.8	4.8	4.5	4.2	4.2	4.2	3.8	3.7	3.7	4.0	4.0	3.8	3.9	4.0	4.0	4.4	4.5	4.4	4.3
France	5.5	5.2	5.4	6.1	6.1	5.4	5.3	5.7	5.6	5.7	5.0	5.2	5.4	5.2	5.1	5.5	5.2	4.7	4.7	4.7
Germany	10.1	9.6	10.1	12.3	12.6	11.8	11.5	12.9	11.5	11.5	10.2	10.1	10.3	9.8	9.2	10.0	9.6	8.7	8.9	8.9
Italy	4.2	4.0	4.2	4.7	4.8	4.6	4.7	5.0	4.9	4.9	4.6	4.6	4.7	4.8	4.4	4.6	4.3	3.9	4.1	4.0
Japan	8.6	9.4	9.6	10.5	9.8	9.3	8.9	8.1	8.7	8.8	9.2	8.9	8.2	7.3	7.2	6.7	7.0	7.1	6.5	6.5
United Kingdom	5.2	5.0	5.3	5.2	5.4	5.2	5.1	5.3	5.3	5.1	4.9	4.9	4.8	4.9	5.1	5.0	4.8	4.5	4.4	4.5
United States	11.3	11.6	11.3	10.5	10.2	12.0	12.6	11.7	12.4	12.3	12.5	12.3	11.7	11.8	12.7	12.9	12.7	12.6	12.5	12.5
Other OECD countries	19.4	19.5	19.7	20.7	21.6	22.7	22.3	22.9	22.9	23.0	22.9	23.1	24.4	24.6	24.1	25.0	25.0	24.3	24.8	25.1
Total OECD	68.7	69.2	70.5	74.3	74.6	75.1	74.5	75.5	75.0	75.0	73.4	73.2	73.3	72.3	71.8	73.7	73.1	70.3	70.4	70.4
Non-OECD Asia	9.4	10.1	9.8	9.7	10.5	10.5	11.0	10.9	12.3	13.2	14.6	15.4	15.4	15.8	16.4	15.8	16.2	17.0	16.8	17.0
Latin America	4.5	4.7	4.5	3.6	3.3	3.1	3.2	3.0	2.9	2.9	3.1	3.2	3.1	3.2	3.3	3.2	3.0	3.2	3.3	3.3
Other non-OECD countries	17.3	16.0	15.2	12.3	11.6	11.2	11.3	10.7	9.7	8.9	9.0	8.3	8.1	8.7	8.5	7.3	7.7	9.5	9.6	9.3
Total of non-OECD countries	31.3	30.8	29.5	25.7	25.4	24.9	25.5	24.5	25.0	25.0	26.6	26.8	26.7	27.7	28.2	26.3	26.9	29.7	29.6	29.6
B. Imports																				
Canada	3.1	3.5	3.7	3.6	3.4	3.9	4.0	3.6	3.6	3.5	3.7	3.7	3.4	3.3	3.7	3.8	4.0	3.9	3.7	3.7
France	5.8	5.4	5.6	6.0	6.3	6.0	6.0	6.4	6.1	5.9	5.0	5.2	5.3	5.1	4.7	5.1	5.0	4.7	4.8	4.8
Germany	8.4	8.0	8.2	9.0	9.3	9.0	8.9	10.0	11.1	10.9	9.3	9.2	9.2	8.6	8.0	8.6	8.4	7.7	7.9	7.8
Italy	4.1	4.1	4.3	4.3	4.7	4.7	4.8	5.1	5.1	4.9	3.9	3.9	4.0	3.9	3.8	4.0	3.9	3.7	3.9	3.8
Japan	6.2	6.3	6.0	5.4	5.4	6.0	6.2	6.1	6.0	5.5	5.6	5.7	5.8	5.9	5.5	4.5	4.9	5.3	5.1	5.0
United Kingdom	5.4	5.4	5.5	5.8	6.1	6.6	6.4	6.4	5.8	5.8	5.5	5.4	5.3	5.4	5.6	5.7	5.6	5.2	5.2	5.2
United States	15.2	17.7	17.9	17.6	17.0	16.5	16.3	15.0	14.5	14.9	16.2	16.4	15.3	15.5	16.4	17.5	18.9	19.8	19.2	18.6
Other OECD countries	20.6	20.1	20.8	22.1	23.3	23.2	23.5	24.5	24.3	24.2	23.7	23.8	24.6	24.9	24.4	25.0	25.0	24.2	24.2	24.6
Total OECD	68.7	70.5	72.0	73.9	75.4	76.1	76.0	77.2	76.4	75.6	72.9	73.4	73.0	72.6	72.2	74.3	75.6	74.5	74.0	73.5
Non-OECD Asia	9.5	9.7	10.1	9.5	9.8	10.6	10.9	10.8	12.1	13.2	15.2	15.8	16.1	16.3	16.2	14.2	14.4	15.7	15.7	16.1
Latin America	4.1	3.9	3.7	3.7	3.4	2.4	2.2	2.1	2.4	2.7	3.1	3.2	3.3	3.3	3.8	3.8	3.1	3.0	3.2	3.2
Other non-OECD countries	17.6	15.9	14.2	12.9	11.3	11.0	10.8	9.9	9.1	8.5	8.8	7.7	7.6	7.7	7.8	7.7	6.9	6.8	7.1	7.1
Total of non-OECD countries	31.3	29.5	28.0	26.1	24.6	23.9	24.0	22.8	23.6	24.4	27.1	26.6	27.0	27.4	27.8	25.7	24.4	25.5	26.0	26.5

Note: Regional aggregates are calculated *inclusive* of intra-regional trade.
Source: OECD.

Annex Table 48. **Trade balances**

Billions US dollars

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	0.0	-0.8	-1.0	-1.9	0.5	-0.7	-3.4	0.4	3.5	1.6	-0.1	-3.3	-4.2	-0.6	1.8	-5.4	-9.7	-4.6	-0.8	-0.1
Austria	-3.2	-3.2	-3.1	-4.0	-4.8	-4.8	-5.6	-7.0	-8.6	-7.7	-6.5	-7.9	-6.7	-7.3	-4.3	-3.7	-3.6	-2.6	-2.2	-1.8
Belgium[a]	-0.0	0.4	1.1	3.0	2.2	3.7	3.4	3.0	3.3	5.0	6.9	8.1	11.1	10.4	9.7	8.9	7.7	7.4	10.6	12.8
Canada	14.2	15.6	11.9	7.2	9.2	8.8	6.5	9.5	6.1	7.4	10.2	14.8	25.8	31.1	17.2	12.8	22.8	36.6	36.0	38.0
Czech Republic	..	..	..	..	..	..	..	..	..	..	-0.5	-1.4	-3.7	-5.9	-4.6	-2.6	-1.9	-3.3	-3.5	-3.9
Denmark	0.2	-0.2	-0.7	-1.0	0.8	2.4	2.7	5.0	5.1	7.4	7.8	7.6	6.7	7.7	5.8	3.9	6.7	6.3	6.6	7.0
Finland	0.1	1.5	0.9	1.7	1.5	1.2	-0.2	0.7	2.2	4.0	6.4	7.7	12.4	11.3	11.6	12.5	11.7	13.2	13.1	13.4
France	-8.3	-4.4	-5.0	-1.4	-7.8	-7.6	-10.3	-13.3	-9.7	2.4	7.2	7.2	11.0	15.1	26.6	24.8	19.8	2.9	-1.2	-5.1
Germany	19.5	21.4	28.3	54.6	67.6	76.3	74.9	68.4	19.5	28.2	41.2	50.9	65.1	70.6	71.3	77.8	71.0	56.0	55.6	67.1
Greece	-5.0	-4.9	-5.9	-5.2	-6.4	-7.2	-8.6	-11.8	-11.7	-13.4	-12.2	-13.2	-16.8	-18.0	-17.3	-16.7	-18.0	-21.0	-22.3	-24.0
Hungary	..	..	..	..	..	..	..	..	..	..	-3.3	-3.6	-2.4	-2.7	-2.0	-2.4	-2.2	-2.1	-2.7	-3.3
Iceland	0.0	-0.0	-0.0	0.1	-0.1	-0.0	0.1	0.1	-0.1	0.0	0.2	0.3	0.2	0.0	0.0	-0.3	-0.3	-0.5	-0.4	-0.4
Ireland	-0.2	0.2	0.6	1.1	2.6	3.8	4.0	3.9	4.3	7.0	8.1	9.3	13.5	15.7	18.6	20.0	24.2	25.8	30.2	32.8
Italy	-1.6	-5.1	-5.4	4.8	0.1	-0.7	-2.9	-1.7	-2.2	-0.3	29.0	31.4	38.7	54.0	40.1	36.4	23.6	10.9	8.4	8.8
Japan	31.5	44.3	54.9	90.7	91.3	92.3	80.3	69.2	96.2	124.7	139.4	144.1	132.1	83.7	101.6	122.5	123.3	116.8	87.6	106.7
Korea	-1.8	-1.1	-0.0	4.3	7.5	11.3	4.4	-2.5	-6.8	-1.8	2.3	-2.9	-4.4	-15.0	-3.2	41.6	28.4	16.6	16.5	17.2
Mexico	14.1	13.2	8.4	5.0	8.8	2.6	0.4	-0.9	-7.3	-15.9	-13.5	-18.5	7.1	6.5	0.6	-7.9	-5.6	-8.0	-11.6	-16.1
Netherlands	5.5	6.6	6.8	7.4	6.3	10.1	9.8	12.0	12.0	12.3	16.9	18.7	23.8	22.8	20.9	21.1	17.9	18.2	19.1	18.5
New Zealand	0.3	-0.5	-0.0	0.1	0.6	2.2	1.0	0.9	2.1	1.6	1.7	1.4	0.9	0.5	0.8	0.9	-0.4	0.6	1.0	1.5
Norway	3.0	3.5	3.0	-3.8	-2.6	-2.1	1.1	4.6	6.0	8.3	6.9	7.5	8.6	12.9	11.5	1.7	10.5	24.9	30.5	28.7
Poland	..	..	..	..	..	..	..	..	..	..	-2.5	-0.6	-1.6	-7.3	-9.8	-12.8	-15.1	-14.4	-15.6	-16.2
Portugal	-2.9	-2.0	-1.4	-1.5	-3.4	-5.2	-4.6	-6.5	-7.5	-9.2	-7.8	-8.1	-8.7	-9.0	-9.9	-12.2	-14.1	-14.4	-13.9	-14.6
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-0.9	0.1	-0.2	-2.3	-2.1	-2.4	-1.1	-0.9	-1.1	-1.4
Spain	-7.8	-4.6	-4.7	-7.2	-13.7	-18.7	-25.4	-29.1	-30.4	-30.4	-15.1	-14.9	-18.4	-16.3	-13.5	-20.7	-29.2	-30.8	-35.3	-36.8
Sweden	1.9	3.4	2.4	5.1	4.5	4.8	4.0	3.4	6.3	6.2	7.2	9.4	16.9	18.7	19.0	17.5	16.9	15.0	13.2	12.8
Switzerland	-4.0	-4.2	-3.9	-4.3	-6.0	-6.3	-7.4	-7.1	-6.0	-1.0	1.7	1.6	0.9	0.9	-0.3	-1.7	-0.3	-2.8	-3.7	-4.0
Turkey	-3.0	-2.9	-3.0	-3.1	-3.2	-1.8	-4.2	-9.6	-7.3	-8.2	-14.2	-4.2	-13.2	-10.6	-15.4	-14.2	-10.4	-22.3	-14.5	-15.7
United Kingdom	-2.4	-7.1	-4.2	-14.1	-19.4	-38.3	-40.6	-32.8	-18.2	-22.8	-20.0	-17.0	-18.5	-20.4	-19.5	-34.1	-42.4	-43.6	-53.0	-58.5
United States	-67.1	-112.5	-122.2	-145.1	-159.6	-127.0	-115.2	-109.0	-74.1	-96.1	-132.6	-166.2	-173.7	-191.3	-196.7	-246.9	-345.6	-449.5	-446.0	-445.6
Euro area	-3.9	5.9	12.1	53.3	44.3	51.0	34.6	18.8	-28.8	-2.1	74.1	89.4	125.2	149.4	153.9	148.1	110.9	65.7	62.1	71.2
European Union	-4.2	2.0	9.6	43.3	30.2	19.9	0.7	-5.6	-35.5	-11.2	69.2	89.4	130.3	155.4	159.2	135.5	92.1	43.4	29.0	32.5
Total OECD	-17.1	-43.4	-42.4	-7.6	-23.4	-0.8	-35.7	-50.0	-23.1	9.4	64.0	58.5	102.2	55.5	58.8	18.6	-115.6	-269.5	-299.5	-282.1

a) Including Luxembourg until 1994.
Source: OECD.

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Australia	-2.8	-3.7	-3.5	-2.9	-2.6	-2.4	-4.3	-3.6	-2.5	-2.6	-1.5	-1.3	-1.0	-0.0	-0.4	-1.2	-1.0	0.2	1.8	1.8
Austria	3.9	3.4	3.3	5.0	5.5	5.4	6.8	9.1	10.1	9.4	7.5	7.3	4.6	4.6	1.0	2.4	2.6	0.7	1.0	1.1
Belgium[a]	0.6	0.3	0.2	0.5	1.1	0.7	-0.8	0.1	-0.1	0.5	1.1	1.3	0.1	0.4	1.3	1.1	1.9	1.8	0.7	0.5
Canada	-3.8	-3.9	-4.1	-4.1	-4.6	-5.4	-6.9	-9.1	-10.0	-10.1	-10.5	-8.5	-7.4	-6.7	-6.8	-4.7	-4.1	-4.4	-4.5	-4.7
Czech Republic	..	..	..	..	..	..	..	..	..	..	1.0	0.5	1.8	1.9	1.8	1.8	1.1	1.4	1.5	1.6
Denmark	0.6	0.8	0.7	0.3	0.5	0.8	0.7	1.8	2.8	2.3	1.6	0.5	0.7	1.3	0.1	-0.5	1.4	2.3	3.1	3.0
Finland	0.0	-0.2	-0.5	-0.7	-1.2	-1.7	-2.1	-3.0	-3.2	-2.9	-2.2	-1.8	-2.2	-1.7	-1.6	-1.1	-1.0	-1.0	-0.8	-0.9
France	8.6	8.9	9.6	10.0	10.4	10.7	13.6	14.9	16.6	19.5	17.3	17.8	17.2	15.1	16.5	17.2	19.0	20.2	21.0	23.5
Germany	-7.2	-5.4	-4.5	-7.0	-10.7	-14.4	-13.7	-18.6	-22.6	-31.6	-33.8	-41.1	-47.0	-45.4	-42.4	-47.0	-52.7	-50.6	-51.2	-54.9
Greece	2.3	2.3	2.2	2.6	3.6	4.1	3.8	5.2	5.6	6.6	6.2	7.0	7.2	6.9	6.5	6.8	7.3	7.7	9.3	10.6
Hungary	..	..	..	..	..	..	..	..	..	..	0.2	0.2	0.6	1.5	2.3	1.8	1.4	1.8	2.0	2.3
Iceland	0.1	0.0	0.0	0.1	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.1	-0.1	-0.1
Ireland	-0.2	-0.3	-0.3	-0.6	-0.9	-1.4	-1.8	-1.7	-2.0	-3.1	-3.0	-4.1	-6.3	-7.7	-9.0	-10.1	-11.4	-12.4	-14.8	-16.6
Italy	3.7	3.3	3.4	3.4	3.5	1.6	2.5	3.6	3.3	0.7	3.3	5.3	6.3	7.2	7.8	4.9	1.3	1.1	2.6	3.4
Japan	-12.2	-12.0	-9.6	-12.9	-20.4	-30.3	-36.7	-42.9	-41.9	-44.0	-43.0	-48.0	-57.3	-62.3	-54.1	-49.5	-54.1	-47.4	-43.9	-43.5
Korea	0.4	0.4	0.5	1.4	2.3	2.3	0.4	-0.6	-2.2	-2.9	-2.1	-1.8	-3.0	-6.2	-3.2	1.0	-0.7	-4.0	-4.2	-4.9
Mexico	-0.3	-0.3	-0.6	-0.4	0.3	0.0	-0.5	-1.9	-1.8	-2.3	-2.1	-2.0	0.7	0.5	-0.5	-0.9	-1.8	-2.3	-2.5	-3.2
Netherlands	-0.6	-0.6	-1.2	-1.3	-1.5	-2.3	-1.4	-0.4	-0.8	-0.1	-0.1	0.2	1.1	2.5	3.2	2.8	2.6	0.3	0.5	1.0
New Zealand	-0.5	-0.3	-0.3	-0.5	-0.5	-0.6	-0.8	-0.8	-0.8	-0.9	-0.6	-0.3	-0.2	-0.3	-0.6	-0.8	-0.3	-0.2	-0.1	-0.1
Norway	1.8	2.0	1.8	1.2	0.6	1.6	2.6	3.2	3.5	0.4	0.8	0.2	0.2	0.6	0.2	-1.0	-1.4	0.2	1.0	1.2
Poland	..	..	..	..	..	..	..	..	..	..	0.4	2.8	3.5	3.4	3.2	4.2	1.4	0.8	1.4	2.0
Portugal	0.2	0.4	0.6	0.8	0.9	0.6	0.8	0.9	0.6	0.5	1.2	1.0	1.3	1.4	1.5	1.9	1.6	1.6	1.9	1.9
Slovak Republic	..	..	..	..	..	..	..	..	..	..	0.3	0.7	0.5	0.0	0.1	0.0	0.1	0.5	0.6	0.6
Spain	6.3	7.9	8.1	11.8	13.4	13.9	12.7	11.9	12.1	12.4	11.7	14.9	18.6	20.4	20.0	21.9	23.0	20.0	25.2	25.9
Sweden	0.1	-0.0	-0.6	-1.8	-1.7	-2.2	-3.0	-3.3	-2.6	-2.3	0.1	0.2	-0.6	-1.3	-1.8	-2.6	-2.3	-3.5	-3.7	-4.1
Switzerland	4.4	4.4	4.8	6.6	8.3	8.3	8.0	9.4	10.3	10.7	11.4	11.5	12.9	12.4	13.1	13.5	13.2	13.4	14.3	15.0
Turkey	0.8	0.9	1.5	1.6	2.1	3.7	3.9	4.9	5.2	5.8	6.7	7.0	9.6	6.6	10.9	13.5	7.4	11.4	12.2	15.6
United Kingdom	6.0	5.8	8.6	9.5	10.9	7.7	6.4	7.1	7.8	10.0	9.9	10.0	14.1	14.0	20.3	20.8	18.2	16.6	18.7	21.1
United States	9.3	3.4	0.3	6.5	7.9	12.4	24.6	30.2	45.8	60.4	63.7	69.2	77.8	89.2	90.7	80.0	80.6	81.0	84.5	91.2
Euro area	17.7	20.0	21.0	24.4	24.3	17.3	20.4	21.9	19.6	11.9	9.3	7.7	-1.8	3.7	4.7	0.8	-5.8	-10.6	-4.8	-4.4
European Union	24.4	26.5	29.8	32.4	34.1	23.6	24.5	27.5	27.5	21.9	21.0	18.5	12.4	17.7	23.3	18.5	11.5	4.9	13.4	15.6
Total OECD	21.6	17.5	20.6	29.0	27.5	13.2	14.9	16.3	33.2	36.6	45.5	48.6	51.3	58.6	79.9	76.2	53.2	57.0	77.3	90.5

Note: The classification of non-factor services and investment income is affected by the change in reporting system to the International Monetary Fund, *Fifth Balance of Payments Manual*.
a) Including Luxembourg until 1994.
Source: OECD.

Annex Table 50. **Investment income, net**

Billions US dollars

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	-3.2	-4.1	-4.5	-4.9	-5.8	-8.6	-10.4	-13.2	-12.2	-10.1	-8.1	-12.4	-14.0	-15.2	-13.8	-11.3	-12.3	-10.9	-10.6	-10.9
Austria	-0.3	-0.3	-0.2	-0.6	-0.8	-0.9	-0.9	-0.9	-1.4	-1.4	-1.5	-1.7	-2.4	-0.9	-1.5	-2.0	-2.7	-2.3	-2.2	-2.1
Belgium[a]	0.1	0.2	0.2	0.3	0.5	0.6	1.8	1.8	2.3	2.3	3.2	3.4	4.1	4.5	4.3	4.4	4.4	4.5	4.9	4.8
Canada	-12.6	-12.4	-12.8	-14.0	-17.1	-17.5	-20.5	-19.4	-17.4	-17.5	-20.8	-18.9	-22.7	-21.5	-21.0	-19.6	-21.7	-20.3	-20.7	-21.0
Czech Republic	..	..	..	..	..	..	..	..	..	..	-0.1	-0.0	-0.1	-0.7	-0.8	-1.0	-1.3	-0.8	-1.0	-1.1
Denmark	-2.1	-2.3	-2.6	-3.5	-4.1	-3.7	-3.8	-5.1	-5.1	-4.9	-3.8	-3.8	-3.8	-3.7	-3.4	-2.8	-2.5	-3.1	-2.9	-2.8
Finland	-1.1	-1.1	-1.0	-1.3	-1.6	-1.7	-2.7	-3.8	-4.7	-5.4	-4.9	-4.4	-4.4	-3.6	-2.4	-3.1	-1.9	-2.1	-2.2	-1.8
France	-1.5	-2.4	-2.3	-1.7	-1.7	-1.0	-0.3	-1.6	-3.3	-6.0	-6.6	-6.0	-8.4	-1.9	7.4	9.5	11.9	13.6	15.8	16.3
Germany	2.9	4.7	4.7	5.3	5.2	9.4	14.3	20.6	20.3	21.8	16.6	2.9	0.1	1.0	-1.4	-7.2	-8.8	-1.0	-3.8	-2.3
Greece	-0.9	-1.0	-1.2	-1.4	-1.5	-1.6	-1.7	-1.8	-1.8	-2.2	-1.5	-1.4	-1.7	-2.0	-1.6	-1.6	-0.7	-0.9	-1.2	-1.1
Hungary	..	..	..	..	..	..	..	..	..	..	-1.2	-1.4	-1.8	-1.5	-1.4	-1.9	-1.7	-1.6	-1.6	-1.7
Iceland	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3
Ireland	-1.6	-1.8	-2.1	-2.6	-3.1	-3.9	-4.3	-5.0	-4.6	-5.6	-5.3	-5.4	-7.3	-8.2	-9.7	-10.6	-13.4	-14.2	-17.2	-20.1
Italy	-2.5	-2.5	-2.7	-4.2	-4.9	-5.5	-7.3	-14.7	-17.6	-21.9	-17.3	-16.7	-15.9	-15.2	-11.3	-12.1	-11.0	-12.0	-11.0	-10.3
Japan	3.1	4.2	6.8	9.3	16.3	20.6	22.9	22.7	26.0	35.7	40.7	40.4	44.1	53.4	55.7	56.7	49.9	57.5	56.7	60.2
Korea	-0.8	-1.3	-2.1	-2.3	-1.6	-1.3	-0.6	-0.1	-0.2	-0.4	-0.4	-0.5	-1.3	-1.8	-2.5	-5.6	-5.2	-2.2	-1.1	-0.3
Mexico	-9.1	-10.1	-9.0	-7.5	-6.8	-7.2	-8.3	-8.6	-8.6	-9.6	-11.4	-13.0	-13.3	-13.9	-12.8	-13.3	-13.3	-14.0	-16.8	-17.4
Netherlands	1.1	1.4	-0.2	-0.2	1.4	1.1	2.9	-0.6	0.4	-1.0	0.9	3.7	7.3	4.1	7.2	-3.6	3.1	1.1	0.5	0.1
New Zealand	-0.9	-1.1	-1.3	-1.5	-2.0	-2.1	-1.9	-1.6	-2.5	-2.2	-2.3	-3.3	-4.0	-4.7	-4.9	-2.6	-3.1	-3.3	-3.0	-3.1
Norway	-1.8	-1.7	-1.2	-1.3	-1.4	-2.5	-2.8	-3.4	-4.0	-2.8	-2.8	-2.2	-1.9	-1.8	-1.6	-1.0	-1.6	-1.5	0.5	2.0
Poland	..	..	..	..	..	..	..	..	..	..	-3.4	-2.6	-2.0	-1.1	-1.1	-1.2	-1.0	-1.1	-1.6	-2.1
Portugal	-1.1	-1.2	-1.1	-1.0	-0.8	-0.8	-0.6	-0.1	0.2	0.6	0.2	-0.6	-0.0	-1.0	-1.5	-1.6	-1.5	-1.4	-1.7	-1.8
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-0.0	-0.1	-0.0	-0.0	-0.1	-0.2	-0.3	-0.5	-0.5	-0.5
Spain	-2.3	-2.3	-1.7	-1.8	-2.6	-3.3	-2.8	-3.5	-4.3	-5.8	-3.6	-7.8	-4.1	-6.1	-6.8	-7.5	-9.5	-9.3	-9.5	-10.3
Sweden	-1.8	-1.9	-2.0	-2.0	-1.6	-1.8	-2.3	-4.5	-6.4	-10.0	-8.8	-5.9	-6.5	-7.6	-5.9	-4.4	-2.4	-2.6	-2.4	-2.1
Switzerland	4.3	5.0	5.0	5.8	6.8	8.9	8.1	8.8	8.9	8.4	9.1	7.9	11.8	12.6	16.2	17.5	21.1	23.8	27.7	31.6
Turkey	-1.4	-1.5	-1.6	-1.9	-2.1	-2.5	-2.3	-2.5	-2.7	-2.6	-2.7	-3.3	-3.2	-2.9	-3.0	-3.0	-3.5	-4.0	-6.0	-6.1
United Kingdom	1.7	3.1	-0.0	4.2	2.4	2.3	-0.0	-0.9	-3.5	3.7	1.0	11.9	9.4	12.6	18.3	23.6	14.9	8.2	12.6	11.9
United States	36.4	35.1	25.7	15.5	14.3	18.7	19.8	28.5	24.1	23.0	23.9	16.7	20.5	18.9	6.2	-6.2	-18.5	-13.7	-12.4	-17.5
Euro area	-7.2	-6.3	-7.7	-9.3	-9.9	-7.4	-1.6	-9.7	-14.5	-24.5	-19.7	-33.9	-32.8	-29.4	-17.3	-35.4	-30.1	-24.1	-27.7	-28.7
European Union	-9.4	-7.4	-12.3	-10.6	-13.2	-10.7	-7.7	-20.1	-29.6	-35.7	-31.3	-31.7	-33.7	-28.1	-8.4	-19.1	-20.1	-21.6	-20.4	-21.7
Total OECD	4.5	4.5	-7.4	-13.5	-12.8	-4.5	-4.0	-9.2	-18.2	-14.1	-10.9	-24.6	-21.7	-8.6	6.5	-11.9	-32.5	-14.4	-11.1	-9.8

Note: The classification of non-factor services and investment income is affected by the change in reporting system to the International Monetary Fund, *Fifth Balance of Payments Manual.*
a) Including Luxembourg until 1994.
Source: OECD.

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	-6.3	-8.9	-9.2	-9.9	-8.0	-11.9	-18.1	-16.0	-11.2	-11.2	-9.8	-17.3	-19.5	-15.8	-12.6	-18.2	-23.1	-15.4	-9.7	-9.3
Austria	0.3	-0.2	-0.1	0.3	-0.2	-0.3	0.3	1.2	-0.0	-0.7	-1.4	-3.3	-6.1	-5.4	-6.5	-5.2	-5.8	-6.0	-5.2	-4.7
Belgium[a]	-0.2	0.2	0.9	3.0	2.6	3.3	2.6	3.0	3.6	5.6	8.9	9.7	11.4	11.3	11.7	10.3	9.7	10.0	12.4	14.7
Canada	-2.5	-1.3	-5.7	-11.2	-13.5	-14.9	-21.8	-19.8	-22.4	-21.1	-21.7	-13.0	-4.4	3.4	-10.0	-11.0	-2.3	12.7	11.3	12.7
Czech Republic	..	..	..	..	..	..	..	..	..	..	0.5	-0.8	-1.4	-4.3	-3.3	-1.4	-1.6	-2.3	-2.8	-3.2
Denmark	-1.4	-1.7	-2.7	-4.5	-3.0	-1.6	-1.7	0.6	1.2	3.2	3.9	2.3	1.2	2.7	0.7	-1.5	2.9	2.3	3.7	4.1
Finland	-1.1	-0.0	-0.8	-0.7	-1.7	-2.7	-5.8	-7.0	-6.7	-5.1	-1.1	1.1	5.4	5.1	6.8	7.3	7.6	9.4	9.3	9.9
France	-5.0	-0.8	-0.2	2.4	-4.5	-4.6	-4.6	-9.8	-5.7	4.8	9.6	7.4	11.0	20.8	37.8	38.2	37.5	24.7	21.7	19.4
Germany	5.2	10.0	18.3	40.2	45.8	52.7	57.1	48.6	-18.4	-14.5	-9.7	-24.3	-20.7	-7.9	-3.1	-6.7	-18.0	-20.5	-23.8	-14.7
Greece	-1.8	-2.0	-3.2	-1.7	-1.2	-1.0	-2.6	-3.7	-1.7	-2.6	-1.1	-0.6	-3.3	-5.0	-5.0	-3.8	-5.2	-8.0	-7.5	-7.6
Hungary	..	..	..	..	..	..	..	..	..	..	-3.5	-4.0	-2.5	-1.7	-1.0	-2.3	-2.1	-1.5	-1.9	-2.3
Iceland	-0.1	-0.1	-0.1	0.0	-0.2	-0.2	-0.1	-0.1	-0.3	-0.2	0.0	0.1	0.1	-0.1	-0.1	-0.6	-0.6	-0.9	-0.8	-0.8
Ireland	-1.2	-1.0	-0.8	-0.9	-0.1	-0.0	-0.6	-0.4	0.3	0.5	1.8	1.5	1.7	2.0	1.9	0.7	0.7	0.0	-0.9	-3.0
Italy	0.8	-3.1	-4.2	2.2	-2.5	-6.9	-11.6	-16.8	-24.0	-29.3	7.7	12.8	24.9	39.4	32.4	21.8	8.6	-3.9	-3.7	-1.7
Japan	20.8	35.0	50.7	85.4	84.1	79.2	63.3	44.2	68.3	112.6	131.9	130.3	111.2	65.8	94.3	121.0	106.9	117.2	91.3	114.0
Korea	-1.5	-1.3	-0.8	4.7	10.1	14.5	5.4	-2.0	-8.3	-3.9	1.0	-3.9	-8.5	-23.0	-8.2	40.4	24.5	11.0	11.4	12.1
Mexico	5.9	4.2	0.8	-1.4	4.2	-2.4	-5.8	-7.5	-14.6	-24.4	-23.4	-29.7	-1.6	-2.3	-7.4	-16.1	-14.4	-17.6	-23.3	-28.8
Netherlands	5.0	6.3	4.4	4.3	4.1	7.0	9.4	8.1	7.4	6.8	13.2	17.3	25.8	22.6	25.2	13.0	17.3	13.6	13.5	12.7
New Zealand	-1.0	-1.9	-1.6	-1.8	-1.7	-0.4	-1.6	-1.4	-1.2	-1.4	-1.0	-1.9	-3.1	-4.0	-4.4	-2.2	-3.6	-2.7	-2.0	-1.6
Norway	2.4	3.3	3.0	-4.7	-4.4	-4.0	-0.1	3.1	4.3	4.4	3.6	3.8	4.9	10.2	8.7	-1.9	6.0	22.0	30.6	30.6
Poland	..	..	..	..	..	..	..	..	..	..	-4.6	1.0	0.9	-3.3	-5.7	-6.9	-12.5	-11.8	-12.1	-12.3
Portugal[b]	-1.6	-0.6	0.4	1.2	0.4	-1.0	0.2	-0.2	-0.7	-0.3	0.3	-2.3	-0.2	-4.2	-6.1	-7.9	-10.1	-10.7	-10.5	-11.0
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-0.6	0.7	0.4	-2.1	-2.0	-2.1	-1.1	-0.7	-0.9	-1.1
Spain	-2.9	1.8	2.8	3.9	-0.2	-3.7	-10.9	-18.1	-19.9	-21.6	-5.7	-6.4	0.8	0.4	2.5	-3.0	-12.7	-17.5	-18.5	-19.5
Sweden	-0.7	0.7	-1.0	0.0	-0.0	-0.6	-3.1	-6.3	-4.7	-7.5	-2.6	2.5	7.1	7.2	8.0	7.1	8.5	5.6	4.6	4.1
Switzerland	3.8	4.4	5.1	6.9	7.6	9.1	7.0	8.7	10.6	15.2	19.5	17.5	21.4	21.9	25.5	25.8	29.9	31.1	34.8	39.0
Turkey	-1.8	-1.4	-1.0	-1.5	-0.8	1.6	0.9	-2.6	0.3	-1.0	-6.4	2.6	-2.3	-2.4	-2.6	2.0	-1.4	-9.8	-3.0	-0.8
United Kingdom	2.8	-0.6	0.5	-3.5	-9.5	-31.2	-38.4	-34.2	-15.0	-17.8	-15.9	-2.1	-5.9	-0.8	10.8	-0.2	-16.0	-24.5	-29.2	-33.1
United States	-38.7	-94.3	-118.2	-147.2	-160.7	-121.2	-97.0	-77.0	6.6	-47.7	-82.7	-118.6	-109.5	-123.3	-140.5	-217.1	-331.5	-435.4	-431.8	-430.8
Euro area	-2.5	10.6	17.5	54.2	42.5	43.1	33.5	4.9	-65.8	-56.3	22.5	12.9	50.6	79.1	97.8	64.7	29.7	-8.8	-13.3	-5.4
European Union	-1.8	9.0	14.2	46.2	29.9	9.6	-9.7	-35.0	-84.3	-78.4	7.8	15.6	53.0	88.1	117.3	70.1	25.1	-25.5	-34.4	-30.3
Total OECD	-20.9	-53.5	-62.8	-34.2	-53.3	-40.9	-77.5	-105.3	-52.1	-57.1	10.5	-17.5	39.0	7.1	47.9	-20.4	-201.7	-329.4	-343.3	-313.0

Note: The balance-of-payments data in this table are based on the concepts and definition of the International Monetary Fund, *Fifth Balance of Payments Manual*.
a) Including Luxembourg until 1994.
b) Break between 1995 and 1996, reflecting change in methodology to the International Monetary Fund, *Fifth Balance of Payments Manual* (capital transfers from European Union are excluded from the current account as from 1996).
Source: OECD.

Annex Table 52. **Current account balances as a percentage of GDP**

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Australia	-3.7	-4.8	-5.5	-5.7	-3.9	-4.6	-6.2	-5.2	-3.6	-3.7	-3.3	-5.1	-5.4	-3.9	-3.1	-5.0	-5.8	-4.0	-2.7	-2.5
Austria	0.3	-0.3	-0.1	0.3	-0.2	-0.2	0.2	0.7	0.0	-0.4	-0.8	-1.6	-2.6	-2.3	-3.2	-2.5	-2.8	-3.2	-2.7	-2.4
Belgium*a*	-0.3	0.2	1.1	2.6	1.8	2.1	1.7	1.5	1.8	2.5	4.1	4.2	4.1	4.2	4.8	4.1	3.9	4.4	5.3	6.1
Canada	-0.8	-0.4	-1.6	-3.0	-3.2	-3.0	-3.9	-3.4	-3.8	-3.6	-3.9	-2.3	-0.8	0.6	-1.6	-1.8	-0.4	1.8	1.6	1.7
Czech Republic	..	..	..	..	..	..	..	..	..	..	1.3	-1.9	-2.6	-7.4	-6.1	-2.4	-3.0	-4.8	-5.2	-5.5
Denmark	-2.4	-3.1	-4.6	-5.3	-2.9	-1.4	-1.6	0.4	0.9	2.2	2.8	1.5	0.7	1.5	0.4	-0.9	1.7	1.5	2.2	2.4
Finland	-2.3	-0.1	-1.5	-1.0	-1.9	-2.5	-5.0	-5.1	-5.4	-4.7	-1.3	1.1	4.1	4.0	5.6	5.6	5.9	7.8	7.4	7.5
France	-0.9	-0.1	-0.1	0.3	-0.5	-0.5	-0.5	-0.8	-0.5	0.4	0.8	0.5	0.7	1.3	2.7	2.6	2.6	1.9	1.7	1.4
Germany	..	..	..	..	..	4.3	4.7	3.2	-1.0	-0.7	-0.5	-1.1	-0.8	-0.3	-0.1	-0.3	-0.9	-1.1	-1.3	-0.8
Greece	-4.2	-4.9	-7.8	-3.4	-2.1	-1.5	-3.8	-4.4	-1.9	-2.6	-1.2	-0.6	-2.8	-4.0	-4.1	-3.2	-4.2	-7.1	-6.5	-6.2
Hungary	..	..	..	..	..	..	..	..	..	..	-9.0	-9.5	-5.5	-3.8	-2.1	-4.9	-4.3	-3.3	-3.7	-4.3
Iceland	-1.9	-4.5	-3.8	0.5	-3.4	-3.6	-1.9	-2.1	-4.0	-2.3	0.8	1.9	0.8	-1.8	-1.7	-6.9	-7.0	-10.2	-10.8	-9.9
Ireland	-5.8	-5.3	-3.7	-3.1	-0.2	-0.0	-1.5	-0.8	0.7	1.0	3.7	2.7	2.6	2.8	2.4	0.9	0.7	-0.1	-0.9	-2.6
Italy	0.2	-0.8	-1.0	0.3	-0.3	-0.8	-1.3	-1.5	-2.1	-2.4	0.8	1.2	2.3	3.2	2.8	1.8	0.7	-0.4	-0.3	-0.1
Japan	1.7	2.7	3.7	4.2	3.4	2.7	2.1	1.5	2.0	3.0	3.0	2.7	2.1	1.4	2.2	3.1	2.4	2.5	2.2	2.7
Korea	-1.8	-1.4	-0.8	4.3	7.4	7.9	2.4	-0.8	-2.8	-1.2	0.3	-1.0	-1.7	-4.4	-1.5	12.8	6.0	2.4	2.7	2.7
Mexico	4.8	2.5	0.8	-0.8	2.8	-1.3	-2.7	-2.9	-4.7	-6.7	-5.8	-7.1	-0.5	-0.7	-1.9	-3.8	-3.0	-3.1	-3.6	-4.0
Netherlands	3.5	4.8	3.2	2.4	1.8	2.9	4.0	2.7	2.4	2.0	4.1	4.9	6.2	5.5	6.7	3.3	4.3	3.7	3.5	3.1
New Zealand	-4.4	-8.6	-7.3	-6.4	-5.0	-0.9	-3.8	-3.2	-2.8	-3.4	-2.4	-3.7	-5.1	-6.0	-6.6	-4.0	-6.6	-5.3	-4.2	-3.3
Norway	4.1	5.4	4.8	-6.2	-4.8	-4.1	-0.1	2.6	3.7	3.5	3.0	3.0	3.3	6.5	5.6	-1.3	3.9	13.9	18.1	17.5
Poland	..	..	..	..	..	..	..	..	..	..	-5.2	1.0	0.7	-2.3	-4.0	-4.4	-8.1	-7.2	-6.2	-5.7
Portugal*b*	-6.1	-2.6	1.5	3.3	1.0	-2.0	0.3	-0.3	-0.8	-0.2	0.4	-2.4	-0.1	-3.7	-5.7	-7.1	-9.0	-10.3	-9.7	-9.6
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-4.9	4.5	2.1	-10.6	-9.5	-10.0	-5.8	-3.7	-4.3	-5.1
Spain	-1.7	1.1	1.6	1.6	-0.0	-1.0	-2.8	-3.5	-3.6	-3.6	-1.1	-1.3	0.1	0.1	0.5	-0.5	-2.1	-3.1	-3.2	-3.2
Sweden	-0.8	0.7	-1.0	0.0	-0.0	-0.3	-1.6	-2.6	-1.9	-3.0	-1.3	1.2	3.0	2.8	3.4	2.9	3.5	2.5	2.1	1.8
Switzerland	3.8	4.6	5.2	5.0	4.4	4.9	3.9	3.8	4.6	6.2	8.2	6.7	6.9	7.4	10.0	9.8	11.6	12.9	13.9	15.2
Turkey	-2.9	-2.4	-1.5	-1.9	-0.9	2.0	0.9	-1.7	0.1	-0.6	-3.6	2.2	-1.5	-1.3	-1.3	1.1	-0.9	-4.9	-1.9	-0.5
United Kingdom	0.6	-0.1	0.1	-0.6	-1.4	-3.8	-4.6	-3.5	-1.5	-1.7	-1.7	-0.2	-0.5	-0.1	0.8	-0.0	-1.1	-1.7	-2.1	-2.2
United States	-1.1	-2.4	-2.8	-3.3	-3.4	-2.4	-1.8	-1.3	0.1	-0.8	-1.2	-1.7	-1.5	-1.6	-1.7	-2.5	-3.6	-4.4	-4.2	-4.0
Euro area	-0.1	0.5	0.8	1.7	1.1	1.0	0.8	0.1	-1.1	-0.9	0.4	0.2	0.7	1.1	1.5	1.0	0.4	-0.1	-0.2	-0.1
European Union	-0.1	0.3	0.5	1.2	0.6	0.2	-0.2	-0.5	-1.2	-1.0	0.1	0.2	0.6	1.0	1.4	0.8	0.3	-0.3	-0.4	-0.4
Total OECD	-0.2	-0.6	-0.7	-0.3	-0.4	-0.3	-0.5	-0.6	-0.3	-0.3	0.1	-0.1	0.2	0.0	0.2	-0.1	-0.8	-1.3	-1.3	-1.2

a) Including Luxembourg until 1994.
b) Break between 1995 and 1996, reflecting change in methodology to the International Monetary Fund, *Fifth Balance of Payments Manual* (capital transfers from European Union are excluded from the current account as from 1996).
Source: OECD.

Structure of current account balances of major world regions

Billions US dollars

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	Projections 2002
Trade balance																				
OECD	-17	-43	-42	-8	-23	-1	-36	-50	-23	9	64	59	102	56	59	19	-116	-270	-300	-282
Non-OECD *of which:*	36	63	53	16	51	33	48	69	54	29	-0	31	11	41	55	48	153	258	215	197
Non-OECD Asia *of which:*	-13	0	-9	-1	13	2	3	8	10	4	-13	-4	-15	-11	27	96	103	77	55	48
China	2	0	-13	-9	-2	-5	-6	9	9	5	-11	7	18	20	46	47	36	34	30	27
Dynamic Asia[a]	-4	12	18	22	28	21	22	11	11	8	8	3	-13	-6	1	69	85	64	45	43
Other Asia	-11	-12	-13	-14	-13	-14	-13	-12	-9	-10	-11	-14	-20	-24	-21	-20	-18	-20	-21	-22
Latin America	17	26	25	12	12	22	28	31	19	10	2	3	-7	-6	-18	-32	-0	9	2	1
Africa and Middle-East	20	24	31	-4	15	4	22	53	23	14	11	23	25	53	49	-12	29	135	124	117
Central and Eastern Europe	12	13	5	8	12	6	-6	-23	1	2	-0	10	8	4	-3	-4	22	36	35	31
World[b]	19	20	10	9	28	32	13	19	30	38	64	90	113	96	113	67	37	-12	-85	-85
Services and private transfers																				
OECD	20	17	9	9	1	-8	-7	-13	-3	0	14	-0	1	20	54	35	-18	2	23	37
Non-OECD *of which:*	-84	-89	-83	-67	-68	-74	-83	-85	-103	-90	-91	-82	-112	-107	-111	-126	-114	-123	-134	-147
Non-OECD Asia *of which:*	-1	-5	-5	-1	-2	-4	-4	-3	-1	-0	-2	3	-16	-6	1	-20	-23	-29	-31	-37
China	2	2	2	2	2	2	1	3	4	1	-1	0	-17	-13	-10	-15	-21	-24	-25	-26
Dynamic Asia[a]	-8	-11	-9	-5	-6	-6	-5	-4	-4	-1	-1	-1	-2	1	1	-13	-11	-12	-12	-17
Other Asia	5	4	3	3	2	0	-0	-1	-1	-0	1	4	3	6	10	8	9	7	6	6
Latin America	-32	-33	-30	-30	-28	-31	-33	-27	-24	-21	-27	-27	-30	-33	-43	-45	-36	-35	-37	-40
Africa and Middle-East	-56	-56	-49	-38	-40	-39	-47	-57	-73	-58	-56	-54	-56	-63	-60	-49	-47	-49	-54	-57
Central and Eastern Europe	4	5	1	1	1	1	1	1	-4	-10	-6	-5	-10	-5	-8	-12	-8	-10	-12	-12
World[b]	-64	-72	-74	-58	-67	-81	-90	-98	-105	-90	-77	-82	-111	-87	-57	-92	-132	-121	-111	-110
Official transfers																				
OECD	-24	-27	-29	-35	-31	-32	-35	-42	-26	-67	-67	-76	-64	-68	-65	-74	-68	-62	-66	-68
Non-OECD *of which:*	2	6	10	11	10	13	12	4	-9	18	18	14	17	16	15	14	14	14	15	15
Non-OECD Asia *of which:*	2	2	2	3	3	3	2	2	3	3	3	3	4	3	3	2	2	2	3	3
China	0	0	0	0	-0	0	0	0	0	0	0	-1	1	0	0	0	0	0	0	0
Dynamic Asia[a]	0	0	0	0	0	0	0	1	0	1	0	1	1	0	0	1	1	0	1	1
Other Asia	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2
Latin America	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
Africa and Middle-East	-1	3	6	7	6	8	8	-1	-20	10	10	8	9	9	8	8	9	9	9	10
Central and Eastern Europe	-0	0	0	0	0	0	0	1	6	4	4	2	2	2	2	2	2	2	2	2
World[b]	-22	-20	-19	-24	-20	-19	-22	-39	-35	-48	-49	-61	-47	-53	-50	-59	-54	-48	-52	-53
Current account balance																				
OECD	-21	-53	-63	-34	-53	-41	-78	-105	-52	-57	10	-18	39	7	48	-20	-202	-329	-343	-313
Non-OECD *of which:*	-46	-19	-20	-40	-6	-28	-22	-12	-58	-43	-73	-37	-84	-51	-41	-64	54	149	96	65
Non-OECD Asia *of which:*	-12	-2	-11	1	14	0	2	8	12	6	-12	2	-27	-14	31	78	82	50	26	13
China	4	2	-11	-7	0	-4	-4	12	13	6	-12	7	2	7	37	31	16	10	5	1
Dynamic Asia[a]	-11	2	8	17	22	16	17	7	7	8	7	3	-14	-5	3	57	75	52	34	26
Other Asia	-5	-6	-8	-9	-9	-11	-11	-12	-8	-8	-8	-8	-15	-16	-9	-11	-8	-12	-13	-14
Latin America	-14	-6	-4	-16	-14	-8	-3	6	-3	-9	-22	-22	-36	-37	-60	-75	-36	-25	-34	-39
Africa and Middle-East	-37	-29	-12	-35	-19	-27	-17	-4	-70	-35	-35	-23	-22	-1	-3	-53	-10	95	79	69
Central and Eastern Europe	16	18	6	10	13	7	-4	-21	3	-4	-3	7	1	1	-9	-14	17	28	25	21
World[b]	-67	-73	-83	-74	-60	-69	-100	-117	-110	-100	-62	-54	-45	-44	6	-84	-148	-181	-248	-248

Note: Historical data for the OECD area are aggregates of reported balance-of-payments data of each individual country. Because of various statistical problems as well as a large number of non-reporters among non-OECD countries, trade and current account balances estimated on the basis of these countries' own balance-of-payments records may differ from corresponding estimates shown in this table.
a) Dynamic Asia includes Chinese Taipei; Hong Kong, China; Indonesia; Malaysia; Philippines; Singapore and Thailand.
b) Reflects statistical errors and asymmetries. Given the very large gross flows of world balance-of-payments transactions, statistical errors and asymmetries easily give rise to world totals (balances) that are significantly different from zero.
Source: OECD.

Annex Table 54. **Semiannual demand and output projections**

Percentage changes from previous period, seasonally adjusted at annual rates, volume

	2000	2001	2002	2000 I	2000 II	2001 I	2001 II	2002 I	2002 II
Private consumption									
Canada	4.0	2.7	2.7	3.8	4.0	2.3	2.4	2.7	3.0
France	2.4	2.6	3.0	2.3	1.6	2.9	3.0	3.0	3.1
Germany	1.6	2.2	2.2	2.1	0.7	2.5	3.1	1.9	2.0
Italy	2.9	2.3	2.5	3.6	2.0	2.3	2.4	2.5	2.5
Japan	0.5	0.5	1.2	0.6	-0.4	0.6	1.2	1.2	1.2
United Kingdom	3.7	3.0	2.6	3.7	3.8	2.8	2.5	2.6	2.8
United States	5.3	2.8	3.1	6.0	3.7	2.6	2.2	3.3	3.6
Euro area	2.6	2.6	2.7	3.0	1.7	2.8	2.9	2.6	2.7
European Union	2.8	2.6	2.7	3.1	2.0	2.8	2.8	2.6	2.7
Total OECD	3.7	2.3	2.7	4.4	2.4	2.2	2.2	2.8	3.0
Public consumption									
Canada	2.4	1.7	1.5	2.7	2.2	1.6	1.5	1.5	1.5
France	1.8	1.6	1.5	1.6	1.5	1.6	1.7	1.4	1.3
Germany	1.4	0.5	0.5	3.0	-0.8	1.3	0.3	0.5	0.5
Italy	1.6	1.4	1.4	1.5	1.0	1.5	1.5	1.4	1.4
Japan	3.6	3.1	2.7	3.6	3.2	3.2	2.6	2.6	3.0
United Kingdom	2.7	4.3	3.3	1.4	4.9	4.2	3.9	3.2	3.0
United States	2.0	1.7	2.4	1.6	1.1	1.6	2.5	2.4	2.3
Euro area	1.8	1.3	1.2	2.3	1.0	1.6	1.3	1.2	1.2
European Union	1.9	1.8	1.6	2.1	1.4	2.0	1.7	1.5	1.5
Total OECD	2.3	1.8	2.0	2.3	1.6	1.9	2.0	2.0	2.0
Investment									
Canada	11.2	3.7	5.8	13.9	4.8	3.0	4.0	6.2	6.6
France	6.7	5.0	3.8	6.8	8.0	4.1	3.7	3.8	3.6
Germany	2.4	2.1	2.9	2.0	1.0	2.3	2.6	2.9	3.2
Italy	6.1	3.0	4.2	7.4	2.5	3.0	3.6	4.2	4.7
Japan	1.1	1.1	-1.4	5.1	-0.5	5.4	-5.4	-0.8	1.4
United Kingdom	2.6	3.3	3.0	0.9	5.8	2.5	2.5	3.2	3.2
United States	8.8	0.9	2.7	11.9	3.7	0.1	0.0	3.3	4.2
Euro area	4.8	3.5	3.7	5.0	3.4	3.6	3.5	3.7	3.8
European Union	4.6	3.5	3.6	4.6	3.9	3.4	3.4	3.7	3.8
Total OECD	6.3	1.9	2.8	9.0	2.5	2.3	0.6	3.2	4.1
Total domestic demand									
Canada	5.5	2.5	3.2	5.8	3.7	2.0	2.6	3.3	3.6
France	3.3	2.9	2.9	3.3	3.3	2.8	2.8	2.9	2.9
Germany	2.0	2.0	2.0	2.2	2.0	2.0	2.2	1.9	2.0
Italy	2.3	2.0	2.7	4.0	-0.8	3.0	2.9	2.6	2.7
Japan	1.3	1.2	0.7	2.7	0.2	2.5	-0.4	0.8	1.5
United Kingdom	3.7	3.1	2.8	3.5	3.8	3.0	2.7	2.8	2.9
United States	5.7	1.9	3.1	6.5	3.5	1.3	1.7	3.4	3.9
Euro area	2.8	2.5	2.6	3.3	2.1	2.7	2.7	2.6	2.7
European Union	3.0	2.6	2.7	3.3	2.3	2.7	2.7	2.6	2.7
Total OECD	4.2	1.9	2.7	5.1	2.3	1.9	1.7	2.9	3.3
Export of goods and services									
Canada	9.6	4.0	6.8	13.0	3.6	3.4	5.4	6.9	7.8
France	13.6	7.4	6.5	13.7	13.6	5.3	5.5	6.7	7.0
Germany	13.2	8.7	7.4	13.4	13.0	7.4	7.0	7.3	7.8
Italy	10.2	8.2	6.1	5.9	19.6	5.0	4.6	6.4	6.7
Japan	12.0	3.4	8.3	16.5	5.1	1.5	5.5	8.4	11.0
United Kingdom	8.4	6.6	7.0	6.8	7.3	6.5	6.2	7.1	7.5
United States	9.0	4.3	7.6	9.3	8.5	1.0	7.1	7.8	8.0
Total OECD [a]	11.2	6.1	7.9	12.3	9.7	4.1	6.8	8.1	8.7

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*

a) Includes intra-regional trade.

Source : OECD.

Annex Table 54. *(cont'd)* **Semiannual demand and output projections**

Percentage changes from previous period, seasonally adjusted at annual rates, volume

	2000	2001	2002	2000 I	2000 II	2001 I	2001 II	2002 I	2002 II
Import of goods and services									
Canada	12.0	4.7	7.0	16.4	3.2	4.8	5.9	7.1	7.9
France	14.7	8.7	7.5	16.1	16.6	6.2	6.7	7.7	7.9
Germany	10.2	8.4	6.4	8.6	14.2	6.7	6.5	6.3	6.5
Italy	8.3	7.7	7.1	8.8	8.9	7.4	7.3	6.9	7.2
Japan	9.7	5.7	5.3	8.5	11.4	4.5	2.9	5.5	7.4
United Kingdom	9.6	7.7	7.0	8.7	8.8	7.5	7.2	7.0	7.0
United States	13.5	4.8	6.7	13.3	12.5	1.7	3.9	7.4	8.1
Total OECD*a*	12.3	6.2	7.0	13.1	10.8	4.6	5.1	7.4	8.1
GDP									
Canada	4.7	2.3	3.2	4.7	4.0	1.4	2.4	3.3	3.6
France	3.2	2.6	2.7	3.0	2.8	2.6	2.5	2.7	2.7
Germany	3.0	2.2	2.4	3.7	1.8	2.3	2.4	2.4	2.6
Italy	2.9	2.3	2.5	3.3	2.2	2.4	2.2	2.5	2.6
Japan	1.7	1.0	1.1	3.6	-0.2	2.2	0.0	1.2	2.1
United Kingdom	3.0	2.5	2.6	2.5	3.0	2.4	2.2	2.6	2.8
United States	5.0	1.7	3.1	5.9	2.7	1.2	1.9	3.3	3.7
Euro area	3.4	2.6	2.7	3.8	2.7	2.6	2.6	2.8	2.8
European Union	3.3	2.6	2.7	3.6	2.7	2.6	2.5	2.7	2.8
Total OECD	4.1	2.0	2.8	5.0	2.4	1.9	1.9	3.0	3.4
				Per cent of GDP					
Current account balance									
Canada	1.8	1.6	1.7	1.7	2.0	1.6	1.6	1.7	1.8
France	1.9	1.7	1.4	2.3	1.5	1.7	1.7	1.5	1.4
Germany	-1.1	-1.3	-0.8	-0.4	-1.8	-1.3	-1.2	-0.9	-0.6
Italy	-0.4	-0.3	-0.1	-0.3	-0.4	-0.2	-0.4	-0.2	0.0
Japan	2.5	2.2	2.7	2.7	2.3	2.1	2.3	2.6	2.9
United Kingdom	-1.7	-2.1	-2.2	-1.8	-1.6	-2.0	-2.1	-2.2	-2.2
United States	-4.4	-4.2	-4.0	-4.2	-4.5	-4.3	-4.0	-4.0	-3.9
Euro area	-0.1	-0.2	-0.1	0.2	-0.5	-0.2	-0.2	-0.1	0.0
European Union	-0.3	-0.4	-0.4	-0.1	-0.6	-0.4	-0.4	-0.4	-0.3
Total OECD	-1.3	-1.3	-1.2	-1.1	-1.4	-1.4	-1.2	-1.1	-1.1
				$ billions					
Current account balance									
Canada	12.7	11	13	11.6	13.9	11	11	12	13
France	24.7	22	19	30.5	19.0	22	22	20	19
Germany	-20.5	-24	-15	-8.6	-32.5	-25	-22	-18	-11
Italy	-3.9	-4	-2	-3.2	-4.6	-3	-5	-3	0
Japan	117.2	91	114	128.9	105.5	88	95	108	120
United Kingdom	-24.5	-29	-33	-26.4	-22.7	-28	-31	-33	-34
United States	-435.4	-432	-431	-414.0	-456.8	-443	-421	-426	-435
Euro area	-8.8	-13	-5	13.5	-31.2	-15	-11	-8	-2
European Union	-25.5	-34	-30	-6.1	-44.8	-35	-34	-33	-28
Total OECD	-329.4	-343	-313	-285.9	-372.9	-364	-323	-315	-311

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
a) Includes intra-regional trade.
Source : OECD.

Annex Table 55.   **Semiannual price, cost and unemployment projections**

Percentage changes from previous period, seasonally adjusted at annual rates

	2000	2001	2002	2000 I	2000 II	2001 I	2001 II	2002 I	2002 II
Private consumption deflator									
Canada	1.8	2.4	2.0	1.4	2.4	2.4	2.2	2.0	1.9
France	1.2	1.4	1.5	1.4	1.3	1.3	1.5	1.5	1.6
Germany	1.4	1.8	1.5	1.4	1.8	1.8	1.5	1.5	1.6
Italy	2.9	2.7	2.2	3.1	2.9	2.8	2.4	2.2	2.0
Japan	-1.2	-0.7	-0.5	-0.3	-2.8	0.2	-0.5	-0.5	-0.5
United Kingdom	0.8	1.9	2.2	-0.1	1.6	2.0	2.1	2.2	2.2
United States	2.4	1.9	1.6	2.8	1.9	2.2	1.3	1.7	1.6
Euro area	2.2	2.2	1.9	2.4	2.3	2.3	2.0	1.9	1.9
European Union	2.0	2.2	2.0	2.0	2.2	2.2	2.0	2.0	1.9
Total OECD	2.8	3.0	2.5	3.1	2.4	3.6	2.7	2.5	2.3
Total OECD *less* high inflation countries[a]	1.7	1.7	1.5	1.9	1.5	2.0	1.5	1.6	1.5
GDP deflator									
Canada	3.6	2.1	2.1	4.5	2.3	2.0	2.1	2.0	2.0
France	0.5	1.5	1.9	0.8	0.4	1.9	1.9	1.9	1.9
Germany	-0.4	1.1	1.4	-0.7	-0.1	1.6	1.4	1.4	1.4
Italy	2.2	2.8	2.5	2.8	2.5	3.1	2.7	2.5	2.3
Japan	-1.7	-1.2	-0.4	-1.1	-2.4	-0.9	-0.6	-0.4	-0.4
United Kingdom	1.8	2.2	2.4	0.9	2.2	2.1	2.4	2.4	2.4
United States	2.0	2.3	1.9	2.6	1.9	2.8	1.8	2.0	1.8
Euro area	1.2	2.2	2.1	1.4	1.4	2.6	2.2	2.1	2.0
European Union	1.4	2.2	2.1	1.4	1.6	2.4	2.2	2.1	2.1
Total OECD	2.5	3.0	2.6	2.8	2.2	3.5	2.7	2.6	2.4
Total OECD *less* high inflation countries[a]	1.3	1.8	1.7	1.5	1.2	2.1	1.7	1.7	1.6
Unit labour cost (total economy)									
Canada	2.4	2.6	1.6	3.7	1.5	3.4	2.3	1.5	1.1
France	1.1	1.7	1.9	1.2	2.3	1.3	1.8	2.0	2.0
Germany	0.0	0.5	0.6	0.2	0.1	0.8	0.4	0.7	0.6
Italy	1.5	1.7	2.0	2.0	0.3	2.1	2.1	1.9	1.9
Japan	-1.1	-0.7	-0.5	-1.6	-0.5	-1.4	0.5	-0.6	-1.4
United Kingdom	2.7	2.8	2.6	3.1	2.6	2.7	3.1	2.5	2.1
United States	1.3	3.5	2.1	0.8	3.0	4.2	2.6	2.1	1.7
European Union	1.6	1.9	1.9	2.0	1.6	2.0	2.0	1.9	1.8
Total OECD	2.2	3.4	2.4	1.8	3.0	3.7	3.2	2.4	1.9
Total OECD less high inflation countries[a]	1.2	2.2	1.7	1.1	1.9	2.4	2.1	1.7	1.3
						Per cent of labour force			
Unemployment									
Canada	6.8	7.2	7.2	6.7	6.9	7.1	7.2	7.2	7.2
France	9.7	8.6	8.1	9.9	9.4	8.7	8.5	8.2	7.9
Germany	7.8	7.3	6.8	7.9	7.7	7.4	7.2	6.9	6.6
Italy	10.7	10.0	9.2	11.0	10.3	10.2	9.8	9.4	9.0
Japan	4.7	4.9	4.8	4.7	4.7	4.9	4.9	4.8	4.8
United Kingdom	5.5	5.4	5.5	5.7	5.4	5.4	5.4	5.5	5.6
United States	4.0	4.6	5.0	4.0	4.0	4.3	4.8	5.0	5.0
Euro area	9.0	8.3	7.8	9.2	8.7	8.5	8.2	8.0	7.7
European Union	8.2	7.7	7.3	8.4	8.0	7.8	7.6	7.4	7.2
Total OECD	6.3	6.3	6.3	6.3	6.2	6.3	6.4	6.3	6.3

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm)*.

a) High inflation countries are defined as countries which have had, on average, 10 per cent or more inflation in terms of the GDP deflator during the last 10 years, based on historical data. Consequently, Hungary, Mexico, Poland and Turkey are excluded from the aggregate.

Source : OECD.

Annex Table 56. **Contributions to changes in real GDP in OECD countries**

As a per cent of real GDP in the previous period, seasonally adjusted at annual rates

	1999	2000	2001	2002		1999	2000	2001	2002
Australia					**Germany**				
Final domestic demand	5.5	3.2	1.5	3.8	Final domestic demand	2.2	1.7	1.8	2.0
Stockbuilding	0.3	-0.6	-0.2	0.2	Stockbuilding	0.2	0.2	0.2	0.0
Net exports	-1.1	0.4	0.6	-0.2	Net exports	-0.8	1.0	0.2	0.5
GDP	4.7	3.7	2.0	3.8	GDP	1.6	3.0	2.2	2.4
Austria					**Greece**				
Final domestic demand	2.7	2.6	1.9	2.1	Final domestic demand	3.7	4.1	4.3	4.7
Stockbuilding	-0.3	0.1	0.0	0.0	Stockbuilding	-0.5	0.0	0.0	0.0
Net exports	0.2	0.3	0.3	0.4	Net exports	0.2	0.0	-0.3	-0.2
GDP	2.8	3.2	2.3	2.5	GDP	3.4	4.1	4.0	4.4
Belgium					**Hungary**				
Final domestic demand	2.8	3.0	2.2	2.2	Final domestic demand	4.6	3.8	5.0	5.0
Stockbuilding	-0.7	0.3	0.0	0.0	Stockbuilding	-0.2	1.4	0.8	0.6
Net exports	0.7	0.8	0.6	0.5	Net exports	0.1	-0.1	-0.7	-0.8
GDP	2.7	4.0	2.8	2.7	GDP	4.5	5.1	5.1	4.7
Canada					**Iceland**				
Final domestic demand	4.2	5.0	2.7	3.1	Final domestic demand	5.1	5.4	1.3	2.1
Stockbuilding	-0.2	0.3	-0.2	0.1	Stockbuilding	-0.1	0.3	-0.2	0.0
Net exports	0.4	-0.7	-0.2	0.0	Net exports	-0.8	-2.2	0.4	0.3
GDP	4.5	4.7	2.3	3.2	GDP	4.1	3.6	1.5	2.4
Czech Republic					**Ireland**				
Final domestic demand	-1.1	2.3	3.6	3.6	Final domestic demand	7.5	7.5	6.9	6.6
Stockbuilding	0.1	2.1	0.1	0.9	Stockbuilding	-1.9	-1.5	-0.2	0.3
Net exports	0.2	-1.2	-0.7	-1.1	Net exports	4.5	4.2	1.0	0.9
GDP	-0.8	3.1	3.0	3.5	GDP	9.8	11.0	7.8	7.8
Denmark					**Italy**				
Final domestic demand	0.9	2.4	1.6	1.5	Final domestic demand	2.6	3.2	2.2	2.6
Stockbuilding	-1.6	0.3	-0.1	0.0	Stockbuilding	0.4	-1.0	-0.2	0.1
Net exports	2.8	0.2	0.5	0.4	Net exports	-1.3	0.6	0.3	-0.2
GDP	2.1	2.9	2.0	2.0	GDP	1.6	2.9	2.3	2.5
Finland					**Japan**				
Final domestic demand	2.8	2.5	2.4	2.3	Final domestic demand	1.0	1.2	1.1	0.7
Stockbuilding	-0.5	0.3	-0.1	0.0	Stockbuilding	-0.2	0.1	0.1	0.0
Net exports	1.6	3.5	1.7	1.5	Net exports	-0.1	0.4	-0.1	0.5
GDP	4.2	5.7	4.0	3.7	GDP	0.8	1.7	1.0	1.1
France					**Korea**				
Final domestic demand	3.5	3.0	2.8	2.8	Final domestic demand	6.8	6.7	1.1	3.3
Stockbuilding	-0.3	0.2	0.1	0.1	Stockbuilding	5.4	-0.9	0.9	0.0
Net exports	0.1	0.1	-0.2	-0.1	Net exports	-1.0	3.5	2.2	2.1
GDP	3.2	3.2	2.6	2.7	GDP	10.9	8.8	4.2	5.5

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
and/or statistical discrepancy.

Source : OECD.

Annex Table 56. *(cont'd)* **Contributions to changes in real GDP in OECD countries**

As a per cent of real GDP in the previous period

	1999	2000	2001	2002		1999	2000	2001	2002
Luxembourg					**Sweden**				
Final domestic demand	9.4	2.5	3.8	3.6	Final domestic demand	3.6	2.4	2.5	3.0
Stockbuilding	0.1	0.1	0.0	0.0	Stockbuilding	-0.5	0.6	-0.2	-0.1
Net exports	-1.9	5.9	1.9	1.8	Net exports	1.1	0.9	0.7	0.2
GDP	7.5	8.5	5.6	5.5	GDP	4.1	3.6	2.8	3.0
Mexico					**Switzerland**				
Final domestic demand	4.8	8.8	4.3	5.4	Final domestic demand	1.7	2.9	2.6	2.3
Stockbuilding	-0.5	0.1	0.0	0.1	Stockbuilding	-0.2	0.2	0.0	0.0
Net exports	-0.5	-1.9	-0.5	-0.8	Net exports	0.1	0.3	-0.6	-0.3
GDP	3.8	6.9	3.7	4.7	GDP	1.5	3.4	2.1	2.0
Netherlands					**Turkey**				
Final domestic demand	4.1	3.5	3.0	2.8	Final domestic demand	-5.8	9.2	-9.3	-0.1
Stockbuilding	-0.2	-0.1	-0.1	0.0	Stockbuilding	2.0	0.8	-3.7	0.0
Net exports	-0.1	0.5	0.1	0.0	Net exports	-0.9	-2.9	8.4	5.3
GDP	3.9	3.9	3.0	2.8	GDP	-4.7	7.2	-4.2	5.2
New Zealand					**United Kingdom**				
Final domestic demand	4.3	2.0	2.1	2.2	Final domestic demand	4.6	3.5	3.4	3.0
Stockbuilding	1.2	-0.6	0.0	0.0	Stockbuilding	-0.8	0.4	-0.1	0.0
Net exports	-1.5	1.6	0.1	0.8	Net exports	-1.5	-0.8	-0.8	-0.4
GDP	4.0	3.0	2.2	3.0	GDP	2.3	3.0	2.5	2.6
Norway					**United States**				
Final domestic demand	0.4	0.7	1.3	2.1	Final domestic demand	5.7	5.7	2.3	3.0
Stockbuilding	-1.3	0.8	0.0	0.0	Stockbuilding	-0.4	0.2	-0.4	0.2
Net exports	1.8	0.7	0.7	0.0	Net exports	-1.2	-1.0	-0.3	-0.2
GDP	0.9	2.2	2.0	2.0	GDP	4.2	5.0	1.7	3.1
Poland									
Final domestic demand	5.2	2.7	3.1	3.2					
Stockbuilding	-0.1	1.0	0.0	0.0					
Net exports	-1.2	0.5	0.9	0.9					
GDP	4.0	4.1	3.8	3.9					
Portugal					**Euro area**				
Final domestic demand	5.0	3.9	3.2	3.4	Final domestic demand	3.1	2.8	2.5	2.6
Stockbuilding	0.1	-0.2	0.0	0.0	Stockbuilding	0.0	0.0	0.0	0.0
Net exports	-2.1	-0.5	-0.5	-0.6	Net exports	-0.5	0.6	0.2	0.2
GDP	3.0	3.2	2.6	2.8	GDP	2.6	3.4	2.6	2.7
Slovak Republic					**European Union**				
Final domestic demand	-8.6	-2.1	3.2	3.9	Final domestic demand	3.4	3.0	2.6	2.6
Stockbuilding	3.5	0.8	-0.5	0.0	Stockbuilding	-0.2	0.0	0.0	0.0
Net exports	7.0	3.6	0.1	-0.3	Net exports	-0.6	0.4	0.0	0.0
GDP	1.9	2.2	2.8	3.6	GDP	2.6	3.3	2.6	2.7
Spain					**Total OECD**				
Final domestic demand	5.4	4.3	3.1	3.0	Final domestic demand	3.9	4.1	2.1	2.6
Stockbuilding	0.2	-0.1	-0.1	0.0	Stockbuilding	0.0	0.1	-0.1	0.1
Net exports	-1.5	-0.1	-0.1	-0.1	Net exports	-0.7	-0.2	0.1	0.1
GDP	4.0	4.1	2.9	2.9	GDP	3.2	4.1	2.0	2.8

Note: The adoption of new national account systems, SNA93 or ESA95, has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. Moreover, some countries are using chain-weighted price indices to calculate real GDP and expenditures components. See Table "National Account Reporting Systems and Base-years" at the beginning of the Statistical Annex and *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods/index.htm).*
    and/or statistical discrepancy.

Source : OECD.

Annex Table 57. **Household wealth and indebtedness**[a]

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Canada													
Net wealth	421.7	422.2	426.5	418.6	429.6	443.5	457.2	475.7	481.9	496.4	505.2	502.8	507.8
Net financial wealth	186.1	182.9	185.6	183.4	192.4	201.7	208.4	218.0	228.0	239.7	246.7	243.3	245.6
Non-financial assets	235.6	239.3	240.9	235.1	237.2	241.8	248.8	257.7	253.8	256.6	258.5	259.5	262.2
Financial assets	271.3	270.9	275.4	275.6	285.2	297.1	306.7	319.9	330.3	345.1	355.0	353.7	358.6
of which: Equities	58.6	55.6	54.1	53.8	56.5	58.3	65.3	69.3	72.4	79.6	88.0	93.8	94.3
Liabilities	85.1	88.0	89.7	92.2	92.8	95.4	98.3	101.9	102.3	105.3	108.3	110.4	113.1
of which: Mortgages	53.2	55.3	57.1	58.7	61.0	64.1	66.0	68.3	68.4	70.3	71.0	71.4	71.9
France													
Net wealth	424.0	439.1	447.7	417.9	439.7	437.9	466.9	452.5	454.4	481.7	501.6	520.4	574.1
Net financial wealth	118.1	138.0	155.6	130.6	150.6	156.4	189.8	178.2	184.7	208.4	228.7	251.8	309.8
Non-financial assets	305.9	301.2	292.1	287.3	289.1	281.6	277.2	274.3	269.7	273.3	272.8	270.9	264.2
Financial assets	195.5	223.5	243.4	218.9	234.2	238.5	267.1	254.2	249.0	273.5	294.2	317.6	378.5
of which: Equities	64.0	90.1	108.7	87.3	103.0	102.3	121.9	101.8	84.9	98.9	110.8	130.2	183.3
Liabilities	77.5	85.5	87.8	88.3	83.6	82.1	77.4	76.0	64.3	65.1	65.5	65.7	68.7
of which: Long-term loans	49.7	52.1	51.6	51.9	50.7	48.4	51.9	50.6	48.8	49.4	49.8	50.2	52.4
Germany													
Net wealth	..	..	..	535.6	472.8	531.1	546.4	553.3	564.2	571.7	580.2	586.2	597.7
Net financial wealth	175.9	182.1	185.4	130.8	123.3	124.2	133.4	130.3	136.1	141.3	150.5	157.0	169.7
Non-financial assets	..	..	..	404.8	349.5	406.9	413.0	423.0	428.1	430.4	429.6	429.1	427.9
Financial assets	192.8	199.2	203.1	200.7	208.2	210.1	224.2	227.3	236.9	246.1	258.0	267.8	284.9
of which: Equities	10.7	12.9	15.1	11.6	30.4	30.8	37.7	40.7	42.5	46.8	55.7	61.9	77.6
Liabilities	16.9	17.1	17.8	70.0	84.9	85.8	90.8	97.0	100.7	104.8	107.5	110.8	115.2
of which: Mortgages	11.2	11.6	12.1	53.6	45.7	49.2	52.5	57.3	60.6	63.7	66.4	68.5	70.6
Italy													
Net wealth	334.2	355.7	417.1	430.9	435.5	447.4	487.5	468.6	469.0	461.6	..	..	..
Net financial wealth	152.8	162.5	195.6	196.3	202.4	207.0	229.2	224.1	217.1	223.5	234.5	257.2	270.4
Non-financial assets	181.5	193.2	221.5	234.6	233.2	240.3	258.3	244.5	244.1	238.1	..	..	..
Financial assets	163.4	174.3	223.9	225.4	232.2	237.7	261.0	256.0	248.1	255.9	268.6	294.0	310.5
of which: Equities	16.0	17.0	48.7	46.0	47.9	47.9	54.4	49.3	42.6	47.9	68.1	106.6	134.5
Liabilities	10.6	11.7	28.3	29.1	29.8	30.6	31.8	31.9	31.1	32.4	34.0	36.7	40.0
of which: Medium and long-term loans	7.6	8.5	13.0	13.7	14.3	14.4	14.9	15.2	15.7	15.9	17.9	19.5	21.7
Japan													
Net wealth	789.7	832.3	901.0	937.5	853.2	783.0	755.9	761.2	749.4	754.9	752.8	738.8	752.9
Net financial wealth	210.8	232.4	261.7	260.3	256.9	249.5	255.0	274.6	283.8	296.2	306.8	300.8	333.3
Non-financial assets	579.0	599.9	639.4	677.2	596.3	533.5	500.9	486.6	465.7	458.4	446.0	438.0	419.7
Financial assets	315.8	344.6	377.6	390.9	386.6	377.3	386.2	407.6	421.4	428.2	438.4	432.3	463.1
of which: Equities	54.6	73.2	93.5	51.4	47.9	34.3	35.6	43.5	43.2	39.5	36.5	25.6	44.5
Liabilities	105.1	112.2	116.0	130.7	129.7	127.7	131.2	133.0	137.6	132.0	131.6	131.5	129.8
of which: Mortgages	41.7	44.5	47.6	50.4	50.3	51.3	53.0	55.9	58.3	59.4	61.2	55.0	57.4
United Kingdom													
Net wealth	619.5	692.9	703.3	618.6	591.5	556.7	592.0	551.4	563.1	585.1	634.8	681.1	723.3
Net financial wealth	221.1	220.2	244.0	211.8	222.9	236.0	280.2	256.5	284.4	296.2	342.6	355.3	372.7
Non-financial assets	398.4	472.6	459.3	406.9	368.6	320.7	311.8	294.9	278.7	288.9	292.2	325.7	350.6
Financial assets	324.5	332.3	360.3	328.7	337.8	346.0	387.2	364.4	391.6	402.2	449.0	465.7	486.4
of which: Equities	51.7	49.3	55.5	56.9	59.7	61.6	74.0	70.5	76.2	80.8	96.8	92.8	110.9
Liabilities	103.4	112.0	116.3	116.9	114.8	110.0	106.9	108.0	107.2	106.0	106.3	110.4	113.8
of which: Mortgages	91.6	100.5	104.8	105.8	103.6	99.4	96.9	98.3	97.3	96.5	96.7	100.6	103.9
United States													
Net wealth	485.9	489.5	501.5	479.0	490.3	479.6	485.4	477.3	505.1	526.9	564.3	586.2	636.7
Net financial wealth	261.5	264.9	274.3	261.8	279.2	275.8	284.6	279.2	307.9	329.9	364.7	384.0	428.5
Non-financial assets	224.3	224.6	227.2	217.2	211.1	203.7	200.8	198.0	197.3	197.0	199.6	202.1	208.2
Financial assets	345.1	349.4	360.6	349.1	367.7	363.1	373.7	370.6	401.8	425.8	462.4	484.3	533.3
of which: Equities	48.8	52.9	60.3	52.4	69.8	74.8	84.7	78.3	96.4	108.9	131.5	143.1	178.6
Liabilities	83.5	84.5	86.3	87.3	88.5	87.2	89.1	91.4	94.0	95.9	97.6	100.2	104.8
of which: Mortgages	55.5	57.0	58.8	60.9	62.7	62.4	63.0	63.5	63.8	64.7	65.7	68.1	71.3

a) Assets and liabilities are amounts outstanding at the end of the period, in per cent of nominal disposable income. Vertical lines between columns indicate breaks in the series due to changes in the definitions or accounting systems. Figures after the most recent breaks in the series are based mainly on the UN System of National Accounts 1993 (SNA 93) (for Japan 1990-99 only) and, more specifically, for European Union countries, on the corresponding European System of Accounts 1995 (ESA 95). Definitions apply to those most recent data.

Households include non-profit institutions serving households (according to SNA 93 and ESA 95, households also include self-employed persons and sole proprietors). Net wealth is defined as non-financial and financial assets minus liabilities; net financial wealth is financial assets minus liabilities. Non-financial assets include stock of durable goods and dwellings, at replacement cost and at market value, respectively. Financial assets comprise currency and deposits, securities other than shares, loans, shares and other equity, insurance technical reserves; and other accounts receivable/payable. Not included are assets with regard to social security pension insurance schemes. Equities comprise shares and other equity, including quoted, unquoted and mutual fund shares.

Sources: Canada: Statistics Canada, *National Balance Sheet Accounts.* France: INSEE, *Rapport sur les Comptes de la Nation* and *25 ans de Comptes de Patrimoine* (1969-1993); Banque de France, *Flow of Funds Accounts.* Germany: Deutsche Bundesbank, *Monthly Report* and *Financial accounts for Germany 1991 to 1999,* Special Statistical Publication, 2000. Italy: Banca d'Italia, *Supplements to the Statistical Bulletin*; Ando, A., L.Guiso, I.Visco (eds.), *Saving and the Accumulation of Wealth,* Cambridge University Press, 1994; OECD, *Financial Accounts of OECD countries*. Japan: Economic Planning Agency, Government of Japan, *Annual Report on National Accounts.* United Kingdom: Office for National Statistics, *United Kingdom National Accounts,* and *Financial Statistics.* United States: Federal Reserve Statistical Release, *Flow of Funds Accounts* of the United States.

Annex Table 59. **Central government financial balances**

Surplus (+) or deficit (-) as a percentage of nominal GDP

	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Canada	-5.5	-4.6	-3.9	-2.0	0.5	0.5	0.6	1.4	1.0	0.8
France	-4.9	-4.9	-4.2	-3.7	-2.8	-3.0	-2.5	-2.4	-1.6	-1.9
Germany	-1.9	-1.2	-1.4	-2.2	-1.7	-1.5	-1.3	1.3	-1.2	-1.0
Italy	-9.3	-9.0	-7.7	-6.9	-2.9	-2.7	-1.3	0.2	-0.8	-0.7
Japan[a]	-2.8	-3.5	-3.9	-4.2	-3.7	-5.2	-6.8	-5.9	-5.5	-5.9
United Kingdom	-8.2	-6.7	-5.5	-4.7	-2.0	0.2	1.1	1.9	1.1	0.8
United States	-4.4	-3.2	-2.6	-1.9	-0.6	0.6	1.3	2.4	2.5	1.9
excluding social security[b]	-5.1	-4.0	-3.4	-2.8	-1.7	-0.6	-0.2	0.9	0.8	0.2
Total of above countries	-4.5	-3.9	-3.5	-3.0	-1.6	-1.2	-1.0	0.2	-0.1	-0.4

Note: Central government financial balances include one-off revenues from the sale of the mobile telephone licenses.
a) For the fiscal years beginning April 1 of the year shown. The 1998 deficit would have risen by 5.4 percentage points of GDP if account were taken of the assumption
   by the central government of the debt of the Japan Railway Settlement Corporation and the National Forest Special Account.
b) OECD estimates derived for the projection years from fiscal year data converted to a calendar year basis.
Source: OECD.

Annex Table 60. **Maastricht definition of general government gross public debt**

As a percentage of nominal GDP

	1993	1994	1995	1996	1997	1998	1999	2000	Projections 2001	2002
Austria	61.8	64.7	68.5	69.2	64.7	63.9	64.7	62.9	61.4	59.1
Belgium	..	..	..	130.5	125.3	119.8	116.4	110.8	104.4	98.9
Denmark	..	..	..	65.1	61.2	55.6	52.0	46.3	42.4	38.8
Finland	56.0	58.0	57.2	57.1	54.1	48.8	46.9	44.0	39.5	35.4
France	..	..	54.5	57.0	59.3	59.7	58.7	57.9	57.8	57.2
Germany	47.1	49.4	57.1	59.8	60.9	60.7	61.1	60.3	58.6	58.2
Greece	..	..	108.7	111.3	108.3	105.5	104.6	103.8	100.7	96.7
Ireland	..	..	..	74.3	65.1	55.0	50.1	39.3	29.5	21.9
Italy	118.1	123.8	123.2	122.1	120.1	116.2	114.5	110.2	106.7	103.4
Luxembourg	..	..	..	6.2	6.0	6.4	6.0	5.3	4.4	3.7
Netherlands	..	..	..	75.2	70.0	66.8	63.2	56.3	52.8	48.7
Portugal	..	..	..	62.6	59.3	55.6	55.4	54.4	53.2	51.8
Spain	..	..	..	68.1	66.7	64.7	63.4	60.7	58.3	56.4
Sweden	..	..	..	76.0	73.0	71.8	65.2	55.6	50.1	44.9
United Kingdom	..	..	..	52.7	51.1	48.1	45.7	42.9	41.6	39.8

Note: Debt figures are based on ESA95 definitions. For the period 1996-99, they are provided by Eurostat, the Statistical Office of the European Communities. Where
   available, debt figures for years prior to 1996 as well as GDP figures for the whole period are provided by National Authorities. The 2001 to 2002 debt ratios are
   projected forward in line with the OECD projections for general government gross financial liabilities and GDP.
Source: OECD.

Annex Table 61. **Monetary and credit aggregates: recent trends**

Annualised percentage change, seasonally adjusted

		Annual change (to 4th quarter)					Latest twelve months	
		1996	1997	1998	1999	2000		
Canada	M2	2.4	-1.2	1.3	3.8	6.1	5.6	(Mar. 2001)
	BL[a]	5.4	9.3	7.5	5.6	6.7	6.1	(Feb. 2001)
Japan	M2+CD	3.3	3.3	4.5	3.0	2.1	2.6	(Mar. 2001)
	BL[a]	0.4	1.2	-1.0	-0.6	2.5	4.2	(Feb. 2001)
United Kingdom	M0	6.9	6.6	5.2	9.2	6.6	7.7	(Apr. 2001)
	M4	10.3	5.4	8.7	3.5	8.6	9.0	(Feb. 2001)
	BL[a]	11.7	12.6	5.4	8.4	13.4	13.8	(Mar. 2001)
United States	M2	4.5	5.6	8.5	6.3	6.2	8.1	(Mar. 2001)
	M3	7.1	9.1	11.1	7.7	9.2	9.8	(Mar. 2001)
	BL[a]	6.1	8.6	9.8	4.5	12.0	9.3	(Mar. 2001)
Euro area	M2	5.1	3.9	5.7	6.6	4.0	5.1	(Feb. 2001)
	M3	4.5	4.7	5.0	7.0	6.6	5.0	(Mar. 2001)
	BL[a]	..	..	..	6.6	5.9	7.5	(Mar. 2001)

a) Commercial bank lending.

Annex Table 62. **Export market growth and performance in manufactured goods**

Percentage changes from previous year

	Import volume				Export market growth				Export volume				Export performance[a]			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
Australia	8.1	6.7	2.8	6.8	11.6	15.8	7.3	8.6	6.9	3.8	7.6	8.1	-4.2	-10.3	0.2	-0.5
Austria	6.2	10.6	6.1	6.5	7.3	13.3	8.8	7.9	5.2	10.5	6.2	7.0	-2.0	-2.5	-2.4	-0.9
Belgium	4.2	10.2	7.8	6.5	7.1	12.6	8.0	7.5	5.8	11.3	7.7	6.6	-1.2	-1.2	-0.3	-0.8
Canada	11.4	13.6	4.9	7.3	13.3	16.2	5.7	7.2	14.0	11.1	3.8	7.4	0.7	-4.3	-1.8	0.2
Czech Republic	5.1	22.6	17.3	15.6	4.0	12.1	8.7	8.0	8.0	19.6	16.9	15.7	3.9	6.7	7.6	7.1
Denmark	2.6	6.5	4.9	6.7	5.6	12.2	7.6	7.4	6.9	7.8	4.6	7.3	1.2	-3.9	-2.8	-0.2
Finland	-1.6	10.2	8.0	7.6	5.1	12.9	7.8	7.9	6.0	18.4	9.8	8.7	0.9	4.9	1.8	0.8
France	5.6	16.9	9.4	8.2	7.2	11.7	8.0	7.5	3.9	14.0	7.0	6.6	-3.1	2.1	-1.0	-0.9
Germany	8.9	12.9	7.6	6.7	6.5	13.0	8.0	8.0	6.5	13.2	7.5	7.5	0.0	0.2	-0.5	-0.5
Hungary	16.9	22.7	17.8	11.8	4.3	12.3	8.1	7.5	20.8	24.1	17.3	11.8	15.8	10.5	8.5	4.0
Iceland	6.0	6.0	-4.1	4.1	8.5	11.8	7.0	7.0	-5.8	-7.8	0.6	11.3	-13.2	-17.6	-6.0	4.0
Ireland	6.9	21.7	12.6	13.9	8.1	12.4	7.5	7.3	15.2	21.6	11.5	11.7	6.5	8.2	3.7	4.1
Italy	8.6	10.5	11.1	8.1	6.3	13.2	7.8	7.7	1.2	10.4	8.2	6.1	-4.8	-2.5	0.4	-1.5
Japan	13.1	16.9	6.2	6.2	10.4	17.3	7.6	8.7	1.9	9.3	1.4	8.7	-7.7	-6.8	-5.8	0.0
Korea	39.6	27.8	11.7	13.2	8.0	16.5	7.7	8.5	10.9	15.5	11.3	12.3	2.7	-0.9	3.3	3.5
Mexico	14.5	20.7	10.0	10.9	12.0	15.7	5.7	7.1	15.4	16.4	7.3	9.3	3.0	0.6	1.6	2.0
Netherlands	6.3	9.8	7.0	7.0	6.7	12.5	7.9	7.5	5.8	11.2	6.3	6.2	-0.9	-1.1	-1.5	-1.1
New Zealand	15.4	-4.2	2.2	5.4	9.7	12.4	5.5	7.4	4.7	5.3	0.7	7.8	-4.6	-6.3	-4.5	0.4
Norway	-3.6	5.4	6.8	4.1	6.3	12.6	7.5	7.8	3.0	2.9	5.0	5.0	-3.0	-8.6	-2.3	-2.6
Poland	5.8	13.3	6.3	7.6	5.4	12.7	8.4	7.6	4.3	25.5	10.3	11.5	-1.1	11.3	1.7	3.6
Portugal	5.8	6.4	7.2	8.0	8.3	11.8	7.9	7.2	4.3	7.4	7.8	8.6	-3.7	-3.9	-0.1	1.3
Slovak Republic	-8.2	7.1	13.8	13.0	4.7	16.5	12.0	10.9	3.7	11.9	14.9	13.9	-0.9	-3.9	2.6	2.8
Spain	16.2	8.5	8.2	6.4	5.7	12.7	8.5	7.9	7.5	13.0	9.2	8.2	1.7	0.3	0.7	0.3
Sweden	3.1	13.6	6.9	8.9	6.0	12.2	7.5	7.5	5.9	11.1	6.7	7.7	-0.1	-1.0	-0.7	0.2
Switzerland	11.1	6.1	5.1	5.9	7.4	13.6	7.8	7.7	4.4	7.6	4.0	5.7	-2.9	-5.3	-3.5	-1.8
Turkey	-6.3	36.8	-7.9	9.3	4.5	12.0	8.6	7.5	7.9	21.6	15.3	24.4	3.3	8.6	6.1	15.8
United Kingdom	8.3	10.1	7.4	7.5	7.2	13.3	7.9	7.9	4.1	10.2	6.0	7.5	-2.9	-2.7	-1.8	-0.3
United States	14.2	16.3	5.3	7.0	7.9	14.9	7.7	8.5	4.8	12.9	4.6	8.3	-2.9	-1.8	-2.9	-0.2
Total OECD	10.3	14.0	7.1	7.6	7.9	14.1	7.7	8.0	5.8	12.3	6.4	8.2	-1.9	-1.6	-1.2	0.2
Memorandum items																
China	19.5	33.4	16.5	17.4	9.1	16.4	6.9	7.8	9.7	29.8	13.7	14.3	0.5	11.5	6.3	6.1
Dynamic Asia[b]	5.8	20.9	6.8	8.8	10.4	18.0	8.1	9.1	9.5	17.7	6.4	8.1	-0.8	-0.3	-1.5	-0.9
Other Asia	3.8	8.3	6.6	6.7	8.3	13.8	7.3	7.6	8.0	16.5	9.3	7.7	-0.3	2.3	1.9	0.1
Non-OECD Asia	8.4	22.3	9.2	10.9	10.0	17.4	7.8	8.8	9.4	20.3	8.4	9.7	-0.5	2.5	0.5	0.8
Latin America	-15.1	7.4	10.8	8.6	1.7	12.8	8.1	8.0	1.5	11.4	9.5	8.5	-0.1	-1.3	1.3	0.5
Africa and Middle-East	1.2	5.2	11.7	7.0	7.1	12.8	7.9	7.6	3.3	8.6	7.1	6.8	-3.6	-3.7	-0.8	-0.8
Central and Eastern Europe	-18.6	10.9	10.4	8.1	-0.0	14.5	8.9	8.8	4.0	10.0	10.8	9.9	4.0	-3.9	1.7	1.1
Total of non-OECD countries	1.2	16.6	9.9	9.8	8.2	16.5	7.9	8.7	8.1	18.3	8.5	9.5	-0.1	1.6	0.6	0.8
World	7.9	14.6	7.8	8.1	7.9	14.6	7.8	8.1	6.3	13.7	6.9	8.5	-1.5	-0.8	-0.8	0.3

Note: Regional aggregates are calculated *inclusive* of intra-regional trade. The calculation of export markets is based on a weighted average of import volumes in each exporting country's market, with weights based on manufacturing trade flows in 1995.

a) Export performance is calculated as the percentage change in the ratio of export volumes to export markets.

b) Dynamic Asia includes Chinese Taipei; Hong Kong, China; Indonesia; Malaysia; Philippines; Singapore and Thailand.

Sources: OECD; Direction of trade data - United Nations Statistical Office; OECD, *Foreign Trade by Commodities*.

Annex Table 63. **Geographical structure of OECD trade**
Percentage of nominal GDP

Area or country	Source/destination		Source of imports						Destination of exports					
			1962	1972	1982	1992	1999	2000	1962	1972	1982	1992	1999	2000
OECD[a]	**OECD**		**6.17**	**8.20**	**10.66**	**11.18**	**13.11**	**13.78**	**5.89**	**8.08**	**10.31**	**10.98**	**13.19**	**13.82**
	of which:	European Union	3.53	4.93	6.15	6.59	7.05	7.04	3.48	4.85	6.38	6.71	7.25	7.22
		United States	1.25	1.27	1.65	1.66	2.19	2.37	0.88	1.38	1.67	1.84	2.80	3.16
		Other	1.40	2.00	2.86	2.93	3.87	4.37	1.53	1.85	2.27	2.43	3.15	3.44
	Non-OECD		**2.24**	**2.35**	**4.59**	**3.09**	**3.98**	**4.89**	**2.24**	**2.22**	**4.13**	**2.98**	**3.22**	**3.55**
	of which:	DAEs + China[b]	0.25	0.34	0.76	1.20	1.93	2.27	0.27	0.38	0.75	1.15	1.40	1.64
		OPEC	0.58	0.80	2.13	0.71	0.64	0.97	0.28	0.40	1.40	0.54	0.39	0.42
United States	**OECD**		**1.80**	**3.45**	**4.94**	**5.74**	**7.45**	**8.10**	**2.22**	**2.93**	**4.22**	**5.08**	**5.54**	**5.79**
	of which:	European Union	0.69	1.15	1.45	1.60	2.10	2.22	0.96	1.13	1.69	1.71	1.63	1.65
		Other	1.11	2.30	3.49	4.14	5.35	5.88	1.26	1.80	2.53	3.37	3.90	4.14
	Non-OECD		**0.99**	**1.03**	**2.55**	**2.67**	**3.56**	**4.12**	**1.46**	**1.08**	**2.29**	**2.01**	**1.95**	**2.04**
	of which:	DAEs + China[b]	0.14	0.30	0.72	1.45	2.08	2.28	0.12	0.18	0.54	0.83	0.89	1.00
		OPEC	0.24	0.21	0.90	0.49	0.45	0.67	0.17	0.21	0.67	0.33	0.22	0.21
Japan	**OECD**		**5.35**	**4.15**	**4.66**	**3.30**	**3.48**	**3.66**	**4.12**	**5.59**	**6.59**	**5.42**	**5.67**	**5.93**
	of which:	European Union	0.88	0.72	0.78	0.89	0.95	0.99	0.97	1.40	1.79	1.76	1.66	1.66
		United States	2.93	1.92	2.18	1.37	1.49	1.52	2.27	2.91	3.28	2.52	2.86	2.99
		Other	1.54	1.50	1.69	1.04	1.03	1.15	0.89	1.28	1.52	1.14	1.15	1.29
	Non-OECD		**3.78**	**3.56**	**7.27**	**2.83**	**3.44**	**4.33**	**3.84**	**3.82**	**5.96**	**3.51**	**3.65**	**4.15**
	of which:	DAEs + China[b]	1.08	0.75	1.43	1.22	1.96	2.38	1.24	1.50	2.09	2.34	2.72	3.20
		OPEC	1.09	1.48	4.39	1.02	0.91	1.32	0.51	0.60	1.95	0.49	0.29	0.33
European Union[c]	**OECD**		**12.45**	**13.58**	**18.13**	**17.81**	**20.84**	**22.91**	**11.49**	**13.64**	**17.24**	**17.06**	**21.94**	**24.11**
	of which:	European Union	8.48	10.32	13.33	13.54	15.18	16.31	8.19	10.28	13.46	13.54	16.35	17.61
		United States	1.96	1.44	2.06	1.53	2.10	2.43	1.17	1.37	1.56	1.31	2.25	2.70
		Other	2.02	1.83	2.74	2.73	3.56	4.17	2.13	1.98	2.22	2.21	3.33	3.81
	Non-OECD		**4.35**	**3.73**	**6.25**	**3.42**	**4.32**	**5.57**	**3.43**	**3.08**	**5.52**	**3.20**	**3.76**	**4.37**
	of which:	DAEs + China[b]	0.31	0.28	0.57	0.94	1.60	1.96	0.30	0.25	0.44	0.65	0.90	1.09
		OPEC	1.11	1.37	2.82	0.71	0.60	0.97	0.46	0.58	2.06	0.70	0.55	0.63

a) OECD includes Korea from 1988. Trade data for Greece and Turkey in 2000 are partially OECD estimates.
b) DAEs are the Dynamic Asian Economies (Chinese Taipei; Hong Kong, China; Malaysia; Philippines; Singapore and Thailand).
c) Trade data for Greece in 2000 are partially OECD estimates.
Source: OECD.

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