OECD Economic Outlook



OECD

Volume 2002/1
No. 71, June

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OECD ECONOMIC OUTLOOK

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JUNE 2002

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FOREWORD

This edition of the *OECD Economic Outlook* analyses prospective global and country-specific economic trends over the period 2002 to 2003 in the context of a world economy which is progressively returning to growth after a relatively short and shallow economic downturn. It also provides an assessment of how economic policies could contribute to sustained non-inflationary growth, following the strong impulse from interest rate cuts in most Member countries and from discretionary fiscal actions in some during the last two years. Risks to the outlook are also examined and these appear to be more evenly balanced than a few months ago.

The short-term outlook is supplemented by a medium-term reference baseline up to 2007 and by a wide range of cross-country statistics. Analyses of economic prospects are also provided for certain non-member economies, particularly in East Asia, Eastern Europe and South America. The projections and underlying policy assessments are based on data and information available as of 11 April 2002. A preliminary version of this edition was published on 25 April 2002.

In addition to the themes featured regularly, five special chapters provide in-depth analysis of important issues:

– *The economic consequences of terrorism*. This chapter examines the economic repercussions of the terrorist attacks in the United States on 11 September 2001. The negative repercussions on activity, confidence and financial markets had largely dissipated within a few months. But there may be long-lasting implications in the areas of insurance and defence spending, and possibly international trade. The chapter reviews these various implications and argues that measures to reduce the risk and the economic consequences of further terrorist attacks should be both security-effective and growth-friendly.

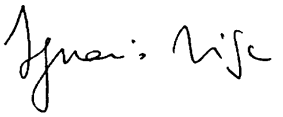
– *Ongoing changes in the business cycle*. Business cycles in OECD economies appear to have become milder over time. This chapter argues that, in part, this reflects the changing nature of economic disturbances affecting the world economy. Structural changes in the composition of output and the adoption of macroeconomic policy frameworks increasingly focused on medium-term stability objectives have also played key roles. Deeper economic integration among OECD economies – such as is reflected by tighter financial market linkages and global production chains – also affects business cycles and has to be factored in when setting economic policy.

– *Intra-industry and intra-firm trade and internationalisation of production*. An important transformation of the world economy has been the "internationalisation" of production systems, which involves vertical trading chains spanning a number of countries, each specialising in particular steps of production. This chapter reviews recent evidence of this transformation, based on data covering intra-industry and intra-firm trade. It finds that the internationalisation of production has increased significantly since the 1980s across OECD countries. As a result, shocks emanating in one country, sector, or industry are now likely to spread more quickly across national borders.

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– *Productivity and innovation: the impact of product and labour market policies*. Policies affecting product market competition and labour market adaptability appear to influence productivity and some of its drivers, such as innovation and the adoption of new technologies. This chapter argues that policies favouring product market competition and easing employment protection positively affect productivity and technological catch-up. The strength of the employment protection effects however depends on bargaining regimes and the technological characteristics of industries.

– *Exchange market volatility and securities transaction taxes.* This chapter discusses the pros and cons of a securities transaction tax ("Tobin tax"), sometimes advocated by economists and policy makers as a means to reduce excessive volatility in exchange rate movements. The potential benefits of such a tax appear to be small while the costs could be large, and it would be very difficult to implement. Also, while not being the most efficient option to finance overseas development assistance, its revenues would probably be much smaller than suggested by the current turnover in exchange markets.



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	Million 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		

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Summary of projections[a]

Seasonally adjusted at annual rates

	2001	2002	2003	2001 I	2001 II	2002 I	2002 II	2003 I	2003 II
	Percentage changes from previous period								
Real GDP									
United States	1.2	2.5	3.5	1.2	-0.2	3.5	3.4	3.5	3.7
Japan	-0.4	-0.7	0.3	1.0	-3.4	0.0	0.6	0.2	0.3
Euro area	1.6	1.3	2.9	1.7	0.4	1.3	2.5	3.0	3.1
European Union	1.7	1.5	2.8	1.8	0.6	1.4	2.5	3.0	3.0
Total OECD	1.0	1.8	3.0	1.1	-0.2	2.3	2.8	3.0	3.1
Real total domestic demand									
United States	1.3	3.0	3.9	1.0	0.0	4.2	3.7	3.8	4.1
Japan	0.3	-1.5	-0.4	2.1	-3.2	-1.1	-0.3	-0.5	-0.3
Euro area	0.9	1.2	2.7	0.8	0.0	1.2	2.4	2.8	2.9
European Union	1.2	1.4	2.7	1.2	0.2	1.5	2.5	2.8	2.8
Total OECD	0.7	1.9	2.9	0.7	-0.3	2.6	2.9	2.9	2.9
	Per cent								
Inflation[b]									
United States	2.2	1.5	1.6	2.6	1.6	1.3	1.6	1.6	1.5
Japan	-1.4	-1.4	-1.7	-1.6	-0.9	-1.5	-1.6	-1.7	-1.6
Euro area	2.2	2.1	1.8	2.9	1.8	2.4	1.8	1.7	1.9
European Union	2.3	2.3	1.9	2.8	1.9	2.6	1.9	1.9	2.0
OECD *less* Turkey	1.9	1.5	1.4	2.3	1.2	1.7	1.5	1.4	1.4
Total OECD	2.7	2.3	1.8	3.2	2.2	2.6	2.1	1.8	1.7
	Per cent of labour force								
Unemployment									
United States	4.8	5.6	5.3	4.3	5.2	5.6	5.5	5.4	5.2
Japan	5.0	5.8	6.0	4.8	5.3	5.7	6.0	6.0	6.0
Euro area	8.0	8.2	8.1	8.0	8.0	8.2	8.3	8.2	8.0
European Union	7.4	7.6	7.5	7.3	7.4	7.5	7.6	7.5	7.4
Total OECD	6.4	6.9	6.7	6.2	6.6	6.9	6.9	6.8	6.6
	Per cent of GDP								
Current account balance									
United States	-4.1	-4.4	-4.9	-4.3	-3.9	-4.2	-4.6	-4.8	-5.0
Japan	2.2	3.3	4.3	2.0	2.4	3.1	3.6	4.2	4.4
Euro area	0.4	0.9	1.0	-0.2	0.9	0.8	0.9	0.9	1.1
European Union	0.1	0.4	0.6	-0.3	0.5	0.4	0.4	0.5	0.6
Total OECD	-1.1	-1.1	-1.2	-1.2	-0.9	-1.0	-1.1	-1.1	-1.1
	Per cent								
Short-term interest rate[c]									
United States	3.7	2.3	3.8	4.7	2.7	1.9	2.7	3.4	4.1
Japan	0.1	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.0
Euro area	4.2	3.3	3.9	4.5	3.8	3.3	3.3	3.7	4.1
	Percentage changes from previous period								
World trade[d]	0.0	2.5	9.5	-1.8	-5.7	4.2	7.8	10.0	10.3

a) Assumptions underlying the projections include:
- no change in actual and announced fiscal policies;
- unchanged exchange rates as from 4 April 2002; in particular 1$ = 131.90 yen and 1.139 euros;
- the cut-off date for other information used in the compilation of the projections is 11 April 2002.

b) GDP deflator, percentage changes from previous period.

c) 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.

d) Growth rate of the arithmetic average of world merchandise import and export volumes.

Source: OECD.

EDITORIAL

A recovery is emerging but is regionally differentiated

Growth momentum is returning to the OECD area at large as the causes of the recent slowdown dissipate. The correction in the inventory overhang appears to be well advanced in many countries. The collapse of investment in information and communication technologies is generally giving way to a cautious recovery. Confidence has returned more rapidly than previously expected in the wake of the 11 September terrorist attacks, especially in the United States. A strong impulse has been provided by economic policies, with low real interest rates helping to boost consumer spending and fiscal policy supportive of demand. In aggregate, following a contraction in the second half of 2001, OECD GDP growth is expected to accelerate gradually, reaching nearly 2 per cent in 2002 and 3 per cent in 2003. However, the recovery is initially likely to be differentiated across the major OECD regions and, while the downside risks have diminished, policy makers continue to be faced by a substantial degree of uncertainty.

An upturn is evident in the United States…

The United States is leading the upturn. Rapid and forceful monetary action, together with fiscal expansion, helped bring about renewed growth from late 2001. Growth is driven by consumption, private and public, and an end to the rundown in stocks, providing a near-term boost to demand and output. A gradual strengthening in business investment is expected to underpin the recovery in the second half of 2002 and into 2003.

… which will require a gradual withdrawal of policy stimulus

With the US recovery becoming more firmly established, the timing and speed of the withdrawal of stimulus become the crucial issues. As slack in the product and labour markets dissipates, monetary policy should be steadily moved back to a neutral and ultimately to a restrictive stance, the scale and timing of such actions needing to take account of a more even distribution of risks. On the fiscal side, following the discretionary measures enacted to cut taxes and boost spending, renewed restraint will be needed to bring the general government back into surplus, so as to be better prepared for the population ageing problem. This would also contribute to reducing the external imbalance.

In the euro area, recovery will be more gradual…

In the euro area, output stagnated in the second half of 2001 and there are as yet few signs of bottoming-out besides surveys of business sector expectations. Household confidence and spending remain anaemic and despite the support provided by accommodating monetary conditions and the play of automatic fiscal stabilisers, economic activity is likely to remain sluggish in the first half of 2002. Growth should gather pace thereafter, as capital spending recovers and the effects of the pick-up in the United States feed through via higher exports. This also would apply to the United Kingdom but, though growth stalled in late 2001, resilient household confidence and an expansion of public spending are providing an additional platform for the projected expansion.

… so that interest rates do not need to be raised soon…

The European Central Bank has been confronted with inflation persistently above 2 per cent, which is the upper bound of its definition of price stability. This partly reflects exceptional factors, and provided that inflation slows as expected, it would seem advisable not to raise interest rates until the recovery has become more

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firmly established and the prevailing economic slack begins to shrink. Fiscal policy in most member states of the European Union has been supportive during the slowdown, chiefly via the operation of built-in stabilisers, and further progress towards budgetary consolidation has been postponed. While there are substantial national variations in budgetary stance, several large member states will have to resume their consolidation efforts as and when the recovery gathers pace, moving towards positions which are more compatible with the medium-term challenges associated with population ageing. Moving forward with budgetary consolidation would also allow automatic stabilisers to work freely in future downturns that could be deeper than the current one.

… but more should be done to raise the growth potential

Beyond the short-term rebound, policy decisions are needed to make European economies more productive and raise potential growth, even though progress has already been made in some areas. In product markets, competition is still hampered by barriers to entry (including, and despite some recent progress, in network industries), excessive home bias in public procurement and occasionally generous state aid to national firms. In labour markets, steps were undertaken to reduce the tax burden on the low-skilled, but progress is still needed in some countries. Action is also required to raise the participation rates of older workers. And despite the completion of monetary unification, the integration of financial markets is still incomplete in significant respects.

In Japan, an export-led recovery is accompanied by domestic deflation…

In Japan, exports are responding to exchange rate depreciation and the revival of global demand, inventories have fallen to more normal levels, and activity is thus expected to stop contracting in the near future. Nonetheless, any growth in output would likely remain very anaemic. Investment demand will continue to be depressed by banking sector ills and corporate restructuring while households, faced with rising unemployment and longer-term pension uncertainties, will be reluctant to raise their spending. Deflation appears to have become entrenched, although it is expected to stabilise at its present moderate pace, with the effect of exchange rate depreciation offset by rising unemployment and a significant output gap.

… calling for continued monetary policy support, but fiscal retrenchment…

With its policy rate virtually stuck at the zero bound, the Bank of Japan has been injecting liquidity in the banking system at an increasing pace. The weakened banking system has, however, failed to translate this monetary policy impulse into credit supply expansion. While monetary policy should continue to aim at providing ample liquidity, with a broader set of instruments, the normalisation of bank lending requires an urgent resolution of the bad loan problem as part of a programme for containing the risks to the financial system. Fiscal policy consolidation needs to proceed with a clear medium-term strategy to restore public finances to a sustainable path. The increase in the debt-to-GDP ratio needs to be halted, to prevent the risk premium, and associated financial tensions, from reaching critical levels. As part of this process, the recent efforts to cut and better prioritise public spending should be vigorously pursued.

… and structural reforms

With the effectiveness of demand management policies obviously constrained, the urgent need is to pursue vigorous structural reforms. Some signs of transformation are emerging as a result of actions already in place. Bankruptcies in the corporate sector have reached a record high, a sign of much-needed restructuring. The government has decided to privatise or abolish a number of public corporations. Nevertheless, more transparency is needed in the allocation of state aid where such aid is justified. In the labour market, more flexible rules are being introduced to employ temporary workers. Easing of the employment protection rules applying to permanent workers is now needed, but would have to be accompanied by a strengthening

of the social safety net, greater job-market intermediation and more effective active labour market policies.

Activity is firming outside the OECD area

Activity in non-OECD countries as a group is likely to accelerate over the projection period, the Asian economies having weathered the downturn well. Growth in China is expected to remain around 7 per cent and activity in the Asia-Pacific region as a whole is set to strengthen as the high-tech investment cycle turns up. The Russian economy, while slowing, has shown some resilience. Latin America presents a mixed picture, but in general the Argentine crisis has had limited spillover effects on the other countries in the region. Overall, the recovery both inside and outside the OECD area is likely to boost world trade growth from 2½ per cent in 2002 to over 9 per cent in 2003.

The possibility of a faster pick-up calls for policy caution…

Abstracting from possible further terrorist attacks, the short-term risks faced by the global economy have become more balanced. On the upside, if and when higher private and public consumption, induced by vigorous monetary and fiscal policy actions, feeds through to higher investment, the US – and global – recovery could build up more rapidly than foreseen. By the second half of 2002, virtually all OECD economies are expected to be growing quite rapidly, from a position where output gaps have not widened much. The possible inflationary consequences of even faster growth make the timing of the withdrawal of stimulus a critical policy consideration.

… but there could also be short-term setbacks…

There are also short-term negative risks to the recovery, in part because the recent household spending surge in the United States has been financed through a run-up in credit. A moderate rise in the saving ratio is to be expected but a relatively sharp adjustment cannot be ruled out as and when interest rates and debt service obligations rise. Outside the United States, the main concerns are that a weaker labour market could prevent the expected normalisation of household sentiment in Europe, while in Japan it could reinforce the already very visible propensity for households to defer their spending. A further source of short-term risk attaches to the oil price, which could rise beyond the level assumed in the projection should the political situation in or near oil-producing countries deteriorate. As experienced in 2000, this could lead to higher inflation, lower incomes, depressed consumer confidence and would weaken the upturn.

… and medium-term tensions

For the medium term, there are also a number of areas of possible tension that could threaten the sustainability of the expansion. The first relates to the dependence of OECD and non-OECD economies alike on US demand to fuel the expansion, and the associated foreign trade gap, which is set to worsen. While there is no immediate suggestion that the capital inflows needed to finance the US current account deficit could become inadequate, US saving, private and public, needs to rise to pre-empt possible upward pressure on global interest rates. The expansion could also be threatened by renewed protectionist pressures, as the US decision to introduce safeguard measures affecting a broad range of steel products might prompt retaliatory action. The financial fragility of a number of emerging countries is a further, related, threat. While the crisis in Argentina has been geographically contained, contagion effects could well be worse if international trade does not recover as projected.

19 April 2002.

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I. GENERAL ASSESSMENT OF THE MACROECONOMIC SITUATION

A recovery is under way…

A recovery is unfolding in the OECD area, led by the United States (Table I.1). The rapidity and vigour of the upturn in North America contrasts with its more tentative nature in Europe, where output growth is not projected to strengthen markedly before the second half of 2002, while Japan is set to emerge only slowly from its third recession in a decade. The global upturn is being driven both by policy easing and by the dissipation of a number of negative forces. The information and telecommunication technology (ICT) investment overhang is unwinding, inventory levels are normalising, equity prices are more stable and confidence has bounced back rapidly after the 11 September 2001 terrorist attacks on the United States. Policy stimulus has helped considerably to limit the magnitude and duration of the downturn, the scope for action being ample in some cases, thanks to the sustained disinflation and fiscal consolidation efforts made during the 1990s. However, the room for manoeuvre has varied according to national circumstances, accounting in part for the differentiated strength of the upturn.

… with policy-makers facing more balanced risks

With a recovery under way, the debate is turning to the withdrawal of policy stimulus. Under the central scenario outlined below, a gradual tightening of monetary and fiscal policy would be needed in both North America and Europe. The timing of such actions will need to take account of a more even distribution of risks than in the autumn of 2001, when they were more heavily skewed towards the downside. There is now the possibility of the expansion gaining too much speed, but downside risks are still significant. These include a derailment of the recovery by rebounding oil prices, a financial market correction associated with possible revisions of profit expectations, or an abrupt turnaround in household saving trends in countries where their balance sheets have become stretched. Proliferating protectionist measures or renewed terrorist attacks would also endanger the nascent recovery.

Table I.1. **Output growth**

Percentage changes from previous period

	2000	2001	2002	2003
United States	4.1	1.2	2.5	3.5
Japan	2.4	-0.4	-0.7	0.3
Euro area	3.5	1.6	1.3	2.9
European Union	3.4	1.7	1.5	2.8
Total OECD	3.9	1.0	1.8	3.0

Source: OECD.

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Forces acting and prospects for renewed growth

Underpinnings of the recovery

The forces behind the downturn have dissipated

The relatively optimistic assessment of the global economic outlook is based on a gradual dissipation of the forces that caused the 2001 downturn:

- With the global slowdown and the associated weakening in oil demand, and despite cut-backs in oil supply, oil prices fell progressively from a peak of $33 per barrel in the autumn of 2000 to around $18.5 on average in late 2001-early 2002.[1] Lower energy prices have thus far helped to boost household real disposable incomes and ease pressures on profits. Oil prices have risen since, however, implying that the support to demand from this source can be expected to diminish.

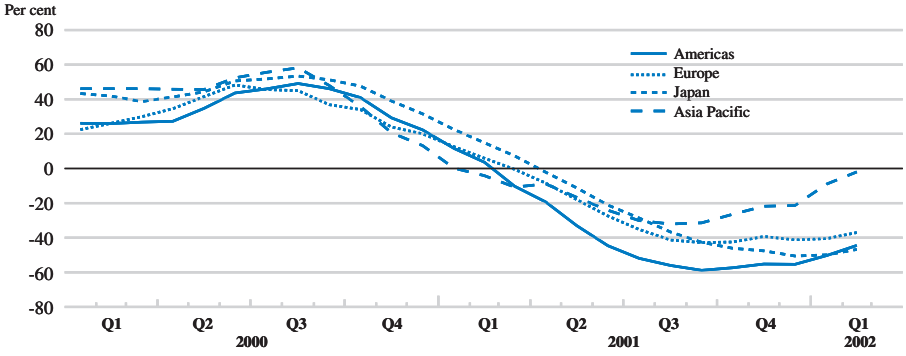
- For the first time since the recession in the early 1980s, world trade contracted in 2001, led by the collapse of ICT investment and a general slowdown in capital spending. The high-tech cycle now appears to be entering a recovery phase, pulled mostly by the IT consumer goods sector (Figure I.1).[2]

- The end of the destocking cycle will automatically lead to a short-term boost to output. Judging from business survey data, this process is underway in the United States and in Japan but less advanced in Europe.

Even though the global decline in manufacturing production has yet to come to an end, a broad-based improvement in orders and business expectations across OECD countries gives firming evidence that the trough has been or is about to be passed (Figure I.2, panel A). Since late 2001, the OECD composite leading indicator has been clearly signalling a turnaround in industrial activity (Figure I.2, panel B).

Figure I.1. **Global billings of the semi-conductor industry**

Year-on-year percentage change[1]



1. 3-month moving average.
Source: Semiconductor Industry Association.

1. The winter weather was exceptionally mild in the United States and Europe, further reducing demand.
2. On the international transmission of sector-specific shocks, in a context of increasing intra-firm trade, see Chapter VI. On the shape of business cycles more generally, see Chapter V.

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

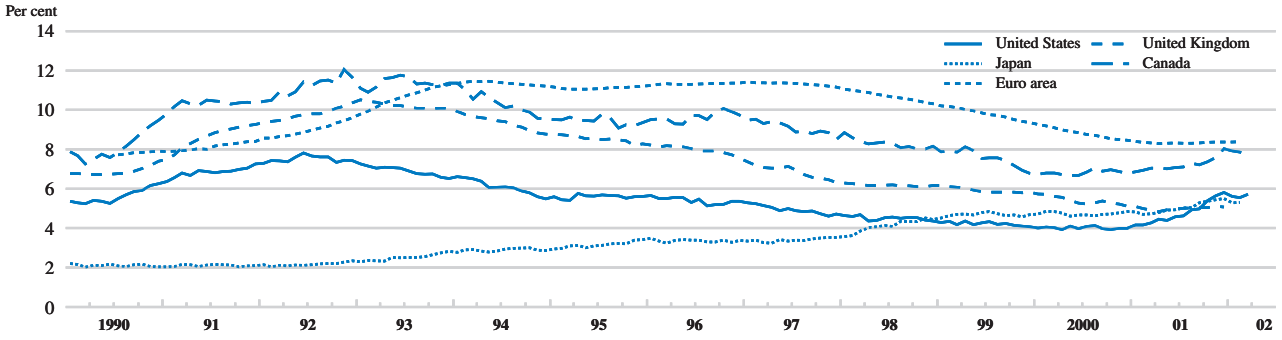


1. For presentation purposes, the scale has been shifted by 50 percentage points.
2. Smoothed curve, 6-month rate of change (annual rate).

Source: OECD, *Main Economic Indicators.*

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Figure I.3. **Unemployment rates**

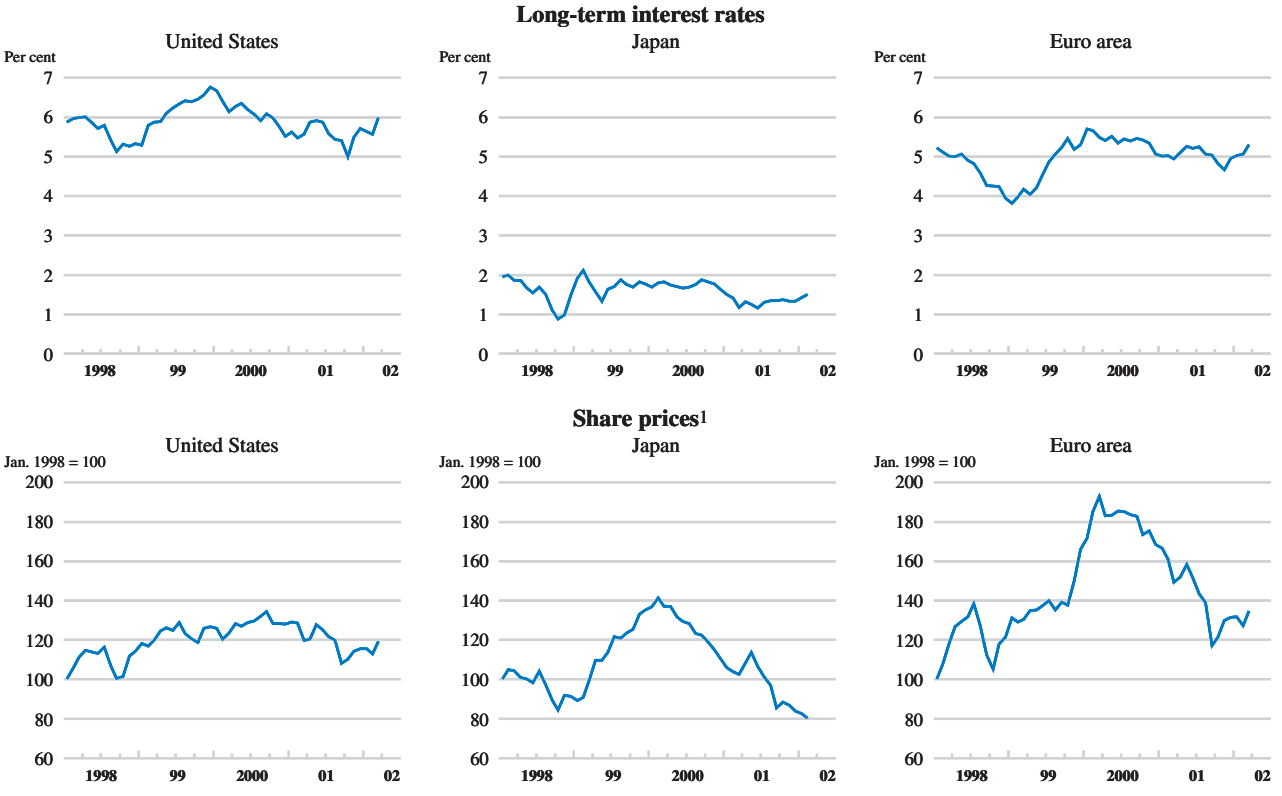


Source: OECD, *Main Economic Indicators.*

Monetary easing has supported household demand…

In contrast to previous downturns, household spending has not been squeezed by the need for high real interest rates to contain high inflation. Indeed, a striking feature of the slowdown in the United States has been the resilience of household spending and residential investment, despite rising unemployment (Figure I.3) and the bursting of the stock-market bubble, accounting for the

Figure I.4. **Bond yields and share prices**



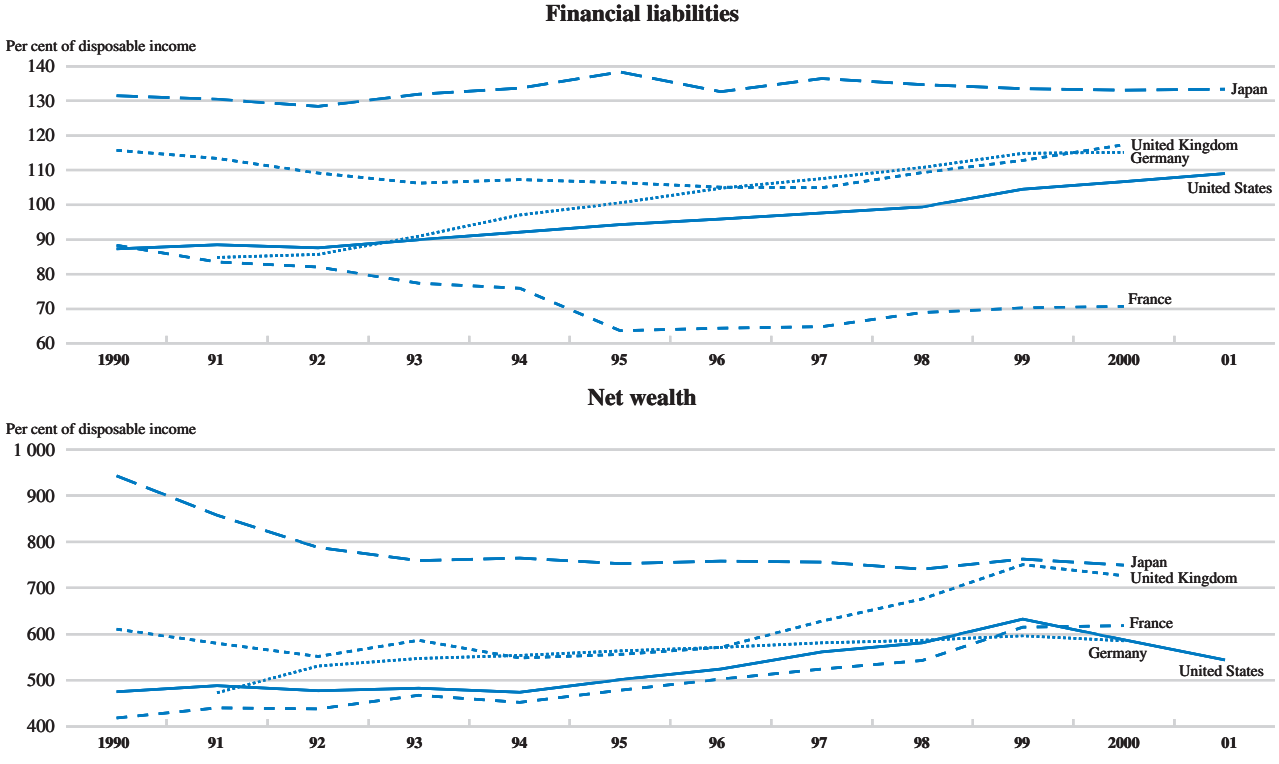
1. For the United States, NYSE common stocks; for Japan, TSE TOPIX; for the euro area, Dow-Jones EURO-STOXX.
Source: OECD, *Main Economic Indicators.*

relative shallowness of the downturn. Monetary easing has been most aggressive in the United States, where the federal funds rate has been brought down to 1¾ per cent, its lowest level in more than 40 years. Real short-term interest rates are close to zero in the United States, partly explaining the buoyancy of durable goods consumption, notably auto sales, which have been boosted by interest-free credit terms. In the euro area, policy moves towards easier financial conditions have been more measured and real interest rates remain significantly positive. In Japan, credit continues to contract, despite nominal short-term rates close to zero and rapid base money growth.

… and higher bond yields reflect anticipations of recovery

Bond yields, which had fallen in the wake of the 11 September terrorist attacks, have since bounced back to their mid-2001 levels (Figure I.4). This raises credit costs, particularly where mortgage rates are linked to bond yields, but may to a large extent reflect the anticipation that the recovery is to strengthen. Over the projection period – and outside Japan, where policy rates are assumed to remain unchanged – short-term interest rates are set to rise somewhat in response to increases in policy-controlled rates as the recovery gets under way and the monetary stance shifts towards neutrality, first in North America, New Zealand and Sweden and later elsewhere (Box I.1). Long-term interest rates are also projected to move up but moderately, as inflation is to remain subdued or to edge lower, thereby maintaining currently well-contained inflation expectations. This implies a rise in real long-term interest rates, but their level would still be relatively low by historical standards.

Figure I.5. **Household gross debt and net wealth**[1]



1. Data are not fully comparable across countries. See *OECD Economic Outlook* Sources and Methods (*http:www.oecd.org/eco/sources-and-methods*).
Source: OECD.

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

Fiscal policy assumptions are based on measures taken and stated policy intentions, where these are embodied in well-defined programmes.[1] Measured by the changes in the structural budget balance, fiscal policy in the United States will be expansionary this year, assuming that the FY 2002 budget and the recent stimulus package are fully implemented. Next year, assuming that the Administration's budget proposal for 2003 is implemented, the fiscal stance will be slightly restrictive. In the euro area, the automatic stabilisers have largely been allowed to work as the cycle weakened. However, some modest fiscal consolidation is projected this year and next. In contrast, fiscal policy remains expansionary in Canada and the United Kingdom. In Japan, with virtually no scope for fiscal stimulus left, the fiscal stance is projected to be broadly neutral in 2002, followed by limited consolidation in 2003.

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 United States, the federal funds target rate was lowered to 1¾ per cent in the course of 2001. It is assumed to rise gradually starting around mid-2002, to 4 per cent by the second half of 2003. Maintenance of price stability over the medium term remains the primary objective of monetary policy in the euro area.[2] The main refinancing rate has been cut by 150 basis points since Spring 2001 and is assumed to remain at 3¼ until late 2002, and then to gradually move up, to a little over 4 per cent in the second half of 2003. In Japan, short-term interest rates are assumed to remain close to zero through the end of the projection period.

The projections assume unchanged exchange rates from those prevailing on 4 April 2002; in particular, one US dollar equals ¥ 131.9 and 1.14 euro. For Turkey, the exchange rate is assumed to depreciate in line with projected inflation.

In late 2001 and early 2002, oil prices fell significantly below the levels built into the projections of the previous *OECD Economic Outlook*. More recently, they bounced back, responding to better news for the global economy and political tensions in the Middle East. As a technical assumption, oil prices are posited to remain around $25 per barrel over the projection period. This price level includes a "war premium" in the short run. Non-oil commodity prices have started to recover, notably metals. Part of this results from supply cut-backs, which may be difficult to maintain as demand strengthens and prices recover. Hence the run-up in commodity prices is expected to be relatively modest in the later part of the projection period.

The cut-off date for information used in the projections was 11 April 2002.

Oil and non-oil commodity prices

	1999	2000	2001	2002	2003
			Percentage changes		
OECD import oil price (cif)	37.3	62.1	-15.9	1.5	4.6
Non-oil commodity prices[a]	-7.1	3.0	-9.5	-6.7	4.5
			$ per barrel		
Memorandum item:					
OECD import oil price (cif)[b]	17.3	28.0	23.5	23.9	25.0

a) Total Hambourg commodity price index, excluding energy. OECD projections for 2002 and 2003.
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 2002-03.
Source: Hamburg Institute for Economic Research (HWWA), International Energy Agency and OECD.

1. Details of assumptions for individual countries are provided in the corresponding country notes (Chapter II).
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.

In the process, indebtedness has risen in many countries…

Against this background, stock markets have first partially recovered and then stabilised (Figure I.4), though the technology sector remains well down from its peak. Buoyed by easier financing conditions, resilient house prices have helped to cushion declines in net wealth in several countries. Consumers have been able to finance spending by withdrawing housing equity. Household debt-to-income ratios have thus risen, especially in the United States, where they reached record levels last year (see Figure I.5 above). Substantial increases in

Table I.2. **General government financial balances**[a]

Per cent of GDP / Potential GDP

	2000	2001	2002	2003
United States				
Actual balance	1.7	0.5	-1.0	-0.7
Structural balance	1.3	0.6	-0.7	-0.5
Primary structural balance	4.0	2.9	1.3	1.4
Japan[b]				
Actual balance	-7.4	-7.1	-8.0	-7.8
Structural balance	-7.4	-6.7	-7.2	-6.8
Primary structural balance	-6.0	-5.3	-6.0	-5.4
Euro area				
Actual balance	0.2	-1.3	-1.5	-1.2
Structural balance	-1.0	-1.1	-0.7	-0.7
Primary structural balance	2.6	2.3	2.6	2.6
European Union				
Actual balance	0.5	-0.8	-1.3	-1.1
Structural balance	-0.5	-0.6	-0.6	-0.7
Primary structural balance	2.9	2.6	2.5	2.4
OECD[c]				
Actual balance	0.0	-1.0	-1.9	-1.7
Structural balance	-0.7	-0.9	-1.6	-1.5
Primary structural balance	2.0	1.5	0.7	0.8

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 0.5, 0.6 and 0.2 per cent of GDP in 2000, 2001 and 2002, respectively, and capital transfers to the Deposit Insurance Company amounting to 0.9 per cent of GDP in 2000.

c) Total OECD figures for the actual balance exclude Mexico and Turkey and those for the structural balance further exclude the Czech Republic, Hungary, Korea, Luxembourg, Switzerland, Poland and the Slovak Republic.

Source: OECD.

indebtedness have also been registered in European countries, particularly the United Kingdom, but also in Germany, the Netherlands and smaller economies benefiting from lower euro-area interest rates, such as Portugal. Australia, Korea and New Zealand have also shared in this trend.[3] Offsetting the effect of rising indebtedness has been the fact that debt servicing burdens have fallen with lower interest rates. The same mitigating factor applies with respect to corporate indebtedness, which has increased in a number of OECD countries, albeit to a more limited extent: while debt service may not have risen proportionally to cash flow, it has increased relative to profits and debt/equity ratios have surged.[4]

… and fiscal stimulus has reversed the trend to fiscal consolidation

Fiscal policies also shape the outlook. The general government balance for the OECD area is set to move from balance in 2000 to a deficit of close to 2 per cent of GDP in 2002 (Table I.2). This may be a factor in higher bond yields, but in the short term is supporting demand. The swing in the fiscal balance is the greatest in the United States, at 2¾ percentage points, with more than two-thirds

3. Japanese household debt has remained broadly stable since the surge in the late 1980s, but at a very high level.
4. Evidence is not available for the majority of OECD economies. However, for the United States net interest was 3 per cent of the price per unit of output for non-financial corporations in 2001, which was the same as in 1998. Over the same period, net interest rose quite significantly relative to unit profits.

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thereof due to discretionary action (measured by the change in the structural budget balance). The corresponding swing in the euro area has amounted to 1¾ percentage points, of which ¾ percentage point mostly reflects the operation of built-in stabilisers, as a result of the slowdown, while the remainder reflects windfall receipts associated with the sale of third generation mobile phone licences, which were recorded in 2000. In Japan, where the fiscal situation is increasingly precarious, the underlying fiscal stance is judged to be broadly neutral in 2002 and to tighten modestly in 2003.

Uneven timing and character of the global upturn

The upturn may initially be gradual…

While the normalisation of inventories has a rapid positive impact on growth, the relative resilience of household spending through the downturn, especially in the United States and the United Kingdom, means that it is not likely to display its traditional dynamism in the upswing. At the same time, the strength of the capital spending recovery is uncertain. The impetus that normally would have come from pent-up demand for consumer durables will be absent or at best relatively moderate, while, more generally, the fact that the household debt service burden is at high levels in a number of OECD countries despite low interest rates, makes a steep rebound based on falling saving rates unlikely (see below).

… as the investment impulse has yet to be restored…

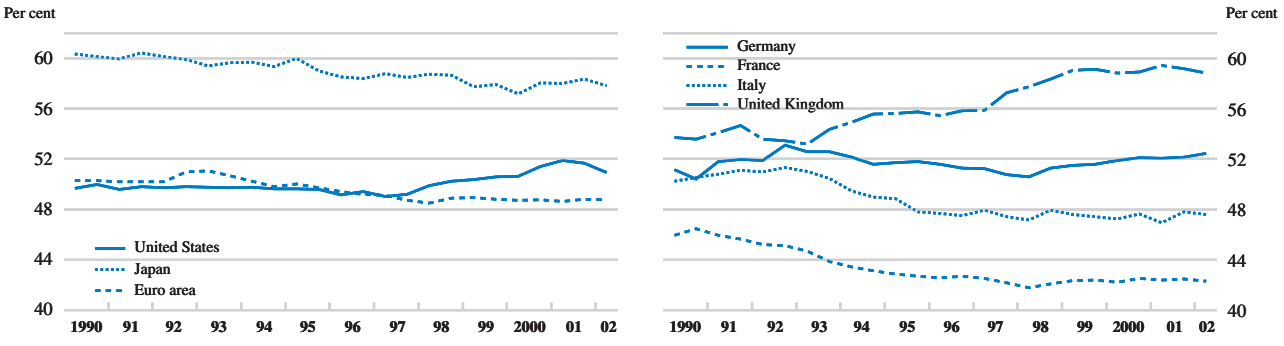
Private non-residential investment fell at an annualised rate of 6 per cent in the OECD area as a whole in the second half of 2001. Going forward, it is being restrained by low capital utilisation and squeezed profit margins. Pressures on profits increased significantly in some OECD countries in the second half of the 1990s, as reflected in the rise of the share of wages in value-added (Figure I.6). The deterioration in unit profits has been most pronounced in the United States and the United Kingdom, where productivity gains since the mid-1990s have mainly accrued to wage-earners.

… and depends on productivity and profit performance

Future profit performance depends to a considerable extent on productivity growth, which can be expected to pick up somewhat as the recovery gathers momentum (Table I.3). Productivity slowed markedly in Japan and in the major European countries in tandem with economic activity last year. However, it held up well in the United States, despite the decline in output, with estimates of longer-run productivity growth still in the region of 2 to 2½ per cent – a downward revision from the late 1990s but a significant improvement on the earlier

Figure I.6. **Wage shares in the business sector**

Per cent of business GDP



Source: OECD.

Table I.3. **Labour productivity in the business sector**

Percentage change from previous period

	Average		2001	2002	2003
	1985-95	1996-2000			
Canada	1.1	2.0	0.3	1.7	2.5
Euro area	1.5	1.1	0.1	0.9	2.0
Japan	2.2	1.0	-0.1	0.7	0.7
United Kingdom	1.6	1.3	1.6	1.8	2.4
United States	1.2	2.3	1.0	3.3	2.1

Source: OECD.

record. Productivity rose particularly fast in the final quarter of 2001, entailing a fall in unit labour costs. As the European recovery takes hold later in 2002, productivity developments should become more convergent, at around 2 per cent *per annum*; but productivity growth (in terms of output per worker) is likely still to depend more on labour-shedding in the European Union (EU), which has yet to see a recovery in total factor productivity to match that experienced in the United States.

The increase in labour market slack is projected to be modest…

Unemployment in the OECD area is projected to peak in the second half of this year at around 35½ million persons, the highest level in five years, and to decline a little in 2003 (Table I.4). Most of the rise has already taken place in the United States, where the recovery is projected to bring about a gradual decline in unemployment rates over the coming two years, to around 5 per cent. The employment situation in Japan is set to deteriorate further, and unemployment is to reach an all-time high of 6 per cent of the labour force despite an expected further fall in participation rates. As the recovery in the euro area is expected to be initially moderate, joblessness may only peak in late 2002, at 8¼ per cent, *i.e.* over 3 percentage points below the maximum reached during the second half of the 1990s. It would fall back to about 8 per cent by the second half of 2003.[5]

… but inflation should remain low as unit labour costs decelerate…

Increased labour market slack should contribute to declining and generally low wage and price inflation, despite a renewed rise in oil and raw materials prices. In the United States, headline inflation has been remarkably subdued and should stay so (Figure I.7). In the euro area, however, inflation has remained well above the 2 per cent rate which the European Central Bank (ECB) defines as the upper bound for price stability. This has been ascribed to exceptionally bad weather pushing up food prices, and to some extent to the euro cash changeover. But core inflation – *i.e.* excluding food and energy – has steadily drifted up, reaching 2½ per cent. It should fall below 2 per cent in the second half of 2002, but may not decline much further in 2003, despite a negative output gap and an assumed deceleration in unit labour costs as productivity increases. With the euro-area economy recovering, higher oil prices pushing up headline inflation and workers in Germany pressing for wage settlements which recoup the real income losses from unexpectedly high inflation in 2001, some uncertainty

5. When comparing the euro area unemployment rate with earlier editions of the *OECD Economic Outlook*, the sizeable statistical revision recently implemented for Spain, which reduced the euro area-wide rate by around 0.3 percentage point, should be borne in mind.

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

	2000	2001	2002	2003
		Per cent		
Employment growth				
United States	1.3	-0.1	-0.4	1.4
Japan	-0.2	-0.5	-1.5	-0.4
Euro area[a]	2.3	1.4	0.5	1.1
European Union	2.0	1.3	0.4	0.9
Total OECD	1.3	0.4	0.0	1.1
		Percentage of labour force		
Unemployment rate				
United States	4.0	4.8	5.6	5.3
Japan	4.7	5.0	5.8	6.0
Euro area[a]	8.5	8.0	8.2	8.1
European Union	7.8	7.4	7.6	7.5
Total OECD	6.1	6.4	6.9	6.7
		Per cent		
Output gaps[b]				
United States	1.7	-0.7	-1.2	-0.9
Japan	0.1	-1.4	-3.0	-3.5
Euro area	0.3	-0.5	-1.6	-1.1
European Union	0.3	-0.5	-1.4	-0.8
Total OECD	0.8	-0.7	-1.5	-1.2
Inflation[c]		*GDP deflator*		
United States	2.3	2.2	1.5	1.6
Japan	-2.0	-1.4	-1.4	-1.7
Euro area	1.3	2.2	2.1	1.8
European Union	1.4	2.3	2.3	1.9
Total OECD *less* Turkey	1.8	1.9	1.5	1.4
Total OECD	2.6	2.7	2.3	1.8
		Consumer price index		
United States	3.4	2.8	1.8	2.4
Japan	-0.7	-0.7	-1.2	-1.2
Euro area[d]	2.4	2.5	2.0	1.9

a) Euro area employment and unemployment are affected by a redefinition in Spain.
b) Per cent of potential GDP.
c) Percentage change from previous period.
d) Harmonised index of consumer prices.
Source: OECD.

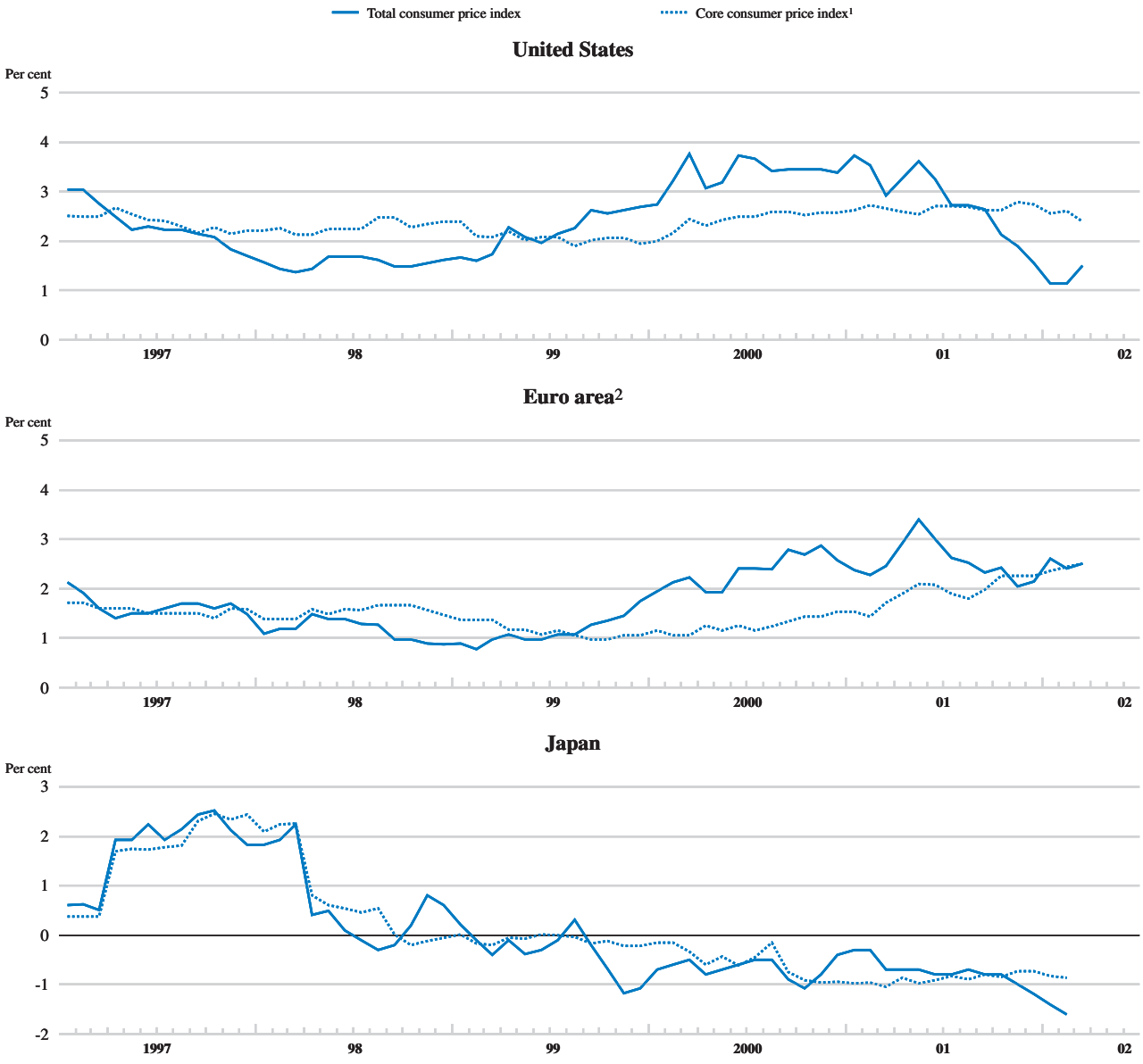
attaches to the extent that core inflation can actually be expected to fall. Contrasting with the other main OECD economies, the problem of deflation seems entrenched in Japan.

… despite some increase in oil and raw material prices

The disinflationary impulse from oil and non-oil commodity markets, which helped damp overall inflation last year and in early 2002, is waning, with oil prices rising against the background of recent political and military conflicts. Underlying supply and demand conditions in the oil market also point towards an oil price above recent lows. Including the latest planned oil production cut by an extra 1½ million barrels a day, the cumulative reduction over the past year has reached 15 per cent of the initial production level of the members of the Organisation of Petroleum Exporting Countries (OPEC). Indeed, OPEC production may be reduced to its lowest levels in more than a decade, and it is increasingly losing

Figure I.7. **Actual and core inflation**

Year-on-year percentage change



1. Non-food and non-energy consumer price index.
2. Harmonised index of consumer prices and associated core measure.

Source: OECD, *Main Economic Indicators*.

market share to non-members such as Russia. With demand gradually strengthening, oil prices are assumed to remain around the $25 per barrel mid-point of the OPEC target range over the projection period (see Box I.1). Industrial raw material prices have started to rise again, underpinned by further production cuts and improved market sentiment bolstered by good US economic news. Bulk commodities, such as iron ore and coal, are exceptions. Metal markets will be switching over the projection period from hefty excess supply to increasing

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excess demand, leading to an inventory reduction and upward price pressures. But for food, tropical beverages and agricultural raw materials, the price outlook remains weak.

The global recovery is led by the United States…

The timing and speed of the initial pick-up are likely to differ across countries before the recovery becomes more generalised in 2003. The rebound of the US economy, which started in the last quarter of 2001, is expected to gather strength in the first half of 2002, reflecting past monetary policy easing, fiscal expansion, a faster-than-expected rebound in confidence following the 11 September shock, a powerful turnaround of the inventory cycle and a revival of ICT investment spending. The euro area recovery will become firmly established only later in 2002, depending on rapidly growing US import demand fuelling exports, which should reinvigorate business investment (Table I.5). The ICT revival is expected to be concentrated on information technology to begin with, so will not be a major stimulative factor in the short term for the European telecommunications industry. With unemployment expected to start declining only later this year, consumer confidence and spending may also recover rather slowly. Japan is projected to emerge only gradually from its third, and probably deepest, recession in a decade, mainly thanks to a strong export boost. However, household spending will continue to be affected by deteriorating labour market conditions. Corporate restructuring and the cyclical decline in profitability will continue to depress capital spending, as will the steady run-down of public works.

Table I.5. **Euro area: summary of projections**

	1999 current prices		2000	2001	2002	2003
	Billion euros	Per cent of GDP	Percentage changes, volume			
Private consumption	3577.5	57.2	2.6	1.8	1.4	2.4
Government consumption	1247.1	19.9	1.9	2.2	1.6	1.3
Gross fixed capital formation	1312.4	21.0	4.6	-0.2	-0.1	3.5
Residential	363.5	5.8	1.1	-2.0	0.1	1.7
Business	792.9	12.7	6.7	0.6	-0.4	4.5
Government	156.0	2.5	1.7	0.2	1.4	2.2
Final domestic demand	6137.0	98.2	2.9	1.4	1.1	2.4
Stockbuilding[a]	19.4	0.3	0.1	-0.5	0.1	0.3
Total domestic demand	6156.4	98.5	2.9	0.9	1.2	2.7
Net exports[a]	96.1	1.5	0.6	0.7	0.2	0.3
GDP at constant prices			3.5	1.6	1.3	2.9
GDP at current prices	6252.6	100.0	4.8	3.8	3.5	4.7
Memorandum items						
Harmonised consumer price index			2.4	2.5	2.0	1.9
Private consumption deflator			2.1	2.3	2.0	1.9
Total employment			2.3	1.4	0.5	1.1
Unemployment rate			8.5	8.0	8.2	8.1
General government financial balance[b]			0.2	-1.3	-1.5	-1.2
Current account balance[b]			-0.3	0.4	0.9	1.0
Output gap[c]			0.3	-0.5	-1.6	-1.1

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) As a percentage of potential GDP.
Source: OECD.

… and outside the OECD area the outlook is mixed

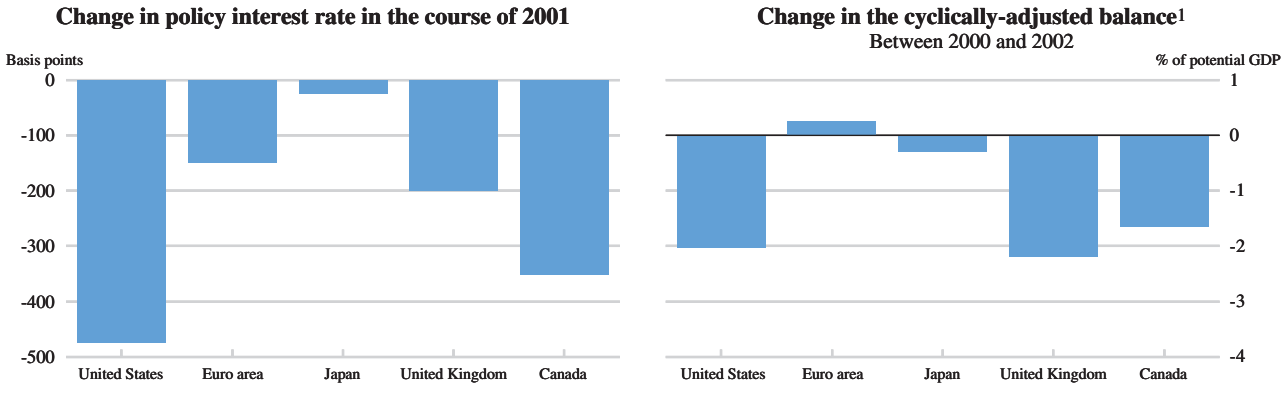
Outside the OECD area, the outlook is promising for the Dynamic Asian Economies,[6] although growth is projected to recover only moderately by historical standards, but elsewhere it is more mixed. In China, growth as measured in the official statistics is set to remain just over 7 per cent,[7] although its sustainability increasingly depends on structural reforms, including those required by its recent accession to the World Trade Organisation.[8] The Russian economy has slowed and the extent and duration of the slowdown partly hinge on energy price and exchange rate developments. In Latin America, overall growth is projected to be weak in 2002, but with strong cross-country variation. The currency board regime collapsed in Argentina in early 2002, against the background of a prolonged and severe recession. Massive exchange rate depreciation and a proliferation of promissory notes issued at sub-national levels of government are fuelling fears of an inflationary spiral. The crisis, however, has had limited contagion effects on neighbouring and other emerging market countries, partly because it had long been anticipated. Activity in Brazil should pick up moderately, growing at around 3 per cent in 2003.[9]

The role of policies in securing a sustainable recovery

Macroeconomic levers have been used actively to support demand…

Against the background of perceived low medium-term inflation risks, central banks in many OECD countries were in a position to cut interest rates more aggressively in 2001 than during previous downturns, without jeopardising credibility (Figure I.8). By the start of 2002, nominal short-term interest rates stood at their lowest levels in four decades in Canada, the United States and the United Kingdom. In the euro area, rates also declined significantly, albeit remaining above their 1999 trough. In real terms, based on projected consumer price inflation, short-term rates are slightly below zero in the United States but they are

Figure I.8. **Monetary and fiscal easing**



1. For Japan, adjusted for deferred tax payments on postal savings accounts and for one-off capital transfers.
Source: OECD.

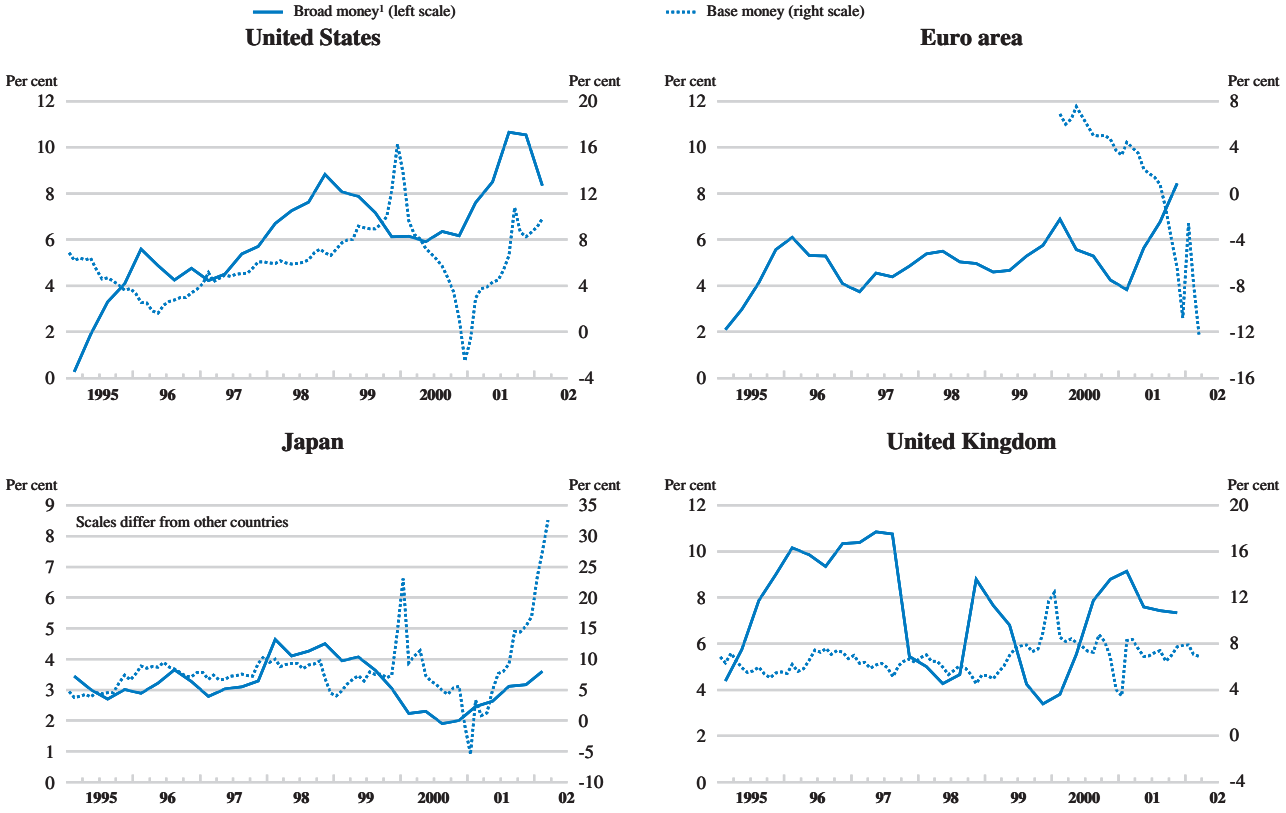
6. Chinese Taipei; Hong Kong, China; Indonesia; Malaysia; the Philippines; Singapore and Thailand.
7. China's national accounts statistics, however, suffer from serious shortcomings and are widely believed to overstate growth performance (see OECD, *National Accounts for China: Sources and Methods*, Paris, 2000).
8. See OECD, *China in the World Economy: The Domestic Policy Challenges*, Paris, 2002.
9. For more details on developments outside the OECD area, see Chapter III.

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well above in the other major OECD countries. Liquidity is ample: broad money has expanded rapidly over the past three years in the United States, the euro area and the United Kingdom, while base money has increased substantially in the United States and Japan – although not in the euro area, owing to the cash changeover (Figure I.9).[10] On the fiscal front, the sizeable boost being provided in the United States, the United Kingdom and Canada has so far been fortuitously timed, even if it was largely motivated by medium-term rather than conjunctural considerations. In the euro area, the room for manoeuvre for discretionary stimulus has been smaller, and the stance has not been significantly loosened, although automatic stabilisers – which are stronger than in the United States[11] – have generally been allowed to work and have helped contain the weakening of activity. In Japan, the dire state of public finances would make any attempt at fiscal reflation counterproductive.

Figure I.9. **Monetary aggregates**

Year-on-year percentage change



1. Broad money refers to M2 for the United States; M3 (adjusted for non-euro area resident holdings of all negotiable instruments) for the euro area; M2 + CD for Japan and M4 for the United Kingdom.

Source: OECD, *Main Economic Indicators* and Bank of England.

10. Somewhat paradoxically, references to the fast expansion of liquidity have been extremely rare in recent speeches by central bank governors, as noted by King, M., "No money, no inflation: the role of money in the economy", lecture delivered at the first Economic Policy Forum, Banque de France, March 2002.
11. See Van den Noord, P. "The size and role of automatic fiscal stabilisers in the 1990s and beyond", *OECD Economics Department Working Papers*, No. 230, 2000.

… and will need to be reversed to ensure sustainability

Looking ahead, key issues revolve around: how and at what pace to withdraw the stimulus to avoid pro-cyclical impulses, or to step up the consolidation of budget positions that still give rise to questions about long-term sustainability; how to enhance economies' potential growth and resilience to future shocks; and what the risks are of a deterioration of saving/investment imbalances over the longer run. An important constraint on the fiscal side, which the debate on cushioning the current cyclical setback should not overshadow, stems from the build-up of pressures on pension and health care spending as populations age in all three major OECD areas.

Monetary policy has been eased most aggressively in the United States…

In the United States, the Federal Reserve cut its target rate 11 times in the course of 2001, to 1¾ per cent. One reason for moving so far and so fast was to avoid being drawn into a liquidity trap.[12] Of the cumulative 475 basis points cut – the most abrupt reduction since the early 1980s – 175 took place after the terrorist attacks of 11 September, contributing to support confidence and demand, not least by facilitating zero-interest-rate financing of car sales. This stimulus was somewhat offset, however, by exchange rate appreciation and weakening equity prices, while long-term interest rates fluctuated within a narrow range, standing at about the same level in the first quarter of 2002 as a year earlier. That interest rates at the long end of the yield curve did not decline more in 2001 may partly reflect the enactment, in mid-year, of a large multi-year programme of tax cuts.[13] The Federal Reserve's target rate has not changed since early December 2001, but the OECD projections incorporate an increase in short-term rates starting around mid-2002. The increase is assumed to take place at a moderate pace, however, as inflation pressures are set to remain subdued and the output gap is not projected to close in the near term.

… where the fiscal stance is also being relaxed substantially

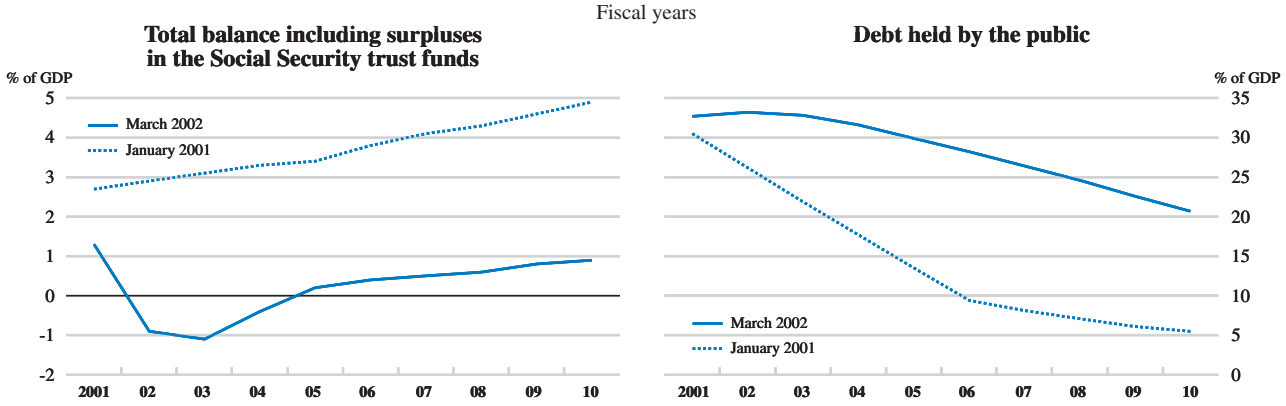
On the fiscal side, the outlook changed considerably in the course of 2001. At the start of last year, a Congressional Budget Office baseline projection for fiscal year 2002 showed a general government surplus of 2.9 per cent of GDP. This projection has now been revised down to a deficit of 0.9 per cent of GDP, mostly reflecting the unanticipated severity of the slowdown but also extra security-related spending in the wake of the 11 September attacks, as well as the over-optimism of some of the assumptions underpinning the earlier baseline: even with a recovery and robust growth over the medium run, the projected fiscal balance is now durably 3 to 4 percentage points of GDP lower, translating into a smaller decline in the public debt ratio (Figure I.10). The OECD projection is more recent and therefore also takes into account the package passed by Congress in early March 2002, which includes the extension of unemployment insurance and business tax relief and amounts to 0.5 per cent of GDP *per annum*. The projection is for a general government deficit of 1 per cent of GDP in calendar year 2002, shrinking to 0.7 per cent of GDP in 2003. Adjusting for the impact of the cycle, the change in the balance between 2000 and 2002 amounts to 2 percentage points of GDP, with most of the weakening taking place in 2002. This is the largest such shift since the early 1980s and it mainly reflects declining tax pressure.[14] In retrospect, the deadlock in Congress over a larger fiscal stimulus package may have been a blessing in disguise, insofar at least as it might have imparted an overly strong boost to demand.

12. See Meyer, L., "Before and after", Speech before the National Association of Business Economics, St. Louis, Missouri, November 2001.
13. Described in *OECD Economic Survey of the United States*, Paris, 2001.
14. The stimulus associated with tax cuts, which are partly saved or used to repay debt, is less than that stemming from spending increases. Survey evidence on the use of the personal income tax rebate cheques received by households in the summer of 2001 is presented by Shapiro, M. and J. Slemrod, "Consumer response to tax rebates", *NBER Working Paper*, No. 8672, 2001.

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Figure I.10. **United States: shifting budget prospects**[1]

Fiscal years



1. The figure does not show the projection for 2011 because of the uncertainly about the fate of the sunset clauses in the tax law.
Source: Congressional Budget Office, January 2001 Budget and Economic Outlook and 6 March 2002 testimony before the Committee on the Budget of the US Senate (CBO estimate of the President's FY 2003 budget proposal).

The forces underlying fiscal consolidation have weakened…

Taking a longer-run view, the forces driving the underlying fiscal position have changed. Until recently, the advent of fiscal surpluses was facilitated by an unusually robust economic expansion, slowing health care cost growth, a demographic reprieve stemming from the low birth rates of the 1930s and early 1940s, and the end of the Cold War, which led to a sharp decline in the share of national income channelled into military spending. But going forward, growth is not expected to be as strong, a demographic tidal wave is about to push up Social Security and health care spending by the end of this decade,[15] and public outlays on security are set to be substantially higher (see below). If tax increases are ruled out, and in the absence of structural changes in entitlement programmes for the elderly and of a reprioritisation of public spending at large, deficit and debt levels are bound to escalate in the longer run. The greater emphasis placed, as of late, on measuring and taking into account the cost and performance of federally financed programmes should help to contain spending pressures.

… and corporate governance failures need to be corrected

Besides the long-standing issues of pension and health care reform, a series of recent large-scale corporate failures has highlighted the need to reconsider accounting standards, reporting requirements and the rules governing auditing and consulting (Box I.2). While such governance problems are being discussed mostly in the US context, they may be as severe, or even more so, in a number of other OECD and non-OECD countries, notably in Asia. At the international level, they also highlight the need for harmonisation of accounting standards, where US and other norms are in competition.

Policy interest rates have remained higher in Europe…

In the European Union, short-term interest rates have remained well above US levels since spring 2001.[16] In the euro area, the ECB has faced persistent, if limited, overshooting of the upper bound of its definition of price stability, with the rate of increase in the harmonised consumer price index exceeding 2 per cent since

15. In 2008, the first members of the baby-boomer generation will be eligible for early retirement and will start to collect Social Security benefits. Adding to pressure from past declines in birth rates is the population's rising longevity.
16. This holds for Iceland and Norway as well, albeit not for Switzerland.

mid-2000. This has reduced the scope for cutting policy-controlled interest rates. The policy rate in the United Kingdom remains well above the one in the euro area but is very low by domestic historical standards, notwithstanding more limited slack in the economy than in the euro area. A distinctive feature of the economic landscape facing the Bank of England is in fact the persistent contrast between overheating symptoms in some sectors and regions, and weak demand in others. So far, the balance of inflation risks has been on the low side and preference has been given to a "two-speed" rather than a "no-speed" economy.[17]

… and do not need to be raised too soon

As inflation is set to slow in the euro area, and unless the euro weakens significantly, it would seem unnecessary to raise the policy rate before evidence has come in that the economy has unambiguously turned the corner and that economic slack is clearly shrinking. Under the same assumption, a somewhat earlier but nonetheless limited increase seems warranted in the United Kingdom.

The fiscal position is deteriorating in many EU countries…

Fiscal policy in the European Union remains a national prerogative, but the 1997 Stability and Growth Pact and subsequent decisions at EU level provide a common framework for ensuring general fiscal discipline. Under these rules, countries have agreed to aim for a budget "close to balance or in surplus" over the cycle and general government net borrowing should remain below 3 per cent of GDP at all times, save during exceptionally severe recessions. Towards the end of every calendar year, member states submit medium-term stability programmes (convergence programmes for the three outside the euro area) which are assessed by the European Commission and on which the European Council ultimately delivers an opinion. The budget outcomes for 2001 showed significant departures from the path envisaged earlier on, leading the Commission to recommend that early warnings be issued to Germany and Portugal. These countries, however, pledged to take the necessary measures to keep the fiscal deficit below the 3 per cent of GDP reference value and to reach a balanced budget position by 2004, and the Council did not endorse the recommendation.

… partly due to the cyclical downturn…

The fiscal targets for 2002 onwards included in the latest vintage of the programmes (finalised around the end of 2001) were revised mainly to adjust for the outcomes in 2001. In close to half of the member states, the difference contemplated for 2002 approaches or exceeds one percentage point of GDP (Table I.6), despite what may in some cases turn out to be still rather optimistic underlying growth assumptions. For the euro area as a whole, the difference averages 0.6 per cent of GDP. For 2003, it amounts to 0.4 per cent of GDP. Historical revenue and spending elasticities suggest that at the area-wide level, the departure from the earlier objectives is essentially of a cyclical nature, *i.e.* corresponds to the working of the automatic stabilisers.[18] For most euro area countries, the OECD projects lower balances than in the latest programmes, partly reflecting weaker growth. For 2003, the lower OECD projections also reflect the assumption of unchanged tax and expenditure policies: stability programmes are of a more normative nature and do not always spell out the measures that would be needed to achieve the targets.

17. See the speech delivered by the Governor of the Bank of England on 14 January 2002 to the Association of Business Community.
18. The sensitivity of the fiscal balance to the cycle, however, varies over time. For example, corporate tax receipts declined sharply in Germany in 2001, owing to tax reform measures.

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Box I.2. **Hidden fragilities**

Partly in connection with the cyclical downturn, several prominent US firms have recently collapsed (Table). The largest such failure was that of Enron, an energy trading company, which filed for bankruptcy in December, after it appeared that it had been grossly overstating its performance by hiding considerable actual and potential losses.[1] The Enron case brought to the forefront some long-standing weaknesses of the system of disclosure, corporate governance and accounting practices in the United States and more globally.

Corporate bankruptcies in the United States

Largest since **1980**

	Date	*Total assets prior to bankruptcy (in $ billions)*
Enron Corp.	Dec. 2001	63.4
Texaco, Inc.	Dec. 1987	35.9
Financial Corp. of America	Sep. 1988	33.9
Global Crossing Ltd.	Jan. 2002	25.5
Pacific Gas and Electric Co.	June 2001	21.5
MCorp	Mar. 1989	20.2
Kmart Corp.	Jan. 2002	17.0
First Executive Corp.	May 1991	15.2
Gibraltar Financial Corp.	Aug. 1990	15.0
FINOVA Group, Inc.	July 2001	14.1
HomeFed Corp.	Oct. 1992	13.9
Southeast Banking Corporation	Sep. 1991	13.4
Reliance Group Holdings, Inc.	Dec. 2001	12.6
Imperial Corp. of America	Feb. 1990	12.3
Federal-Mogul Corp.	Oct. 2001	10.2
First City Bancorp. of Texas	Oct. 1992	9.9
First Capital Holdings	May 1991	9.7
Baldwin-United	Sep. 1983	9.4

Source: BankruptcyData.com.

Published financial reports often provide an incomplete picture of the risks borne by corporations. Some risks are simply very difficult to quantify. One example is counterparty risk, *i.e.* the risk that a firm's suppliers or customers – or further up or down the value-added chain their own counterparts – might fail. Other examples encompass the treatment of joint ventures and outsourcing. Some risks, however, are more deliberately hidden, notably in the United States, *via* the creation of off-balance sheet special-purpose entities (SPEs), the lack of explicit documentation, or "aggressive accounting":

– SPEs allow companies to offload financial commitments such as loan guarantees, the financing of the sales of their own products, or leasing arrangements. Airlines, for instance, reduce the long-term debt appearing on their balance sheets by locating aircraft financing in SPEs. Banks, which help engineer such vehicles, are also big users themselves. SPEs are not intrinsically harmful but have clearly been abused in some cases.

– Another example of misleading accounting practices is the failure to include most employee stock-option (ESO) grants as compensation. The Financial Accounting Standards Board (FASB) tried to change this in 1993-94, but without success, in the face of strong resistance by corporations and in Congress.[2] Federal Reserve staff have estimated that the substitution of unexpensed option grants for cash compensation added about 2½ percentage points to the annual earnings growth rate reported by large US corporations between 1995 and 2000.[3] This encouraged excessive leverage and fuelled the stock market bubble.

– In a number of companies, the way in-house defined-benefit pension plans are accounted for has increased current reported profits in an unsustainable way.[4]

Box I.2. **Hidden fragilities (*cont.*)**

As a result, the financial reports issued by parent companies and SPEs are often dense and impenetrable, aimed at avoiding liability rather than informing, and not allowing investors and regulators to assess where the risks fall. A number of proposals have been aired by regulators and others to improve disclosure and provide shareholders and stakeholders with more timely and reliable information, including:

- *Improvement of the readability and economic relevance of the accounts*. Accounting standards are overly complex in the United States and need streamlining. Specific areas for improving the quality of the accounts include revenue recognition, which according to the FASB is the largest single category of fraudulent financial reporting and financial statement restatements,[5] and more systematic valuation of assets and liabilities to market rather than at the historical book price. Beyond accounting stricto sensu, the FASB is working on better disclosure of intangible assets (brand names, customer lists, licensing agreements and patents).
- *Better accounting treatment of ESOs.* Standard & Poor's propose to include ESO issue costs in their new definition of operating earnings.[6]
- *Making the standard-setting process more efficient and less politicised*. A strengthened FASB would be able to move more promptly.
- *Increasing the timeliness of disclosure.* Periodic reporting should be supplemented by disclosure and updating in real time of unquestionably material information, including as pertaining to changes in liquidity and market price risk, off-balance sheet operations and transactions on terms that would not be available for independent third parties on an arm's-length basis.
- *Minimising the potential conflicts of interest faced by auditors*. Auditing and consulting are often carried out by the same professional-services firms, creating possible conflicts of interest. A clearer separation between the two professions may help reduce such conflicts. Compulsory rotation of auditors or at least of the senior partners auditing a company has also been proposed.
- *Regulation of the auditors.* Self-regulation and peer review might be supplemented by a greater measure of regulation by an independent and publicly-led organisation empowered to perform investigations and to undertake disciplinary proceedings and publicise their results.
- *Enhancement of the role of audit committees.* Audit committees should play a more proactive role in ensuring the quality and integrity of corporate financial reports. They must more forcefully impress on corporate accountants the need for transparent disclosure of the key accounting principles and policies they use.
- *Strengthening sanctions against corporate officials found to mislead shareholders*. Generous compensation for chief executive and chief financial officers should entail stricter accountability for the financial statements issued under their responsibility. They should share investors' pain more directly in the event of misreporting – be it due to fraud or negligence.

Heightened attention to actual or perceived hidden risks can have macroeconomic consequences. When such risks come to the forefront, they translate into generally higher risk premia and possibly more selective lending behaviour. This can lead to lower levels of investment and thus of long-run growth. In addition, the mispricing of risk may have an unfortunate pro-cyclical dimension: in buoyant times, risk may be underpriced, fuelling credit growth greater than warranted by the fundamentals, while in adverse conjunctural conditions, when rating agencies and financial institutions rush to correct past judgements, risk may be overpriced, with the opposite effect. This pro-cyclicality may be further increased once the new Basel capital standards come into force (possibly around 2006), as they foresee capital requirements that vary according to the highly cyclical risk of loan defaults.

1. The overstatements discussed in this box pertain to the accounts filed with the Securities and Exchange Commission (SEC), in accordance with Generally Accepted Accounting Principles (GAAP). Another problem is the proclivity manifested by many firms to report excessively rosy headline or so-called "pro forma" results before they report GAAP earnings. According to the consultancy SmartStockInvestor.com, the top 100 NASDAQ companies reported a combined "pro forma" profit of $19 billion for the first three quarters of 2001 but a combined GAAP loss of $82 billion.
2. The FASB is the designated private-sector organisation establishing US financial accounting and reporting standards, which are officially recognised as authoritative by the SEC and the American Institute of Certified Public Accountants.
3. Greenspan, A., "Corporate governance", Remarks delivered at the Stern School of Business, New York, March 2002. See also Pickford, D. and A. Smithers, "Employee stock options – The results for 2000 and the ongoing debate", Report No. 170, Smithers & Co. Ltd., London, December 2001.
4. See for instance Napolitano, G. and M. Moran, "Looking for soft spots in corporate earnings – pension accounting", Goldman Sachs, Global Equity Research, June 2001.
5. Revenue recognition covers the question of when companies account for their sales they make, given that in some sectors, such as software, sales often involve ongoing obligations to provide customers with services, but companies tend to book a sale's full value as soon as the product is handed over, even though they may be required to do more work later.
6. See Blitzer, D., R. Friedman and H. Silverblatt, "Measures of corporate earnings", Standard & Poor's, November 2001.

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Table I.6. **Fiscal commitments in the European Union**

General government balance, in per cent of GDP [a]

	2000	2001	2002		2003		2004	
	Actual[b]	Estimated[b]	Latest programme	*Change compared with the previous programme*	Latest programme	*Change compared with the previous programme*	Latest programme	*Change compared with the previous programme*
Austria[c,d]	-1.9	0.1	0.0	*0.0*	0.0	*0.0*	0.2	*0.1*
Belgium	0.1	0.0	0.0	*-0.3*	0.5	*0.0*	0.6	*0.0*
Finland[d]	7.0	4.9	2.6	*-1.8*	2.1	*-2.4*	2.6	*-2.3*
France[e]	-1.3	-1.5	-1.4	*-0.8*	-1.0	*-0.6*	0.0	*-0.2*
Germany[f]	-1.3	-2.7	-2.0	*-1.0*	-1.0	*-0.5*	0.0	*0.0*
Greece[d]	-0.8	-0.3	0.8	*-0.7*	1.0	*-1.0*	1.2	*-0.8*
Ireland[d]	4.5	1.7	0.7	*-3.1*	-0.5	*-5.1*	-0.6	..
Italy[d]	-1.7	-1.4	-0.5	*0.0*	0.0	*0.0*	0.0	*-0.3*
Luxembourg	5.8	5.0	2.8	*0.3*	3.1	*0.6*	3.4	..
Netherlands[g]	1.5	0.2	1.0	*0.8*	1.0	*0.8*	1.0	*0.8*
Portugal[h]	-1.9	-2.2	-1.8	*-1.1*	-1.0	*-0.7*	0.0	*0.0*
Spain	-0.4	0.0	0.0	*-0.2*	0.0	*-0.3*	0.1	*-0.2*
Euro area	-0.8	-1.3	-0.9	*-0.6*	-0.4	*-0.4*	0.2	..
Denmark	2.5	2.5	1.9	*-0.7*	2.1	*-0.5*	2.1	*-0.6*
Sweden	3.7	4.7	2.1	*-1.2*	2.2	*-1.4*	2.3	..
United Kingdom[i]	1.8	0.9	-1.1	*-1.0*	-1.3	*-0.4*	-1.1	*-0.1*

a) Excludes UMTS (third generation mobile phone) license receipts.
b) February 2002 notification to the European Commission.
c) The notified surplus for 2001 is likely to be reduced when late tax payments made in 2001 are imputed back to earlier years.
d) The figure may change once Eurostat decides how to treat the securitisation of some public assets.
e) Favourable scenario. In February 2002, the Government published revised projections for the fiscal deficit of 1.8-1.9 per cent of GDP in 2002 and 1.7-1.8 per cent in 2003 based on a below-potential growth forecast.
f) The Stability Programme indicates that the deficit would reach 2.5 and 1.5 per cent of GDP in 2002 and 2003, respectively, under a lower growth scenario. These projections were included in the 2002 Annual Report published by the Federal Government in February 2002.
g) Cautious scenario.
h) Eurostat expects the notified 2001 deficit to be revised up by 0.4 percentage points as the accounting of taxes and social contributions is aligned with ESA95 requirements and by an additional, unspecified, amount to reflect capital injections into public corporations.
i) On a financial year basis (year t stands for FY t/t+1) from 2002 onwards.
Sources : National stability and convergence programmes (third and fourth vintage), French Ministry of Finance, *Perspectives économiques 2002-2003,* Eurostat, Deutsche Bundesregierung, *Jahreswirtschaftsbericht 2002.*

… but also due to a failure to contain expenditure

Across EU member states, the fiscal situation varies considerably. When the unexpected slowdown became apparent, some had not yet moved close enough to the "close to balance or surplus" position aimed for under the Pact to allow the automatic stabilisers a free rein without risking a breach of the 3 per cent of GDP deficit threshold. In Germany for instance, the deficit rose to 2.7 per cent of GDP in 2001 despite discretionary containment measures. A serious cause for concern in this regard is the expenditure drift expected in the three largest euro area countries (Table I.7), which outstrips the rise in social spending associated with the cyclical set-back. The latest stability programmes tend to lack specific measures that would address this worrying trend.

Table I.7. **Public spending ratios in the largest euro area countries**

In per cent of GDP, as projected in successive stability programmes

	2002		2003	
	Penultimate programme	Latest programme	Penultimate programme	Latest programme
France[a]	51.4	52.3	50.7	51.4
Germany	45.5	48.0	44.5	46.5
Italy	46.3	47.0	44.9	46.0

a) Favourable scenario. In February 2002, the Government published revised projections based on a below-potential growth forecast and putting public spending at 52.8-52.9 per cent of GDP in 2002 and 52.1-52.2 in 2003.
Sources : National stability programmes, French Ministry of Finance.

Efforts are under way to contain deficits at sub-national levels

In Germany, close to half of the general government deficit stemmed from the *Länder* in 2001. Proposals to introduce a "national stability pact", which had been much discussed in the run-up to European monetary union,[19] have therefore recently resurfaced. They involve various ways of capping the ability of the *Länder* to run deficits and of sharing the burden of fiscal adjustment across government levels.[20] An arrangement of this sort already exists in Austria and Italy and has been recently introduced in Spain, where it is to become operational in 2003. Very recently, the Federal Government agreed with the *Länder* that they would bring forward by one year, to 2004, their broad commitment to try to balance their budget, but without formal deficit ceilings and penalties. In this context, the Government has committed itself to reducing Federal spending by 0.5 per cent a year on average in 2003 and 2004, and the sub-national authorities to restricting their expenditure increases to a maximum of 1 per cent.

Fiscal objectives should err on the cautious side

The recent deterioration of fiscal positions in the euro area illustrates that in interpreting the "close to balance or surplus" fiscal objective, greater ambition is warranted than demonstrated in the previous expansion.[21] The shift in Ireland's fiscal position – involving a projected decline in the cyclically-adjusted surplus exceeding 3 percentage points of GDP between 2000 and 2002 – suggests that an apparently ample margin for manoeuvre can quickly be eroded, especially at times of tax reform, when tax elasticities may change more than anticipated. An additional reason for prudence is that to some extent, the current fiscal balance projections embody some favourable but non-recurrent factors. One example is the sale of real estate to a newly set-up special purpose vehicle in Italy, which in 2001 reduced the deficit by 0.2 percentage point of GDP.[22] Another example is the securitisation and sale by the

19. See *OECD Economic Survey of Germany*, Paris, 1998.
20. See for instance Deutsche Bundesbank, *Monthly Report*, February 2002, and Vesper, D., "Ein nationaler Stabilitätspakt – aber wie?", Deutsche Institut für Wirtschaftsforschung, *Wochenbericht*, No. 8, 2002.
21. See *OECD Economic Survey of the Euro Area*, Paris, 2001.
22. See *OECD Economic Survey of Italy*, Paris, 2002. In a similar fashion, future lottery receipts were also sold in December 2001. In Austria, the Government has transferred many buildings to a new State-owned real estate company (BIG), for an amount equivalent to 0.4 percentage point of annual GDP in 2001, and 1.1 percentage points of annual GDP cumulatively over 2000-03. The Government rents them back from BIG. Eurostat ruled that BIG was to be considered as part of the corporate sector as the rents paid are close enough to market levels, thus excluding BIG's debt from general government debt. However, Eurostat also recommended an accounting presentation excluding any impact of the asset transfer on the fiscal balance.

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Greek Government of future EU subsidies, in late 2001. Some such schemes can in principle bring about welcome efficiency gains, but their direct impact on fiscal flows is a transitory one. It is important, not least in the light of recent failures to consolidate accounts properly in the private sector, that the public accounts be as transparent and economically revealing as possible. Last but not least, an even stronger reason for fiscal restraint in Europe is the build-up of spending pressures associated with ageing populations.

The changeover to cash euros has been successfully completed…

The introduction of euro cash and the withdrawal of legacy currencies has been achieved smoothly, thanks to extensive and careful preparation. Monetary union is now a tangible everyday reality for over 300 million citizens in the euro area. For the full benefits of a single money to materialise, however, a number of structural reforms need to move forward.

… but much remains to be done to raise Europe's growth potential

As recently reiterated by policymakers at the European Council in Barcelona, Europe's economic speed limit can and should be raised. Areas where more ambition or decisions are needed include, non exhaustively:

- *The effective opening up of markets. De facto* barriers to entry persist in some important network sectors – notably energy and transport – and *de jure* barriers in others, such as postal services. Public procurement also continues to exhibit an excessive home bias, with only 15 per cent of the total value of contracts being advertised in the Official Journal of the European Communities.
- *The reduction of state aid.* While transparency has improved somewhat, sectoral and *ad hoc* subsidisation remains too high in a number of countries.[23] A welcome development, however, is the recent approval by the European Commission of a revamped framework to limit the subsidy race between European regions for attracting major investment projects.
- *The promotion of employment.* Little has been done lately to improve geographical labour mobility across but also within countries, which is far lower than in the United States. While the tax burden weighing on low wage earners has continued to decrease, the interaction of tax and benefit systems is still contributing to high rates of unemployment in several cases. Contracting is becoming more flexible in some countries (*e.g.* Italy), but progress in this area is stalling or even being partly reversed in others (including France and Germany).[24]
- *The integration of financial markets.* Some progress has been made, for instance as regards risk capital, even though risk-taking continues to be inhibited in many EU countries by the *modus operandi* of bankruptcy and insolvency procedures. The treatment of several dossiers needs to be accelerated if the 2005 deadline for full adoption of the Financial Services Action Plan[25] is to be met, in particular concerning cross-border equity investment. As well, implementation in national law is often a long time off.
- *Putting pension systems on a sustainable basis.* Despite significant and welcome changes to pension arrangements in some countries, reform has stalled in

23. As a share of GDP, total State aid tended to decline in the late 1990s. More recent data are not available yet, however.
24. In this respect, recently proposed EU-wide legislation on temporary agency workers may tend to restrict flexibility while contravening the principle of subsidiarity.
25. This plan, adopted in 1999, set out a series of policy objectives and specific measures to improve the Single Market for financial services.

others, and incentives to retire early remain too strong in many. It is urgent to move forward, while ensuring that in the process national pension system reforms simplify rather than complicate financial market integration and keeping in mind the lessons for pension fund rules ensuing from the Enron debacle.

– *Encouraging innovation.* At the national level, incentives and funding for Research and Development (R&D) have been improved in several countries. However, the 2001 deadline for agreement on a long-overdue Community patent was missed.

Monetary policy has been eased further in Japan…

In Japan, the overnight money market rate has been virtually stuck at the zero bound for over a year. However, the stance of monetary policy has continued to be eased in the course of 2001, *via* rising injections of liquidity. In December, an increase in the targeted level of current account balances held by the banking system at the Bank of Japan from above ¥ 6 trillion to ¥ 10-15 trillion was announced, alongside a broadening of the set of instruments accepted as collateral in money market operations and a stepping up of government bond purchases by the central bank, to ¥ 800 billion per month (subsequently raised to ¥ 1 trillion). In effect, the Bank of Japan is on course to monetise the equivalent of one third of the new issuance of government debt this year. Against this backdrop, base money in March 2002 was up 33 per cent over a year earlier, and now exceeds the same aggregate in the United States.[26] Even so, broad money was up by less than 4 per cent, while lending by private banks was down by about 2 per cent, after allowing for debt forgiveness and write-offs. Weak credit reflects the effects of deflation and depressed activity on demand as well as the inability of a severely weakened banking system to take on risk and translate monetary policy impulses into credit supply expansion.

… and the yen has depreciated

The increase in base money has, however, been accompanied by a depreciation of the exchange rate, which amounted to over 9 per cent *vis-à-vis* the US dollar in the quarter to February 2002, and only slightly less on an effective basis. If sustained, and all else equal, this would contribute about half of one percentage point to GDP growth in 2002.[27]

There is little room to relax fiscal policy

The room for a discretionary fiscal push to reinvigorate domestic demand is now virtually nil. Japanese government bond yields increased in early 2002, reflecting growing concerns about the sustainability of the fiscal position and amidst announcements by rating agencies of possible further public bond downgrades. A continued rise in the risk premium borne by the Government would worsen already adverse public-sector debt dynamics. At the same time, there is concern that forceful consolidation could depress activity further in the short run. A second supplementary budget was therefore adopted by the Government in late 2001, amounting to ½ percentage point of annual GDP and focused on urban public works. The 2002/03 budget includes cutbacks in: public works expenditure (coupled with more prioritisation); subsidies to public corporations; medical service compensation; overseas development aid; and local authorities outlays.[28] The fiscal stance, as measured by underlying cyclically-

26. Also contributing to the surge in base money is the capping of the formal government guarantee on large time deposits (see below), which prompted some portfolio shifts into cash.
27. According to the ready reckoners presented in Dalsgaard, T., C. André and P. Richardson, "Standard shocks in the OECD INTERLINK model", *OECD Economics Department Working Papers*, No. 306, 2001.
28. The Government has also indicated that over the medium term, it intends to use private finance initiative schemes more actively. This should not be done solely to reduce the apparent size of the public sector's bloated balance sheet, but can in principle help ensure that investment is more likely to be undertaken where there are clear efficiency gains.

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adjusted net lending, is thus estimated to remain broadly unchanged in 2002 and to tighten slightly in 2003 (on the technical assumption – which involves a departure from recent practice – of no future supplementary budgets).[29]

Restructuring is taking place in some sectors…

Bankruptcies in the corporate sector were at a record high in 2001, a sign of economic stress but also a symptom of necessary structural adjustment and increased pressure on banks. Indeed, a new bankruptcy law, which has made it easier for firms to seek protection from creditors and to agree a restructuring plan, has been used quite frequently by large firms in difficulty. Others have started to take advantage of another new law to divide companies and to either sell them or to place them in a holding company structure. At the same time, more flexible rules on the hiring of temporary employees have led to a significant increase in their share in total employment. Merit-based pay and promotion are becoming more widely accepted, and younger managers are being put in charge in a number of enterprises. Moreover, the Government recently announced that 62 out of 163 public corporations would be privatised or abolished and that government spending for public corporations was slated to be cut by a fifth. Nevertheless, while restructuring is underway in some enterprises and sectors, it could be speeded up and made more effective if the safety net for the unemployed were strengthened and if the Government made its "soft landing" policy – whereby some large companies have been supported in their rescue operations – more transparent.

… but the pace is too slow, especially in the financial sector…

Adjustment is especially slow in the financial sector, which is teetering under the ever rising burden of bad loans. Against the background of anaemic core profitability, banks are reluctant to foreclose on bad loans and to expand lending, thus blunting monetary policy.[30] The Financial Services Agency has carried out special on-site inspections of a small portion of the loans of major banks to large borrowers. The results of these inspections were recently published, and involved the reclassification of a large share of the inspected loans (Table I.8). They showed the magnitude of the non-performing loans problem to be even worse than recognised a few months ago and further highlighted the inadequacy of disclosure by banks. In addition, it should be borne in mind that the official criteria governing loan classification may lead to unduly minimise the severity of the problem: many loans to struggling companies tend to be rolled over at near-zero interest rates, allowing them to be considered as current even if the borrower will ultimately be unable to repay. Against this background, provisioning remain woefully insufficient: loan-loss provisions for the banking sector as a whole total less than one third of reported net impaired assets, which themselves are estimated by some rating agencies as understated by a factor of three. Further capital injections into the banking sector will therefore be required at some point.

… even if the pressure on banks is being stepped up

In the context of a weak banking system, the policy has been to increase the pressure on banks to restructure and to widen the means available for them to react. Mark-to-market requirements came into effect at the turn of the fiscal year (*i.e.* at the end of the first quarter of the calendar year) to promote transparency, and the government guarantee on time deposits was capped.[31] The latter measure is intended to make depositors more interested in the quality of their bank and for the banks to

29. Interpreting published general government statistics and measures based thereon is not devoid of problems, however, as documented in the two most recent *OECD Economic Surveys of Japan*.
30. See Box I.5 on bad loans in the previous *OECD Economic Outlook* and Box I.3 on the life insurance sector in the penultimate one.
31. However, if the Government declares a systemic crisis or the threat of one (even in a single region), it has automatic resort to ¥ 15 trillion with which it can, *inter alia*, fully compensate deposit holders in a failing institution.

Table I.8. **Results of the special loan inspections in Japan**

13 major banks, 149 debtors [a]

Classification	End-September 2001		End-March 2002	
	Number of debtors	Amount (¥ trillion)	Number of debtors	Amount (¥ trillion)
Normal	50	3.2	35	2.4
In need of attention	56	6.4	35	2.6
In need of special attention	43	3.2	45	4.2
In danger of bankruptcy or below	..	..	34	3.7

a) The inspections took place between October 2001 and April 2002. The amount of loans inspected (¥ 12.9 trillion) represents 4 per cent of the total performing loans of the major banks. They are concentrated in the construction, real estate, trade and non-bank financial institutions sectors.
Source : Financial Services Agency.

worry more about their performance and communicating better with depositors. It should also reduce banks' incentives to take undue risks safe in the knowledge that their depositors will not suffer. To head off runs on weaker institutions, the authorities have closed around 60 credit unions and credit associations. Weaker regional banks have also been pressured to raise capital and improve transparency. In their recent review of loans, the authorities have raised the pressure on banks by demanding that 80 per cent of the new bad loans be dealt with within two years. To assist bank restructuring, the Resolution and Collection Corporation has been empowered to bid for non-performing loans at market prices. Moreover, the state-owned Japan Development Bank will co-operate with it to restructure some loans. Banks, however, are reluctant to sell them for fear of recording losses. Herein lies the crux of the problem: simple pressure on banks to cleanse their balance sheets runs against their limited financial capacity to react.

Risks, tensions and imbalances in the global outlook

Short-term risks include the possibility of a more rapid upturn

Overall, the short-term uncertainties surrounding the projection appear more balanced than in late 2001. On the upside, investor confidence could return more strongly and a new high-tech cycle could become established more rapidly than projected. This risk is heightened by the strength of the policy stimulus currently in place. Moreover, because the new expansion is commencing from a situation where pressures on resources could build up quickly, a very rapid recovery could carry dangers for the medium term, especially since the recent downturn failed to correct the prevailing current account imbalances. How significant this risk might be depends in part, however, on productivity trends.

Downside risks…

On the downside, the most immediate risk is of a sizeable and durable increase in oil prices, against the background of heightened tensions in the Middle-East. Otherwise, the main areas of concern arise from the heavy dependence of the recovery on the United States, where the uncertainties include a possible abrupt downward adjustment of equity prices in the face of unrealised profit expectations, a more negative investment response to the upturn in demand and a possible shift in consumer behaviour in response to high indebtedness and a tougher labour market:

… attach to share prices…

– While share prices are well below their 2000 peaks, concerns remain over high price/earnings ratios. Although the associated risk premia are difficult to

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calculate, market anticipations appear to be for double-digit increases in profits. There is a clear risk that profits will be less buoyant and that market expectations will be disappointed.

… corporate profits and investment…

– An important risk arises from the implications of impaired profitability and highly-leveraged balance sheets for corporate investment. In the United States, despite easy monetary policy, many corporations appear to have been forced out of the commercial paper market into the bond market. While this helps to lock in rates and extends planning horizons, such a shift may also be raising the cost of capital, especially in circumstances where the Government is now competing more actively for funds. At the same time, corporate accounts are being more closely scrutinised for off-balance sheet commitments (suppliers credit, guarantees, leasing, stock options, etc.), which add to the difficulties of adequately pricing risk into profit projections. In these circumstances, a return to late-1990s rates of investment is unlikely – indeed, it is not expected in the OECD projections – and a slower upturn than that envisaged cannot be ruled out.

… and household indebtedness

– So far, household spending has held up well in the United States and the United Kingdom despite share price adjustments, but further equity and job losses could have unpredictable effects where household indebtedness is high relative to income. While debt service obligations do not seem particularly problematic, mortgage rates have been rising and there could be some payback after the buoyancy of housing and durables spending in late 2001 and early 2002. Household saving could thus rise faster than projected.

Current account imbalances remain large…

On the external side, the fact that the United States posted a current account deficit of around 4 per cent of GDP in 2001, whereas it came out of the 1990-91 recession in broad balance, could pose problems for the expansion. The deficit is projected to rise to 5 per cent of GDP by the second half of 2003 (Table I.9), and the OECD medium-term reference baseline does not see it declining in subsequent years (see Appendix). There is no immediate suggestion that the capital inflows needed to finance the deficit could become inadequate: the United States retains a long-term productivity growth advantage and foreign investors continue to find the US capital markets attractive, even after the stock market relapse. However, a maintained deficit of that order would push US foreign indebtedness to levels that would represent an extremely high share of world savings, with possible portfolio repercussions on interest rates and the dollar.[32] At the same time, with private sector saving low and the public sector surplus removed, such a deficit could "crowd out" global capital accumulation with negative repercussions on growth rates. And it could, as the upturn becomes more broadly based and investment picks up, put upward pressure on inflation and interest rates. To avoid this, US saving, private and public, needs to rise.

… with possible consequences for capital flow volatility…

One of the concerns is that substantial and persistent current-account imbalances could give rise to large, and possibly disorderly, exchange rate changes, with associated capital market disruption if (as in 1987) investor expectations were abruptly affected. This potential source of tension does not derive from international capital and exchange-rate volatility *per se* – indeed, the past downturn has been associated with a high degree of stability in exchange rates among industrial countries.

32. See the discussion in Chapter IV of the previous *OECD Economic Outlook.*

Table I.9. **World trade and current account summary**

	2000	2001	2002	2003
		Percentage changes		
Merchandise trade volume				
World trade[a]	12.7	0.0	2.5	9.5
of which: Manufactures	14.1	-0.7	2.2	10.0
OECD exports	12.0	-0.8	1.5	8.5
OECD imports	11.9	-0.8	2.3	8.2
Non-OECD exports	13.9	1.2	4.3	12.7
Non-OECD imports	15.9	3.6	3.9	13.0
Intra-OECD trade[b]	11.4	-1.4	1.1	7.2
OECD exports to non-OECD	15.7	2.5	4.9	12.7
OECD imports from non-OECD	12.7	1.1	5.2	12.0
Trade prices				
OECD exports[c]	-3.7	-2.2	-1.1	1.6
OECD imports[c]	-1.0	-2.9	-1.6	1.9
OECD terms-of-trade with rest of the world[d]	-6.7	2.2	1.6	-0.8
		Per cent of GDP		
Current account balances				
United States	-4.5	-4.1	-4.4	-4.9
Japan	2.4	2.2	3.3	4.3
Euro area	-0.3	0.4	0.9	1.0
European Union	-0.4	0.1	0.4	0.6
OECD	-1.3	-1.1	-1.1	-1.2
		Billion dollars		
United States	-444.7	-417.4	-469.9	-545.5
Japan	116.8	91.1	124.1	159.9
Euro area	-16.5	22.6	53.1	64.7
European Union	-32.1	8.3	35.6	47.6
OECD	-335.2	-278.8	-287.6	-310.2
Non-OECD	160.1	86.5	87.2	92.4
World	-175.1	-192.3	-200.4	-217.8

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 US$.
d) The OECD terms of trade are calculated as the ratio of OECD export to OECD import prices, excluding intra-OECD trade.
Source: OECD.

However, the impact of any disruption could be amplified by the speed at which such shocks are transmitted internationally. Some have suggested that policies to deal directly with exchange rate volatility might be beneficial – the most common being the so-called "Tobin tax". Such a tax has been advocated as a "win-win" formula, both reducing excessive exchange rate volatility and generating revenues for overseas development aid. However, as discussed separately,[33] the costs are likely to exceed the benefits, revenues would be much lower than suggested, and implementation would face possibly insurmountable obstacles.

33. See Chapter VIII.

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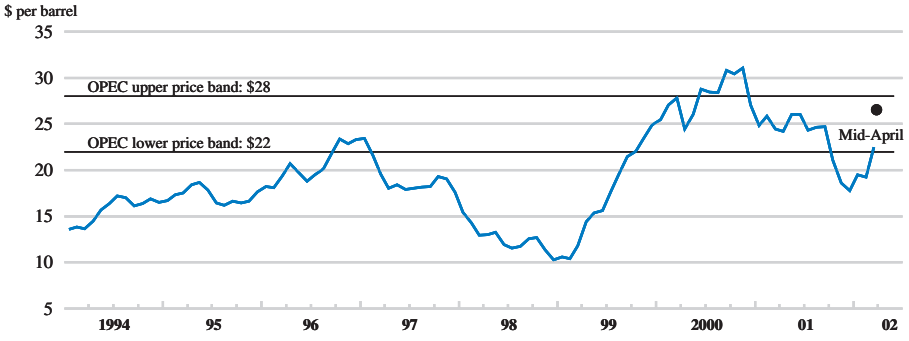
… and protectionist pressures

External imbalances can also generate trade friction, leading to protectionist actions. Tensions in trade have already been raised by the recent US decision to introduce a safeguard measure affecting a broad range of steel products, which provoked a large number of other countries to take similar actions. Additional tariffs ranging from 8 to 30 per cent have been imposed on US imports, to be reduced in the second and third years of the programme. Certain countries have been exempted, however, under the terms of free-trade agreements (*e.g.* Canada and Mexico) or based on developing country status. Product-specific exemptions are also being made. This action has been taken against the background of massive overcapacity at world level, government intervention in a number of countries that has impeded needed industry restructuring or promoted industry development, and dollar strength.[34] Even so, the surge in US steel imports that occurred in 1998 has been reversed, with import volumes now well below this peak, and performance has been varied across different US steel producers, with traditional integrated steelworks particularly affected. Indeed, over thirty producers representing a substantial part of the industry have sought refuge in bankruptcy with recovery made more difficult by the legacy costs associated with in-house pension and medical care plans. The safeguard action has raised a number of concerns. The higher tariffs, for example, are likely to affect the competitiveness of US steel users. The protection might also stall needed restructuring in the US industry, while shifting the burden of adjustment to other countries. Moreover, the measure could have negative implications for the new WTO trade round, given that other countries have already begun to follow suit.

A new adverse oil price shock could abort the recovery

The cyclical turnaround was helped by the decline in oil prices in late 2001 (Figure I.11). While the technical assumption underlying the projections is that oil prices will average $25 per barrel, recent developments have underscored that a higher level cannot be ruled out. The impact on activity and prices of such an adverse supply and terms-of-trade shock has been quantified in previous editions of the *OECD Economic Outlook*.[35] A small temporary price hike, perceived as such, would not visibly alter the shape of the cycle, but a lasting and sizeable increase would

Figure I.11. **OECD oil import prices**



Note: January to April 2002 data are OECD estimates.
Source: OECD, *Main Economic Indicators.*

34. Several rounds of discussion on how to facilitate the closure of inefficient steel capacity and how to limit subsidies and related market-distorting government interventions in steel have been held under the aegis of the OECD since September 2001.
35. See in particular issues 68 and 70.

significantly worsen the above-mentioned pressure on margins and confront some central banks with a severe dilemma. For example, simulations using the OECD's Interlink model suggest that a maintained $10 increase would initially depress activity in the United States by 0.2 percentage point. The impact on Japan would be twice as large, with the euro area in between, in line with relative dependence on oil imports. At the same time, the shock would push up inflation by ½ percentage point in the United States and the euro area, and somewhat less in Japan. The ensuing policy challenge would be particularly unwelcome for the European Central Bank.

Public finances are on an unsustainable course in Japan

The steady worsening of public finances in Japan, where the ratio of public debt to GDP is rising by some 10 percentage points per annum, is a particular, and now longstanding, threat. The rate of debt accumulation is clearly unsustainable: even under favourable assumptions regarding bond yields, spending restraint and a resumption of growth over the medium term, the debt-to-GDP ratio would exceed 180 per cent of GDP in 2007 (see Appendix), and exceed the 200 per cent mark by the end of the decade. While the timing and modalities of a reversal are impossible to predict, tensions are building up, as witnessed in the increases in long-term bond yields in early 2002. To restore fiscal sustainability, resolute action is called for, but that cannot be painless. Part of the adjustment could take place in the context of sharp yen depreciation, although that could exacerbate trade tensions, as the rest of the world would shoulder part of the burden in the form of lower growth. This underlines the need to pursue domestic growth through more vigorous structural reform, as argued above.

Terrorism still casts a shadow over the outlook

A very different tension lurking in the background is that created by the risk of further terrorist attacks. As noted in the previous *OECD Economic Outlook*, policymakers reacted promptly and vigorously to the 11 September aggression and, combined with the resilience of the private sector, this helped to limit the short-run impact of the shock. Further attacks cannot be ruled out, however, and despite the ongoing efforts to be better prepared for such emergencies, they could have serious disruptive effects. Over the longer run, the heightened terrorist threat may have some lasting, if diffuse, macroeconomic effects. Three channels of influence are surveyed in Chapter IV, namely higher perceived risk, more expensive transport and stepped-up security spending. At this stage, and in the absence of further large-scale terrorist onslaught, it would appear that the net long-run macroeconomic impact is tangible but limited. Uncertainty is marginally higher, and so are transaction and security costs. Potential output may therefore be slightly lower, but growth is unlikely to be significantly affected if over time ways are found to cope more efficiently with terrorism risk and minimise the associated economic costs.

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Appendix: The medium-term reference baseline

The medium-term reference baseline shows area-wide growth of around 3 per cent

The medium-term reference baseline (Tables I.10 to I.12) extends the current short-term projections to the end of 2007, based on the assumptions spelled out in Box I.3. It is essentially supply-driven. Growth in output for any country beyond 2003 is assumed to be a combination of growth in potential and any contribution from the closing of the output gap. Growth in potential output for the OECD as a whole is expected to remain around 2½ per cent *per annum*. This reflects an anticipated slowing in population growth and participation trends being offset by a small increase in trend labour productivity.

Since most OECD countries are projected to be in a position of moderate excess supply in 2003, growth in subsequent years slightly exceeds estimated potential. OECD-wide real GDP is projected to expand at a little over 3 per cent *per annum* over the 2004-07 period, while the area-wide rate of unemployment declines by almost a percentage point to just under 6 per cent and inflation declines slightly from 2003 levels. Fiscal balances improve moderately, resulting in falling government debt ratios, Japan being the most notable exception. World trade is projected to grow steadily at around 8 per cent *per annum*, a rate close to the historical average for the 1990s.

Growth is robust in the United States beyond 2003…

The reference baseline for the United States embodies fairly robust average growth beyond 2003 at around 3½ per cent. Even so, the level of output remains slightly below potential over most of the projection period, putting gentle downward pressure on inflation, which falls to below 1½ per cent. The fiscal balance moves from deficit to a surplus of around ½ per cent of GDP over the period, factoring in the Administration's most recent fiscal plans.

… but more modest in the euro area

Growth in the euro area beyond 2003 is more modest than in the United States, owing to a smaller output gap at the end of 2003 and lower estimated potential growth. Inflation falls to around 1½ per cent over the medium term. Assuming unchanged

Box I.3. Assumptions underlying the medium-term reference baseline

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

- Gaps between actual and potential output are eliminated by 2007 in all OECD countries.
- Unemployment returns to its structural rate (the NAIRU) in all OECD countries by 2007.[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 programmes where these are well-defined parts of the institutional framework for fiscal policy.

The main purpose of the medium-term reference baseline 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 baseline does not embody a specific view about the timing of future cyclical events.

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.

Table I.10. **Medium-term reference baseline summary**

Per cent

	Real GDP growth	Inflation rate[a]		Unemployment rate[b]		Current account balance[c]		Long-term interest rate	
	2004-07	2003	2007	2003	2007	2003	2007	2003	2007
Australia	3.7	2.6	2.4	6.3	6.0	-3.9	-2.9	6.3	6.5
Austria	2.6	1.7	1.8	5.1	4.7	-1.6	-1.0	5.4	5.7
Belgium	2.5	2.3	1.7	6.7	6.8	5.5	5.3	5.4	5.9
Canada	2.8	1.9	2.0	7.2	6.8	2.0	2.4	6.3	6.0
Czech Republic	4.1	3.2	3.0	8.6	7.5	-4.0	-2.4	5.4[d]	8.0[d]
Denmark	1.9	2.1	2.0	4.2	4.9	2.5	2.4	5.4	5.6
Finland	3.6	1.8	1.4	9.3	8.0	5.9	8.3	5.3	5.7
France	2.5	1.4	1.6	9.0	8.8	1.9	2.0	5.3	5.6
Germany	2.4	1.6	0.8	7.6	6.9	1.6	1.5	5.1	5.5
Greece	3.4	2.9	2.0	10.0	9.0	-5.7	-5.7	5.5	5.7
Hungary	4.5	5.1	3.0	5.7	5.7	-3.1	-2.8	10.0[d]	7.5[d]
Iceland	2.4	3.4	2.5	2.6	3.0	-1.5	-1.0	9.0	8.5
Ireland	7.6	3.2	3.0	4.9	5.1	-0.7	-0.7	5.4	5.5
Italy	3.0	2.1	1.5	9.0	8.5	0.4	0.6	5.6	5.7
Japan	1.8	-1.7	-1.0	6.0	3.9	4.3	4.2	1.7	1.7
Korea	6.0	3.5	3.0	3.0	3.0	2.8	1.8	7.5	6.5
Mexico	4.5	4.0	3.0	2.5	2.3	-3.0	-3.6	10.0	8.6
Netherlands	2.4	2.2	1.6	3.2	3.4	5.0	4.8	5.3	5.6
New Zealand	2.9	2.0	1.8	5.3	5.4	-4.0	-4.0	6.6	6.1
Norway	1.5	2.5	2.5	3.5	3.5	15.5	13.8	6.4	6.8
Poland	4.0	3.6	3.2	19.5	14.1	-5.1	-4.4	8.4[d]	8.6[d]
Portugal	3.3	2.8	2.4	4.3	3.8	-8.1	-7.2	5.5	5.7
Slovak Republic	4.5	6.8	5.0	18.6	16.6	-6.8	-4.4	8.0	7.1
Spain	2.9	2.6	2.1	10.5	9.0	-2.8	-2.7	5.5	5.6
Sweden	2.4	2.4	2.2	4.0	5.2	4.7	4.8	5.7	5.5
Switzerland	1.8	0.7	0.7	2.2	1.8	10.6	11.9	3.7	4.0
Turkey	5.7	29.4	7.7	8.6	8.1	-0.2	-1.5	38.9	17.0
United Kingdom	2.2	2.3	2.0	5.3	5.3	-2.1	-2.1	5.3	5.5
United States	3.5	1.8	1.3	5.3	5.0	-4.9	-5.0	5.5	5.8
Euro area	2.8	1.9	1.5	8.1	7.5	1.0	1.1	5.3	5.6
European Union	2.6	2.0	1.5	7.5	7.0	0.6	0.6	5.3	5.6
Total of above OECD countries	3.1	1.5[e]	1.3[e]	6.7	5.9	-1.2	-1.4	5.2[e]	5.3[e]

Note: For further details see *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*
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.

policies, the area-wide fiscal balance improves gradually, from a deficit of over 1 per cent of GDP in 2003 to a small surplus of 0.1 per cent four years later. This is partly the result of lower unemployment and higher output.[36] Reflecting the somewhat delayed achievement of the objective of a position of balance or surplus, most euro area countries end up in 2007 with positive net lending, while area-wide gross general government debt is projected to decline to around 63 per cent of GDP.

36. A small contribution also comes from government consumption expenditure growing at a slightly slower rate than nominal GDP.

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Table I.11. Fiscal trends in the medium-term reference baseline

As a percentage of nominal GDP

	Financial balances[a]		Net financial liabilities[b]		Gross financial liabilities[c]		Gross public debt (Maastricht definition)[d]	
	2003	2007	2003	2007	2003	2007	2003	2007
Australia	0.2	0.7	10	6	23	20	..	..
Austria	0.0	0.9	44	34	57	48	57	48
Belgium	0.0	-0.3	90	78	100	85	100	85
Canada	1.1	1.8	47	32	96	81	..	..
Czech Republic	-7.8	-3.1	..	..	..	..	..	..
Denmark	2.3	2.8	17	4	40	27	39	26
Finland	3.3	3.5	-51	-54	41	38	41	38
France	-1.8	-0.6	43	41	66	63	59	58
Germany	-2.1	0.4	46	42	61	58	60	57
Greece	1.0	1.4	..	..	98	82	98	82
Hungary	-4.4	-2.0	..	..	..	..	..	..
Iceland	-0.2	-0.4	23	16	37	31	..	..
Ireland	-0.3	-0.2	0	..	31	28	31	28
Italy	-1.3	0.2	91	76	103	88	104	89
Japan	-7.8	-7.8	76	105	152	181	..	..
Korea	7.1	7.6	-42	-56	12	17	..	..
Netherlands	-0.3	-0.8	38	34	49	45	49	45
New Zealand	0.0	1.5	..	..	..	..	..	..
Norway	13.9	10.2	-95	-125	26	26	..	..
Poland	-5.5	-4.6	..	..	..	..	..	..
Portugal	-1.8	-0.1	..	..	54	45	54	45
Slovak Republic	-5.7	-3.3	..	..	..	..	..	..
Spain	0.0	0.3	36	29	65	58	55	49
Sweden	2.4	2.1	-4	-12	47	39	49	41
United Kingdom	-1.3	-1.0	30	30	52	51	39	41
United States	-0.7	0.5	40	33	58	50	..	..
Euro area	-1.2	0.1	53	46	70	63	68	61
European Union	-1.1	0.0	47	42	67	61	63	58
Total of above OECD countries	-1.7	-0.7	45	43	75	74		

Note : For further details see *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*

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 2001, 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.

The recovery in Japan is weak

Given continuing near-term weakness, and the widening of the output gap over the projection period, the process of economic adjustment towards a closed output gap is likely to be drawn out in Japan. Deflation is, therefore, projected to persist.[37]

37. Assessing the relationship between the output gap and inflation is particularly difficult in the current Japanese deflationary environment. The judgement taken over the medium-term horizon is that the positive change in the output gap offsets any increasing deflationary pressures arising from the negative output gap level. Alternatively, if the usual level effects were to dominate, the rate of deflation would increase over the medium term.

Table I.12. **Growth in potential GDP and its components**

Annual averages, percentage points

	Potential GDP growth		Potential labour productivity growth (output per employee)		Potential employment growth		Components of potential employment[a]					
							Potential labour force participation rate		*Working age population*		*NAIRU*	
	1995-2003	2004-2007	1995-2003	2004-2007	1995-2003	2004-2007	1995-2003	2004-2007	1995-2003	2004-2007	1995-2003	2004-2007
Australia	3.7	3.7	2.0	2.2	1.7	1.4	0.2	0.2	1.4	1.2	0.2	0.0
Austria	2.3	2.3	1.9	2.1	0.3	0.2	0.0	0.0	0.3	0.2	0.0	0.0
Belgium	2.3	2.2	1.5	1.6	0.8	0.6	0.6	0.5	0.0	0.0	0.2	0.0
Canada	2.9	3.2	1.4	1.7	1.5	1.4	0.0	0.2	1.2	1.2	0.2	0.0
Denmark	2.2	2.1	1.8	2.1	0.4	0.0	-0.1	0.0	0.2	0.0	0.3	0.0
Finland	3.0	3.2	2.4	2.5	0.6	0.7	0.1	0.5	0.3	0.2	0.2	0.1
France	2.1	2.5	1.2	1.6	0.9	0.9	0.4	0.4	0.3	0.4	0.1	0.1
Germany	1.7	2.0	1.4	1.6	0.3	0.3	0.4	0.4	0.0	-0.2	-0.1	0.1
Greece	2.9	3.6	2.2	2.8	0.7	0.8	0.5	0.2	0.3	0.3	-0.1	0.2
Iceland	2.6	2.4	1.7	1.4	0.9	1.0	0.0	0.0	1.1	0.8	-0.1	0.1
Ireland	7.7	7.8	4.0	5.3	3.5	2.3	0.8	0.6	1.7	1.5	1.0	0.1
Italy	2.0	2.5	1.4	1.7	0.6	0.8	0.6	1.0	-0.1	-0.3	0.1	0.1
Japan	1.1	0.9	1.0	0.9	0.1	-0.1	0.4	0.3	-0.2	-0.4	-0.1	0.0
Netherlands	3.1	2.1	1.4	1.5	1.7	0.6	1.0	0.4	0.4	0.2	0.4	0.0
New Zealand	2.9	3.0	1.3	1.8	1.6	1.2	0.2	0.1	1.2	1.0	0.3	0.0
Norway	2.4	1.9	1.5	1.2	0.9	0.7	0.1	0.2	0.6	0.5	0.2	0.0
Spain	3.0	2.7	1.2	1.2	1.7	1.5	0.8	1.1	0.3	0.2	0.6	0.2
Sweden	2.4	2.4	2.1	2.0	0.2	0.4	-0.1	0.0	0.4	0.4	0.0	0.0
Switzerland	1.3	1.6	0.8	1.0	0.5	0.6	0.0	0.0	0.4	0.6	0.0	0.0
United Kingdom	2.4	2.2	1.7	1.7	0.7	0.5	0.1	0.2	0.4	0.3	0.2	0.0
United States	3.4	3.3	1.8	2.1	1.6	1.2	0.5	0.2	1.1	1.0	0.0	0.0
Euro area	2.2	2.4	1.4	1.7	0.8	0.7	0.5	0.6	0.1	0.0	0.1	0.1
Total OECD	2.6	2.6	1.5	1.7	1.0	0.8	0.4	0.3	0.5	0.5	0.1	0.0

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

The fiscal balance is not assumed to improve from the close to 8 per cent of GDP deficit projected for 2003. Indeed, the rise in revenues from expanding activity is offset by the ongoing fiscal costs associated with population ageing and increasing debt service obligations (as real long-term bond rates are assumed to remain above GDP growth). It is also assumed that tax rates do not change and, rather optimistically perhaps, that nominal long-term bond rates do not materially increase. Overall, these assumptions imply that general government gross debt exceeds 180 per cent of GDP in 2007. With nominal GDP virtually flat, the debt ratio increases by some 6½ percentage points a year, implying unsustainable debt dynamics.

Unemployment is only reduced slightly…

Employment in the OECD area is projected to rise at slightly above 1 per cent *per annum*, with the euro area remaining significantly below average. As the labour force increases at around 1 per cent, unemployment continues to edge down to just under

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6 per cent by the end of the period. This corresponds to limited declines in unemployment rates in the euro area, a larger fall for Japan, while unemployment rates in the United States and the United Kingdom stay virtually constant just above 5 per cent.

… and current account imbalances persist

For the OECD area as a whole, the external balance remains in small deficit (around 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 broadly unchanged real exchange rates, there is little overall adjustment in the current external imbalances between regions. For the euro area, the surplus remains around 1 per cent of GDP. For the United States, the deficit widens marginally to 5 per cent of GDP, which partly reflects an increasing net outflow of investment income as foreign debt continues to accumulate. Japan's surplus remains at around 4¼ per cent of GDP.

II. DEVELOPMENTS IN INDIVIDUAL OECD COUNTRIES

United States

The recession in 2001 was short and shallow, and a recovery has taken root. Household spending remained resilient throughout the contraction, buoyed by tax cuts and a very substantial easing in monetary policy. The sharp decumulation in stocks and decline in business fixed investment appear to be abating, and their reversals are likely to support activity. Consumption and housing activity may slow, as households increase saving in the face of weakened balance sheets, but strengthening export markets and a pick-up in investment are likely to take over as drivers of the expansion from mid-year. Inflation is likely to remain subdued, reflecting gains in productivity and hence moderate increases in unit labour costs.

Monetary policy responded quickly to the deterioration in activity last year. Attention should now turn to the timing and speed of the withdrawal of stimulus. As the labour market is set to improve, interest rates should be raised, moving first to a neutral and ultimately to a restrictive stance as the expansion broadens. Fiscal policy has loosened considerably. The budget balance has worsened with new spending priorities and tax measures, and renewed restraint will be needed to re-establish the surpluses necessary to confront the ageing problem.

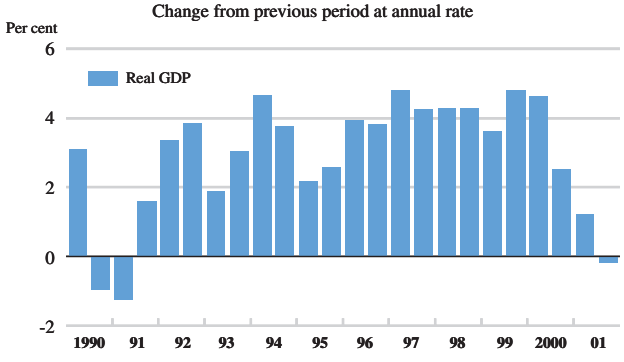
The recession was shallow…

The economy contracted, but only slightly, in the second half of 2001. The correction in investment continued and was accompanied by a dramatic weakening in external trade; business fixed investment, exports, and imports all fell at double-digit rates. Moreover, businesses adjusted rapidly to the weakening in final sales and stocks contracted at a record pace. Offsetting this weakness were robust increases in consumption and residential investment, both of which were aided by last year's tax cuts and the easing in monetary policy over the course of 2001. The impetus to household spending from lower interest rates was particularly apparent in the spike in motor vehicle purchases that accompanied the easy financing terms offered by the

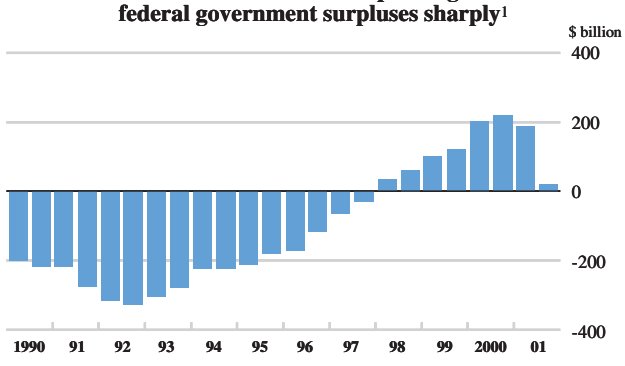
United States

The economy stalled late last year

Change from previous period at annual rate



Tax cuts and increased spending cut federal government surpluses sharply[1]



1. On a National Account basis.
Source: Bureau of Economic Analysis.

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

Percentage changes

	1999	2000	2001	2002	2003
Employment[a]	2.0	2.0	0.2	-0.4	1.6
Unemployment rate[b]	4.2	4.0	4.8	5.6	5.3
Employment cost index	3.2	4.6	4.0	3.5	3.4
Compensation per employee[c]	4.3	5.6	5.1	3.1	3.5
Labour productivity[c]	2.4	2.5	1.0	3.3	2.1
Unit labour cost[c]	1.9	3.1	4.1	-0.1	1.4
GDP deflator	1.4	2.3	2.2	1.5	1.6
Consumer price index	2.2	3.4	2.8	1.8	2.4
Private consumption deflator	1.6	2.7	1.9	1.4	1.8
Real household disposable income	2.4	3.5	3.6	2.8	3.1

a) Whole economy, for further details see *OECD Economic Outlook* Sources and Methods, *(http://www.oecd.org/eco/sources-and-methods)*.
b) As a percentage of labour force.
c) In the business sector.
Source: OECD.

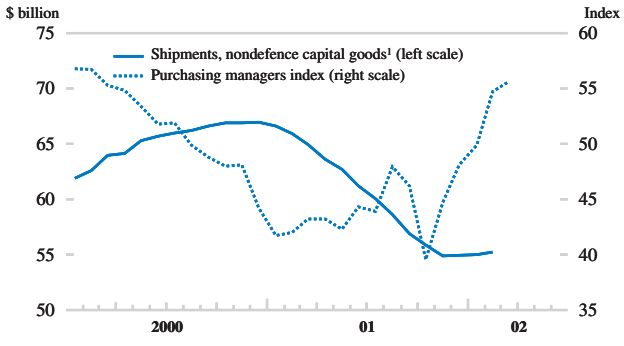
major automakers and in the run-up in mortgage refinancing activity spurred by the fall in mortgage rates.

… and an expansion is well underway

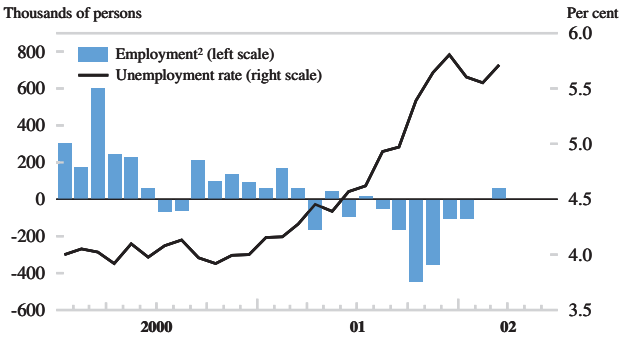
Signs that the economy had begun to pick up became apparent early this year. Shipments and orders for non-defence capital goods signalled a recovery in overall equipment and software spending. The contraction in the manufacturing sector, which had led the economy into the recession, moderated late last year and began to reverse. In the labour market, payrolls rose in March for the first time in eight months and the unemployment rate has shown signs of stabilising. This has been accompanied by an increase in consumer confidence. Long-term yields have jumped, reflecting financial markets' assessment of stronger growth prospects.

United States

The manufacturing sector has begun to turn around



Deterioration in the labour market may have ended



1. Aircraft excluded; 3-month moving average.
2. Establishment measure. Change from previous period.
Source: Bureau of Labor Statistics, Institute for Supply Management and US Department of Commerce.

United States: **Financial indicators**

	1999	2000	2001	2002	2003
Household saving ratio [a]	2.4	1.0	1.6	1.7	2.2
General government financial balance [b]	0.8	1.7	0.5	-1.0	-0.7
Current account balance [b]	-3.5	-4.5	-4.1	-4.4	-4.9
Short-term interest rate [c]	5.4	6.5	3.7	2.3	3.8
Long-term interest rate [d]	5.6	6.0	5.0	5.2	5.5

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.

Imbalances persist despite the recession

The mild recession has not improved the imbalances in household and corporate balance sheets and the current account. In 2001, the household savings rate was 1.6 per cent – up modestly from the low reached in 2000, but still down substantially from the level of a few years ago. While the strength in consumer spending helped moderate the recession's depth, it has also boosted households' stock of debt, which continued to grow rapidly last year. And household net worth fell for the second consecutive year. Though the ratio of net worth to income is not currently unusual by historical standards, its swing over the past two years and the elevated debt-servicing burden suggest that consumer spending will not accelerate in 2002. Moreover, corporate profits fell dramatically over the first three quarters of last year. The strength in productivity led to a jump in profits in the fourth quarter, and both trends should continue. Even so, the weakness in profits over the past year may limit the speed of the investment recovery. Finally, the slowing in US activity and import demand last year has been accompanied by a world-wide contraction in trade, and the current account deficit has remained near 4 per cent of GDP.

United States: **Demand and output**

	1998	1999	2000	2001	2002	2003
	Current prices billion $	Percentage changes, volume				
Private consumption	5 856.0	5.0	4.8	3.1	3.0	2.6
Government consumption	1 261.4	2.2	2.9	3.1	4.2	4.2
Gross fixed investment	1 742.8	7.9	6.7	-0.7	-0.7	5.5
Public	277.1	8.3	2.0	5.6	4.5	4.1
Residential	364.4	6.7	0.8	1.5	2.4	1.1
Non-residential	1 101.3	8.2	9.9	-3.2	-3.2	7.6
Final domestic demand	8 860.2	5.2	4.9	2.3	2.4	3.4
Stockbuilding [a]	73.1	-0.2	-0.1	-1.2	0.6	0.5
Total domestic demand	8 933.3	5.0	4.8	1.3	3.0	3.9
Exports of goods and services	964.9	3.2	9.5	-4.5	-2.8	7.3
Imports of goods and services	1 116.7	10.5	13.4	-2.7	2.3	8.8
Net exports [a]	- 151.7	-1.1	-0.9	-0.1	-0.7	-0.6
GDP at market prices	8 781.6	4.1	4.1	1.2	2.5	3.5

Note: National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see *OECD Economic Outlook* Sources and Methods, *(http://www.oecd.org/eco/sources-and-methods).*
a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
Source: OECD.

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United States: **External indicators**

	1999	2000	2001	2002	2003
			$ billion		
Merchandise exports	684.6	772.2	720.8	689	746
Merchandise imports	1 030.0	1 224.4	1 147.4	1 151	1 279
Trade balance	- 345.4	- 452.2	- 426.6	- 462	- 533
Invisibles, net	21.1	7.5	9.2	- 8	- 12
Current account balance	- 324.4	- 444.7	- 417.4	- 470	- 545
			Percentage changes		
Merchandise export volumes [a]	3.9	11.3	- 5.7	- 3.1	7.3
Merchandise import volumes [a]	12.4	13.5	- 2.8	3.3	9.2
Export performance [b]	- 2.0	- 1.3	- 4.8	- 5.8	- 1.9
Terms of trade	- 1.5	- 3.5	2.4	1.4	- 0.8

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

The monetary policy stimulus is projected to be withdrawn progressively…

The Federal Reserve cut the federal funds rate by 475 basis points over the course of 2001, to 1¾ per cent – the lowest level in over 40 years. This substantial easing was necessary to offset the powerful cross-currents buffeting domestic financial conditions over the course of last year, particularly the weakness in equity prices and the dollar's appreciation, and the potentially large increase in risk aversion that could have stemmed from the events of 11 September. The monetary loosening was facilitated by the quiescence of inflation, as core measures remained subdued and the rise in overall consumer prices slowed considerably with the decline in energy prices. Recently, the sharp increase in long-term yields has been accompanied by a narrowing in risk premia, as the firming in activity has lowered the market's assessment of the strains on corporate profitability going forward. This has been associated with a slight firming in equity prices. As product- and labour-market slack dissipates, the federal funds rate is projected to rise, first moving towards a more neutral level and ultimately rising to a level which clearly bears down on demand. By late 2003, it is assumed to reach 4¼ per cent.

... while the budget has returned to deficit

Federal government purchases of goods and services rose rapidly over the course of 2001, and the pace of spending growth picked up with increases for defence and homeland security at the end of last year. These priorities are likely to continue to put pressure on overall spending and may force difficult budget decisions. In addition, the stimulus package implemented recently, consisting primarily of an extension of unemployment insurance benefits and accelerated depreciation allowances for businesses, will increase the deficit by nearly ½ per cent of GDP this year and next. This deterioration adds to the pressures created by increased spending, the softening in revenue growth associated with the weaker economy, and last year's tax cut legislation, which together lead to renewed federal budget deficits in both 2002 and 2003.[1] Once account is taken of the cyclical deterioration at the state and local level, the overall general

1. The federal budget for the fiscal year 2003 has not yet been approved. The projection assumes that the priorities outlined in the Administration's recent budget proposal are implemented; one exception is the form of the stimulus package, where the recent package replaced the Administration's Bipartisan Economic Security Plan.

government balance is projected to move to a deficit of $110 billion this year, a shift of 2¾ percentage points of GDP in just two years.

The recovery should broaden by the second half of 2002

The economy appears to be rebounding in the first half of 2002, and the recovery is likely to broaden in the second half of this year. Consumption expenditures should slow, as households strive to increase savings following a period of rising unemployment and declining wealth. Business investment in 2002 is expected to be considerably below its 2001 level, although investment expenditures are expected to rise from their recent lows – spurred by the rebound in profits. However, stockbuilding is likely to provide a substantial lift to activity, reflecting the sharp reduction in inventories achieved last year. By the second half of this year, growth should be supported by a pick-up in business investment, further increases in government spending, and a turnaround in export demand. The unemployment rate should begin to fall steadily. Strong productivity growth is expected to keep unit labour costs and core inflation in check, although higher oil prices will boost overall consumer prices. With the turnaround in domestic demand exceeding that of trading partners, the current account deficit is expected to rise to 5 per cent of GDP by the end of the projection period.

Consumer and business spending provide both upside and downside risks

The underlying strength of the recovery remains difficult to gauge. The jump in consumer spending late last year amply demonstrates the willingness of consumers to spend, and growth could accelerate quickly if households fail to ease back on their recent spending binge. Conversely, high oil prices could undermine growth in disposable income. Further, the recovery in business fixed investment could fail to materialise if the profitability of future investments is weaker than expected. Such weakness could place downward pressure on equity prices, which have remained high relative to earnings despite the large correction over the past two years. As a result, domestic demand could weaken, and foreigners could re-evaluate their willingness to finance the current account deficit. This could potentially place downward pressure on the dollar and upward pressure on costs and prices.

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Japan

The cyclical downturn is coming to an end as exports recover and inventories reach low levels. With a favourable exchange rate, profitability should improve, leading to a stabilisation of business investment going into next year. Headwinds, however, remain significant. Intensified corporate restructuring is likely to lower employment and household incomes, keeping consumption growth weak. Real GDP is projected to decline by ¾ per cent in 2002, followed by only ¼ per cent growth in 2003. Major downside risks arise from financial sector weakness and rapidly rising public debt, both of which could lift longer-term interest rates, intensify deflation and reduce activity.

Emphasis needs to be placed urgently on resolving bad loans held by banks and on containing the risks to the financial system. Should this involve public funds, radical bank restructuring, including changes of management, would need to be the price of support. Monetary policy should continue to provide ample liquidity, through the use of a broader range of instruments. Fiscal consolidation needs a clear medium-term strategy to contain the increase in public debt and raise household confidence, while short-term fiscal stimulus should be avoided. Planned structural reforms should be implemented without delay.

The trough of the business cycle has probably been reached

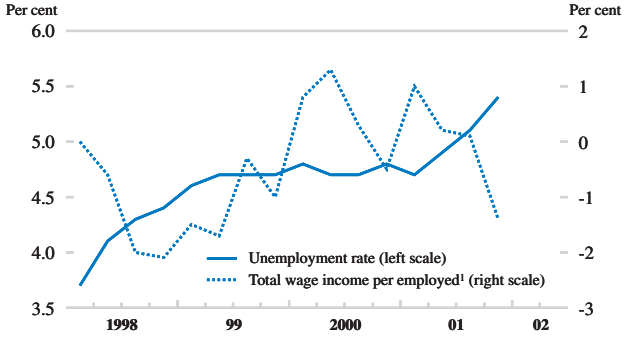
Real GDP fell sharply in the second half of 2001 but leading indicators suggest that the situation is stabilising and that preconditions for a recovery are coming into place. Exports have started to pick up, reflecting stronger demand in the United States and a weaker yen. Inventories, particularly in the information and communication technology sector, have fallen to levels last seen at the beginning of the previous upswing in 1999, and industrial production appears to have passed its trough. Nevertheless, indicators of domestic demand point to only a weak recovery: investment orders continue to decline and consumption lacks dynamism.

Deflation is continuing, underpinned by falling wages

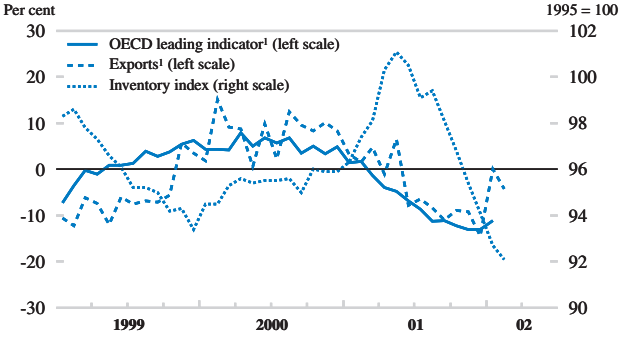
Moderate deflation of around 1½ per cent has become entrenched, although there is little evidence at this stage either that the pace is accelerating markedly or that it will prevent a cyclical recovery. The higher unemployment rate arising from restructuring, combined with the inherent flexibility of the bonus system, has led to a decline in the nominal wage rate and to lower household incomes. Wage flexibility reinforces deflation, while at the same time mitigating the reduction of profitability – which could trigger a collapse of output and hence lead to a deflationary spiral.

Japan

The labour market continues to deteriorate



Contractionary forces are weakening



1. Year-on-year percentage changes.

Source: Ministry of Economy, Trade and Industry, Ministry of Finance, Ministry of Labour and Ministry of Public Management, Home Affairs, Posts and Telecommunications.

Japan: **Employment, income and inflation**

Percentage changes

	1999	2000	2001	2002	2003
Employment	-0.8	-0.2	-0.5	-1.5	-0.4
Unemployment rate[a]	4.7	4.7	5.0	5.8	6.0
Compensation of employees	-1.6	0.9	0.1	-2.0	-1.0
Unit labour cost	-2.3	-1.4	0.5	-1.3	-1.3
Household disposable income	-0.4	-0.6	-0.9	-1.7	-1.0
GDP deflator	-1.4	-2.0	-1.4	-1.4	-1.7
Consumer price index	-0.3	-0.7	-0.7	-1.2	-1.2
Private consumption deflator	-0.5	-1.1	-1.5	-1.6	-1.7

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

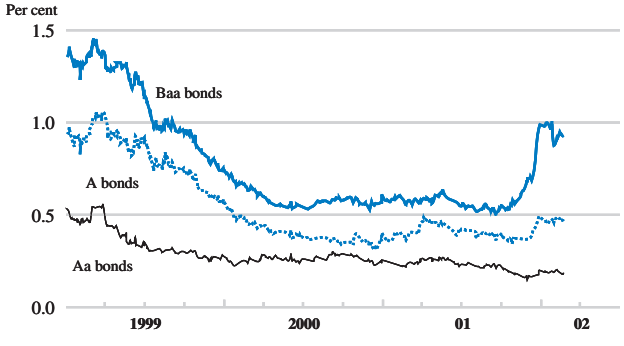
Deflation increases the real interest rate for the business sector and further weakens fragile balance sheets for a significant number of domestically oriented firms. The immediate depressing effect has been attenuated by the practice of banks charging weak clients very low interest rates and by debt forgiveness. The cost, however, is a continued weakening of the banking sector, which is not sustainable.

The financial system remains fragile

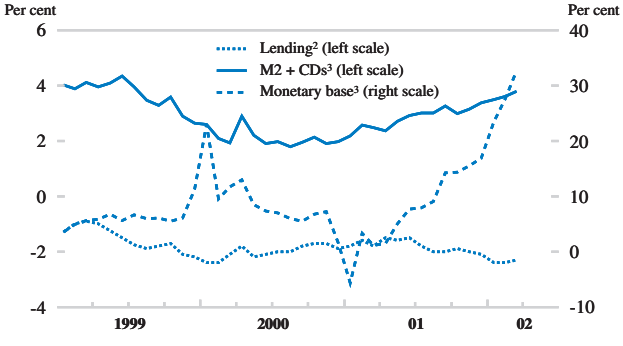
Non-performing loans held by banks remain high despite a policy-induced acceleration of loan write-offs, and even though the major banks have disposed of nearly a half of their existing bad loans during the past year. These have been offset by new ones due to weak macroeconomic conditions and stricter assessment of loan quality after the introduction of special inspections by the authorities. Although the government has called for non-performing loans to be resolved rapidly, it became clear early in the year that banks were still not prepared to move against large enterprises given their limited profitability, preferring instead to keep them in operation through debt forgiveness and debt/equity swaps. This reluctance has unsettled financial markets: share prices of banks fell relative to the market and the risk premia paid by them rose significantly, leading to an increase in the prime lending rate. The government announced in

Japan

Corporate bond spreads have widened[1]



Money supply is increasing modestly, but not lending



1. With respect to 5-year Japanese government bonds.
2. Year-on-year percentage change, adjusted for loan write-offs.
3. Year-on-year percentage change.

Source: Bank of Japan.

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Japan: **Financial indicators**

	1999	2000	2001	2002	2003
Household saving ratio[a]	10.6	10.3	10.5	10.8	11.0
General government financial balance[b]	-7.1	-7.4	-7.1	-8.0	-7.8
Current account balance[b]	2.4	2.4	2.2	3.3	4.3
Short-term interest rate[c]	0.2	0.2	0.1	0.1	0.0
Long-term interest rate[d]	1.7	1.7	1.3	1.6	1.7

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

late February its Anti-deflation Policy Package which, *inter alia*, affirmed that every means would be used to avoid a crisis in the banking system.

Monetary policy has moved to increase liquidity

Even though the overnight policy interest rate has been effectively zero since March 2001, monetary policy has been eased successively so as to increase liquidity and to contain credit risks in the inter-bank market. In December 2001, the Bank of Japan raised its target for bank deposits held at the Bank to 10 to 15 trillion yen and broadened the range of assets that it would purchase. Outright purchases of government bonds were also raised to 1 trillion yen per month in February 2002. As a result, base money has grown rapidly although the broader money supply has increased only modestly. Nevertheless, the ratio of money supply to nominal GDP has risen quite strongly. Concerns about the partial removal of the blanket deposit guarantee in April and risks of possible bank failure have made financial institutions nervous about credit risks. This has led to reduced activity in the inter-bank market. To ease these concerns, the Bank of Japan has relaxed its conditions for Lombard type lending and announced that it will accept a broader range of collateral.

Japan: **Demand and output**

	1998	1999	2000	2001	2002	2003
	Current prices trillion yen	Percentage changes, volume (1995 prices)				
Private consumption	286.9	1.2	0.6	0.4	-0.4	0.5
Government consumption	80.7	4.5	4.6	3.2	2.5	2.2
Gross fixed investment	138.7	-0.8	3.2	-1.7	-5.8	-4.3
Public[a]	38.5	5.5	-9.8	-3.4	-1.7	-15.5
Residential	20.1	1.2	1.6	-7.8	-1.8	1.2
Non-residential	80.1	-4.2	10.4	0.5	-8.2	-0.6
Final domestic demand	506.4	1.1	1.9	0.3	-1.4	-0.5
Stockbuilding[b]	0.0	-0.3	0.0	0.0	-0.1	0.1
Total domestic demand	506.4	0.8	1.9	0.3	-1.5	-0.4
Exports of goods and services	55.1	1.4	12.4	-6.6	1.9	9.0
Imports of goods and services	45.6	3.0	9.6	-0.5	-5.6	3.1
Net exports[b]	9.4	-0.1	0.5	-0.7	0.7	0.7
GDP at market prices	515.8	0.7	2.4	-0.4	-0.7	0.3

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**

	1999	2000	2001	2002	2003
			$ billion		
Merchandise exports	403.5	459.3	383.8	373	410
Merchandise imports	280.2	342.6	313.6	284	298
Trade balance	123.2	116.6	70.3	89	112
Invisibles, net	- 16.3	0.1	20.8	35	48
Current account balance	107.0	116.8	91.1	124	160
			Percentage changes		
Merchandise export volumes [a]	2.1	9.4	- 10.1	2.7	9.5
Merchandise import volumes [a]	9.6	10.9	- 1.3	- 4.2	3.3
Export performance [b]	- 7.6	- 6.7	- 8.8	- 0.5	- 2.1
Terms of trade	4.8	- 5.2	0.5	0.1	- 1.0

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

Fiscal policy is aimed at alleviating deflation

In order to alleviate deflationary problems, the government has relaxed fiscal policy somewhat and a package of new measures is being developed. Two supplementary budgets amounting to ¼ per cent and ½ per cent of GDP were adopted late in fiscal year (FY) 2001 and the carry-over into 2002 is expected to make the underlying fiscal stance broadly neutral this year. The FY 2002 budget is also acting as a stabiliser, in the sense that the shortfall of tax revenue relative to the initial budget guideline has not been fully offset by additional spending cuts. Some progress has been made in allocating funds more efficiently, but attempts to limit new bond issues to 30 trillion yen have necessitated complex financial measures which at the end of the day do not change the deficit on a national account basis. No additional supplementary budget is assumed for this year so that the fiscal position is projected to tighten in 2003.

Export demand should lead to a mild recovery

Real GDP is projected to decline by ¾ per cent in 2002, followed by modest growth of some ¼ per cent in 2003. Although a rapid increase in exports is likely to lead to a recovery from the second half of 2002, domestic demand is expected to stagnate throughout the projection period as balance sheet adjustment continues. Continuing corporate restructuring should restrain private consumption by raising the rate of unemployment and by lowering household income. Business investment is projected to fall throughout 2002, but then to pick up in 2003 led by increasing profits due to cost reduction and rising exports. The pace of price decline is expected to accelerate somewhat over the projection period, the effects of a widening output gap more than offsetting the inflationary impact of the lower exchange rate. The current account surplus will probably increase, reflecting the recovery of the world economy, weak domestic demand and improved competitiveness.

A weak financial sector and high public debt are major downside risks

Important downside risks are associated with the financial sector's fragility and the rising level of public debt, both of which tend to increase the danger of a deflationary spiral. Shifting perceptions about credit risk could raise the risk premium paid by banks or the government and weaken balance sheets. Consumers and firms could then cut back expenditures, exacerbating economic contraction and deflation. On the other hand, the upswing could be stronger and more durable than expected, if on-going and prospective deregulation in telecommunications, electricity, health care and urban redevelopment were to stimulate private spending.

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Germany

Output hardly grew in 2001, as weak world demand caused exports to decelerate. In the process, both investment and private consumption contracted, stocks were reduced significantly and unemployment increased. Annual growth will remain well below potential in 2002, but should pick up in the course of the year with exports the driving force of the recovery. As activity broadens GDP is projected to grow by 2½ per cent in 2003, somewhat above potential.

The general government deficit is projected to total 2.8 per cent of GDP in 2002 but to improve by ¾ percentage point in 2003. Achieving the government's commitment to roughly balance the budget by 2004 will require further expenditure reforms to reduce the structural deficit and measures to raise the growth path of the economy, notably with respect to easing labour market rigidities and streamlining government transfers.

Growth decelerated sharply in 2001, but stabilised at the beginning of 2002

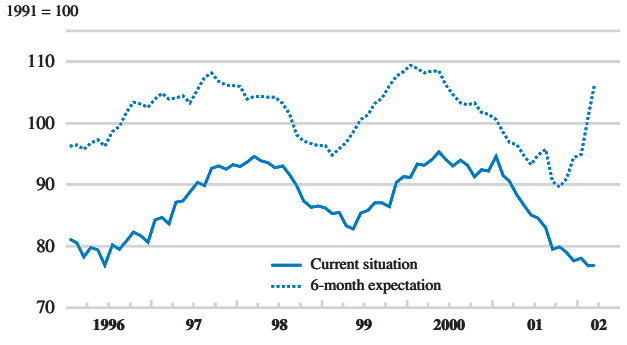
Real GDP grew by 0.6 per cent in 2001, with activity slowing throughout the year and contracting in the last two quarters. Export growth fell sharply in the last quarter when world trade growth decelerated further in the wake of the 11 September terrorist attacks in the United States. Imports continued to contract, reflecting a pronounced deterioration in total domestic demand. Private consumption fell in the second half of 2001 as consumer confidence weakened and rising unemployment reduced disposable income growth. Investment in machinery and equipment, already in recession in the first half of 2001, declined even faster in the second half. This was related to a steep deterioration in export expectations and in business confidence more generally, in combination with manufacturing capacity utilisation dropping to the lowest level since the mid-1990s. Significant destocking continued. Construction remained in recession, on account of both ongoing downward adjustment in the new states and weak housing investment in the old *Länder*.

Business expectations are improving, but consumer confidence remains low

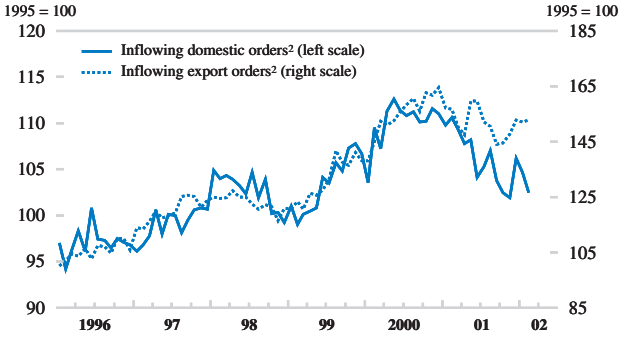
Leading indicators suggest a stabilisation of economic activity in the first half of 2002. Incoming orders have strengthened somewhat in recent months. Business expectations are improving since the turn of the year, largely driven by improving export expectations. On the other hand, consumer confidence has not yet recovered from the low level prevailing in the last quarter 2001.

Germany

Business expectations are improving[1]



Export orders are turning up



1. Industry, western Germany.
2. In manufacturing, volume.

Sources: Ifo Institut für Wirtschaftsforschung; Deutsche Bundesbank and OECD.

Germany: **Employment, income and inflation**

Percentage changes

	1999	2000	2001	2002	2003
Employment	1.2	1.6	0.2	-0.3	0.5
Unemployment rate[a]	8.2	7.5	7.4	7.8	7.6
Compensation of employees	2.7	2.9	1.9	2.2	3.0
Unit labour cost	0.8	-0.1	1.3	1.5	0.5
Household disposable income	2.9	2.8	3.5	2.3	3.3
GDP deflator	0.5	-0.4	1.3	1.4	0.9
Consumer price index	0.6	2.1	2.4	1.5	1.6
Private consumption deflator	0.4	1.4	1.8	1.4	1.6

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

Employment is falling

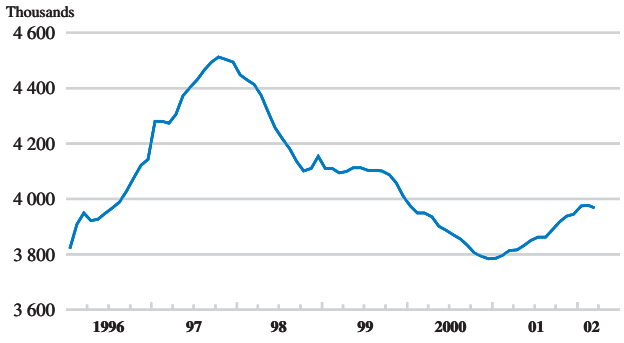
With growth fading, labour productivity declined in the second half and unit labour costs have continued drifting upwards. Employment, which responded with some delay to the weakening in output, declined steeply in the winter (seasonally adjusted) and short-time working has been extended significantly. While labour force participation decelerated, unemployment has increased substantially in recent months.

Monetary conditions are consistent with economic recovery

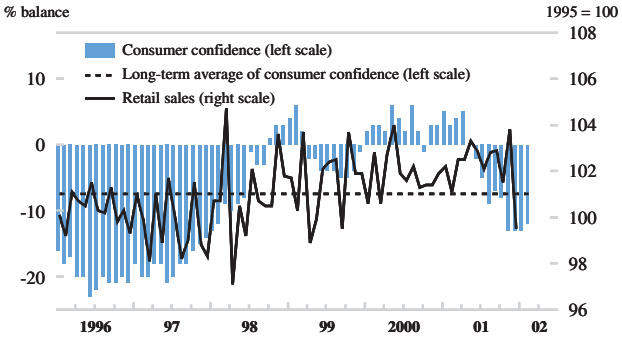
Headline inflation (harmonised consumer price index) declined substantially in the second half of last year on account of falling energy and raw material prices, to less than half of its peak in spring 2001. Core inflation (harmonised) increased slightly to around 1½ per cent in the last quarter. At the beginning of 2002 inflation rebounded temporarily reflecting rising food prices and increases in indirect taxes, as well as – to a lesser extent – price hikes associated with the introduction of the cash euro. But inflation is likely to remain subdued this year and next, although it may edge up as the economy recovers and wages pick up. Real interest rates are presently favourable for growth, and increases in short-term interest rates by the European Central Bank, as projected by the OECD as activity gains strength, would not significantly restrain growth in Germany.

Germany

Unemployment has risen[1]



Consumer confidence has deteriorated



1. Seasonally adjusted, registered unemployment.
Source: Deutsche Bundesbank and OECD.

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Germany: **Financial indicators**

	1999	2000	2001	2002	2003
Household saving ratio [a]	9.9	9.8	10.2	10.4	10.4
General government financial balance [b]	-1.6	1.2 [c]	-2.7	-2.8	-2.1
Current account balance [b]	-0.9	-1.1	0.1	1.5	1.6
Short-term interest rate [d]	3.0	4.4	4.2	3.3	3.9
Long-term interest rate [e]	4.5	5.3	4.8	4.9	5.1

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) Including proceeds of sales of mobile telephone licences (around 2.5 per cent of GDP).
d) 3-month interbank rate.
e) 10-year government bonds.
Source: OECD.

General government balances have deteriorated…

Fiscal policy was expansionary in 2001, with phased business and income tax reductions causing the structural deficit to increase by ¾ per cent of GDP. In total, the general government deficit came in at 2.7 per cent of GDP, some 1½ percentage points above the level in 2000 (net of the receipts from the auctioning of Universal Mobile Telephone Service licences in 2000, which amounted to 2½ per cent of GDP). About half of the deterioration in fiscal balances was unexpected, caused by higher social transfers and revenues foregone on account of slower economic growth. Moreover, the health funds slid into deficit.

… and will only improve in 2003

The budget for 2002 foresees spending restraints on some items, though child allowances will be extended. Additional expenses on defence and security measures, which are being implemented in response to the terrorist attacks, will be financed by raising indirect taxes. Revenue-raising measures also include increases in social security contributions and the phased broadening of the tax base associated with the business tax reform. While in 2002 fiscal consolidation is projected to reduce the structural

Germany: **Demand and output**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	1 111.0	3.1	1.4	1.1	0.6	1.8
Government consumption	369.5	1.6	1.2	1.7	1.4	0.9
Gross fixed investment	412.6	4.2	2.3	-4.8	-2.3	2.3
Public	35.7	5.9	-0.4	-4.3	-1.2	-0.7
Residential	141.5	1.6	-2.9	-7.0	-2.2	-0.7
Non-residential	235.4	5.4	5.6	-3.8	-2.6	4.3
Final domestic demand	1 893.0	3.0	1.6	-0.1	0.1	1.7
Stockbuilding [a]	8.3	-0.4	0.4	-0.9	0.2	0.5
Total domestic demand	1 901.3	2.6	2.0	-1.0	0.2	2.2
Exports of goods and services	559.7	5.6	13.2	4.7	3.2	7.5
Imports of goods and services	531.6	8.5	10.0	0.1	2.2	7.3
Net exports [a]	28.1	-0.7	1.1	1.6	0.4	0.4
GDP at market prices	1 929.4	1.8	3.0	0.6	0.7	2.5
Memorandum items						
Investment in machinery and equipment	169.6	8.0	8.7	-3.6	-2.1	6.0
Construction investment	243.0	1.5	-2.5	-5.8	-2.5	-0.9

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**

	1999	2000	2001	2002	2003
			$ billion		
Merchandise exports	542.9	550.3	570.4	585	639
Merchandise imports	472.0	491.7	480.9	481	529
Trade balance	70.9	58.6	89.5	104	109
Invisibles, net	- 90.0	- 78.9	- 87.4	- 77	- 79
Current account balance	- 19.1	- 20.4	2.1	27	30
			Percentage changes		
Merchandise export volumes [a]	6.3	12.8	2.9	2.8	7.9
Merchandise import volumes [a]	6.7	9.9	1.1	2.4	7.9
Export performance [b]	- 0.4	- 0.1	2.1	0.2	- 0.9
Terms of trade	- 0.2	- 5.7	2.5	2.1	- 0.8

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

part of the deficit by half a per cent of GDP, weak economic growth and continued increases in unemployment are likely to lift the overall deficit marginally to 2.8 per cent of GDP. Even with additional phased reductions in personal income taxes becoming effective in 2003 the structural deficit is likely to decline further on account of both spending restraint and phased revenue-raising measures, and the actual deficit is also projected to come down, to around 2 per cent of GDP, as economic growth picks up.

Accelerating exports will drive GDP growth…

Activity is likely to remain weak in the first half of 2002 but is projected to pick up thereafter. With world trade expected to recover in the course of the year, accelerating exports will be the main driving force this year and next. Private consumption will grow only moderately in 2002, as unemployment is projected to increase further over the next months and consumer confidence remains depressed. Consumption should strengthen as employment ceases to fall, and the recovery will be supported by the positive impact on disposable incomes of the income tax cuts scheduled for 2003. Rising foreign and domestic demand, gradually improving profits and increasing capacity utilisation in manufacturing should lead to strengthening investment in machinery and equipment. While wages are likely to accelerate as a result of the ongoing wage round, settlements are assumed to lie sufficiently below trend productivity growth to be consistent with the economic upswing. However, construction is projected to remain in recession with the capacity adjustments continuing in both the new and the old states.

… and unemployment will only decline in 2003

With GDP growth remaining weak, on average, in 2002, the unemployment rate is expected to increase from 7.4 per cent in 2001 to around 7¾ per cent this year (national accounts definition). Thereafter, employment is projected to pick up again and unemployment might ease back to around 7½ per cent in 2003.

There are risks to the projections on both sides

A risk to these projections would arise if world trade were to recover less rapidly than anticipated in the projections. Lower investment and higher unemployment could also result if the ongoing wage round resulted in steep wage increases. Furthermore, uncertainty about how the government will meet its commitment to roughly balance the budget in 2004 may weigh negatively on confidence, weakening growth. On the upside, the income tax reductions scheduled for 2003 could lead to higher private consumption than projected.

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France

GDP slowed sharply in the second half of 2001 and declined in the fourth quarter. The weakness was broadly based, with the external sector making a positive contribution to growth despite a sharp drop in exports, as imports fell even more. Although unemployment has been rising, firms still report difficulty in filling posts and core inflation has been increasing. A pick-up in external demand and an end to destocking are expected to lead to a moderate recovery during 2002, which is projected to accelerate in 2003.

While it is appropriate to allow automatic stabilisers to operate, the 2002 Budget does not provide for further budgetary consolidation – even on a cyclically-adjusted basis. As a result, substantial budgetary savings will be required in the near future if France is to create the necessary budgetary room to finance its looming pension liabilities. Structural unemployment remains high and further steps need to be taken to make paid employment more attractive and to reduce hiring disincentives.

Economic activity slowed sharply in the second half of 2001

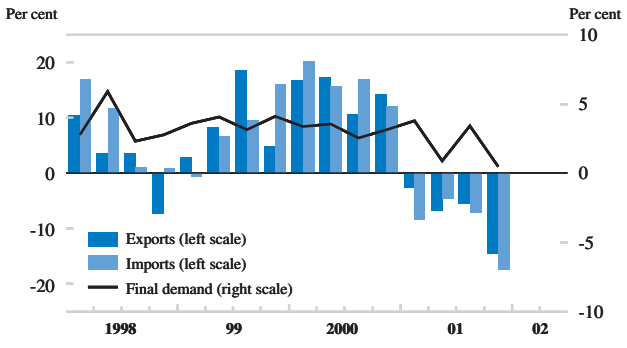
Aggregate output grew 2 per cent in 2001, reflecting a substantial and broadly-based slowdown in the fourth quarter, when GDP fell by 0.6 per cent at an annual rate. Private consumption remained the strongest component of demand but still slowed markedly, as labour market conditions weakened and the earlier support from personal income tax cuts wore off. High frequency data suggest that this tendency persisted into the first few months of 2002. The slowdown of other demand components was even more marked. Both business- and government-sector investment declined in the fourth quarter, and inventories continued to be reduced. The combination of a sharp drop in exports in the fourth quarter of 2001 and an even steeper decline in imports meant that France's current account surplus improved and net exports contributed positively to growth.

While unemployment rose, core inflation continued to increase

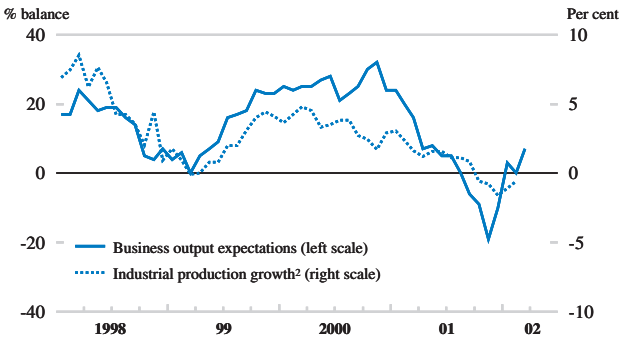
In this context of declining activity, employment growth has slowed sharply in the most recent period, and survey evidence suggests that it will continue to weaken over the near term. Unemployment has been rising since May 2001 and is currently 9 per cent of the labour force. Nevertheless, firms continue to report recruiting difficulties, and labour costs picked up towards the end of the year as the impact of financial incentives related to the 35-hour week wore off. Partially reflecting these

France

Trade has fallen off sharply[1]



Business expectations are improving



1. Growth rate from previous period at annual rates.
2. Percentage change year-on-year.

Source: National Institute for Statistics and Economic Studies (INSEE).

France: **Employment, income and inflation**

Percentage changes

	1999	2000	2001	2002	2003
Employment	2.1	2.5	1.5	0.4	0.8
Unemployment rate[a]	10.8	9.4	8.7	9.2	9.0
Compensation of employees	4.3	4.7	3.9	3.1	3.2
Unit labour cost	1.3	1.1	1.8	1.7	0.2
Household disposable income	2.8	4.9	4.3	3.0	3.3
GDP deflator	0.3	0.8	1.6	1.6	1.4
Consumer price index	0.6	1.8	1.8	1.6	1.7
Private consumption deflator	0.2	1.2	1.2	1.5	1.4

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

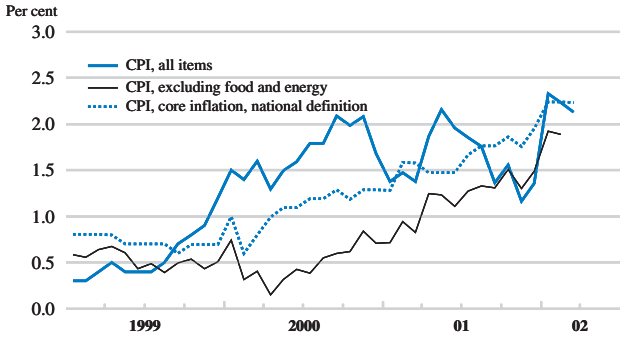
developments and, perhaps, the depreciation of the currency in effective terms, inflation has picked up, reaching 2.1 per cent in March 2002. Indeed, core inflation (excluding administered, tobacco, food and energy prices as well as indirect taxes) has been rising for 16 months and, at 2.2 per cent, is some 0.6 percentage points higher than at the same point the year before.

Business prospects are improving but remain subdued

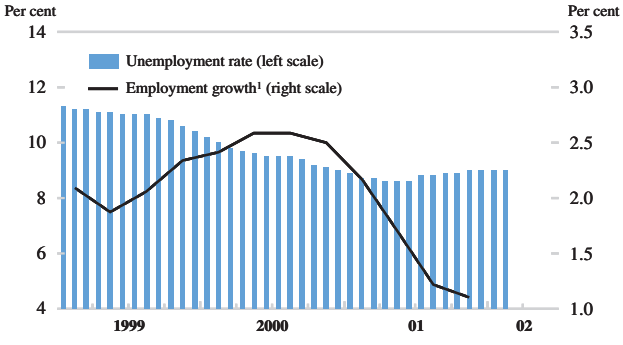
The slowdown in activity has led to a substantial easing of the capacity constraints that had emerged in 2000. Capacity utilisation rates are now below their historical averages. Industrial production began falling in August and, notwithstanding a pick-up in January 2002, is down about 2 per cent from its peak. Leading indicators are mixed. Producers of investment goods anticipate further declines in sales, while in the consumer goods sector sales are expected to remain flat. Among manufacturers of intermediate goods and automobiles, there are signs of improvement. Although order books remain depressed, overall, managers expect production levels to increase somewhat and the forces driving destocking appear to be diminishing.

France

Core inflation continues to rise[1]



The labour market is weakening



1. Percentage change year-on-year.
Source: National Institute for Statistics and Economic Studies (INSEE).

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France: **Financial indicators**

	1999	2000	2001	2002	2003
Household saving ratio[a]	15.1	15.7	15.8	15.4	14.8
General government financial balance[b]	-1.6	-1.4	-1.4	-2.0	-1.8
Current account balance[b]	2.5	1.5	1.8	2.0	1.9
Short-term interest rate[c]	3.0	4.4	4.2	3.3	3.9
Long-term interest rate[d]	4.6	5.4	5.0	5.1	5.3

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.

Macroeconomic policy remains supportive of demand

Monetary conditions in the euro area have become supportive of demand during 2001 and into 2002. Measured by the structural budget balance, fiscal policy was neutral last year as compared with 2000, with cuts to income taxes and social security charges offset by real expenditures increasing less quickly than potential output. The 2002 Budget leaves the structural deficit unchanged at 1.7 per cent of GDP, an apparent deviation from the progressive return to budget balance outlined in the stability programme.

GDP is projected to recover in 2002 and accelerate in 2003

Output growth is projected to grow only slowly during the first half of 2002, before the pace of the expansion picks up. Consumer demand, which was the main source of growth for the last several years, is expected to moderate in line with slower employment and real wage growth. Given the picture for industrial output, investment is initially projected to fall somewhat before picking up towards the end of the year. Weak demand in Germany and in other major French export markets will be reflected in a slow recovery of the external sector, even though activity in North America appears to be picking up relatively quickly. Overall, the slowdown in the economy should serve to reduce inflationary pressures, but higher oil prices may be

France: **Demand and output**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	716.2	3.2	2.9	2.9	2.1	2.6
Government consumption	306.1	2.0	2.3	2.1	1.9	1.5
Gross fixed investment	240.7	6.2	6.2	2.8	-0.1	3.2
General government	37.7	3.6	4.2	2.7	0.7	1.1
Household	59.8	7.6	4.6	-0.2	0.1	1.3
Other	143.2	6.3	7.4	4.1	-0.4	4.5
Final domestic demand	1 263.0	3.5	3.4	2.7	1.6	2.5
Stockbuilding[a]	8.9	-0.4	0.4	-1.0	0.0	0.4
Total domestic demand	1 271.9	3.0	3.9	1.7	1.6	2.9
Exports of goods and services	340.6	3.9	13.3	1.1	-2.0	7.8
Imports of goods and services	306.8	4.2	15.4	-0.2	-1.7	7.9
Net exports[a]	33.8	0.0	-0.2	0.4	-0.1	0.1
GDP at market prices	1 305.7	3.0	3.6	2.0	1.4	3.0

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**

	1999	2000	2001	2002	2003
			$ billion		
Merchandise exports	298.4	296.8	290.0	282	309
Merchandise imports	279.8	297.2	286.2	277	305
Trade balance	18.6	- 0.4	3.8	5	4
Invisibles, net	17.0	20.5	20.2	21	23
Current account balance	35.6	20.1	24.0	26	26
			Percentage changes		
Merchandise export volumes [a]	4.0	13.9	0.1	- 2.8	8.1
Merchandise import volumes [a]	5.1	17.0	- 0.8	- 2.7	8.4
Export performance [b]	- 2.0	1.5	- 1.9	- 5.3	- 0.2
Terms of trade	- 0.4	- 3.4	0.5	0.3	- 0.3

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

reflected in some upward pressure on headline prices next year. Given the gradual pace of recovery, unemployment seems likely to continue to rise slowly over the next few months, before beginning to reverse itself in the second half of 2002 and falling in 2003. Nevertheless, joblessness will remain a serious problem.

But the timing of the recovery is uncertain

The principal risks surrounding this projection concern the timing and strength of the recovery. On the upside, stronger than expected external demand could speed the pick-up of domestic demand, both by reversing the destocking process and by accelerating the recovery in investment activity. On the downside, the employment consequences of the current slowdown, which have been muted thus far, could strengthen as the initial impact of lower social charges and other subsidies associated with the introduction of the 35-hour workweek pass through. This could be expected to impact directly on consumption but could also adversely affect consumer and business confidence, thereby delaying the recovery.

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Italy

After coming to a halt in the second half of 2001, economic activity is set to recover from early 2002. Actual GDP growth is projected to pick up during the year and through 2003 towards 3 per cent, above the growth of potential output. The main driving forces are a rebound in domestic confidence, the recovery in world demand, and supportive monetary and fiscal policies. Inflation is expected to fall towards 2 per cent, gradually converging with the euro area average.

The budget deficit should continue to fall, but will still exceed the government's Stability Programme targets, partly reflecting the operation of the automatic stabilisers. Making room for planned reductions in tax pressure requires that structural measures replace one-off savings in order to contain spending pressures in areas such as health, pensions and personnel. Further labour market reform could boost potential growth, while greater competition in network industries and other services would help to contain underlying inflation pressures.

The economy weakened markedly in late 2001…

Domestic demand fell in the second half of 2001, as most demand components decelerated, and inventory decumulation made a large negative contribution to growth. As imports fell even more sharply than exports, GDP remained flat for the semester, though with a weakening trend so that GDP decreased by 0.2 per cent in the fourth quarter, in line with the negative performance of the euro area as a whole. The industrial sector showed the most marked deterioration and, in contrast to its positive performance in previous quarters, the service sector suffered a setback as a consequence of the impact of the 11 September events on tourism.

… but has shown recent signs of improvement

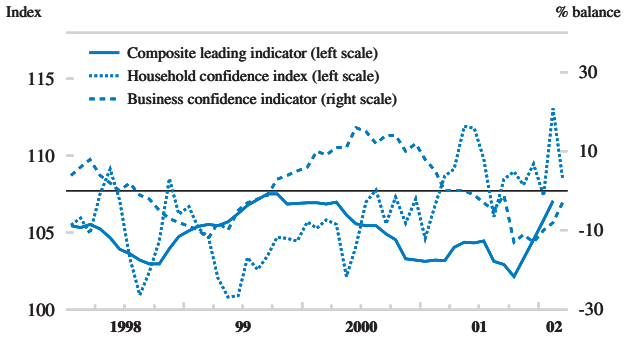
Recent indicators suggest, however, that a turnaround is under way. Industrial production began to rise again as early as December 2001, and available indicators, including in particular for the services sector, point to a recovery of GDP in the first quarter of 2002. At the same time, both businesses and consumers seem to be regaining confidence more swiftly than in other major euro area countries, though the recovery in consumer confidence in late 2001 was partly reversed in early 2002.

Employment keeps rising

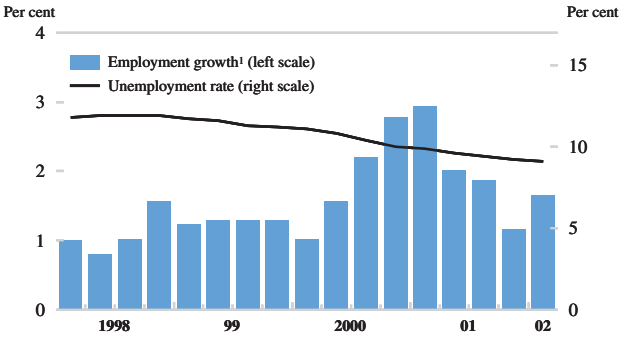
Despite the weak economy, the unemployment rate continued to edge down, to 9.1 per cent by January 2002. As usual, the national average masks significant regional differences: the South still showed a rate of 18.6 per cent that month

Italy

An early 2002 upturn is apparent



The labour market is still improving



1. Year-on-year percentage changes.
Source: OECD; Istituto Nazionale di Statistica (ISTAT) and Eurostat.

Italy: **Employment, income and inflation**

Percentage changes

	1999	2000	2001	2002	2003
Employment	1.2	1.9	2.0	1.5	2.0
Unemployment rate[a]	11.5	10.7	9.6	9.1	9.0
Compensation of employees	3.8	5.0	5.5	4.2	4.4
Unit labour cost	2.1	2.0	3.6	2.7	1.5
Household disposable income	3.0	4.9	4.2	4.3	4.4
GDP deflator	1.7	2.1	2.6	2.6	2.2
Consumer price index	1.7	2.6	2.3	2.3	1.9
Private consumption deflator	2.1	2.8	2.9	2.5	2.1

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

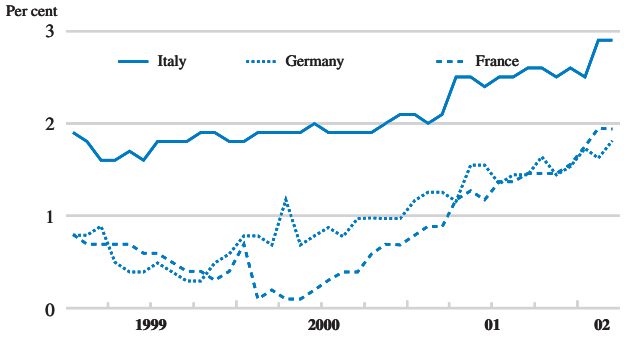
compared with 3.8 per cent in the North. Rising employment over the past year has especially benefited the construction and service sectors, while manufacturing has sustained net job losses. Permanent contracts rose in response to new fiscal tax incentives as well as tight labour markets in the North. Temporary contracts, by contrast, fell as a result of the economic slowdown and perhaps a waning of the structural impacts of earlier liberalisation of such contracts.

Disinflation has been interrupted

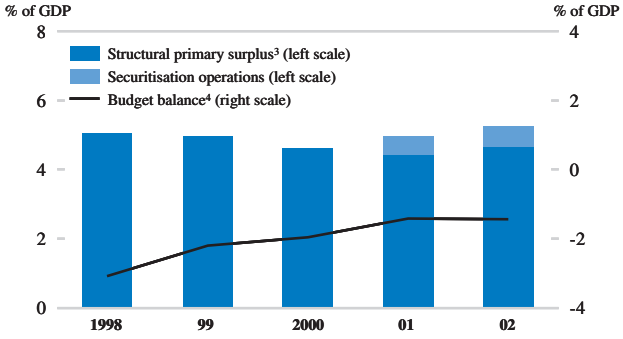
After declining through most of 2001 as the effect of earlier oil price rises unwound, consumer price inflation rose again in the early months of 2002 to the 2½ per cent range. In common with the rest of the euro area, this reflected the currency changeover, bad weather, and euro weakening, but an added factor in the case of Italy was an increase in regulated public prices at the start of the year. However, moderate private sector wage settlements underpin the prospect of reduced inflation pressure over the coming year.

Italy

The core inflation gap is significant[1]



Securitisation operations are softening the fiscal stance[2]



1. Harmonised consumer price index excluding food and energy. Year-on-year percentage changes.
2. Data for 2002 are projections.
3. Less securitisation operations.
4. Excluding the sale of UMTS licences in 2000.

Source: OECD and Istituto Nazionale di Statistica (ISTAT).

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Italy: **Financial indicators**

	1999	2000	2001	2002	2003
Household saving ratio [a]	11.3	10.7	10.9	11.2	10.9
General government financial balance [b,c]	-1.8	-0.6	-1.5	-1.4	-1.3
Current account balance [b]	0.7	-0.5	0.3	0.3	0.4
Short-term interest rate [d]	3.0	4.4	4.2	3.3	3.9
Long-term interest rate [e]	4.7	5.6	5.2	5.3	5.6

a) As a percentage of disposable income.
b) As a percentage of GDP.
c) Excludes the impact of swaps and forward rate transactions on interest payments. These operations are however included in the financial balance reported to the European Commission for purposes of the excessive deficit procedure. On this basis the deficits are -0.5 and -1.4 per cent of GDP for the years 2000 and 2001, respectively.
d) 3-month interbank rate.
e) 10-year government bonds.
Source: OECD.

Fiscal deficit objectives have been overshot

Fiscal policy has been supporting the recovery of demand while ensuring that the deficit continues to narrow. In 2001 and 2002, the budgetary impact of the automatic stabilisers, along with selected tax cuts to business and households and higher public investment, were, and are being, offset by numerous "one-off" measures (*e.g.* securitisation of property sales and state lottery proceeds)[1] that have negligible effects on economic activity. However, the 2001 budget target was overshot and slippage from target is likely in 2002, with the OECD expecting almost 1 percentage point slower growth than in the current official government forecasts. In addition, recent data suggests that upward pressure on health, personnel and social security spending may be greater than assumed by the government. Thus, despite the pick-up

Italy: **Demand and output**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption [a]	637.3	2.4	2.7	1.1	1.4	2.5
Government consumption	192.2	1.3	1.7	2.3	1.1	0.6
Gross fixed investment	198.3	5.7	6.5	2.4	1.5	4.4
Machinery and equipment	114.8	7.7	7.1	1.5	1.0	4.3
Construction	83.5	2.8	5.6	3.7	2.1	4.4
Residential	46.3	1.8	5.2	3.0	2.6	4.1
Non-residential	37.3	4.1	6.0	4.5	1.6	4.8
Final domestic demand	1 027.9	2.9	3.3	1.6	1.4	2.6
Stockbuilding [b]	8.6	0.1	-1.1	0.0	0.0	0.0
Total domestic demand	1 036.5	3.0	2.1	1.6	1.3	2.6
Exports of goods and services	282.7	0.3	11.7	0.8	2.3	7.2
Imports of goods and services	246.2	5.3	9.4	0.2	1.8	6.9
Net exports [b]	36.5	-1.3	0.8	0.2	0.2	0.2
GDP at market prices	1 073.0	1.6	2.9	1.8	1.5	2.8

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.

1. Securitisation, even if one-off, is included in the structural balance as defined by the OECD.

Italy: **External indicators**

	1999	2000	2001	2002	2003
			$ billion		
Merchandise exports	236.1	240.6	242.1	247	271
Merchandise imports	212.6	230.6	224.6	226	248
Trade balance	23.5	10.0	17.5	20	22
Invisibles, net	- 15.4	- 15.4	- 14.3	- 17	- 17
Current account balance	8.2	- 5.4	3.2	3	5
			Percentage changes		
Merchandise export volumes [a]	1.8	10.2	0.3	1.7	7.6
Merchandise import volumes [a]	7.9	8.3	- 0.7	2.9	7.1
Export performance [b]	- 4.2	- 2.6	- 0.6	- 0.5	- 1.0
Terms of trade	0.8	- 7.4	2.0	2.0	- 0.4

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

of growth in 2003, it is clear that additional action will have to be taken if the objective of zero balance in that year is to be attained.

Monetary conditions are supportive

Real interest rates fell to historical lows in 2001, to 1¼ and 2¼ per cent at the short and long term ends, respectively. Despite a widening yield gap in 2002 and a projected renewed monetary policy tightening by the European Central Bank in 2003, interest rates are expected to remain low by Italian historical standards, helping to boost investment activity.

The impact of labour market reform is waning

Labour market reforms have helped employment to grow in the face of external shocks, and this kept consumer sentiment at high levels. However, the effects of earlier reforms could be waning and insiders' resistance may delay the implementation of the needed next phase of reforms. Despite strong employment growth, the employment rate is still low and less than the average in the euro area.

Growth should pick up substantially

The projections point to a modest recovery in the first half of 2002, led by consumption. The negative carry-over from 2001 means that year-on-year growth in 2002 may be around 1½ per cent. Exports will take up the running in the second half, in line with world demand, although Italian competitiveness may be hobbled by the re-emergence of traditional cost differentials *vis-à-vis* main euro area trading partners. Investment should then respond to the improved outlook. Half-year (annualised) growth rates between 2½ and 3 per cent should be realised by the second half of 2002 and continue into 2003. Unemployment will keep declining, though at a slower pace. Real wage gains are set to be quite modest, although unit labour costs may rise somewhat faster than the euro area average. Core inflation is expected to fall to around 2 per cent.

Risks attach to exports and consumption

The main risks attach to the timing and strength of a recovery in international trade, and Italy's capacity to take advantage of it, and to the resilience of consumer spending in Italy. Although consumer confidence has, on balance, remained surprisingly strong, any deterioration in labour market conditions due to a delay in the implementation of the reforms could translate into lower incomes and a lower propensity to consume. Terms-of-trade losses arising from an unexpected increase in the oil price could also have a negative impact on private consumption.

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United Kingdom

The UK economy has probably turned the corner after a slowdown in 2001 that was less marked than in the euro area. With household sentiment remaining upbeat and interest rates low, consumption has cushioned weak export and investment demand. Unemployment and inflation have remained low. Growth is expected to return to a solid pace soon, boosted by the turnaround in international trade and supported by rapidly expanding public expenditure.

While sound monetary and fiscal policies have contributed to greater macroeconomic stability, and should continue to do so, imbalances between internal and external demand have been building up and some deep-seated structural problems remain to be settled. In particular, it is important for structural policy to succeed in enhancing human capital and work incentives, raising competitive pressures and improving public infrastructure.

Growth paused, but slowed less than elsewhere…

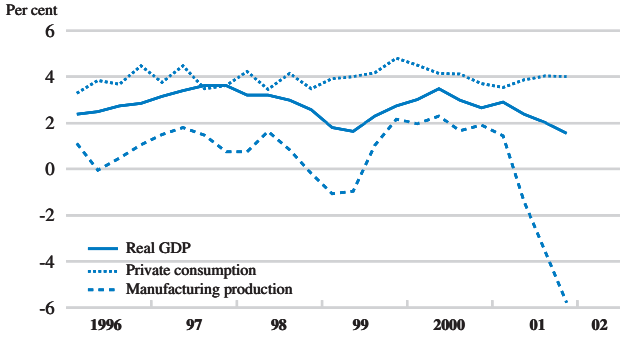
The UK economy was less affected by the 2001 global downturn than most other European economies. Growth stalled in the fourth quarter and the protracted slump in manufacturing deepened due to the downturn in international trade. Exports plummeted and fixed business investment and inventory formation declined in their wake. However, household demand continued to be buoyed by strong earnings growth and wealth gains stemming from the surge in house prices, thus acting as a stabilising force. With government spending also gaining momentum and imports surprisingly weak, economic growth of 2¼ per cent was recorded for 2001 as a whole, a little below potential but outpacing all the other major countries.

… while the "two-speed" economy persisted

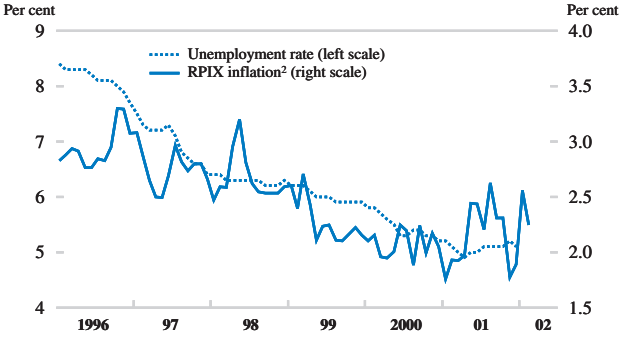
The "dual economy" that has been a feature of UK economic performance for several years, with strong activity in sheltered sectors and weakness in much of the manufacturing sector, became even more marked over the past year. It has resulted in a further widening of the trade deficit and job losses in manufacturing, with the unemployment rate edging up since the trough last summer to just over 5 per cent (or 3 per cent according to the claimant count). As pay settlements remained moderate, inflation stayed below the official 2½ per cent target for retail inflation (RPIX, which excludes mortgage payments) through most of 2001. While inflation saw a

United Kingdom

Growth rates are diverging[1]



Inflation and unemployment remain low



1. Seasonally adjusted data, growth over same period of previous year.
2. All items excluding mortgage interest payments, year-on-year percentage changes.

Source: Office for National Statistics (ONS) and OECD.

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

Percentage changes

	1999	2000	2001	2002	2003
Employment	1.3	1.0	0.8	0.3	0.6
Unemployment rate[a]	6.0	5.5	5.1	5.3	5.3
Compensation of employees	6.5	5.6	6.2	4.6	5.0
Unit labour cost	4.3	2.5	3.9	2.7	2.1
Household disposable income	5.1	4.9	6.7	4.9	5.4
GDP deflator	2.6	1.7	2.4	3.2	2.5
Consumer price index[b]	2.3	2.1	2.1	2.3	2.3
Private consumption deflator	1.5	0.6	1.5	2.3	2.3

a) As a percentage of labour force.
b) Retail price index excluding mortgage payments RPIX.
Source: OECD.

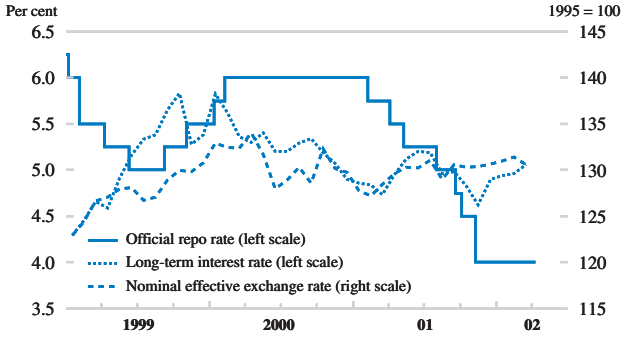
one-off spike early this year due to temporary factors, most prominently the hike in seasonal food prices, underlying inflation pressures remained subdued due to favourable labour cost developments.

Low interest rates have been fueling household borrowing…

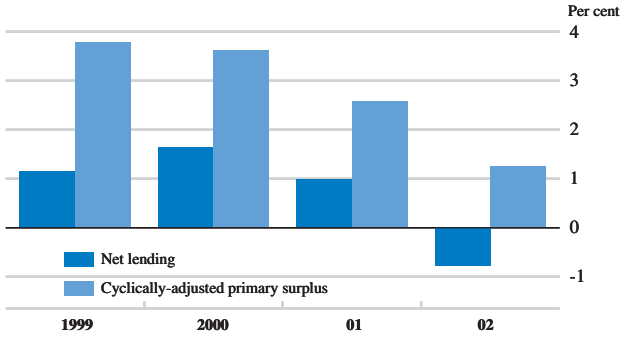
The Bank of England has maintained the repo rate at its 37-year low of 4 per cent since the last 50 basis points cut in November. Meanwhile long-term interest rates have closely tracked yields in the euro area, rising from 4½ to 5 per cent as the prospects for a global recovery have improved. Bank lending to households, especially mortgage lending, has accelerated, stimulated by lower short-term interest rates, and mortgage equity withdrawals (the excess of households' net new mortgage borrowing over their expenditure on new house purchases and home improvements) have soared. While household debt as a percentage of financial and housing wealth is now close to the late-1980s boom levels, the ratio of interest payments to disposable income has stayed low, as cuts in interest rates more than offset the effect of the increased borrowing. Bank credit to non-financial corporations, in contrast, has fallen as investment activity weakened and growing solvency concerns prompted corporate yield spreads to widen. Indeed, with sterling strong, industry faces much tighter monetary conditions than households.

United Kingdom

Monetary conditions are easy



The fiscal stance is becoming more relaxed[1]



1. General government net lending in per cent of (potential) GDP.
Source: Bank of England and OECD.

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United Kingdom: **Financial indicators**

	1999	2000	2001	2002	2003
Household saving ratio [a]	4.8	4.3	5.6	5.6	6.1
General government financial balance [b]	1.1	1.6	1.0	-0.8	-1.3
Current account balance [b]	-2.1	-1.8	-1.8	-1.9	-2.1
Short-term interest rate [c]	5.4	6.1	5.0	4.2	5.1
Long-term interest rate [d]	5.1	5.3	4.9	5.1	5.3

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.

… while public spending is increasing rapidly

The sound fiscal position established in recent years has provided the authorities with the room to begin to address some longstanding problems, most prominently the poor quality of public infrastructure and key public services. Accordingly, Budget 2001 programmed a significant increase in public spending in several areas – notably public transport, health and education – building on the Spending Review 2000 and totalling an accumulated 3 per cent of GDP in fiscal years (FY) 2001/02 and 2002/03. Tax credits and transfers aimed at enhancing work incentives and saving and more generous corporate tax credits for research and development expenditure will also be introduced. In accordance with the "golden rule", which allows the government to borrow to invest, the Budget 2001 projected the structural fiscal position to move from a surplus of 1¼ per cent of GDP in FY 2000/01 towards a small deficit in FY 2002/03. The 2001 Pre-Budget Report, issued last November, confirmed these intentions, but raised fears that receipts in FY 2001/02 and FY 2002/03 may turn out significantly lower than projected due to tax shortfalls associated with weaker equity markets and lower profits of financial corporations. Budget 2002 was presented on 17 April, after the cut-off date for information for the projections.

United Kingdom: **Demand and output**

	1998	1999	2000	2001	2002	2003
	Current prices billion £	Percentage changes, volume (1995 prices)				
Private consumption	557.6	4.2	4.1	3.9	3.1	2.5
Government consumption	154.9	2.8	3.3	2.7	2.8	4.0
Gross fixed investment	151.5	0.9	3.9	0.1	-0.2	3.3
Public [a]	12.5	-1.4	7.6	14.0	12.4	10.0
Private residential	30.8	-1.3	0.4	-0.6	-0.5	2.1
Private non-residential	108.3	1.7	4.4	-1.1	-1.7	2.6
Final domestic demand	864.1	3.4	3.9	3.0	2.5	2.9
Stockbuilding [b]	4.9	0.1	-0.3	-0.2	0.1	0.0
Total domestic demand	869.0	3.4	3.6	2.8	2.5	2.9
Exports of goods and services	228.8	5.4	10.3	1.0	0.7	8.8
Imports of goods and services	237.9	8.9	10.9	2.8	2.6	8.3
Net exports [b]	- 9.1	-1.4	-0.7	-0.8	-0.8	-0.4
GDP at market prices	859.8	2.1	3.0	2.2	1.9	2.8

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**

	1999	2000	2001	2002	2003
			$ billion		
Merchandise exports	268.9	284.8	275.4	278	311
Merchandise imports	313.4	330.2	323.0	328	361
Trade balance	- 44.6	- 45.4	- 47.6	- 50	- 50
Invisibles, net	13.6	19.8	22.5	21	18
Current account balance	- 31.0	- 25.6	- 25.1	- 29	- 32
			Percentage changes		
Merchandise export volumes [a]	4.5	11.3	1.3	- 0.9	9.6
Merchandise import volumes [a]	7.6	11.8	2.8	1.9	8.1
Export performance [b]	- 1.5	- 1.0	1.3	- 3.0	0.8
Terms of trade	0.3	0.8	0.1	1.8	0.3

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

It confirms the tax shortfall, and projects from FY 2003/04 onward a further acceleration in public spending, mostly on health care, financed by increases in National Insurance contributions.

Growth is projected to pick up…

Activity is projected to pick up, reflecting the brisk rebound in external demand. While fiscal policy is set to boost domestic demand throughout the projection period, household consumption should slow if, as embodied in the OECD projections, the Bank of England begins to raise the repo rate from late spring 2002 onwards. This would induce the saving rate to edge up from its current low level. Business investment is projected to pick up somewhat in 2003. Overall, GDP growth is expected to recover from a trough of just below 2 per cent in 2002 to around 2¾ per cent in 2003, marginally above the potential growth rate. Unemployment is projected to level off at around 5¼ per cent in 2003, close to the structural rate. Inflation is likely to stay close to target over the projection period.

… though there are some risks

Growth could be slower than projected if the increase in house prices and household debt were to prove unsustainable in the context of higher interest rates and consumer sentiment were to weaken correspondingly. Indeed, it cannot be ruled out that house price inflation will taper off soon. While this would dampen the demand impetus stemming from wealth effects, it would, particularly if associated with a weakening of the exchange rate, help in the unwinding of the underlying imbalances.

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Canada

As in the United States, the Canadian economy has rebounded much earlier than expected following the brief downturn last summer. Fortuitously-timed tax cuts, substantial monetary easing and a resurgence in confidence were largely responsible for this favourable outcome. The outlook is for growth to continue to pick up speed until capacity pressures begin to arise once again next year, though inflation should remain moderate over the projection period.

The earlier reductions in short-term interest rates proved well timed and well-measured, but rates will have to continue to increase to head off a rise in inflation. The federal government should use the additional revenues from the early rebound to aim for a moderate surplus so as to accelerate the pace of public debt reduction in view of its still high level.

The downturn has been short and shallow…

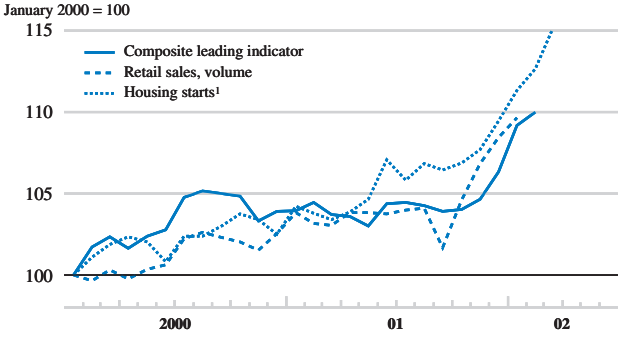
Like its North American neighbour, the Canadian economy has turned around faster than expected following the terrorist attacks in the United States and the downturn already underway. Real GDP grew at a 2 per cent annual rate in the fourth quarter, following a drop in the third. The big surprises have been in the resilience of private consumption and the renewed strength in residential investment. Confidence has returned quickly: consumers never lost heart, and business sentiment has regained nearly three quarters of its third-quarter drop. With higher output levels, the amount of spare capacity is well below earlier predictions.

… largely following the pattern observed in the United States

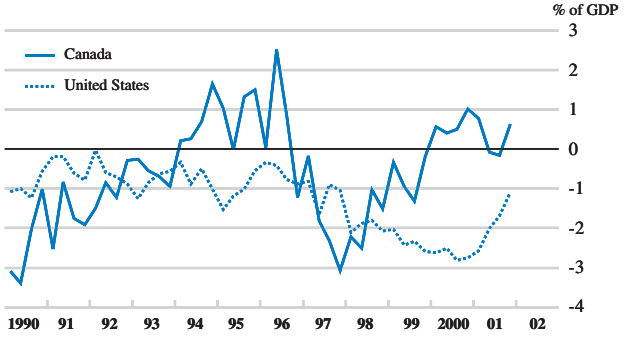
Many of the developments observed in the United States have also been reflected in Canada. Private consumption fell in the third quarter but has since rebounded vigorously, especially in cars, sales of which also benefited from unusually attractive purchase incentives. The housing sector too has followed a parallel trajectory, with a sharp jump in units started and resales, thanks to continent-wide mild autumn and winter weather and historically low mortgage rates. As in the United States, exports experienced a year-long erosion. Business investment also ended the year on a weak note, led by industrial machinery and telecommunications equipment. However, the decline was much more moderate than in the United States, perhaps because the overhang of capital was less significant and the corporate financing gap more favourable. Finally, the excessive level of inventories has also been largely worked off, except in the manufacturing sector.

Canada

A household-led recovery is underway



The corporate financing gap is more favourable2



1. 3-month moving average.
2. Financing gap: non-financial corporate cashflow less investment.

Source: Statistics Canada; Board of Governors of the Federal Reserve System.

Canada: **Employment, income and inflation**

Percentage changes

	1999	2000	2001	2002	2003
Employment	2.8	2.6	1.1	1.6	1.7
Unemployment rate[a]	7.6	6.8	7.2	7.6	7.2
Compensation of employees	5.9	6.8	4.2	4.5	5.2
Unit labour cost	0.8	2.3	2.7	1.2	1.1
Household disposable income	5.0	5.6	4.3	4.5	4.9
GDP deflator	1.4	3.7	1.2	0.5	2.0
Consumer price index	1.7	2.7	2.5	1.9	2.2
Private consumption deflator	1.6	2.0	1.9	1.8	1.9

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

Employment has held up well, as job creation has continued

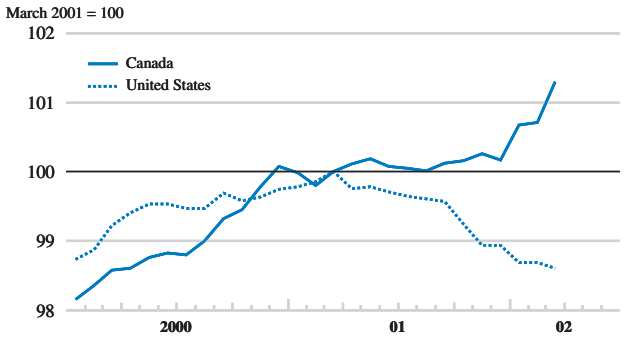
Unlike in the United States, the labour market experienced only moderate adjustment in 2001, through shortened hours and an increased share of part-time workers. There was no decline in employment; indeed, labour inputs have risen sharply thus far this year. Nonetheless, unemployment is still much higher than last summer because of an increase in participation. In view of the reduction in the average work week in 2001, output per worker slowed, even as hourly productivity growth picked up. This resulted in a significant deceleration in real labour income gains. At the same time consumer price inflation has headed back down, with year-over-year increases in the headline measure, as well as that excluding food and energy, below the midpoint of the Bank's target range. In the second half of 2001 energy and other primary product prices plunged, leading to a marked decline in the terms of trade and the current account surplus.

Financial conditions are still quite stimulative

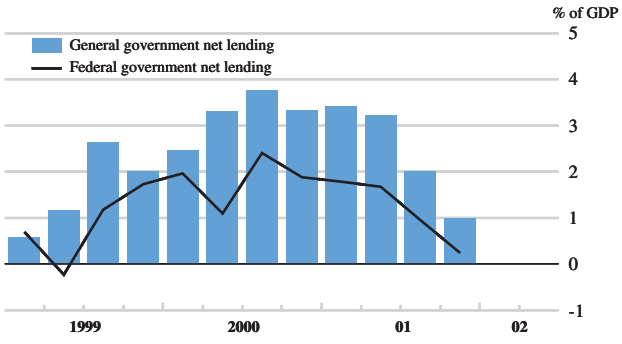
Financial conditions are still supplying a substantial stimulus. The Bank of Canada cut its policy rates by a total of 375 basis points from the beginning of 2001 – nearly as much as in the United States – before increasing them in April 2002. Similarly, some of that has been offset by a steepening yield curve, as long-term rates began to reflect investors' anticipation of the recovery. Stock markets have recently recovered some ground, though they remain nearly 30 per cent below their

Canada

Total employment has continued to grow



The budget surplus has decreased



Source: Statistics Canada ; OECD.

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Canada: **Financial indicators**

	1999	2000	2001	2002	2003
Household saving ratio[a]	4.2	3.9	3.6	3.5	3.4
General government financial balance[b]	1.6	3.2	2.4	1.0	1.1
Current account balance[b]	0.2	2.5	2.7	1.9	2.0
Short-term interest rate[c]	4.9	5.8	4.0	2.7	4.5
Long-term interest rate[d]	5.7	5.9	5.8	6.0	6.3

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

all-time highs recorded nearly two years ago. Yet, unlike the US currency, the Canadian dollar has not risen much in recent years. Indeed, it fell to another all-time low against the US dollar in January, although in effective terms it has been steadier. As elsewhere in the OECD, narrow money growth has been increasingly robust.

Fiscal policy has been eased

All levels of government used their room for manoeuvre to relax the fiscal purse strings in 2001, especially towards the end of the year. The national-accounts measure of the surplus shrank by more than 2 percentage points of GDP during the second half; about two-thirds of that was at the federal level. The provincial and territorial surplus also declined last year, in large part because of an increase in subsidies. In the December 2001 federal budget, spending was raised by around CAD 2.5 billion (about ¼ percentage point of GDP) per year (especially on security-related matters and on health, human capital, infrastructure and the environment). This was partly offset by a new security charge on travellers which will bring in almost CAD ½ billion per year.

Canada: **Demand and output**

	1998	1999	2000	2001	2002	2003
	Current prices billion CAD	Percentage changes, volume				
Private consumption	534.4	3.4	3.6	2.5	2.8	3.1
Government consumption	176.8	2.6	2.2	2.2	2.5	2.5
Gross fixed investment	181.6	7.3	6.7	1.0	2.5	5.0
Public[a]	20.0	12.3	7.6	6.8	6.0	3.5
Residential	42.5	5.3	2.7	4.4	9.8	2.6
Non-residential	119.1	7.2	8.0	-1.2	-0.7	6.2
Final domestic demand	892.8	4.1	4.0	2.1	2.6	3.4
Stockbuilding[b]	5.8	-0.1	0.5	-1.3	0.0	0.5
Total domestic demand	898.6	4.0	4.5	0.7	2.7	3.9
Exports of goods and services	377.3	9.9	7.6	-3.7	2.8	9.1
Imports of goods and services	360.3	7.3	8.1	-5.7	1.6	9.5
Net exports[b]	17.1	1.3	0.2	0.7	0.6	0.3
Error of estimate[b]	0.1	-0.1	0.0	0.2	0.1	0.0
GDP at market prices	915.9	5.1	4.4	1.5	3.2	4.0

Note: National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see *OECD Economic Outlook* Sources and Methods, *(http://www.oecd.org/eco/sources-and-methods).*
a) Excluding nationalized 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**

	1999	2000	2001	2002	2003
			$ billion		
Merchandise exports	245.9	284.5	266.6	259	288
Merchandise imports	220.1	244.6	226.8	225	251
Trade balance	25.9	39.9	39.8	34	37
Invisibles, net	- 24.7	- 21.8	- 20.9	- 21	- 22
Current account balance	1.2	18.1	18.9	13	15
			Percentage changes		
Merchandise export volumes [a]	11.0	8.7	- 3.9	3.4	9.3
Merchandise import volumes [a]	8.7	9.5	- 5.9	1.8	9.9
Export performance [b]	- 0.2	- 4.7	- 0.2	0.9	0.4
Terms of trade	1.8	4.8	- 0.7	- 3.3	0.1

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

The Budget also did away with the prudence factor and squeezed the contingency reserve. Based on assumed real growth of around 1 per cent in 2002, the official outlook was for a zero public sector balance at the federal level (abstracting from the reserve), with any incipient surplus devoted to debt reduction and resulting interest savings assigned to aid to Africa and to public infrastructure. With much stronger projected activity and a continued surplus in the public pension plans, the OECD expects that the general government surplus will stabilise near the level of 1 per cent of GDP reached in the last quarter. This would still be a sizeable reduction in its structural level.

A moderate recovery should eliminate economic slack quite soon...

The evidence that recovery is underway is now clear. Besides the surge in retail sales and housing starts, the composite leading indicator, the evolution of which was more favourable than in other major countries all last year, is now growing at a vigorous rate. With some of the effect of the monetary easing of 2001 still to come and a decidedly easier fiscal stance, the pick-up in export market growth resulting from the US rebound should be more than enough to put the Canadian economy firmly on an unemployment-reducing growth path. On the domestic front, private consumption and residential investment should continue to lead the way, but production is expected to be boosted as well by a slowing in the pace of inventory reductions this year and some restocking in 2003. Growth should also be bolstered by the acceleration in exports, which is likely to be followed by a rise in business investment, powered by renewed capacity constraints and rebuilt profit margins. To head off higher wage and price pressures, the Bank of Canada is assumed in the OECD's projections not only to match US tightening later this year and next but to increase the interest rate spread to about double its recent size. Nonetheless, with potential growth of around 3 per cent per year, the modest amount of slack that had recently been built up is unlikely to be sufficient to prevent inflation from edging up, especially in view of recent oil price rises. The current account surplus should resume its upward trend thanks initially to rising net export volumes, followed by the effects of stronger commodity prices.

... with external and domestic risks

Given its key trading relationship with the United States, a major risk is, as usual, the timing and strength of the recovery there. Domestic risks probably centre more on the supply than on the demand side, with considerable uncertainty as to the underlying trend in productivity and the amount of economic slack.

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Australia

After a slow start, the economy gathered momentum during 2001, and overall growth was barely affected by the global slowdown in the second half, as robust domestic demand growth more than offset the pronounced weakening of exports. Given supportive monetary conditions, the improving global environment and the absence of major structural imbalances, the economy is projected to strengthen further. The combination of moderate wage increases and the pick-up in labour productivity should keep inflation within the Reserve Bank's 2 to 3 per cent target range.

Faster output growth should allow medium-term budget objectives to be met, against the background of prospective increases in health and pension outlays. Stronger economic activity could also justify a realignment of monetary policy to a more neutral setting. Further labour market reforms, in particular further expansion of enterprise bargaining, should aim at a reduction in still high structural unemployment.

Strong economic growth in the second half of 2001…

The economy has recovered from the slowdown in late 2000 and early 2001 and grew by 4¾ per cent in the second half of the year, driven by robust household consumption, business investment and especially residential construction. This was accompanied by high levels of business and consumer confidence as well as historically low interest rates, and share prices which remained close to their peaks. A generous subsidy to first-home buyers contributed to the very sharp recovery of dwelling investment.

… has combined with modest employment gains and low inflation

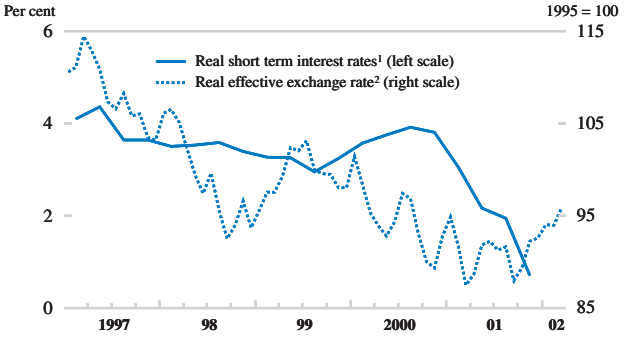
After remaining essentially flat in 2001, employment began to recover strongly in the first quarter of 2002. The unemployment rate fell markedly, to 6¼ per cent in March, about the same as a year earlier. After the GST effect dropped out, consumer price inflation returned to the Reserve Bank's 2 to 3 per cent target range in the second half of 2001, despite retailers' efforts to rebuild margins after their squeeze from earlier exchange rate depreciation. Good inflation performance was underpinned by wage moderation and very strong (hourly) labour productivity growth.

Monetary conditions remain supportive of activity…

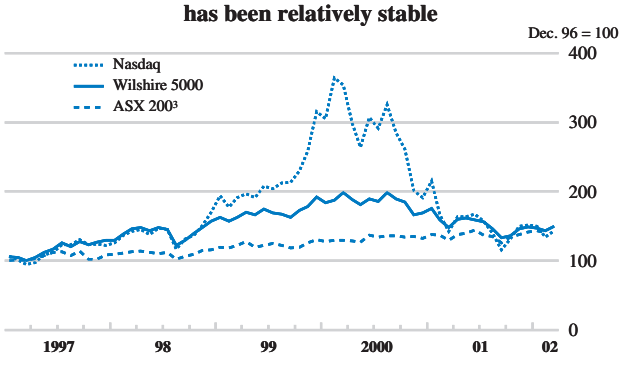
With inflation under control and the international environment still rather weak, the Reserve Bank cut the cash rate by another 25 basis points to 4.25 per cent in December 2001, reducing it to its lowest level in almost 30 years. Given that the trade-weighted exchange rate has recently appreciated, while domestic demand remains buoyant and the global picture is improving, the projections assume that policy-determined interest rates will be raised towards more neutral levels once the labour market shows clear signs of improvement.

Australia

Monetary conditions remain supportive



The Australian stock market has been relatively stable



1. 90-day bank accepted bill rate, deflated by core inflation estimates.
2. Consumer price index based.
3. Australian share price index.

Source: OECD, Datastream.

Australia: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion AUD	Percentage changes, volume				
Private consumption	344.9	5.1	2.7	3.2	4.0	3.7
Government consumption	104.0	4.2	5.4	1.2	1.5	2.0
Gross fixed capital formation	134.3	6.6	0.3	-3.0	8.3	6.5
Final domestic demand	583.1	5.3	2.6	1.4	4.4	4.0
Stockbuilding [a]	3.4	0.3	-0.5	-0.4	0.4	0.0
Total domestic demand	586.5	5.6	2.1	1.0	4.9	4.1
Exports of goods and services	114.7	4.6	10.6	1.1	2.8	7.8
Imports of goods and services	125.0	9.2	7.1	-4.4	8.0	8.0
Net exports [a]	- 10.4	-1.0	0.5	1.2	-1.1	-0.1
Statistical discrepancy [a]	0.0	-0.1	0.7	0.1	-0.1	0.0
GDP at market prices	576.1	4.5	3.4	2.4	3.7	4.0
GDP deflator	_	0.8	4.1	3.2	2.5	2.4
Memorandum items						
Consumer price index	_	1.5	4.5	4.4	2.8	2.6
Private consumption deflator	_	0.8	3.2	3.4	2.8	2.6
Unemployment rate	_	6.9	6.3	6.8	6.6	6.3
Household saving ratio [b]	_	2.1	4.2	3.6	3.6	3.6
General government financial balance [c]	_	1.6	0.1	0.0	0.1	0.2
Current account balance [c]	_	-5.4	-3.5	-2.2	-3.8	-3.9

Note: National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see *OECD Economic Outlook* Sources and Methods, *(http:// www.oecd.org/eco/sources-and-methods).*

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 emphasises medium-term consolidation

Following the counter-cyclical loosening of the fiscal stance in 2001, a gradual tightening is expected to bring the budget back to surplus during the projection period in order to meet the government's medium-term objective of balance over the course of the economic cycle. In this regard, the government has decided to reduce the grants paid to first-time home buyers.

The economy remains well placed to outperform global growth in 2002-03

Economic growth is expected to accelerate. Household consumption is likely to continue supporting activity, reflecting unusually low interest rates and the sound financial position of households. The projected improvement in the labour market should help underpin consumer confidence. Dwelling construction may slow. But surveys suggest that business investment is picking up, encouraged by strong corporate profitability, very favourable financing conditions and a still competitive exchange rate. Exports are expected to recover, accelerating in 2003 in line with export market developments, but with import volume growth turning positive, the current external deficit is set to widen again, from somewhat above 2 per cent of GDP in 2001 to around 3¾ per cent in 2002-03. Altogether, GDP growth may rise to 3¾ per cent in 2002 and to 4 per cent in 2003. With potential output estimated to be expanding at about a 3½ per cent rate, an output gap will remain, which will help to keep inflation at bay.

Risks are fairly balanced

The risks attached to the projections appear fairly balanced. Weighing on the downside is the fragility of the Japanese economy while a sharper than expected recovery in other major Australian markets could generate additional demand pressures, which could leave inflation above target for longer than acceptable.

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Austria

Economic activity weakened across the board during 2001, particularly in the second half of the year as confidence continued to decline. The economy is only expected to pick up significantly from around mid-2002, leaving annual growth broadly unchanged at 1¼ per cent before returning to growth which is well above potential in 2003.

The slowing of economic activity has made balancing the budget difficult in 2002. Provided the planned fiscal consolidation measures at all levels of government are fully implemented, budget balance should be restored next year. However, long-term fiscal sustainability requires the replacement of one-off revenue measures with lasting savings.

Economic growth decelerated in 2001…

The economy contracted in the second half of 2001. Private consumption growth weakened as real income growth was reduced by falling employment and higher taxes, although the impact was mitigated by a lower household savings rate. Export growth slowed as the 11 September terrorist attacks in the United States accentuated the ongoing deceleration in world trade. The slowing of demand reduced the growth of investment in machinery and equipment, while construction investment weakened further as public investment and residential construction continued to contract. In early 2002, however, both consumer and business confidence showed signs of improvement.

… accompanied by an increase in unemployment and easing inflation

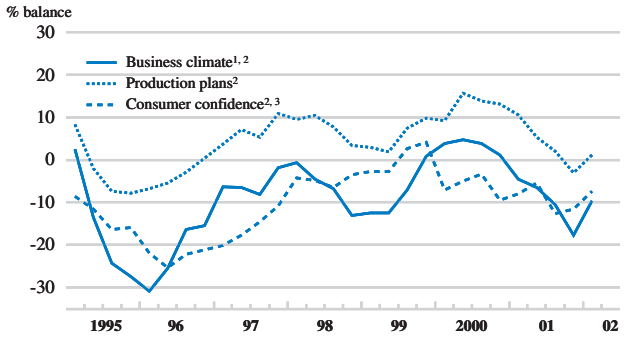
While employment contracted in the second half of 2001 and into 2002, the labour supply continued to expand. Reflecting these trends, the registered unemployment rate (seasonally adjusted) in early 2002 was more than 1 percentage point higher than its cyclical low at the end of 2000. Last autumn's wage negotiations for 2002 resulted in growth of 2½ per cent in collectively-negotiated wages, somewhat lower than the year before. Consumer price inflation peaked in May 2001 before coming down by almost 1¼ percentage point to 1¾ per cent in early 2002 in response to lower oil prices and as the effects of earlier hikes in indirect taxes disappeared.

Slowing economic activity is putting the balanced budget under pressure

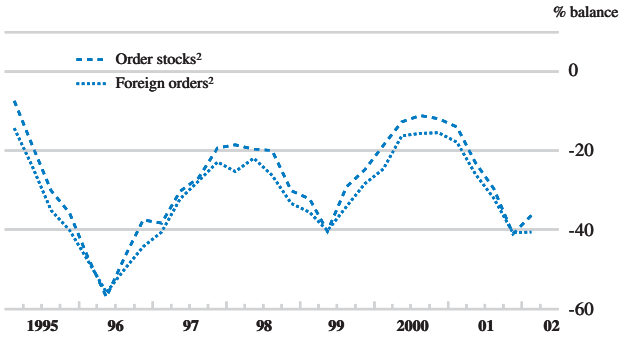
The federal and local governments broadly balanced the general government budget in 2001 with the structural balance improving by about 2 per cent of GDP. This was achieved by expenditure restraint and revenue raising measures as well as unexpectedly high business tax revenues and low interest payments. However, the

Austria

Confidence has started to recover



Orders are stabilising



1. Anticipated business conditions.
2. Seasonally adjusted. Balance of positive-negative replies.
3. The data point in Q1 2002 refers to the average of January and February 2002.

Source: WIFO Institut für Wirstchaftsforschung and OECD.

Austria: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	108.5	2.7	2.5	1.3	1.6	2.2
Government consumption	37.2	2.2	0.9	-0.2	0.0	0.5
Gross fixed capital formation	44.8	1.5	5.1	-1.5	0.3	4.4
Final domestic demand	190.5	2.3	2.8	0.3	1.0	2.4
Stockbuilding [a]	1.3	0.2	-0.3	-0.3	-0.2	0.1
Total domestic demand	191.8	2.5	2.4	0.1	0.7	2.5
Exports of goods and services	82.7	8.7	12.2	5.5	4.7	8.0
Imports of goods and services	83.8	8.8	11.1	3.6	3.9	7.6
Net exports [a]	- 1.1	0.0	0.5	1.0	0.5	0.4
GDP at market prices	189.9	2.8	3.0	1.0	1.2	2.8
GDP deflator	_	0.7	1.2	1.8	1.5	1.9
Memorandum items						
Consumer price index	_	0.5	2.0	2.3	1.7	1.7
Private consumption deflator	_	0.7	1.5	2.3	1.8	1.7
Unemployment rate [b]	_	5.3	4.7	4.9	5.6	5.1
Household saving ratio [c]	_	7.7	6.7	5.4	5.5	6.1
General government financial balance [d]	_	-2.4	-1.7	-0.1	-0.3	0.0
Current account balance [d]	_	-3.2	-2.8	-2.3	-1.8	-1.6

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 disposable income.
d) As a percentage of GDP.
Source: OECD.

modest expansion of the economy projected for this year will make it difficult to preserve a balanced budget despite downward revisions of some projected spending items, such as interest payments. A December stimulus package (focusing on measures to stimulate research and development (R&D), education and investment) has a limited budgetary effect in the short term. In sum, a small deficit is likely to reappear in 2002 but stronger growth should allow balance to be restored in 2003.

Economic activity should pick up during the course of 2002…

Economic activity is projected to accelerate from around mid-2002, as the effects of accommodating monetary conditions come through and world trade picks up. Thereafter, growth should fairly quickly rise above the estimated potential rate of around 2½ per cent. Private consumption should pick up as real disposable incomes increase, partly on account of higher family benefits. Investment in machinery and equipment is expected to recover rather strongly in 2003 as profits increase in the face of projected wage moderation and higher productivity growth. Construction investment, on the other hand, is likely to remain subdued, with little stimulus coming from housing demand and government investment. Government consumption is also being restrained by the fiscal consolidation. In total, GDP growth is projected to remain at around 1¼ per cent in 2002 before recovering to 2¾ per cent in 2003. Consequently, employment growth should accelerate strongly only in 2003. This is likely to be accompanied by somewhat higher wage increases. Underlying inflation is expected to remain subdued, while headline inflation is pushed up by higher energy prices.

… with evenly balanced risks

A downside risk is that a failure to fully implement the fiscal consolidation programme could lead to negative confidence effects, dampening domestic demand. On the upside, an earlier and faster recovery in Europe could benefit Austria's cyclically-sensitive intermediate goods industries.

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Belgium

Economic growth fell sharply in 2001 and is projected to recover only slowly, to 2¾ per cent in 2003. Despite a deceleration in unit labour costs, Belgium is expected to suffer a further loss of competitiveness against its main trading partners, weighing on growth in output and employment. Inflation should decline to 2 per cent by 2003, reflecting smaller increases in energy prices and the abolition of television licence fees in Flanders and Brussels.

Modest wage increases will be needed if a further loss of cost competitiveness is to be avoided. Incentives to work need to be strengthened, especially for the older working-age population, so as to raise the employment ratio.

Growth has slowed sharply but confidence has begun to recover

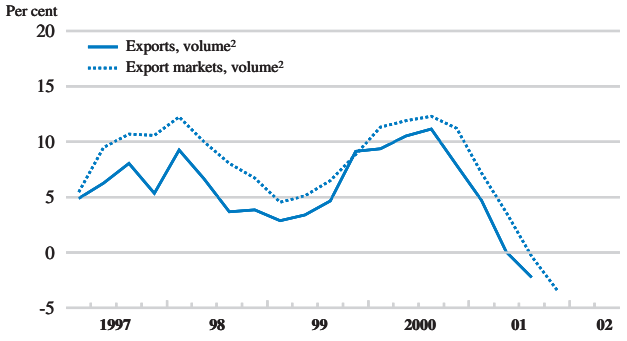
Economic growth continued to slow in the second half of 2001, falling to –0.8 per cent (annualised rate) in the fourth quarter and opening a negative output gap. As in the past, the timing of this economic cycle is leading that of the euro area by about one quarter, and the amplitude is greater as the Belgian economy is more open than most other euro area economies. Exports of goods and services have been very weak, contracting in each of the first three quarters of 2001 on the back of deteriorating export markets. Domestic demand also weakened over this period as private consumption expenditure was depressed by falling consumer confidence and business investment slowed in the face of worsening demand prospects, rising spare capacity and declining profitability. Employment growth has continued to slow progressively, following the path of economic activity with a lag of two to three quarters, with the unemployment rate rising to 6¾ per cent by early 2002, which is around the OECD estimate of the structural rate. Business and consumer confidence have improved in recent months, following large declines during most of 2001, suggesting that the bottom of this economic cycle may have been reached in early 2002.

A loss of competitiveness could weigh on the recovery

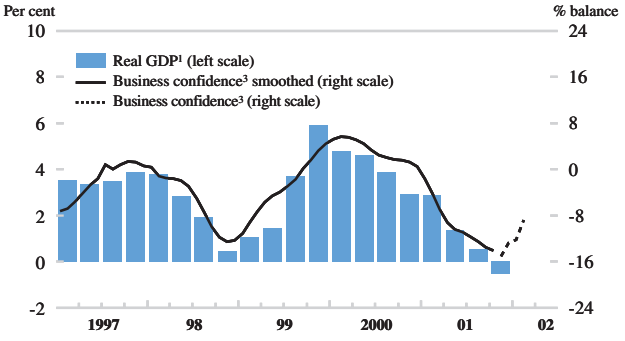
Growth in wage rates picked up in 2001 owing to automatic increases linked to underlying inflation (as measured by the "health index", which excludes most petroleum products and cigarettes and alcohol from the consumers price index). This contributed to a further loss of cost competitiveness *vis-à-vis* Belgium's main trading partners, which could weigh on the recovery. Moreover, even though index-linked wage increases should moderate, there may be a further loss of competitiveness in 2002 owing to more favourable labour cost developments in Belgium's main trading partners. Subsequent developments will depend crucially on the outcome of the

Belgium

Export growth has slowed[1]



Business expectations have started to recover



1. Year-on-year percentage changes.
2. Goods and services.
3. Monthly, seasonally adjusted.

Source: National Bank of Belgium, National Accounts Institute and OECD.

Belgium: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	122.7	2.1	3.8	1.7	1.0	2.2
Government consumption	47.7	3.2	2.5	2.1	0.9	1.4
Gross fixed capital formation	46.5	3.3	2.6	0.3	0.7	3.2
Final domestic demand	216.9	2.6	3.3	1.5	0.9	2.2
Stockbuilding [a]	- 0.4	-0.4	0.5	-1.0	0.5	0.0
Total domestic demand	216.5	2.2	3.8	0.4	1.5	2.3
Exports of goods and services	169.7	5.0	9.7	-0.4	1.0	7.4
Imports of goods and services	160.3	4.1	9.7	-1.3	1.4	7.2
Net exports [a]	9.4	0.9	0.5	0.6	-0.2	0.6
GDP at market prices	225.9	3.0	4.0	1.1	1.1	2.7
GDP deflator	_	1.2	1.3	1.8	2.4	2.5
Memorandum items						
Consumer price index	_	1.1	2.7	2.4	1.8	2.0
Private consumption deflator	_	1.0	2.2	2.2	2.2	2.3
Unemployment rate	_	8.6	6.9	6.6	6.7	6.7
Household saving ratio [b]	_	14.4	12.8	12.6	13.0	12.4
General government financial balance [c]	_	-0.6	0.0	0.2	0.0	0.0
Current account balance [c]	_	5.1	4.4	5.0	5.0	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.
Source: OECD.

next round of wage negotiations in Belgium, relating to 2003-04, and on the results of similar negotiations in the other countries.

The cyclical deterioration in the budget balance is being offset

The government has taken steps on both the expenditure and revenue side to maintain a balanced budget in 2002 despite a cyclically-weak economy. This has been done with a view to ensuring that public debt continues to fall rapidly in relation to GDP and that the resulting savings in debt interest payments are fully available for further fiscal reform. Personal income tax reform is being phased in over 2002-06. This will reduce tax revenue by 0.3 percentage point of GDP in 2002 and 2003. Further reductions in employers' social security contributions are scheduled for 2002-03, albeit smaller than in recent years. The tax rate on corporate profits is also being cut in 2003, but this has no effect on the budget balance, as there is a compensating widening of the corporate profits tax base.

Growth should exceed potential by 2003

Economic recovery should strengthen during the course of 2002, leading to growth of around 2¾ per cent in 2003, slightly above potential but a little below the euro area average owing to a loss of cost competitiveness. Employment growth is likely to increase with a lag, but not by enough to avoid a rise in the unemployment rate to 7 per cent. Inflation is projected to decline to 2 per cent in 2003, reflecting smaller increases in energy prices but also the abolition of television licence fees in Flanders and Brussels which reduces consumer price inflation by 0.3 percentage point in 2002 and 2003. The main risk to the outlook is that energy prices could be higher than expected, which would increase inflation and reduce economic growth. There is also a risk that high wage increases could further reduce international competitiveness, weighing on output and employment growth.

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Czech Republic

The economy continued to grow at around 3 per cent since spring 2001, with expansionary domestic consumption and investment compensating for strongly decelerating foreign trade. Falling international prices, together with an appreciating currency, contributed to a slowdown of inflation. Given presently weak external demand and somewhat subdued investment, GDP growth is projected to be slower this year than last, picking up in the second half and strengthening further in 2003.

Fiscal policy is loose and needs to be tightened. At the same time, the fiscal and monetary authorities need to cooperate even more closely to reduce the impact of the massive foreign direct investment inflows, resulting from privatisation of public utilities as well as greenfield projects, on the value of the Czech koruna. Privatisation-related inflows should be sterilised in a special foreign-exchange account set up by the Central Bank.

Foreign trade growth has decelerated, while inflation has declined

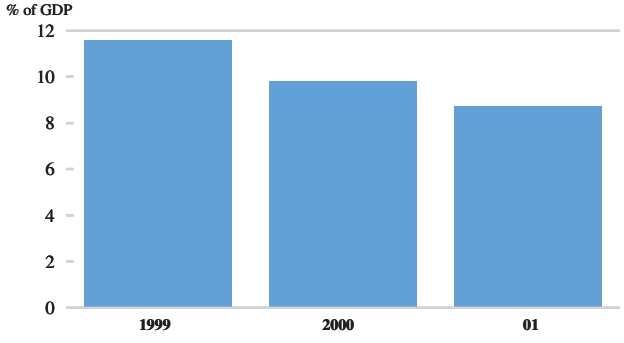
Export expansion slowed in the last quarter of 2001 as export markets weakened. But the merchandise trade balance improved, with exports of goods decelerating less than imports. Massive foreign direct investment (FDI) inflows and robust capital formation continued, reflecting mainly investment incentives and further advance in the privatisation of the banking sector. The pace of consumer inflation declined to below 4 per cent, partly due to falling energy and food prices. Unemployment fell towards 8 per cent, although in the context of a shrinking labour market.

Fiscal policy is loose while monetary conditions have tightened

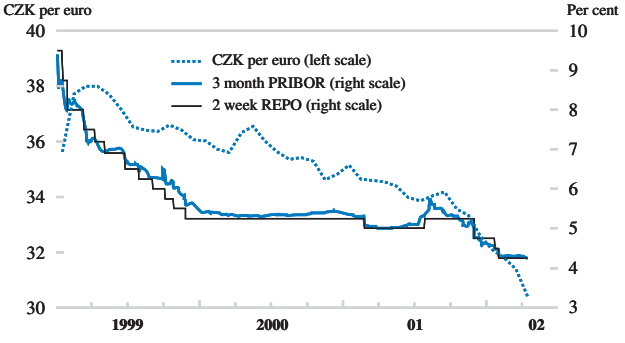
Fiscal policy is on a strongly expansionary path, with the general government deficit expected to rise this year towards 9 per cent of GDP (on the Government Financial Statistics basis), reflecting the costs of restructuring the banking sector and additional spending on social security and public wages prior to the general election in June 2002. Buoyant FDI inflows have kept the koruna under upward pressure and have thereby contributed to a tightening of monetary conditions. The Central Bank has prevented an even stronger appreciation by cutting interest rates and intervening in the foreign exchange market.

Czech Republic

Foreign direct investment has been strong



The exchange rate has appreciated while interest rates have declined



Source: Czech National Bank; OECD.

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

	1998	1999	2000	2001	2002	2003
	Current prices billion CZK	Percentage changes, volume (1995 prices)				
Private consumption	962.4	1.9	1.9	3.7	3.2	3.5
Government consumption	346.5	-0.1	-1.3	-1.0	1.0	0.5
Gross fixed capital formation	532.2	-0.6	4.2	7.0	5.4	6.9
Final domestic demand	1 841.2	0.8	2.0	4.0	3.6	4.1
Stockbuilding [a]	22.0	-1.4	1.7	1.8	0.0	0.0
Total domestic demand	1 863.2	-0.5	3.7	5.6	3.4	4.0
Exports of goods and services	1 076.0	6.3	17.1	12.0	7.0	11.2
Imports of goods and services	1 102.2	5.4	17.0	13.7	7.1	10.8
Net exports [a]	- 26.1	0.2	-1.0	-2.4	-0.8	-0.7
GDP at market prices	1 837.1	-0.4	2.9	3.6	3.0	3.7
GDP deflator	_	3.1	0.9	5.7	4.0	3.3
Memorandum items						
Consumer price index	_	2.1	3.9	4.8	3.2	3.3
Private consumption deflator	_	3.8	2.8	3.6	3.0	3.2
Unemployment rate	_	8.8	8.9	8.2	8.6	8.6
Household saving ratio [b]	_	18.3	14.0	13.8	14.7	15.3
General government financial balance [c,d]	_	-7.6	-5.5	-4.6	-8.7	-7.8
Current account balance [c]	_	-2.9	-5.6	-4.7	-4.7	-4.0

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) On the GFS basis; net of privatisation revenues.
Source: OECD.

Economic growth will pick up from the second half of 2002

GDP growth is expected to slow to about 3 per cent in 2002 in response to subdued international and European demand and new market uncertainties. Investment spending and private consumption are both projected to decelerate in the first half of the year. Thereafter, recovery in western Europe, together with improved production potential resulting from ongoing industrial restructuring driven by FDI firms, should result in output growth picking up to over 3½ per cent in 2003.

Eroding competitiveness and a weaker European recovery are downside risks

The continued privatisation of public utilities and new greenfield projects are bound to entail massive FDI inflows. Market expectations of growing privatisation receipts have strengthened the currency to an extent that damages competitiveness of Czech exporters. In order to dampen the currency appreciation, the Government has agreed in principle to co-operate with the Central Bank in sterilising the foreign-exchange inflows associated with privatisation. However, this agreement has yet to be fully implemented. Risks to the expansion from further competitiveness losses would be amplified by a delayed recovery in Germany. This would cause additional problems for major exporters who target the European market and probably result in a slower pace of FDI inflows.

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Denmark

Activity in the Danish economy is gradually picking up as households benefit from robust real disposable income and businesses respond to brighter prospects with higher investment. Improving international conditions should add further momentum. Unemployment remains low and labour market pressures may re-emerge, placing upper limits on the rate of expansion.

The neutral fiscal stance is appropriate. Policy attention should focus on raising labour supply to ease capacity constraints. This would allow a faster rate of expansion to be sustained without fear of inflationary pressures building up.

Recovery in activity is underway

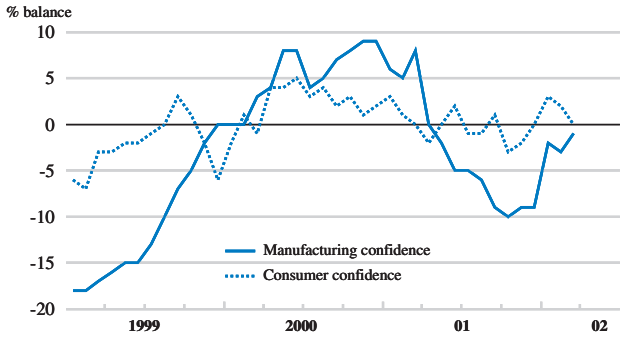
The pace of activity started picking up in the second half of 2001, with the economy expanding by almost 1½ per cent at an annualised rate despite the international slowdown. Business investment has also returned to a positive path after a sharp downturn in the first half, reflecting increased confidence in future market prospects. Despite slower growth, employment expanded by close to ½ per cent in 2001, and the standardised unemployment rate fell to 4¼ per cent. The labour market has remained tight, with unemployment low, and wage growth moderating only slightly. Real household disposable incomes rose by around 1½ per cent and, with private consumption increasing by only ½ per cent, these income gains went into savings. Consumer confidence weakened in the autumn, but turned upward again by the end of the year before faltering slightly in early 2002.

Fiscal policy remains neutral…

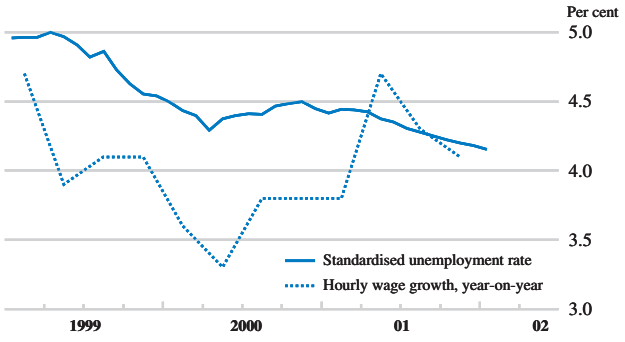
Fiscal policy remains neutral, and the general government surplus is expected to remain above 2 per cent of GDP this year and next. The new administration has reiterated the importance of maintaining sound public finances in preparation for the future pressures of ageing populations, and the "tax-freeze" is designed to put more downward pressure on public expenditures. This year's expansion of public consumption by a projected 1¼ per cent largely reflects local authority budget plans already decided before the change of policy. It is assumed that the state will take a firmer position on local authority spending in negotiations over next year's budgets, but growth in public consumption may prove difficult to rein in, especially given the government's ambition to devote additional resources to health and education.

Denmark

Confidence has been recovering



The labour market remains tight



Source: Statistics Denmark; OECD.

Denmark: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion Dkk	Percentage changes, volume (1995 prices)				
Private consumption	581.3	0.2	-0.4	0.6	1.2	1.9
Government consumption	300.5	1.8	0.6	1.4	1.3	0.8
Gross fixed capital formation	240.3	1.0	10.7	0.0	2.8	2.9
Final domestic demand	1 122.0	0.8	2.4	0.7	1.6	1.9
Stockbuilding [a]	10.1	-1.3	0.2	0.4	0.0	0.0
Total domestic demand	1 132.1	-0.5	2.6	1.1	1.6	1.9
Exports of goods and services	413.4	10.8	11.5	3.1	2.9	6.9
Imports of goods and services	390.1	3.3	11.2	3.8	2.4	6.6
Net exports [a]	23.3	2.8	0.6	-0.1	0.3	0.4
GDP at market prices	1 155.4	2.3	3.0	0.9	1.9	2.2
GDP deflator	_	2.7	3.7	2.7	1.8	2.5
Memorandum items						
Consumer price index	_	2.5	2.9	2.4	2.1	2.2
Private consumption deflator	_	2.6	3.0	2.1	2.1	2.1
Unemployment rate	_	4.8	4.4	4.3	4.3	4.2
Household saving ratio [b]	_	1.7	4.0	5.1	5.2	5.5
General government financial balance [c]	_	3.2	2.5	2.8	2.2	2.3
Current account balance [c]	_	1.7	1.6	2.5	1.9	2.5

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.
Source: OECD.

… and monetary policy mirrors euro area developments

Monetary policy settings will continue to reflect developments in the euro area in order to keep the Danish krone within narrow bands around its central parity rate *vis-à-vis* the euro. Official euro interest rates are projected to start moving upwards again around the end of this year, which would also be broadly appropriate for Danish conditions.

The pace of activity is projected to pick up steadily

Output is projected to expand at a gradually increasing rate over this year and next, with real GDP growth of around 2 per cent expected for 2002 and 2¼ per cent in 2003. The expansion is likely to be broadly based, with private consumption responding to the evolution of real household disposable incomes, business investments reflecting more buoyant demand prospects, and public consumption continuing to increase, albeit at a slower rate next year. The recovery in exports is likely to be clearly visible by the second half of this year, and in 2003, on average, they are projected to grow at around 7 per cent, broadly maintaining market share.

Capacity constraints pose the main risk to growth

Employment growth is projected to be slightly more modest than last year, allowing productivity to return to trend after a weak outturn for 2001. Unemployment will remain low, and the main risk is that output will be constrained by the tight labour market and skill shortages will again re-emerge. This could lead to higher wage growth, with competitiveness eroding and inflation starting to creep upwards.

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Finland

Against the background of an international rebound and a strong rise in real disposable income, growth performance is set to improve following sluggish activity in 2001. By 2003 growth is projected to be slightly above its long-run potential of about 3¼ per cent. Unemployment is likely to edge up further for a while and downward pressures on inflation will remain for some time.

Given the prospect of exceeding the medium-term expenditure ceilings laid down for 2002, forthcoming spending reviews will need to be rigorous if the authorities' budgetary objectives for 2003 and beyond are to be met. The reform of the pension system should be completed, including increased incentives to work longer. Reforms of unemployment insurance are needed to continue to improve the incentives to find a regular job.

The Finnish economy appears set to bottom out

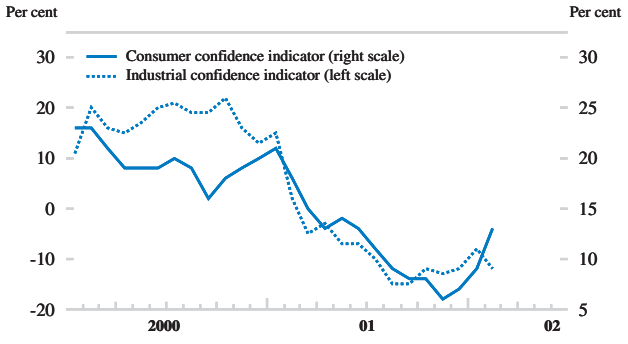
Finland's growth in 2001 was only 0.7 per cent, much weaker than in 2000 and below the euro area average for the first time since 1993. Following the downturn in the first half of 2001, which was driven by a collapse in exports due to the slump in the telecommunications equipment industry and cyclical forestry-related activities, the second half of 2001 showed the first signs of a recovery, notably in stronger exports. But sluggish activity had already begun to impact the labour market, the unemployment rate edging up since the middle of last year. In part due to relatively weak demand and lower oil prices, inflation measured by the harmonised consumer price index has remained close to the euro area average (2.6 per cent in March 2002), even though core inflation continues to be higher.

The government surplus continues to fall from the record high in 2000

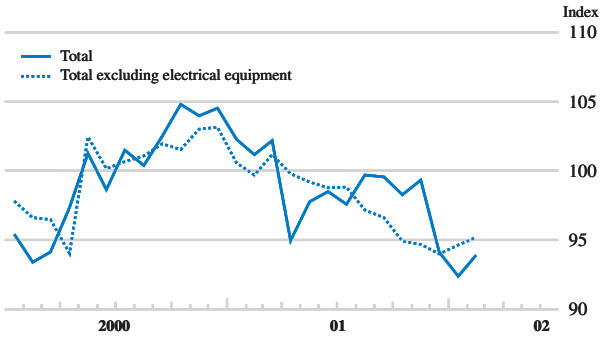
In 2001, the general government surplus was 4.9 per cent of GDP, down nearly two percentage points from 2000 due to the slowdown in economic activity, income tax cuts and a fall off in exceptionally high revenues on realised capital gains and stock options. The same factors, plus a more expansionary fiscal stance, are likely to lead to a further decline in the surplus to around 3 per cent of GDP in 2002 and 2003, with the central government budget perhaps in deficit.

Finland

Confidence has turned around[1]



Industrial production has remained weak[2]



1. Balance, seasonally adjusted data.
2. Seasonally adjusted data, indexed 2000 = 100. Electrical includes optical equipment.

Source: Statistics Finland and Eurostat.

Finland: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	58.2	4.0	2.2	1.4	2.1	2.4
Government consumption	25.1	1.9	-0.2	1.7	1.3	1.3
Gross fixed capital formation	21.7	3.0	4.8	2.1	-1.1	2.6
Final domestic demand	105.0	3.3	2.2	1.6	1.2	2.2
Stockbuilding [a]	1.1	-1.2	1.3	-0.8	0.1	0.0
Total domestic demand	106.2	2.0	3.6	0.7	1.4	2.2
Exports of goods and services	45.0	6.8	18.2	-0.7	2.7	9.0
Imports of goods and services	34.8	4.0	16.2	-1.0	3.0	7.9
Net exports [a]	10.2	1.6	2.6	0.0	0.3	1.5
GDP at market prices	116.0	4.1	5.6	0.7	1.5	3.4
GDP deflator	_	-0.2	3.2	2.2	1.2	2.0
Memorandum items						
Consumer price index	_	1.3	3.0	2.7	1.7	1.8
Private consumption deflator	_	1.0	3.8	2.7	1.7	1.8
Unemployment rate	_	10.3	9.8	9.1	9.4	9.3
General government financial balance [b]	_	1.9	7.0	4.9	3.2	3.3
Current account balance [b]	_	6.0	7.4	6.5	5.2	5.9

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 mild recovery is projected for 2002, with an acceleration in 2003

The improved export performance in late 2001, combined with the turnaround in consumer and business confidence, suggests that a recovery is already underway. However, the upturn is unlikely to become widespread before the second half of the year and hence only modest growth of around 1½ per cent is projected for 2002. With confidence expected to continue to buoy up domestic demand and with the pick-up in global activity boosting exports, output growth is likely to accelerate to nearly 3½ per cent in 2003. In the short term, weak economic performance continues to filter through to hiring and firing decisions and further increases in the unemployment rate are likely during 2002, followed by declines in 2003. The negative output gap combined with no further rise in the oil price beyond $25 should ensure further deceleration in inflation.

Recovery depends on the strength of ICT based export growth

The principle concern is whether the strong export growth in late 2001 and other positive signals are genuinely heralding the start of a sustained recovery. Much depends on the performance of information and communication technology (ICT) based exports. Although this sector has weathered the industry-wide downturn quite well, prospects for the immediate future are unclear and for 2003 and beyond they depend on a positive international consumer reaction to third-generation mobile telephony.

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Greece

After a rapid start, real GDP growth slowed in the second half of 2001, reflecting weakening domestic and foreign demand. Output growth, though expected to ease back year-on-year in 2002, is nevertheless continuing to outpace the euro area average, and is projected to pick up to around 4¼ per cent in 2003. Persisting labour market slack should lead to a fall in consumer price inflation, though rising demand pressures may pose a risk in this regard.

Fiscal policy needs to be more ambitious in reining in primary government expenditure to reduce the still-high debt ratio. A medium-term priority is the gradual further convergence of incomes to European Union levels via sustained non-inflationary growth. This would be facilitated by further progress in addressing labour market rigidities, a more determined opening to competition of network industries, and bold reforms of the pension system and of public sector management.

Growth has slowed and the current account deficit has narrowed…

Economic activity was buoyant in the first half of 2001, but conjunctural indicators point to weaker growth in the second half. For 2001 as a whole real GDP is estimated to have grown by around 4 per cent year-on-year, roughly the same rate as in 2000 and well above the euro area average. Domestic demand was the main engine of growth. The low level of interest rates, especially in real terms, the inflows from the third Community Support Framework and preparations for the 2004 Olympic Games all boosted activity. But sharply falling share prices and a weaker international outlook sapped confidence, while higher inflation dampened real disposable income. Although declining, average unemployment in 2001 remained high, at around 10½ per cent. The current account deficit narrowed somewhat in 2001, to 6.2 per cent of GDP, reflecting improvements in both oil and non-oil balances.

… while inflation is still above the euro area

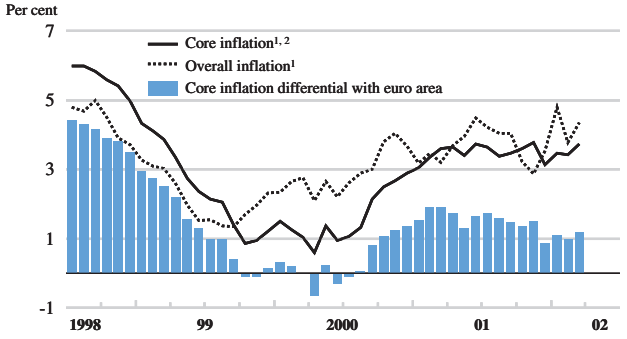
After rising during the first half of 2001, harmonised consumer price inflation fell back to 2.9 per cent in November because of lower oil prices, but accelerated again to 4¼ per cent in the first quarter of 2002. Core inflation has also moved upwards in the first quarter, although the differential with respect to the euro area has narrowed somewhat.

Monetary conditions remain easy while the fiscal balance has improved

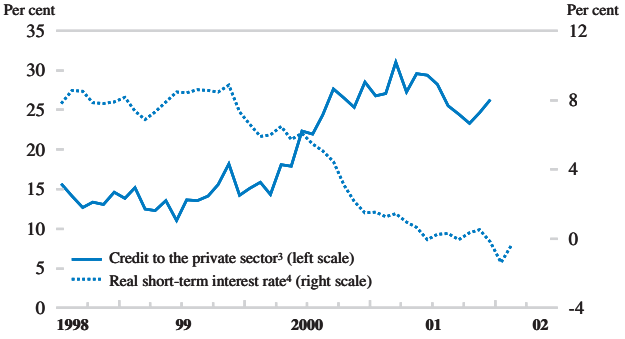
Real interest rates fell in tandem with rising inflation for much of 2001. Easier monetary conditions have been reflected in the rapid pace of credit expansion to the private sector, which had risen by an estimated 26 per cent, by the end of the year. The general government balance is estimated to have moved to a small surplus of

Greece

The inflation differential persists



Monetary conditions have eased with EMU entry



1. Harmonised index of consumer prices. Year-on-year percentage change.
2. Excluding energy, food, alcohol and tobacco.
3. Provisional data for December 2001.
4. Three-month interest rate. From January 2001, 3-month Euribor. Deflated using the harmonised index of consumer price.

Source: OECD; Bank of Greece.

Greece: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	75.9	2.9	3.3	3.2	2.8	3.2
Government consumption	16.2	0.9	0.7	1.8	-0.3	0.9
Gross fixed capital formation [a]	22.3	6.2	7.8	7.4	8.0	8.3
Final domestic demand	114.4	3.3	3.9	3.9	3.5	4.1
Stockbuilding [b,c]	0.2	-0.6	0.3	-0.1	0.0	0.0
Total domestic demand	114.6	2.7	4.1	3.8	3.5	4.1
Exports of goods and services	21.0	8.1	18.9	2.3	3.3	7.3
Imports of goods and services	29.8	3.6	15.0	1.9	3.5	6.2
Net exports [b]	- 8.8	0.6	-0.4	-0.1	-0.3	-0.2
GDP at market prices	105.8	3.6	4.1	4.1	3.5	4.2
GDP deflator	_	3.0	3.4	3.2	3.0	2.9
Memorandum items	_					
Consumer price index	_	2.1	2.9	3.7	3.4	2.9
Private consumption deflator	_	2.1	3.1	3.0	3.0	2.9
Unemployment rate	_	12.0	11.2	10.4	10.3	10.0
General government financial balance [d]	_	-1.7	-0.8	0.1 [e]	0.4	1.0
Current account balance [d,f]	_	-4.2	-6.7	-6.2	-5.9	-5.7

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) Including proceeds of sales of mobile telephone licences (around 0.4 per cent of GDP).
f) On settlement data basis.
Source: OECD.

0.1 per cent of GDP in 2001, compared with an original target of 0.5 per cent of GDP. Weaker than expected tax revenues were only partly offset by the sizeable proceeds of sales of mobile telephone licences (about 0.4 per cent of GDP). The 2002 Budget, which projects a surplus of 0.8 per cent of GDP, includes a new package of tax reductions and social measures. The OECD also expects a further increase in the surplus over the projection period, to 1 per cent of GDP in 2003, reflecting more efficient tax collection procedures, lower interest payments and cyclically-strong revenues. This is in line with the 2001 update of the Stability Programme which revised down the surplus targets, for 2002 and 2003.

Output growth may rebound in the course of 2002…

Output growth is expected to pick up again in the course of 2002, in line with developments in the international environment. However, given the weak carry-over from the end of 2001, year-on-year real GDP growth is likely to ease further to 3½ per cent in 2002, before edging up to around 4¼ percent in 2003. Completing the infrastructure for the 2004 Olympic Games, along with rising inflows from the European structural funds, should stimulate activity. Domestic demand is likely to be further strengthened by the implementation of the new tax/benefit package included in the 2002 Budget, and by low nominal and real interest rates now enjoyed by the Greek economy in the context of euro membership. Imports are expected to pick up strongly in 2003, but the recovery in world demand should also boost exports, keeping the real foreign balance contribution broadly unchanged.

… with a risk of inflationary pressures

Given the projected strength of the economy, and the possibility of faster earnings growth, a major uncertainty is whether low inflation can be maintained. Risks to activity appear balanced, depending mainly on the pace and timing of recovery in Europe.

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Hungary

Growth decelerated through 2001, but less so than in other countries as a sizeable fiscal impulse revived infrastructure and housing construction and strong wage growth stimulated private consumption. While a temporary loss of competitiveness may act to restrain activity, the projected international recovery should serve to return growth close to potential in the second half of 2002 and 2003.

Monetary conditions have tightened to preserve ambitious disinflation objectives in the context of fiscal loosening. Budget consolidation is needed in order to avoid even more stringent monetary conditions which would penalise domestic growth and trade performance.

GDP growth has been maintained by a large fiscal stimulus

GDP growth in 2001 decelerated less than in other countries, from 4.4 per cent in the first quarter to 3.3 per cent in the last (year-on-year). Industrial production, after increasing early in the year, declined during most of 2001. This reflects the sharp deceleration of export growth and the related contraction of private business investment. GDP growth was nevertheless kept at 3.8 per cent for the year as a whole, under the strong impulse of fiscal expenditures and of private consumption and housing spending, which were mostly due to government initiatives. Yet, aggregate growth remained below potential. With imports decelerating more than exports and tourism revenues exceptionally strong, the current account deficit diminished.

The appreciation of the currency is supporting the disinflation targets

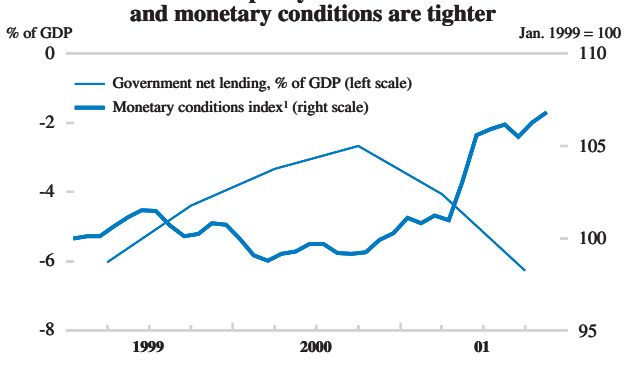
Labour market and inflation outcomes continue to be strongly influenced by policy factors. Minimum wages were raised by 57 per cent in January 2001 and 25 per cent in January 2002, and government wages increased strongly in 2001 with further rises announced for the current year. Private sector wages have followed, with a 6½ per cent real increase in 2001. Labour markets remain tight, dependent employment decreasing only slightly through 2001 and early 2002, while self-employment shows a trend increase and the labour force is shrinking. Inflation in the non-tradables sector has been very strong, averaging 11 per cent in 2001, but the strongly appreciating currency has kept downward pressure on prices in the tradables sector and permitted the Central Bank to reach its year-end inflation target of 7 per cent with ease.

Fiscal policy has loosened and more monetary tightening could follow

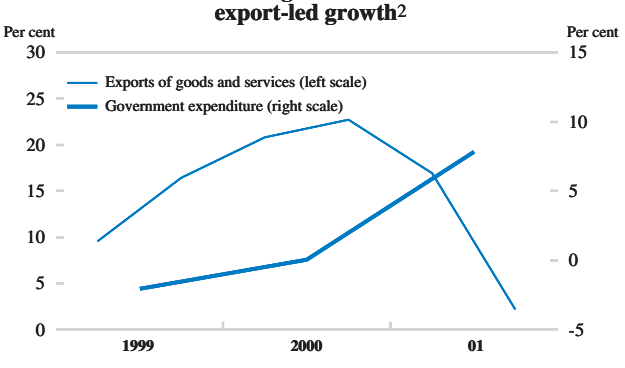
The two-year budget 2001-02 implies a stimulus of 2½ per cent of GDP in 2001 and a further ½ per cent or more in 2002. The 2002 outturn may be even more stimulative than envisaged, as more than one-third of the planned full-year deficit had already been attained at the end of February. This stimulus would need to be

Hungary

Fiscal policy has loosened and monetary conditions are tighter



Government-led growth has substituted export-led growth[2]



1. Measures the change in the real interest rate and the real exchange rate. See Sources and Methods.
2. Volume growth over previous period, annualised.

Source: National Bank of Hungary; OECD.

Hungary: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion HUF	Percentage changes, volume (1998 prices)				
Private consumption	5 120.5	5.4	4.5	5.1	4.6	4.9
Government consumption	2 186.9	1.5	2.8	0.0	2.1	2.2
Gross fixed capital formation	2 384.6	5.9	7.7	3.1	4.0	4.8
Final domestic demand	9 692.0	4.6	4.9	3.5	4.0	4.3
Stockbuilding [a]	607.8	-0.4	0.5	-1.2	0.0	0.2
Total domestic demand	10 299.7	4.0	5.1	2.1	3.8	4.4
Exports of goods and services	5 105.9	13.1	21.8	9.1	5.5	9.4
Imports of goods and services	5 318.2	12.3	21.1	6.3	5.9	9.5
Net exports [a]	- 212.3	0.1	0.0	1.7	-0.3	-0.1
GDP at market prices	10 087.4	4.2	5.2	3.8	3.5	4.3
GDP deflator	_	8.4	9.1	9.0	5.3	5.2
Memorandum items						
Consumer price index	_	10.0	9.8	9.2	5.5	5.1
Private consumption deflator	_	10.7	9.9	9.1	5.5	5.1
Unemployment rate	_	7.1	6.5	5.7	5.8	5.7
General government financial balance [b,c]	_	-5.2	-3.0	-5.2	-5.5	-4.4
Current account balance [b]	_	-4.4	-2.9	-2.1	-3.5	-3.1

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) OECD estimate which adjusts official data so as to increase international and intertemporal comparability.
Source: OECD.

reversed in the following two years (2003 and 2004), if the official pre-accession economic plan submitted to the European Commission is to be implemented. The fiscal loosening goes well beyond the working of automatic stabilisers and risks conflicting with the ambitious monetary objectives adopted after the monetary regime change in mid-2001, when the crawling peg was abandoned, the fluctuation band of the currency widened and new inflation targets dedicated to meeting the EMU inflation criteria within a few years introduced. Under the influence of capital inflows, the forint has subsequently appreciated about 10 per cent above its reference rate. At the same time, as unit labour costs stopped decreasing with wages growing above productivity, the real exchange rate on a unit labour cost basis is showing an upward trend for the first time since 1994. The resulting loss of competitiveness may rein in the strong performance of the Hungarian export sector in the short term.

The international recovery should push the economy closer to potential

The expected international recovery from the second half of 2002 should once again stimulate Hungarian exports, leading to a recovery of private business investment. With the fiscal stimulus projected to fade away, GDP growth is expected to be more balanced, remaining at 3½ per cent in 2002 and reaching around 4¼ per cent in 2003. Monetary policy is projected to tighten in order to reach the end-2003 inflation target of 3½ ±1 per cent. The output gap should decline but may not be fully reabsorbed over the projection period. The impact of competitiveness losses may deepen and extend into 2003 if fiscal policy loosens further than projected in the current electoral year, leading to more monetary tightening and further currency appreciation. Wage outcomes out of line with productivity gains and inflation targets would cause an additional deterioration in trade performance. Another risk to the present projections, also on the downside, would be a slower-than-expected recovery in Europe and in particular Germany, with direct impacts on the pace of Hungarian growth.

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Iceland

The economy is still contracting, but an export-led recovery is projected to commence around mid-year. With declining domestic demand weighing on import volumes, the unwinding of the large external imbalance has made good progress. Inflation has exceeded expectations, however, and may not fall to the official target by the end of next year, despite recent currency appreciation.

As long as prospects for attaining the inflation target do not improve, high interest rates will be required to establish the credibility of the new monetary policy framework and avoid a wage-price spiral with associated exchange-rate depreciation. Wage moderation and fiscal discipline would take some pressure off monetary policy and facilitate the return to a low-inflation environment.

The economic downturn has reined in the external deficit…

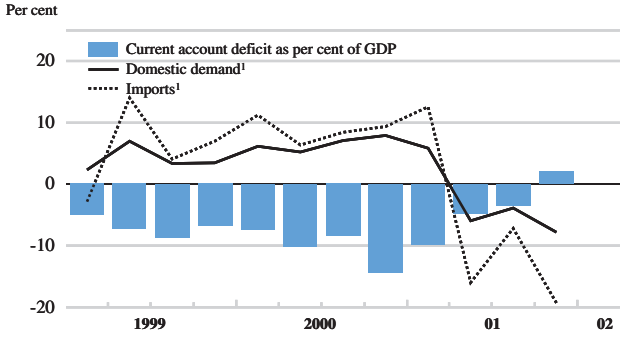
The decline in domestic demand in response to tightening monetary conditions in the late 1990s has continued in recent months. Private consumption and business investment have been running below year-earlier levels since the second quarter of 2001, as households have found it onerous to service the high debts built up during the consumption boom of the late 1990s. The downturn in business investment has been reinforced by the completion of several large projects. Although robust demand for marine products has underpinned exports, their growth contribution has diminished significantly, reflecting the economic downturn in trading-partner countries. At the same time, import volumes have contracted markedly. Together with an improvement in the terms of trade, this has made for a rapid narrowing in the current account deficit, which fell by half last year after reaching 10 per cent of GDP in 2000.

… but inflation has remained high

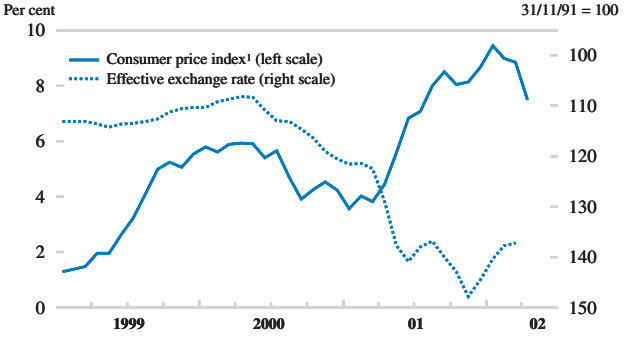
By contrast, limited progress has been made in bringing inflation down. The twelve-month increase in consumer prices approached 9½ per cent at the beginning of the year before receding to 7½ per cent. This reflects in part the tightness in product and labour markets at the onset of the current downturn. The unemployment rate has drifted upward over the past year or so but is still noticeably below its estimated structural rate of 3½ per cent. Moreover, after the massive currency depreciation in the spring of 2001, the exchange rate weakened again significantly in the autumn,

Iceland

The external balance has improved rapidly



Inflation has remained high



1. Year-on-year growth.
Source: Central Bank, National Economic Institut and Statistics Iceland.

Iceland: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion ISK	Percentage changes, volume (1990 prices)				
Private consumption	332.2	7.2	4.2	-2.8	-1.2	1.5
Government consumption	127.8	4.4	3.7	3.0	3.2	3.2
Gross fixed capital formation	138.8	-3.7	14.9	-6.0	-12.8	2.1
Final domestic demand	598.8	4.2	6.3	-2.5	-2.9	2.0
Stockbuilding [a]	0.9	-0.2	0.3	-0.7	0.0	0.1
Total domestic demand	599.7	4.0	6.6	-3.1	-2.9	2.1
Exports of goods and services	203.7	4.8	6.0	7.6	1.5	5.5
Imports of goods and services	230.1	5.5	8.7	-7.8	-4.0	5.0
Net exports [a]	- 26.3	-0.6	-1.6	6.3	2.2	0.2
GDP at market prices	573.4	3.7	5.5	3.0	-0.8	2.3
GDP deflator	_	3.4	3.0	9.1	5.8	3.7
Memorandum items						
Consumer price index	_	3.2	5.0	6.7	6.2	3.8
Private consumption deflator	_	2.7	4.6	7.8	6.0	3.4
Unemployment rate	_	1.9	1.4	1.5	2.5	2.6
General government financial balance [b]	_	2.4	2.5	-0.1	-0.5	-0.2
Current account balance [b]	_	-7.0	-10.1	-4.6	-1.8	-1.5

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.

adding to inflation pressures. Since then, it has tended to appreciate, partly because of an agreement between employers and trade unions to postpone the review (and eventual inflation-triggered revocation) of wage agreements to May.

Monetary policy may ease gradually, while the fiscal stance tightens

The firmer tone of the exchange rate is also attributable to the Central Bank's decision to refrain from interest-rate cuts following the early-November reduction. Although the Bank expected rapid disinflation, it felt that currency appreciation or greater economic slack was needed to achieve the target of 2½ per cent inflation next year. Nevertheless, given the ongoing strengthening of the krona, the Bank lowered interest rates in early April. On the assumption of constant exchange rates, the projections incorporate only a modest further decline in interest rates. They also embody some tightening in fiscal stance, based on official budget plans, following substantial easing last year, when expenditure overruns exceeded 1 per cent of GDP, mainly owing to higher-than-envisaged public-sector wage increases. Given tax reductions, this will require avoiding further fiscal slippage.

The economy seems set to recover, but there are inflation risks

The economy is likely to shrink this year, though not to the extent seen in the early 1990s. However, exports should accelerate in the second half of the year, reflecting market growth, a favourable competitive position, and the government's recent decision to raise fishing quotas for the current fishing year. Subsequently, domestic demand should also recover as real disposable income picks up. As a result, real GDP growth may exceed 2 per cent in 2003. Inflation should fall sharply as the effects of last year's currency depreciation wane, but is not expected to reach the official target in the absence of further exchange-rate appreciation. The current account is projected to keep improving. While exports might be even stronger than expected, risks to domestic demand would seem to be on the downside, given the assumption of continued high interest rates. Yet with inflation expectations above the official target, there is an upward risk to the price projections.

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Ireland

Exports are set to rise in the course of the year and, supported by robust public and private consumption, GDP is expected to accelerate strongly during 2002, with growth reaching some 6½ per cent in 2003. Inflation is likely to slow, while remaining well above the euro area average due to rapidly rising prices for domestic services.

For an economy experiencing a temporary downturn, the shift in fiscal stance from sizeable structural surplus to small deficit has been inappropriately large and suggests weakness in the budgetary system. Current public expenditures need to be better managed to avoid the choice of either allowing further fiscal slippage or cutting infrastructure investment.

Growth fell sharply in 2001 but sentiment is now improving

GDP fell in the second half of last year driven by falling information and communication technology (ICT) exports as well as by reduced tourism in the summer. Manufacturing investment declined in tandem with falling exports. The lower level of activity led to an increase in the historically low rate of unemployment during the second half, the first rise in five years. Nevertheless, consumption has remained robust. Business sentiment recovered in nearly all exporting sectors towards the end of last year and this was followed by rising orders at the start of this year.

Wage pressures and inflation remain high in the non-traded sector

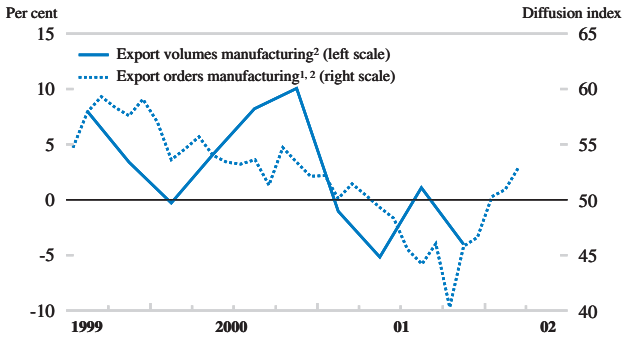
Despite the slowdown, wage pressures have remained strong. As a result, core consumer price inflation – in terms of the harmonised index of consumer prices (HICP) – continues to be well above the euro area average, reflecting a sharp increase in service prices, especially in the health and education sectors where employment has increased. With the effective exchange rate now relatively stable for some months, wholesale price rises for manufactures are slowing.

The structural budget surplus has turned to deficit

With the 2001 and 2002 budgets there has been a fundamental shift in the stance of fiscal policy from a structural surplus of around 2¾ per cent of GDP in 2000 to a deficit of around ½ per cent of GDP this year (after adjustment is made for one-off revenues). Not all of the 2001 deterioration was foreseen: indirect taxes were affected by a sharp drop in car sales among other factors, and income tax revenues were weak due to what appears to be, *inter alia*, an underestimation of the cost of tax changes. On the expenditure side, current spending on goods and services (national

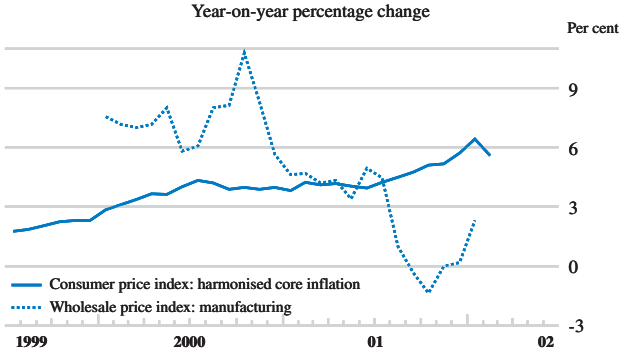
Ireland

Exports are set to rebound



Consumer prices are rising rapidly

Year-on-year percentage change



1. Above 50 indicates expansion.
2. Percentage change over preceding quarter.

Source: NCB Purchasing Manager's Index and Central Statistics Office.

Ireland: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	38.3	8.3	10.0	4.5	3.5	5.5
Government consumption	11.2	6.3	5.4	6.7	5.7	4.1
Gross fixed capital formation	17.0	13.5	7.3	1.1	-2.7	5.8
Final domestic demand	66.6	9.2	8.6	4.0	2.4	5.3
Stockbuilding [a]	1.2	-1.8	0.5	0.1	0.2	0.0
Total domestic demand	67.7	7.0	9.2	4.1	2.6	5.3
Exports of goods and services	66.8	15.7	17.8	7.4	3.3	9.4
Imports of goods and services	58.0	11.9	16.6	5.2	2.4	9.3
Net exports [a]	8.8	5.0	3.7	3.2	1.4	2.0
GDP at market prices	77.1	10.8	11.5	6.6	3.5	6.3
GDP deflator	_	4.2	4.7	4.2	4.0	3.7
GNP at market prices	67.7	8.2	10.4	5.7	2.9	5.1
Memorandum items						
Consumer price index	_	2.5	5.3	4.0	3.7	3.1
Private consumption deflator	_	3.3	5.1	4.7	4.0	3.2
Unemployment rate	_	5.6	4.3	3.9	4.9	4.9
General government financial balance [b]	_	2.3	4.5	1.4	0.1	-0.3
Current account balance [b]	_	0.4	-0.7	-1.3	-1.1	-0.7

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 GDP.
Source: OECD.

accounts basis) increased by 19 per cent. One-off payments to combat the threat of foot-and-mouth disease, which were not foreseen in the budget, also contributed to the high rate of expenditure growth. Despite the large fiscal adjustment, further tax-reduction measures have been introduced in this year's budget, albeit apparently offset by an increase in the statutory rate of indirect taxes. Current spending is budgeted to increase by 12 per cent in 2002, and spending departments have been placed on a new monthly reporting system. However, in view of continuing public sector wage demands, expenditure targets will remain under pressure.

Growth should rebound this year, driven by exports and consumption

Output growth is projected to accelerate during the course of this year driven by exports, since the fundamental factors which have contributed to the country having the strongest growth in the euro area are still in place. However, due to a big negative carry-over from the second half of 2001, the overall growth rate for the year could amount to only around 3½ per cent. Strong growth of household real disposable income, driven by tax cuts, is set to underpin robust consumption in the course of the year. Business investment has been very weak but should pick up toward the end of the year and into 2003. Employment growth is projected to ease this year, so that the rate of unemployment is likely to increase to a level close to its estimated structural rate. Wage growth and price inflation are thus expected to ease.

A loss of competitiveness remains a key risk

With the inflation rate for both manufacturing and international service prices stabilising at a low level, a key risk is that wage growth will not ease sufficiently and thereby dampen the recovery of exports and investment. Failure to control the expansion of the public sector would magnify such a risk. Expansion of the ICT sector might be stronger than anticipated and would raise competition for labour with the expanding public sector, giving increasing urgency to the need for decisions about the size and structure of the public sector.

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Korea

The slowdown that began in the latter part of 2000 came to an end in the final quarter of 2001, thanks primarily to buoyant consumption growth. With a reversal of the negative trends in exports and strengthening domestic demand, output growth may rise to around 6 per cent or more in 2002 and 2003.

As the recovery takes hold, it will be necessary gradually to reverse the decline in short-term interest rates, which were reduced by 125 basis points in 2001, in order to achieve the central bank's medium-term inflation target of 2½ per cent. Further progress in the restructuring of the corporate and financial sectors – including the privatisation of government-owned banks – is important to sustain the expansion and maintain high potential growth.

The slowdown ended in late 2001, with a recovery in private consumption…

Falling investment and stagnant exports slowed output growth to 3 per cent in 2001. Weak demand in turn reduced imports, keeping the current account in substantial surplus for the fourth consecutive year. Consumer price inflation, which had been boosted by the jump in oil prices, decelerated from nearly 4½ per cent in the first half of 2001 to 2½ per cent (year-on-year) in the first quarter of 2002. However, strong growth in private consumption, concentrated in cars and other durable goods, limited the extent of the slowdown and led to an upturn in the final quarter of 2001, helping to improve labour market conditions. By the beginning of 2002, unemployment had fallen to its lowest rate (in seasonally-adjusted terms) since the onset of the Asian crisis, while the labour force participation rate had returned to its 1997 level.

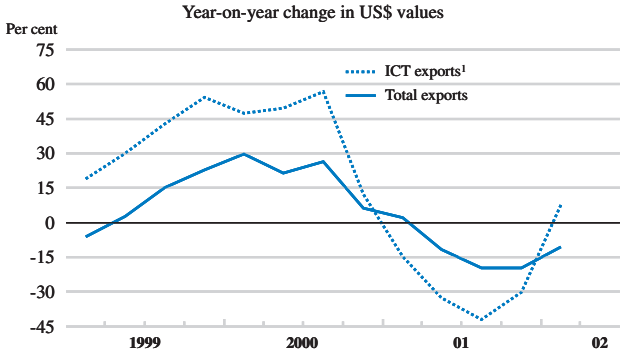
… fuelled by rising confidence, wealth effects and borrowing…

The growth of private consumption was driven by a recovery in consumer sentiment and a significant wealth effect from rising house prices. This was accompanied by a 50 per cent rebound in the stock market since mid-2001, fuelled in part by foreign purchases of Korean equities. In addition, changes in the financial market have facilitated a significant rise in household debt, reversing its decline in the wake of the crisis. Banks have increased the share of lending to households, reflecting greater sensitivity to the risks associated with lending to the large number of financially-troubled firms. In addition, the government introduced policies, including tax advantages, to encourage the use of credit cards as a means of improving tax compliance. Household debt appears to have returned to its pre-crisis level of 90 per cent of disposable income.

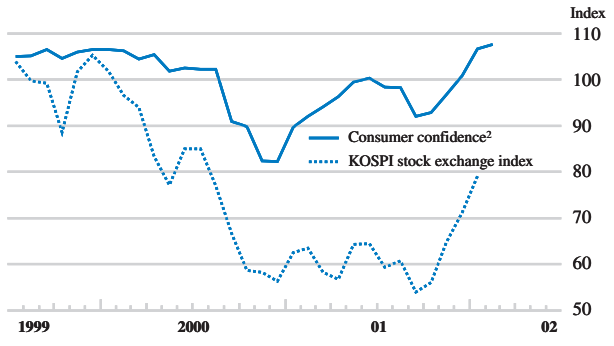
Korea

Exports are turning around

Year-on-year change in US$ values



Household and investor confidence are strengthening



1. Information and communication technology products, including semi-conductors.
2. A score of 100 means that consumption is expected to be the same in six months as at present.

Source: National Statistical Office and Federation of Korean Industries.

Korea: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices trillion KRW	Percentage changes, volume (1995 prices)				
Private consumption	242.8	11.0	7.9	4.2	5.0	4.2
Government consumption	48.8	1.3	0.1	0.2	1.5	1.2
Gross fixed capital formation	132.4	3.7	11.4	-1.7	8.1	5.0
Final domestic demand	424.1	7.6	8.2	1.9	5.6	4.2
Stockbuilding [a]	- 38.3	5.4	-0.2	0.0	0.4	0.0
Total domestic demand	385.8	14.7	8.1	1.9	6.2	4.3
Exports of goods and services	221.0	15.8	20.5	1.0	5.4	13.0
Imports of goods and services	161.1	28.8	20.0	-2.8	5.8	10.7
Net exports [a]	59.8	-1.0	3.1	1.5	0.7	3.0
Statistical discrepancy [a]	- 1.1	-0.4	-0.7	-0.1	0.0	0.0
GDP at market prices	444.5	10.9	9.3	3.0	6.0	6.5
GDP deflator	_	-2.1	-1.1	1.4	2.6	2.2
Memorandum items						
Consumer price index	_	0.8	2.3	4.1	3.3	3.0
Private consumption deflator	_	0.5	2.2	4.0	3.2	3.5
Unemployment rate	_	6.3	4.1	3.7	3.3	3.0
Household saving ratio [b]	_	16.0	15.5	12.6	10.3	10.1
Consolidated central government balance [c]	_	-2.7	1.3	1.3	1.5	1.6
Current account balance [c]	_	6.0	2.7	2.0	1.4	2.8

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 macroeconomic policies also played a positive role

Macroeconomic policies also attenuated the slowdown in domestic demand. The Bank of Korea reduced the overnight interest rate from 5¼ per cent at the beginning of 2001 to a record low of 4 per cent in September, suggesting that real interest rates were negative for much of the year. Fiscal policy has also been supportive, with two supplementary budgets totalling 1.3 per cent of GDP introduced in 2001 and cuts in some tax rates. The financial-sector restructuring programme, with total expenditures equivalent to a quarter of GDP, has been directed at re-capitalising banks and addressing the non-performing loan problem and is showing positive results. The banking sector recorded profits in 2001, for the first time since 1997, while non-performing loans fell to a record low of 3.4 per cent of bank lending. In this favourable environment, the authorities have launched the privatisation of the banks it re-capitalised in the wake of the crisis.

With a rebound in external demand, growth is likely to accelerate

With household confidence at a record high level, private consumption growth should remain robust in 2002. However, a full recovery depends on a pick-up in export demand, which would in turn reverse the fall in investment. Stronger growth in export markets, particularly the United States, may boost output growth to around 6 per cent in 2002 and 6½ per cent in 2003, with inflation in the range of 3 to 4 per cent and the unemployment rate near 3 per cent. The current account surplus is likely to continue, further boosting Korea's net creditor position. The pace of the recovery, though, will be significantly influenced by the information and communication technology sector, which accounts for a third of Korean exports. The possibility of a decline in the currencies of other major Asian economies poses a downside risk to the projected improvement in the external environment. On the domestic side, the main concern continues to be the large number of highly-indebted companies with weak balance sheets, although improvements in the banking sector may leave it less vulnerable to adverse developments in the corporate sector.

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Luxembourg

Economic growth is projected to fall to 2¾ per cent in 2002 but to rebound to 6¾ per cent in 2003 as the international economy recovers. Underlying inflation should decline to around 2 per cent in 2003, influenced by the lagged effects of lower energy prices and a reduced frequency of indexed wage increases.

Wage indexation arrangements should be modified so that they do not contribute to large swings in real unit labour costs when the terms of trade change.

Exports have dragged down economic growth

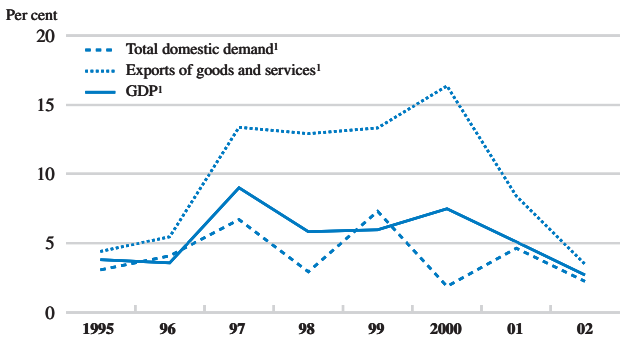
The Luxembourg economy entered 2001 at a high level of activity but this subsequently weakened as export markets deteriorated sharply. For the year as a whole, economic growth is estimated to have fallen to 5 per cent. Stronger domestic demand growth cushioned the impact of the fall in export growth on economic activity. Growth in private consumption expenditure picked up on the back of strong growth in household income, boosted by large tax cuts. Meanwhile, infrastructure projects and the implementation of previous investment decisions also contributed to strong growth in investment expenditure. Employment growth remained robust until the third quarter, despite the weakening economy, but slowed thereafter when expectations of a rapid recovery in the international economy were dashed. While a trough in economic activity seems to have been reached at the turn of the year, there are not yet clear signs of a recovery.

High wage increases have weakened international price competitiveness

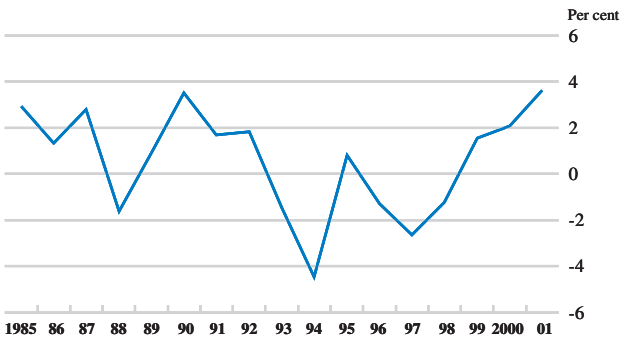
Inflation fell sharply in 2001, to around 2¼ per cent in early 2002, mainly owing to the fall in energy prices. By contrast, underlying inflation continued to accelerate through to mid-2001, when it reached a little over 3 per cent, but has since declined somewhat. The rise in underlying inflation seems to be attributable to the delayed transmission of energy prices and wage increases to other prices. Wage increases also rose through the year, to 5.7 per cent in the first nine months (year-on-year), owing to more frequent indexation following earlier rises in energy and food prices. This, combined with a cyclical slowdown in productivity growth, has resulted in a large rise in unit labour costs, adversely affecting Luxembourg's international price competitiveness.

Luxembourg

Exports are cutting growth



Real unit labour costs are rising2



1. Year-on-year percentage changes, in volume.
2. Real unit labour costs (unit labour costs deflated by gross value added deflator).

Source: Central Service of Statistics and Economic Studies (STATEC) and OECD.

Luxembourg: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	7.3	2.1	3.1	3.4	3.8	3.6
Government consumption	2.9	7.7	4.7	4.4	3.7	3.5
Gross fixed capital formation	3.6	19.6	-3.0	5.9	-1.0	3.3
Final domestic demand	13.8	7.8	1.6	4.3	2.4	3.5
Stockbuilding [a]	0.1	-0.4	0.2	0.3	-0.1	0.0
Total domestic demand	13.9	7.3	1.9	4.6	2.2	3.5
Exports of goods and services	21.5	13.3	16.4	8.4	3.5	8.8
Imports of goods and services	18.5	15.6	13.8	8.6	3.3	7.0
Net exports [a]	3.0	-0.3	5.4	1.3	0.9	4.0
GDP at market prices	17.0	6.0	7.5	5.1	2.7	6.8
GDP deflator	_	2.5	3.7	1.4	1.2	3.2
Memorandum items						
Consumer price index	_	1.0	3.8	2.4	2.1	2.4
Private consumption deflator	_	1.4	2.8	2.8	2.2	2.3
Unemployment rate	_	2.9	2.6	2.6	2.9	3.1
General government financial balance [b]	_	3.8	5.8	5.0	2.2	1.8

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.

Fiscal policy will contribute to economic recovery

The easing in fiscal policy that began in 2001 is set to continue this year. Personal income tax cuts, amounting to 1.1 per cent of GDP, were made in 2001 and further cuts of 0.7 per cent of GDP are being implemented this year. In addition, the corporate income tax rate is being cut from 37.5 per cent to 30 per cent in 2002, at a budget cost of 1.4 per cent of GDP. At the same time, further large increases in public investment are planned for this year. As a result of these policies and the sharp slowdown in growth, the budget surplus is projected to decline from almost 6 per cent of GDP in 2000 to 2 per cent in 2002-03.

Growth should exceed the long-term average by 2003

Economic growth (year-average) is projected to fall further to 2¾ per cent in 2002, on the back of weak exports, but to recover to 6¾ per cent in 2003 (somewhat above the average of 6 per cent over 1985-2001) as the international recovery continues. Employment growth should follow economic activity with a lag, allowing a cyclical recovery in labour productivity growth. Cross-border workers, who account for three-quarters of employment growth, should absorb most of the slowdown in employment growth, with the result that there should only be a small increase in the unemployment rate. Underlying inflation is likely to decline steadily to around 2 per cent in 2003, as the lagged effects of lower energy prices and less frequent indexed wage increases flow into other prices. The main risk to these projections is that the international economic recovery could be weaker than expected, which would have a major effect on Luxembourg owing to its openness. There is also a risk that international stock markets perform poorly. This would weaken financial service prices and prolong the squeeze on profits, with adverse consequences for both employment and investment.

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Mexico

GDP fell slightly in 2001, as declining exports led to a contraction of industrial production and investment. Employment weakened and consumer confidence wavered. Inflation came down further, and the peso strengthened while real interest rates declined. Export markets are projected to recover early in 2002, and output growth should pick up progressively to reach 4½ per cent in 2003, with evenly balanced risks. Inflation is projected to continue falling and the current account deficit to widen to about 3 per cent of GDP in 2003.

A cautious budgetary and monetary policy stance remains appropriate, given the sizeable public sector borrowing requirement and ambitious medium-term inflation objectives. This will help to continue insulating Mexico from possible emerging market turbulence. Despite the recent tax reform, further action is needed to put public-sector finances on a sounder footing. Pressing ahead with market-oriented reforms in network industries remains a priority.

GDP fell slightly in 2001 and the current account deficit narrowed…

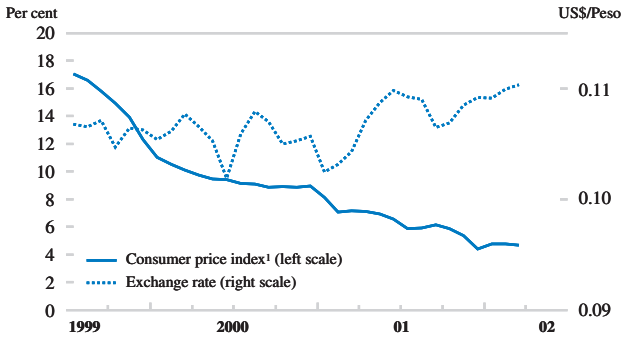
Real GDP was falling through most of 2001, but at the end of the year the economy seemed to be bottoming out. The downturn reflected weakening United States demand and Mexican business spending, whereas private consumption was resilient until mid-year. Employment in the formal sector contracted. Imports declined in tandem with exports, reflecting the increasing integration of Mexican industry in the North American free trade area. Despite falling oil export revenue, the current account deficit narrowed to under US$18 billion (2.8 per cent of GDP), helped by improved factor services and remittances from abroad. Net foreign direct investment reached US$25 billion, of which half was due to the purchase of a major Mexican bank.

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

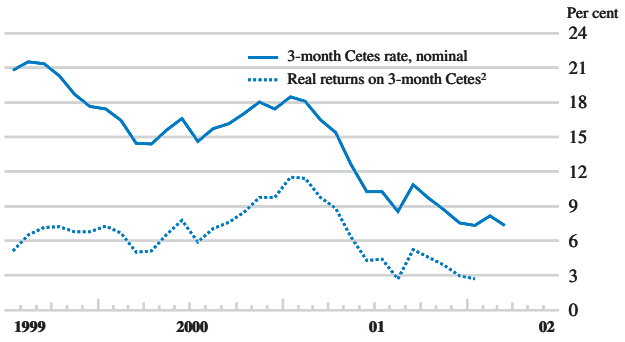
Strong capital inflows helped keep the peso strong in 2001. In combination with weak activity and cautious monetary policies, this led to consumer price inflation falling well below the central bank target of 6.5 per cent by December, and it is currently below 5 per cent. Contractual wage bargaining showed some inertia, however, and to prevent second round effects from the hike in public sector prices at the beginning of 2002, monetary policy was tightened in February, with a subsequent reversal in April as inflationary pressures receded.

Mexico

Disinflation has continued, helped by a strong peso



Nominal and real interest rates have declined



1. Consumer price index inflation, year-on-year percentage change.
2. Three-month Cetes rate minus average year-on-year inflation of the following three months.

Source: Bank of Mexico; OECD.

Mexico: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion MXN	Percentage changes, volume (1993 prices)				
Private consumption	2 593.3	4.3	9.5	3.4	1.6	4.6
Government consumption	400.0	3.9	3.5	-1.4	0.9	2.5
Gross fixed capital formation	804.0	7.7	10.0	-5.9	5.2	7.7
Final domestic demand	3 797.3	4.9	8.9	1.0	2.2	5.0
Stockbuilding [a]	133.3	-0.5	0.1	-0.5	0.0	0.3
Total domestic demand	3 930.6	4.3	8.8	0.4	2.2	5.2
Exports of goods and services	1 180.4	12.4	16.0	-5.1	2.4	8.7
Imports of goods and services	1 262.8	13.8	21.4	-2.8	3.6	10.2
Net exports [a]	- 82.4	-0.5	-1.9	-0.7	-0.5	-0.9
GDP at market prices	3 848.2	3.8	6.9	-0.3	1.8	4.5
GDP deflator	_	14.8	12.0	5.4	4.6	4.1
Memorandum items						
Consumer price index	_	16.6	9.5	6.4	4.6	4.1
Private consumption deflator	_	13.8	10.7	5.9	4.6	4.0
Unemployment rate [b]	_	2.6	2.2	2.5	2.7	2.5
Current account balance [c]	_	-2.9	-3.1	-2.8	-2.6	-3.0

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.

Following strict discipline in 2001, fiscal policy will remain tight

The public sector deficit target for 2001, set at 0.65 per cent of GDP when real output growth of 4.5 per cent was expected, was met despite negative GDP growth and lower-than-anticipated oil sales. Spending cuts were implemented as fiscal revenues fell below budget projections. The broader public sector borrowing requirement, including servicing of contingent liabilities and excluding non-recurrent revenues, amounted to 3.8 per cent of GDP. A major tax reform was finally voted at the end of 2001, though it fell short of the original proposals. The 2002 budget sets the deficit at an unchanged 0.65 per cent of GDP, assuming modest real growth, higher revenue on account of the tax reform, and lower oil revenues. A tight fiscal stance is assumed to continue into 2003, with the budget deficit projected to fall to ¼ per cent of GDP.

Real interest rates fell in 2001, but may stabilise at their current levels

Short-term interest rates fell to a record low in 2001. In the first quarter of 2002, the three-month *Cetes* rate averaged about 7 per cent, some ten percentage points below the level a year earlier, despite the monetary tightening in February. Real interest rates are assumed to stabilise at somewhat under 4 per cent, as the central bank pursues its objective of bringing inflation down to 3 per cent by December 2003.

Recovery is expected to get underway in the first half of 2002

Led by exports and business investment, real GDP growth is expected to rebound in the first half of 2002, as activity picks up in the United States. Job losses could delay private consumption growth until mid-year. Given the negative carry-over from the end of 2001, year-on-year GDP growth is likely to be under 2 per cent for 2002, though gaining momentum during the year. With no short-term bottlenecks in product or labour markets, it could reach 4½ per cent by 2003. Inflation is expected to come down gradually, to around 3 per cent by the end of 2003, under the usual assumption of fixed exchange rates. As domestic demand picks up, the current account deficit is projected to widen to 3 per cent of GDP in 2003, while inflows of foreign direct investment are expected to remain strong. The main uncertainties are developments in world oil prices and the speed of the recovery in the United States.

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Netherlands

Real GDP growth is set to pick up moderately this year and to return to trend (2½ per cent) in 2003, as foreign and domestic demand recover. Wage increases are likely to remain high owing to a tight labour market. As a result, inflation, which accelerated to 5 per cent in 2001, will fall below 3 per cent only in 2003. Due to weakening in competitiveness, export growth is set to lag behind the international recovery. The budget surplus, which had reached 2 per cent of GDP in 2000, will move to a small deficit in 2003.

Further "activation" of working-age persons on welfare, notably recipients of disability insurance benefits, would help to ease tensions in the labour market and sustain economic activity in the face of declining growth in the working-age population.

Economic growth has slowed sharply

The Dutch economy slowed further in the second half of 2001, resulting in GDP growth for 2001 as a whole of only 1.1 per cent. As in other euro area countries, growth in exports of goods and services slowed sharply. Private consumption expenditure also weakened, reflecting a decline in consumer confidence, as did private investment, owing to a decrease in profits, the deterioration in the business climate and the completion of some large investment projects. Despite the slowdown, employment growth remained robust, reducing the unemployment rate to 2.2 per cent in 2001.

A further loss of competitiveness could weigh on the recovery

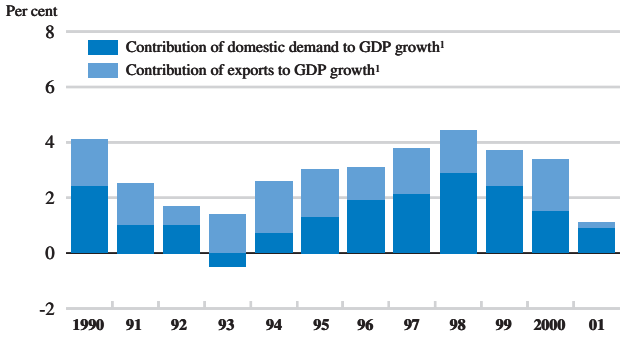
Growth in wage increases picked up in 2001 owing to very tight labour market conditions and high inflation, while labour productivity decreased. This contributed to a further marked loss of international competitiveness (unit labour costs rose by 5.5 per cent), which could weigh on the recovery. Harmonised consumer price inflation rose to 4.4 per cent in 2001, reflecting both the high growth in labour costs and the hike in the value added tax and environmental taxes in January 2001.

Fiscal policy provided a stimulus beyond automatic stabilisation

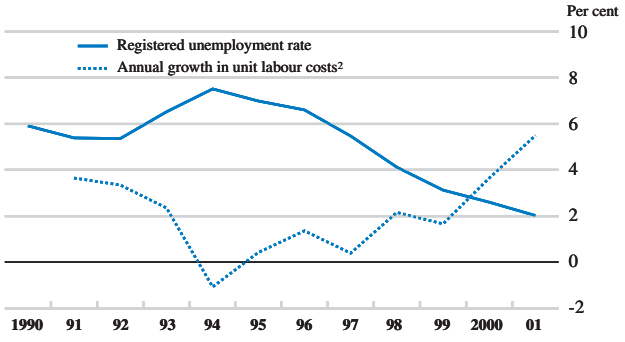
There was a substantial easing in fiscal policy in 2001 reflecting the costs of personal income tax reform and expenditure of previous budget windfalls. This easing and the downturn in the business cycle resulted in a decline in the budget from a surplus of 2 per cent of GDP in 2000 to balance in 2001. Despite strengthening economic activity, the budget is projected to deteriorate in 2003, when government investment in infrastructure will peak and unemployment outlays will rise.

Netherlands

Growth has slowed down



The labour market has remained tight



1. Imports have been subtracted from the related expenditure categories on the basis of estimates by the Netherlands Bureau for Economic Policy Analysis (CPB).
2. Of the business sector.

Source: Netherlands Bureau for Economic Policy Analysis (CPB); OECD.

Netherlands: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume				
Private consumption	176.0	4.5	3.8	1.2	2.2	3.1
Government consumption	80.4	2.8	1.9	3.3	2.2	2.0
Gross fixed capital formation	76.2	7.8	3.8	-1.1	-0.5	2.4
Final domestic demand	332.6	4.8	3.3	1.1	1.6	2.7
Stockbuilding [a]	2.4	-0.6	-0.2	-0.1	0.1	0.0
Total domestic demand	335.0	4.2	3.1	1.1	1.7	2.7
Exports of goods and services	215.9	5.4	9.5	1.1	2.8	7.4
Imports of goods and services	196.7	6.3	9.4	1.1	3.3	8.0
Net exports [a]	19.2	-0.2	0.6	0.1	-0.2	0.0
GDP at market prices	354.2	3.7	3.5	1.1	1.4	2.6
GDP deflator	_	1.7	3.7	4.7	3.6	2.9
Memorandum items						
Consumer price index	_	2.0	2.3	5.1	3.4	2.4
Private consumption deflator	_	1.9	2.8	4.6	3.0	2.2
Unemployment rate	_	3.2	2.6	2.2	2.7	3.2
Household saving ratio [b]	_	9.5	7.6	10.3	11.1	11.3
General government financial balance [c]	_	0.4	2.2	0.3	0.1	-0.3
Current account balance [c]	_	3.2	2.9	3.1	4.6	5.0

Note: National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see *OECD Economic Outlook* Sources and Methods, *(http:// www.oecd.org/eco/sources-and-methods).*

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.

Growth should return to potential by 2003

Real GDP growth is set to pick up in the course of 2002, rising to 2½ per cent in 2003, around the trend rate but lower than the euro area average owing to a loss of competitiveness. As the international recovery gathers pace, consumer confidence is expected to improve, underpinning a marked increase in private consumption. Employment growth is likely to recover only with a lag, resulting in a rise in the unemployment rate. Wage increases should gradually decline to 4 per cent. Harmonised consumer price inflation is projected to fall in 2002, as the effects of the indirect tax increases wane, and decline further as growth in labour costs moderates. The main risk to the outlook is that the international economic recovery could be weaker than expected, which would markedly affect the Netherlands owing to the openness of the economy. There is also the risk that high wage increases could further undermine international competitiveness, which would weaken output and employment growth.

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New Zealand

After underpinning activity for most of 2000 and 2001, exports fell sharply at the end of last year. The impact was cushioned by a pick-up in domestic spending, driven by migration inflows, supportive monetary policy, low unemployment and the flow-on effects of the earlier strong farm incomes. Business investment has remained surprisingly strong, and the global recovery should lead to output growth above 3 per cent on average over the next two years.

With little economic slack available, the central bank has begun to remove the stimulus from low interest rates. It will need to continue increasing them throughout the forecast period. As government investment rises significantly, spending discipline will be needed to ensure that the gross debt target is met.

The export boom ended suddenly…

Exports were the main driving force in 2001, but the boom stopped abruptly towards the end of the year. Export volumes and prices fell sharply from their peaks, particularly dairy products (which accounted for nearly half of all commodity export growth last year). Meat prices, which had been supported by mad cow disease and foot-and-mouth problems abroad, also fell but have recovered some ground. The tourism industry slumped after 11 September. While this just wiped out the considerable growth over the nine preceding months (so that arrivals fell back to their level of December 2000), the industry nevertheless partially missed the lucrative summer high season for which it had been planning.

… but domestic demand plugged the gap

With fortuitous timing, the domestic economy picked up at the end of 2001 to offset the weakening trade sector. The benefits of earlier high farm incomes began to be felt in the cities, strong employment growth boosted household incomes, immigration lifted consumption and led to a housing boom (especially in Auckland), and capacity constraints encouraged further business investment. The combination of these factors resulted in final domestic demand growth of nearly 6 per cent in the second half of 2001.

Monetary policy has been supportive of activity

The official cash rate (OCR) was lowered by 100 basis points to 4¾ per cent in the final few months of 2001. With the real exchange rate close to an historical low, current monetary conditions are clearly stimulatory. However, inflation pressures persist and as there is little spare capacity available to handle a recovery in spending, the central bank is removing some of this stimulus, having raised the OCR by ½ per cent since March.

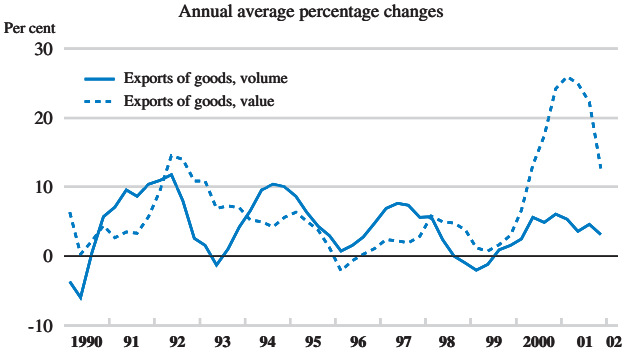
Fiscal policy has become less restrictive

Excluding "extraordinary" items, the government's operating surplus is likely to exceed the official forecast of 1 per cent of GDP this fiscal year and compare well with last year's 1.8 per cent. Most of the expenditure pressure, however, is on the investment

New Zealand

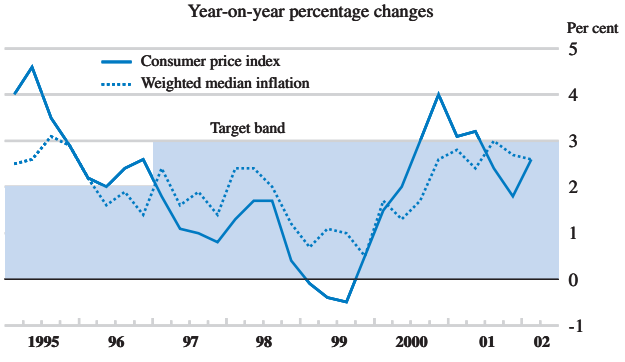
Export incomes have been strong

Annual average percentage changes



Inflation pressures persist

Year-on-year percentage changes



Source: Reserve Bank of New Zealand, Statistics New Zealand and OECD.

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

	1998	1999	2000	2001	2002	2003
	Current prices billion NZD	Percentage changes, volume				
Private consumption	61.1	4.2	2.1	2.1	2.8	3.1
Government consumption	18.6	5.7	-2.5	2.1	2.0	2.8
Gross fixed capital formation	20.0	3.1	7.3	-0.6	11.1	5.2
Final domestic demand	99.8	4.2	2.2	1.6	4.3	3.5
Stockbuilding [a,b]	0.0	1.3	-0.6	0.2	-0.3	0.0
Total domestic demand	99.9	5.5	1.4	1.7	4.3	3.4
Exports of goods and services	29.8	7.1	7.6	2.1	1.4	7.5
Imports of goods and services	29.6	11.7	1.1	1.7	5.2	7.5
Net exports [a]	0.3	-1.3	2.0	0.2	-1.2	0.0
GDP (expenditure) at market prices	100.1	4.2	3.6	1.8	2.9	3.5
GDP deflator	_	-0.4	2.5	4.9	1.6	2.6
Memorandum items						
GDP (production)	_	3.9	3.8	2.4	2.7	3.5
Consumer price index	_	-0.1	2.6	2.6	2.5	2.0
Private consumption deflator	_	0.3	2.2	2.0	1.8	2.0
Unemployment rate	_	6.8	6.0	5.3	5.7	5.3
General government financial balance [c]	_	0.9	1.9	0.9	0.1	0.0
Current account balance [c]	_	-6.6	-5.4	-3.2	-4.0	-4.0

Note: National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see *OECD Economic Outlook* Sources and Methods, *(http:// www.oecd.org/eco/sources-and-methods).*

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.

side, with increased capital spending planned for hospitals, schools, student loans, prisons and defence equipment. This investment programme is larger than the projected operating surpluses, so it is partly being funded by an increase in public debt.

The outlook is favourable…

Export markets are expected to pick up in the second half of this year and to grow by around 7½ per cent in 2003. The global recovery will also boost tourism, while agricultural exports will benefit from the recent good growing season. Growth in export incomes, however, will be more subdued since the terms of trade are unlikely to bounce back to last year's peak (although they should still settle at a fairly high level). The current account deficit is therefore likely to rebound to 4-5 per cent of GDP, up from its recent trough of 3 per cent. Meanwhile, strong net immigration will continue to boost domestic activity. This influx will have several effects. Residential construction is projected to rise, along with consumption of durables. Rising house prices will also create a (small) wealth effect. On the other hand, the inflow should ease skill shortages, and thereby reduce some of the pressure on wages. There may be a temporary uptick in the unemployment rate as people will be arriving faster than jobs are being created. With spare capacity being quickly exhausted and the exchange rate still relatively weak, core inflation is likely to stay in the top half of the target band over the next couple of years.

… but uncertain

The main negative risk is that the world recovery falters, in which case the weakening export sector should take the steam out of household and business spending. However, domestic demand could prove more vigorous than expected and the global recovery could also be stronger; on balance, the risks are skewed slightly towards stronger-than-expected growth.

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Norway

After several years of moderate expansion, output growth is expected to rebound to close to 2½ per cent in 2003 due to a strong rise in oil investments, the international recovery and an expansionary fiscal stance. As a result, unemployment is projected to fall and the labour market will become even tighter.

The authorities should adhere to the new fiscal guideline which entails only a gradual and limited rise in the non-oil government deficit. Achieving this will require substantial efficiency improvement in the public sector and pension reforms to ensure the long-term sustainability of the public finances. Moreover, in the short run, spending overruns should be offset by expenditure cuts elsewhere. Lack of fiscal discipline would inevitably lead to the need for a monetary tightening.

Output growth has remained moderate and the labour market tight

In 2001, the impact of the international slump was limited, but growth remained moderate because of a tight monetary policy, a limited increase in labour supply, lack of spare capacity and a drop in oil investments. Mainland GDP excluding electricity production increased by somewhat more than 1 per cent in 2001, as in 2000. However, as hydro-electric production was temporarily boosted by strong precipitation in 2000, total mainland GDP decelerated from 1.8 to 1 per cent. With residential investment and house prices both rising markedly, households' appetite for credit has remained impressive. Despite several years of low output growth, the labour market has remained tight – the unemployment rate rising only marginally to 3.6 per cent – and wages increased again more rapidly than in the main trading partners. Mainly due to indirect tax changes, consumer price inflation has fallen sharply, to only 1.0 per cent in March 2002. Excluding taxes and energy, consumer price inflation was 2.6 per cent, close to the inflation target of 2.5 per cent.

The central bank has reduced its key rate only once

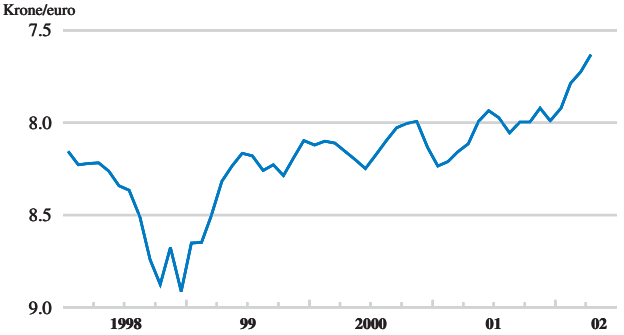
Reflecting the effect of moderate growth and projected weak national and international developments on inflation, the central bank cut its key deposit rate by 50 basis points to 6.5 per cent in December 2001. However, the interest rate differential with the euro area has remained sizeable, probably contributing to the further appreciation of the Norwegian krone in early 2002. In February, the central bank switched from an easing to a neutral bias in reaction to signs of a global recovery.

There will only be limited room for tax cuts in the 2003 budget

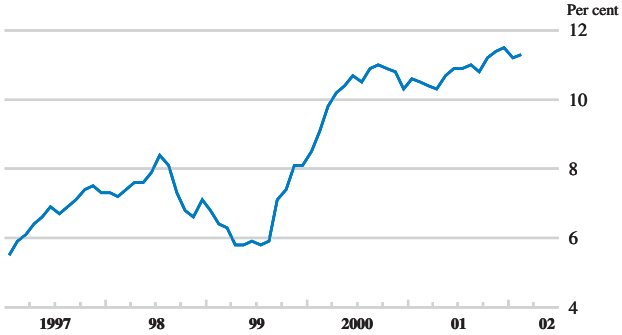
The 2002 budget is in line with the new fiscal policy guideline of a structural non-oil central government deficit equal to the expected return on the Petroleum Fund. The room for fiscal expansion due to rising assets in the fund, approximately ½ per cent of mainland GDP, will be fully used for tax cuts. These tax cuts, which are even

Norway

The krone is at a record high



Credit growth to households remains strong[1]



1. Year-on-year percentage changes.
Source: Norges Bank; OECD, *Main Economic Indicators.*

Norway: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion NOK	Percentage changes, volume (1997 prices)				
Private consumption	552.8	2.2	2.4	2.2	3.1	3.3
Government consumption	238.3	3.3	1.4	1.5	1.9	2.0
Gross fixed capital formation	289.5	-8.2	-1.1	-5.9	-0.6	4.2
Final domestic demand	1 080.5	-0.3	1.3	0.1	2.0	3.2
Stockbuilding [a]	24.4	-0.3	0.8	-0.7	0.0	0.0
Total domestic demand	1 104.9	-0.7	2.2	-0.6	1.9	3.1
Exports of goods and services	411.6	2.8	2.7	5.3	3.2	2.9
Imports of goods and services	401.7	-1.6	2.5	0.3	2.9	4.7
Net exports [a]	9.9	1.7	0.2	2.0	0.4	-0.4
GDP at market prices	1 114.8	1.1	2.3	1.4	2.1	2.5
GDP deflator	_	6.2	16.3	1.9	1.9	3.4
Memorandum items						
Mainland GDP at market prices [b]	_	1.0	1.8	1.0	1.7	2.4
Mainland GDP deflator [b]	_	2.7	3.7	4.0	3.4	3.3
Exports of non-manufactures (incl. energy)	_	2.4	4.5	4.5	3.5	3.0
Consumer price index	_	2.3	3.1	3.0	1.2	2.5
Private consumption deflator	_	2.0	3.1	2.5	1.2	2.5
Unemployment rate	_	3.2	3.4	3.6	3.6	3.5
Household saving ratio [c]	_	7.3	7.6	7.3	8.1	7.8
General government financial balance [d]	_	5.9	14.8	15.2	14.0	13.9
Current account balance [d]	_	3.9	14.3	14.7	15.3	15.5

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.

larger than those of the 1992 tax reform, will sharply boost household disposable income. Since tax cuts are mainly implemented late in the year, there are strong carry-over effects into 2003. As a result, the possibilities to implement further tax cuts or expenditure measures in the 2003 budget are limited, despite a fiscal expansion that will be comparable with that of 2002.

Output growth is projected to accelerate to 2½ per cent in 2003

This fiscal boost will be occurring at the same time as the international recovery, while consumer confidence has already picked up sharply and a strong rise in investment by the oil sector is expected. Hence, mainland GDP growth is projected to accelerate to close to 2½ per cent in 2003 despite export market losses caused by worsening competitiveness. As a result, the labour market will become even tighter. In early April, the social partners agreed on a wage rise in the private sector of around 5 per cent in 2002, which will keep the rise in labour costs above that of the main trading partners. Even though interest rates are much higher than elsewhere in Europe, rising labour costs are likely to prevent any monetary easing in 2002. With growth then picking up, some monetary tightening may be needed to comply with the inflation target in 2003 unless the recent appreciation of the krone continues. With an assumed oil price of $25 per barrel from the second quarter of 2002 onwards, the current account surplus and the general government surplus are projected to remain extremely large.

The main risk concerns wage developments in the public sector

A major uncertainty concerns the outcome of the public sector wage negotiations. Due to the tight labour market, the sheltered sector may conclude agreements with higher wage rises than in the private sector, boosting demand in the short run and reducing the room for tax cuts and new spending initiatives.

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Poland

Output grew by only 1 per cent last year, having slowed markedly in the second half. The deceleration contributed to a further rise in unemployment, to 18.2 per cent, and to a substantial fall in inflation. Recovery in the second half of 2002 and into 2003 is projected to be export-driven, which should prompt a reversal of the decline in investment. As a result, imports are expected to pick up and the current account deficit could rise to over 5 per cent of GDP in 2003. Inflation is likely to meet or undershoot official targets.

Recent steps to improve the macroeconomic policy mix need to be pursued further. While the weakness of domestic demand leaves scope for further monetary easing, this needs to be supported by a strong commitment to new public expenditure norms. Moreover, greater urgency is required in the pursuit of structural reforms in both labour and product markets if the external imbalance is to be contained.

Economic activity was almost stagnant in the second half of 2001

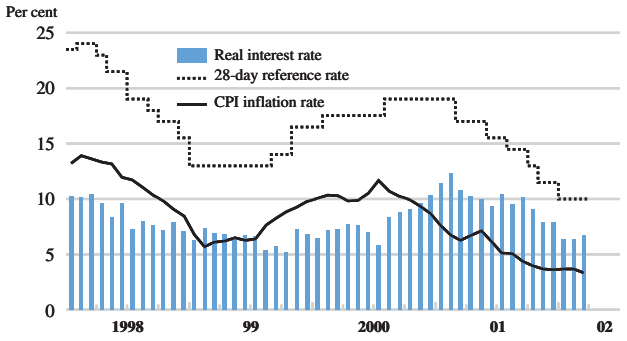
Real GDP grew by only 0.5 per cent in the second half of 2001, further intensifying the downturn that began towards the end of 1999. Unlike most other countries in transition, domestic demand contracted, as the expansion of consumption was too mild to offset the impact of plunging investment (particularly in the construction sector), partly as a consequence of earlier hikes in real interest rates. Notwithstanding the slowdown in external demand and the appreciation of the currency, export growth was strong, as firms sought to offset dwindling domestic sales. Imports actually fell towards the end of the year and, as a result, net exports made a large positive contribution to growth. Despite having fallen to 4¼ per cent of GDP, the current account deficit remains very high given the depressed state of the economy.

Employment and inflation declined sharply

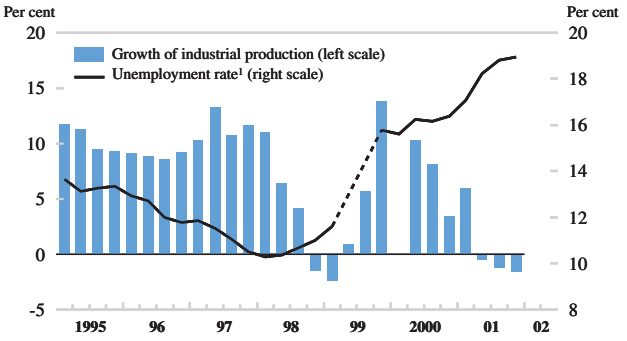
The economic slowdown resulted in the loss of about 500 thousand jobs during 2001, and unemployment reached 19 per cent of the labour force (on a registered basis) in March 2002, a historical high. In this environment, wages grew only moderately, which, along with falling energy prices, helped inflation decline to 3½ per cent, well below last year's end-of-year target of between 6 and 8 per cent and below the authorities' medium-term target of less than 4 per cent by the end of 2003.

Poland

Real interest rates remain high



Unemployment is at record levels



1. The LFS Survey was not carried out in Q2 and Q3 1999.
Source: OECD.

Poland: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion PLZ	Percentage changes, volume				
Private consumption	352.1	5.3	2.7	2.1	0.8	1.9
Government consumption	85.5	1.0	1.1	0.5	0.4	0.5
Gross fixed capital formation	139.2	9.2	-2.0	-10.0	0.9	6.2
Final domestic demand	576.8	5.6	1.3	-1.0	0.8	2.5
Stockbuilding [a]	5.8	-0.3	0.5	-1.5	0.0	0.0
Total domestic demand	582.6	5.0	2.8	-1.8	0.8	2.6
Exports of goods and services	155.9	-3.2	23.6	10.6	5.8	10.7
Imports of goods and services	184.9	1.1	15.5	-0.1	3.7	9.4
Net exports [a]	- 29.0	-1.4	1.5	3.8	0.8	0.6
GDP at market prices	553.6	4.0	4.0	1.1	1.3	2.7
GDP deflator	_	6.9	7.1	4.4	2.6	3.2
Memorandum items						
Consumer price index	_	7.3	10.1	5.5	3.5	3.6
Private consumption deflator	_	6.9	10.0	5.1	3.5	3.6
Unemployment rate	_	13.9	16.1	18.2	19.6	19.5
General government financial balance [b]	_	-2.0	-2.1	-5.0	-5.4	-5.5
Current account balance [b]	_	-8.1	-6.3	-4.3	-4.8	-5.1

Note: National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see *OECD Economic Outlook* Sources and Methods, *(http:// www.oecd.org/eco/sources-and-methods).*
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.

Fiscal policy eased, while monetary policy remained tight

Fiscal policy relaxed significantly in 2001. The general government deficit rose from 2 per cent of GDP to an estimated 5 per cent, much more than could be expected on the basis of the operation of built-in stabilisers alone. This fiscal stimulus was counteracted by tight monetary conditions, reflecting the appreciation of the currency and real interest rates which remained high because inflation fell almost as quickly as nominal rates. As passed, the 2002 State Budget, which emphasises expenditure norms, leaves the overall fiscal policy stance unchanged.

An export-driven recovery is expected…

GDP growth is projected to increase moderately in 2002 and exceed 2½ per cent in 2003. Increased export demand is expected to drive the recovery. As activity picks up, the decline in business investment is expected to end before picking up in 2003. Given the overall weakness of demand, unemployment is likely to continue rising in 2002 and wage growth to remain moderate. As a result, private consumption and consumer prices are projected to grow only slowly, though rising oil prices may contribute to some upward pressure on the latter during 2003. The gradual recovery in domestic demand is likely to be reflected in stronger import growth pushing the current account deficit above 5 per cent of GDP in 2003.

… the strength of which will depend on investment picking up

If the recovery in the rest of Europe is slower than projected, weaker exports would delay the pick-up in investment spending and the overall recovery of the Polish economy. A similar impact could be observed if interest rates do not ease as projected. This could arise either because the central bank takes a more cautious approach to monetary policy or because fiscal slippage causes market rates to rise as government borrowing absorbs an even larger share of savings.

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Portugal

With exports slowing and the business climate deteriorating, real GDP decelerated in 2001. Growth is expected to strengthen during 2002 as external demand picks up and transfers from the European Union boost investment; by 2003, it could reach 2¾ per cent. Inflation, though easing, is expected to be ¾ percentage point higher than the euro area average. The current account deficit, which peaked at 10½ per cent of GDP in 2000, is projected to narrow gradually.

Weak growth has exacerbated the difficulties encountered in budget implementation in recent years and the general government deficit has risen. A reduction in the deficit, in line with the latest Stability Programme, requires strong measures to control government spending. Further structural reforms in the health and other social spending areas are also required.

Activity has decelerated and inflation has come down

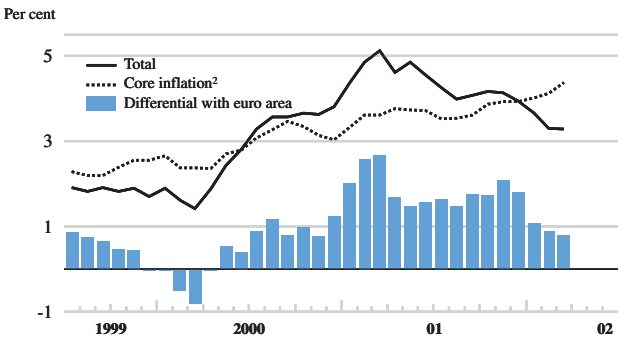
With foreign demand weakening, business confidence falling and consumer demand moderating as the household saving ratio rose, real output is estimated to have grown by less than 2 per cent in 2001, after five years of growth in excess of 3 per cent. Against the background of slowing employment growth, the unemployment rate edged up, to a little over 4 per cent, just above its estimated structural rate, while contractual wages continued to rise at a strong pace. The slowdown in activity and the unwinding of special factors (domestic oil price hikes) have led to a decline in consumer price inflation, which fell below 3½ per cent in the first quarter of 2002, still much higher than the euro area average. Terms-of-trade gains contributed to a narrowing of the current account deficit to 9.2 per cent of GDP in 2001, more than one percentage point below its 2000 peak.

General government balances have deteriorated

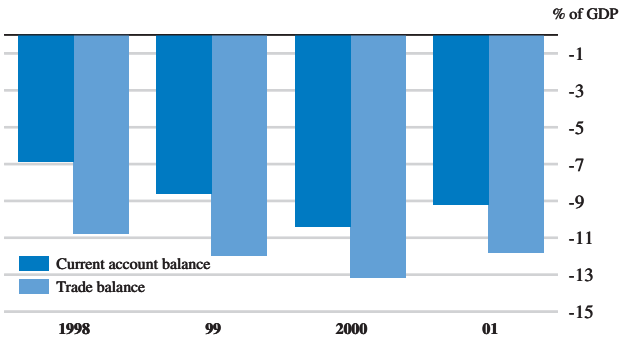
Budget revenues have been much lower than projected, mostly reflecting the economic slowdown, but also as a result of tax cuts and increased tax evasion. Despite a series of emergency spending cuts around mid-2001, there was some slippage in current spending and the budget deficit reached 2½ per cent of GDP, more than one percentage point above the target set in the Stability Programme. The out-turn is also higher than the deficit for 2000, once adjusted for exceptional proceeds from the sale of mobile phone licences that year (equivalent to 0.3 per cent of GDP). Given the background of slowing activity, the implication is that automatic stabilisers have been

Portugal

Inflation is still above the euro area average[1]



The current account deficit has fallen



1. Harmonised index of consumer price. Year-on-year percentage change.
2. Excluding energy, food, alcohol and tobacco.

Source: Banco de Portugal; Eurostat.

Portugal: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	63.0	4.8	2.6	0.8	1.1	2.0
Government consumption	19.1	4.5	2.5	2.5	2.0	1.7
Gross fixed capital formation	27.2	7.1	5.3	0.6	2.9	5.0
Final domestic demand	109.3	5.4	3.3	1.0	1.7	2.7
Stockbuilding [a]	0.9	0.2	-0.3	0.0	0.0	0.0
Total domestic demand	110.2	5.5	3.0	1.0	1.7	2.7
Exports of goods and services	31.2	3.2	8.1	3.2	3.4	7.8
Imports of goods and services	40.1	8.7	6.0	0.8	3.0	6.7
Net exports [a]	- 8.9	-2.6	0.0	0.8	-0.1	-0.3
GDP at market prices	101.3	3.4	3.4	1.9	1.7	2.7
GDP deflator	_	3.3	2.7	4.7	4.0	3.3
Memorandum items						
Consumer price index	_	2.2	2.8	4.4	3.1	2.8
Private consumption deflator	_	2.3	2.8	4.4	3.3	2.8
Unemployment rate	_	4.4	4.0	4.1	4.4	4.3
Household saving ratio [b]	_	8.6	8.2	9.2	9.6	10.0
General government financial balance [c]	_	-2.3	-1.6 [d]	-2.5	-2.4	-1.8
Current account balance [c]	_	-8.6	-10.4	-9.2	-8.7	-8.1

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.
d) Including proceeds of sales of mobile telephone licences (around 0.3 per cent of GDP).
Source: OECD.

allowed to work in full. The budget balance outcome for 2001 is likely to be revised up, depending on accounting decisions to be made by the Statistical Office of the European Communities (Eurostat); this will also have implications for 2002. In the absence of a fully articulated revised budget by the new government which took office in April this year, the budget deficit is assumed to narrow gradually over the projection period to just below 2 per cent of GDP in 2003 as the economy strengthens and spending restraint is implemented. Strong measures will be needed to bring the budget into balance by 2004, as foreseen in the latest Stability Programme.

The pace of recovery is expected to be gradual

Relatively easy monetary conditions in the euro area and the strengthening of the external environment should underpin the recovery, while increased European Union transfers will boost public works. But labour market slack is still increasing and the saving rate is expected to continue to edge up, as households adjust to a more sustainable level of indebtedness. Consumer spending is thus projected to remain subdued. While real GDP growth is expected to gain momentum during this year, and into next, it is unlikely to exceed the expansion of potential output (estimated at around 2¾-3 per cent a year), even in 2003, because of fiscal tightening. The widening output gap is projected to bring inflation down and allow the current account deficit to continue to narrow.

There are external uncertainties and wage settlements pose a risk

The main external uncertainty concerns the speed of the recovery in Europe. On the domestic front, much depends on the government's ability to control public spending, and in particular to limit public sector pay, which traditionally serves as a benchmark for private sector wage settlements. If wage increases do not moderate as projected, there would be a further erosion of competitiveness, which could put employment growth at risk.

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Slovak Republic

Buoyant domestic demand boosted output growth to 3¼ per cent in 2001, despite weaker growth abroad. This early recovery contributed to a widening of the current account deficit to 9 per cent of GDP. With a pick-up in export growth further fuelling activity, output growth may reach 4 per cent in 2002 and 2003, leading to some decline in the unemployment rate.

It is essential to push ahead with privatisation plans and measures to improve the business environment, in part to generate the capital inflows needed to finance the current account deficit. Fiscal consolidation should be a top priority, focusing on reform of the social security and social welfare systems, which could also help to improve labour market performance. Progress in reducing the budget deficit would limit the need for increases in interest rates.

The economic upturn in 2001 was led by fixed investment…

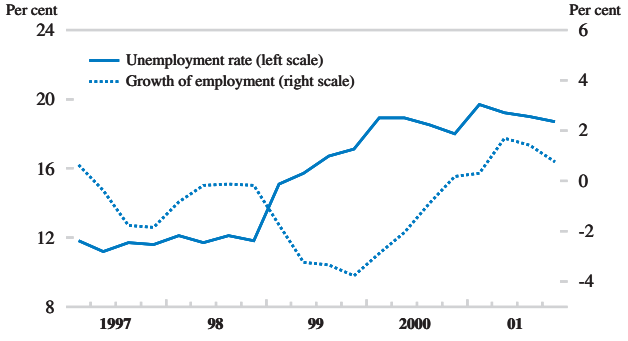
The pick-up in growth in 2001 was led by a double-digit rise in fixed investment that was underpinned by rising corporate profitability and strong foreign direct investment, related in part to the privatisation of state-owned enterprises. Real wages reversed a two-year decline, sparking a rebound in private consumption. Employment also rose in 2001 – the first time since 1996 – but the increase failed to match the growth in the labour force. The unemployment rate – already the highest in the OECD area – thus continued its upward trend, surpassing 19 per cent in 2001. Given significant slack, the core inflation rate, which excludes administered prices, slowed to a record low of 3.2 per cent in 2001. There has been a near doubling of administered prices since 1998 to bring them closer to market levels, and these increases entail headline inflation of over 7 per cent. The pick-up in domestic demand, combined with weaker growth in export markets, led to a doubling of the trade deficit to over 10 per cent of GDP in 2001, partially offset by a surplus in services.

… and an easier fiscal policy stance

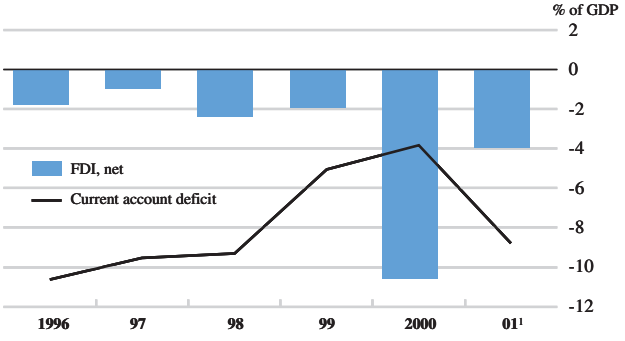
A loosening of the fiscal policy stance, through reductions in income tax rates for corporations and individuals, also boosted domestic demand. The tax changes contributed to a rise in the budget deficit in 2001 to 3.9 per cent of GDP (on a Government Financial Statistics basis), although this was still in line with the objective set in the Staff Monitored Programme adopted with the International Monetary Fund. However, spending overruns will make it difficult to meet the fiscal target for 2002. The central bank kept short-term interest rates unchanged between March 2001 and April 2002. In real terms, interest rates were close to zero, though the stimulative impact was limited by the prudence of banks, some of which have

Slovak Republic

Unemployment has continued to rise



Foreign direct investment has helped to finance the current account



1. Estimates based on January-September data for FDI.
Source: Statistical Office of the Slovak Republic.

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

	1998	1999	2000	2001	2002	2003
	Current prices billion SKK	Percentage changes, volume (1995 prices)				
Private consumption	400.4	-0.2	-3.4	4.0	3.5	3.5
Government consumption	161.4	-6.9	-0.9	5.2	6.0	4.5
Gross fixed capital formation	285.3	-18.8	-0.7	11.6	8.0	8.0
Final domestic demand	847.1	-7.7	-2.1	6.5	5.4	5.1
Stockbuilding [a]	- 14.0	3.5	0.8	1.1	-0.2	-0.6
Total domestic demand	833.1	-4.6	-1.3	7.3	5.0	4.4
Exports of goods and services	459.5	3.4	15.9	6.5	8.4	9.5
Imports of goods and services	541.8	-6.0	10.2	11.7	9.5	9.5
Net exports [a]	- 82.3	7.0	3.6	-4.1	-1.3	-0.5
GDP at market prices	750.8	1.9	2.2	3.3	4.0	4.1
GDP deflator	_	6.6	6.5	5.3	6.5	7.5
Memorandum items						
Consumer price index	_	10.6	12.0	7.4	5.5	7.0
Private consumption deflator	_	10.2	11.3	5.5	5.6	6.8
Unemployment rate	_	16.4	18.8	19.3	19.1	18.6
Current account balance [b]	_	-5.0	-3.8	-8.8	-7.9	-6.8

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.

recently been privatised, in expanding credit in the new supervisory environment. As credit growth accelerates, an increase in real interest rates is likely to be necessary to achieve the central bank's medium-term inflation target. Indeed, official rates were raised by 50 basis points in April 2002. Progress in reducing the budget deficit in 2003 would limit the necessary rise in official short-term rates.

The expansion is expected to continue in 2002 and 2003

Investment is likely to remain the driving force of the expansion, although it may moderate somewhat in 2002 and 2003. Nevertheless, output growth may pick up to around 4 per cent as an economic recovery in Europe boosts Slovak exports and helps to reverse the upward trend in the current account deficit. Headline inflation is likely to slow in 2002, as the sharp increases in administered prices are temporarily halted. However, a resumption of price deregulation in 2003 may lead to a rebound in inflation. Job creation is expected to accelerate, leading to modest declines in the unemployment rate.

The major risk comes from the large current account deficit

The exceptionally large current account deficit is a risk to a sustained expansion. Difficulties in financing the imbalance would have serious macroeconomic consequences, including pressure on the exchange rate, as in the 1997-98 episode. Such difficulties can be reduced by moving ahead with fiscal consolidation and the planned privatisation of state-owned companies and implementing reforms to improve the business environment. Failure to meet the annual fiscal targets for deficit reduction could also weaken international confidence in the Slovak economy and damp capital inflows. An overshooting of spending targets even greater than is assumed in the projections is a particular risk in 2002.

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Spain

Activity slowed during the second half of 2001, as exports and equipment investment were very weak. Household spending remained quite resilient. Headline inflation decelerated due to lower energy prices, but underlying inflation remained 1 per cent above the euro area average. Activity is projected to recover during the second half of 2002, buoyed by higher exports, with output growth rebounding to over 3 per cent in 2003, somewhat above potential.

The government projects a balanced budget for 2002, despite lower revenues as a result of weaker activity. Tight spending control is needed to limit slippage from this target. Structural reforms in goods and labour markets should continue to focus on reducing structural unemployment and on raising productivity growth, which has been low in recent years. In particular, a reform of the wage bargaining system should ensure that wage increases match productivity developments.

Activity slowed in 2001 though consumption remained resilient

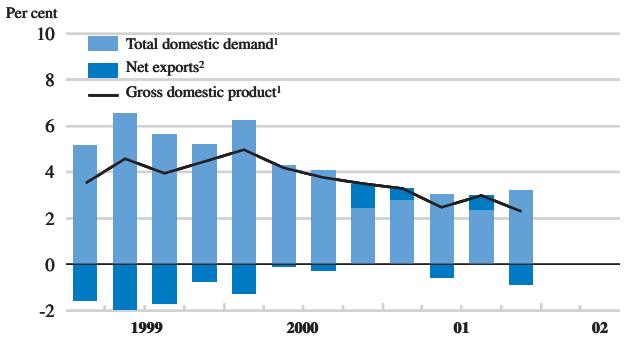
In 2001, activity decelerated to 2¾ per cent, from growth rates of over 4 per cent in previous years. Export demand was weak throughout the year, while machinery and equipment investment declined. However, domestic demand was sustained by private consumption, which rebounded in the fourth quarter, and by construction investment, which grew by nearly 6 per cent over the year. Recent indicators are rather mixed but overall they suggest that the economy may be turning the corner. The slowdown in activity has been reflected in weaker employment growth of 2½ per cent in 2001, while registered unemployment has edged up slowly since October. The Argentinean crisis has resulted in important profit reductions and heavy losses in stock market valuation at the beginning of 2002 for the large Spanish companies that invested in the country. However, in the absence of contagion to other countries in the area, this should only have a minor effect on Spanish activity through a very limited impact on consumption.

Lower energy prices have moderated headline inflation

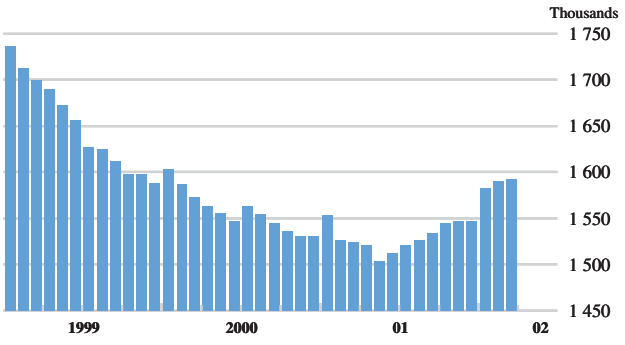
Lower oil prices have contributed to the decline in headline inflation since May last year, to slightly above 3 per cent in March 2002. Core inflation is still high at close to 3½ per cent, but has slowed somewhat since the peak in November. Wages increased by 3½ per cent in 2001, although pay rises have eased somewhat at the beginning of 2002 following a national agreement between trade unions and employers' associations to limit wage increases. This should help to moderate labour cost increases further and contribute to lower the inflation differential with the euro area.

Spain

Domestic demand has been resilient



Unemployment has risen3



1. Year-on-year percentage changes.
2. Contribution to GDP growth.
3. Registered unemployment, seasonally adjusted.

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

Spain: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion euros	Percentage changes, volume (1995 prices)				
Private consumption	313.0	4.7	4.0	2.7	1.8	3.1
Government consumption	92.1	4.2	4.0	3.1	2.8	2.0
Gross fixed capital formation	120.5	8.8	5.7	2.5	1.9	4.6
Final domestic demand	525.6	5.6	4.4	2.7	2.0	3.3
Stockbuilding [a]	2.1	0.1	-0.1	0.1	0.1	0.0
Total domestic demand	527.7	5.6	4.2	2.8	2.1	3.3
Exports of goods and services	143.9	7.6	9.6	3.4	3.3	7.4
Imports of goods and services	143.6	12.8	9.8	3.7	3.0	7.2
Net exports [a]	0.2	-1.5	-0.2	-0.1	0.0	-0.1
GDP at market prices	528.0	4.1	4.1	2.8	2.1	3.3
GDP deflator	_	2.9	3.4	3.9	2.6	2.4
Memorandum items						
Consumer price index	_	2.2	3.5	3.2	2.8	2.6
Private consumption deflator	_	2.4	3.2	3.2	2.8	2.6
Unemployment rate [b]	_	12.9	11.4	10.5	10.7	10.5
Household saving ratio [c]	_	11.7	11.2	11.2	11.6	11.2
General government financial balance [d]	_	-1.2	-0.3	0.0	-0.3	0.0
Current account balance [d]	_	-2.3	-3.1	-2.6	-2.9	-2.8

a) Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
b) Spanish data on labour force, employment and unemployment are revised since 1976 using the methodology applied by the Labour Force Survey as from 2002. Revisions are made by the OECD based on information from the official Statistical Office in Spain. They imply a downward revision of the unemployment rate by 2.5 points in 2001.
c) As a percentage of disposable income.
d) As a percentage of GDP.
Source: OECD.

A balanced budget was achieved in 2001 and is again the target for 2002

The general government account closed in balance in 2001, thanks to very strong revenues from social security contributions. For 2002 the government aims again at a balanced budget, although the growth projection of 2½ per cent underlying the budget seems slightly optimistic. The budget incorporates corporate tax cuts, which are compensated by continued restraint on current spending. Due to sluggish activity, the OECD projects a small deficit in 2002, but the fiscal stance, as measured by the structural budget balance, is broadly neutral. In 2003, a new Budget Stability law will enter into force that will oblige all levels of administration to present a balanced budget.

GDP growth should pick up during the second half of 2002...

As the international recovery picks up, exports should strengthen in the course of 2002 and improve the business sector outlook, thus turning around equipment investment. Better job prospects should contribute to redressing consumer sentiment and maintain private consumption at a strong pace. Overall, GDP is projected to grow by over 2 per cent in 2002, with a strong recovery in 2003. Employment growth should remain solid, even if somewhat more subdued than in previous years, while unemployment could rise moderately in 2002, but start to decline in 2003. Inflation pressures should weaken, with underlying inflation falling below 3 per cent, reflecting a negative output gap over the projection period and more moderate wage settlements.

… but there are downside risks to private consumption

The resilience of private consumption might not last if unemployment rises by more than projected, which could happen if a large number of temporary contracts are not renewed. This would dampen consumer sentiment further and delay the recovery. Also the very strong spending in late 2001 linked to the introduction of the cash euro could be followed by a lull in consumption. On the other hand, a more rapid improvement in the external environment would result in a faster recovery.

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Sweden

Early indicators point to a recovery in both domestic demand and exports in the first half of this year, so that output is expected to expand at or above potential rates throughout the projection period. Sweden is entering the recovery with low unemployment and with inflation still exceeding the targeted rate of 2 per cent. While recent currency appreciation may attenuate such pressures, the rate of wage increases seems to have picked up of late, increasing the risk that this situation may persist.

Despite expansionary fiscal policies, the general government financial surplus is expected to remain above 2 per cent of GDP and to increase further next year. Monetary conditions remain supportive of growth, although much less so than last year. Trends in domestic inflation and the prospect of increasing capacity utilisation mean that further hikes in the policy interest rate are likely to be necessary. Policy action to increase the supply of labour has become more urgent.

A recovery is now underway after weak growth throughout 2001

Output remained sluggish throughout 2001, expanding at a modest 1¼ per cent both in the fourth quarter and for year as a whole. A decline in exports and very subdued private consumption over the year accounted for most of the weakness in demand. Although not yet confirmed by the national accounts, evidence is mounting that the trough of the cycle was passed late last year. A sharp turnaround in consumer and business confidence (including in the important telecommunication sector) occurred in the first quarter of this year. At the same time the pace of expansion in foreign trade and retail sales accelerated. Having exceeded 3 per cent for most of the past year, base-effects are causing inflation to moderate this spring, but it remains above the target rate of 2 per cent.

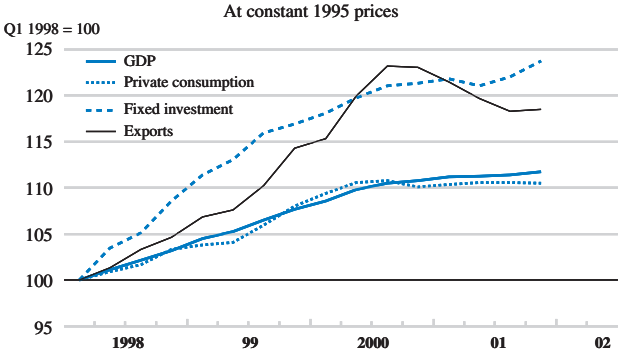
A robust budget surplus remains despite continued fiscal easing

The general government financial surplus was 4¾ per cent of GDP in 2001 despite the slowdown in activity and substantial discretionary easing of fiscal policies. This result was obtained because of exceptionally large, and lagged, payments of corporate and capital gains taxes. The disappearance of these temporary inflows, which may have been as large as 2 per cent of GDP, will contribute to a big decline in the budget surplus this year. This is reinforced by a fiscal stimulus of some 1¾ per cent of GDP, primarily in the form of tax cuts. Nevertheless, the budget surplus should remain at more than 2 per cent of GDP.

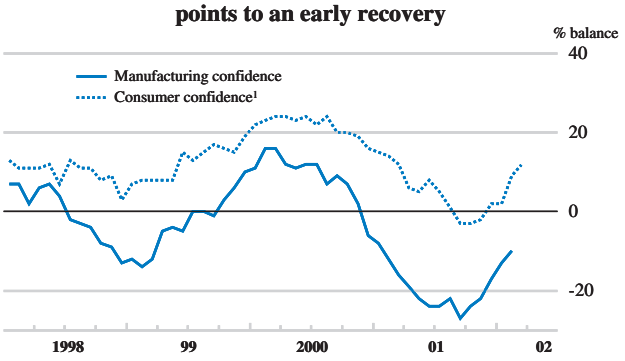
Sweden

Weak exports and consumption slowed output

At constant 1995 prices



The turnaround in confidence points to an early recovery



1. The figures for 2002 may not be fully comparable with those for earlier years due to a change of methodology.

Source: Statistics Sweden; OECD, *Quarterly National Accounts.*

Sweden: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion SEK	Percentage changes, volume				
Private consumption	956.9	3.9	4.6	0.2	2.5	2.7
Government consumption	509.4	1.7	-0.9	1.4	1.3	0.9
Gross fixed capital formation	304.9	9.6	5.0	1.5	-0.4	3.1
Final domestic demand	1 771.2	4.3	3.2	0.8	1.6	2.3
Stockbuilding [a]	15.0	-0.6	0.5	-0.5	0.0	0.0
Total domestic demand	1 786.2	3.6	3.8	0.2	1.6	2.3
Exports of goods and services	832.6	6.5	10.3	-1.4	2.5	9.2
Imports of goods and services	713.5	4.4	11.5	-3.9	1.4	8.0
Net exports [a]	119.1	1.3	0.4	1.0	0.7	1.4
GDP at market prices	1 905.3	4.5	3.6	1.2	2.1	3.2
GDP deflator	_	0.7	1.0	2.0	2.5	2.4
Memorandum items						
Consumer price index	_	0.3	1.3	2.6	2.6	2.8
Private consumption deflator	_	1.0	0.9	1.6	2.4	2.4
Unemployment rate [b]	_	5.6	4.7	4.0	4.2	4.0
Household saving ratio [c]	_	2.8	1.5	4.5	6.3	6.1
General government financial balance [d,e]	_	1.3	3.7	4.8	2.1	2.4
Current account balance [d]	_	3.6	3.3	3.2	3.9	4.7

Note: National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see *OECD Economic Outlook* Sources and Methods, *(http://www.oecd.org/eco/sources-and-methods).*

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.

Monetary conditions support growth but have moved closer to neutral

Monetary conditions have moved closer to neutral from the very expansionary stance in the second half of 2001, largely because the krona strengthened considerably against the euro after political signals early in the year of a tentative timetable for Sweden's possible accession to the European Monetary Union. In addition, the *Riksbank* raised the repo rate by ¼ percentage point to 4 per cent in March.

GDP growth is projected to expand at or above potential rates

Real GDP is projected to expand by 2 per cent this year and 3¼ per cent in 2003. Private consumption is likely to recover momentum, with household real disposable income set to increase almost 5 per cent in 2002. Exports should get support from accelerating world trade and past currency weakness, but the high specialisation in telecommunications products may continue as a negative factor this year. Growth in exports is expected to marginally outstrip growth in imports, thereby causing the trade and current account surpluses to widen. Unemployment is expected to edge up in the short term to a peak of 4½ per cent but to turn down again towards the end of the year in line with a faster pace of job creation. Inflation is expected to persist at around 2½ per cent *per annum*.

The risks are balanced for GDP but possibly skewed upwards for inflation

The risks to the projection are difficult to assess at the current early stage of the recovery but appear balanced. Upside risks include the possibility of greater export market-share gains resulting from past currency weakness and a faster recovery of global demand for telecommunications equipment. Alternatively, greater persistence of relatively high inflation rates, reflecting the tightness of the labour market, could necessitate higher interest rates than assumed, restraining activity. Policies to boost labour supply would contribute positively to managing these risks.

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Switzerland

Switzerland did not escape the international slowdown in 2001. With activity growing by no more than 1¼ per cent, unemployment rose and public finances deteriorated. However, an upturn is expected for the second half of 2002. The recovery is likely to be fairly moderate because of the continuing strength of the exchange rate since the events of 11 September. With a negative output gap and low import prices, inflation should be limited to around ½ per cent in 2002-03.

In the absence of inflationary pressures, the Swiss National Bank should keep an accommodative monetary stance until the recovery is on a firmer ground. A balanced federal budget will be difficult to achieve in 2002 but needs to be ensured in structural terms in order to allow for a smooth introduction of the debt containment rule in 2003. Moreover, resolute efforts must be pursued to strengthen competition and market liberalisation in order to increase the potential growth rate of the economy.

Activity slowed because of the weakening of the external environment

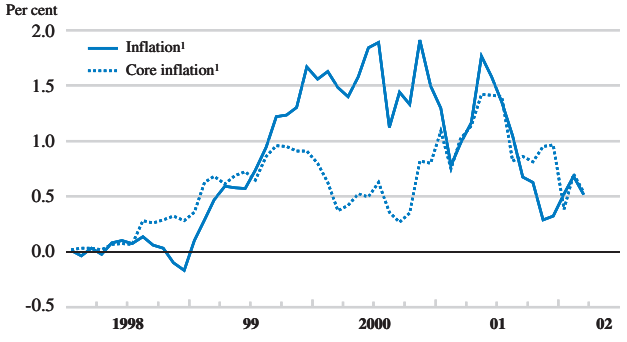
GDP growth, which reached 1¾ per cent in the first half of 2001, stagnated in the second half of the year. This downturn in activity, which derives from less dynamic exports and investment, was accompanied by an easing of tensions in the labour market. Employment growth slowed considerably and the unemployment rate, which was only 1.7 per cent until the autumn, rose to 2.6 per cent in March 2002. Household confidence has picked up somewhat recently after a sharp fall last autumn, but job security concerns have increased. Against this background, the rise in consumer prices was down to 0.5 per cent in March 2002.

The monetary stance is accommodative

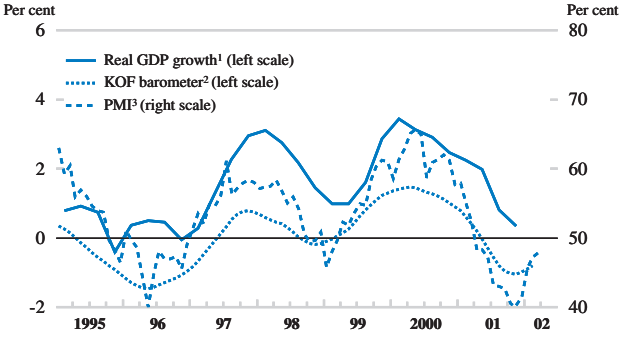
Since the events of 11 September, the Swiss National Bank has lowered the three-month money market rate (LIBOR) by 1½ percentage points in several stages to 1.75 per cent, the last half point reduction dating from December 2001. The impact of lower interest rate on monetary conditions has only been partly offset by the effective appreciation of the Swiss franc since the autumn and the current accommodative monetary stance appears appropriate given the weakness of activity. The projections are based on a stable interest rate up to the end of 2002.

Switzerland

Inflation has been slowing



The cyclical trough may have been reached



1. Year-on-year percentage changes.
2. The KOF barometer is a leading indicator of future GDP growth, with an average lead of 6 to 9 months.
3. The Purchasing Managers' Index (PMI) is an index based on the response of 200 managers at Swiss industrial companies about their performance in the current month compared with the prior month. An index below 50 indicates that the production is falling.

Source: National Swiss Bank; Crédit Suisse; KOF; OECD, *Quarterly National Accounts.*

Switzerland: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices billion CHF	Percentage changes, volume (1990 prices)				
Private consumption	229.0	2.2	2.0	2.3	1.6	2.2
Government consumption	56.8	0.5	-0.4	0.1	0.0	0.0
Gross fixed capital formation	76.0	3.7	5.8	-1.3	-0.9	3.8
Final domestic demand	361.8	2.3	2.7	1.0	0.7	2.3
Stockbuilding [a]	- 0.8	0.3	-0.2	-0.2	0.0	0.0
Total domestic demand	361.0	2.6	2.4	0.9	0.7	2.3
Exports of goods and services	148.1	5.2	10.0	1.0	0.5	5.1
Imports of goods and services	129.1	7.5	8.5	0.0	-0.3	5.3
Net exports [a]	19.0	-0.9	0.6	0.5	0.4	0.0
GDP at market prices	380.0	1.6	3.0	1.3	1.0	2.3
GDP deflator	_	0.6	1.1	1.8	1.4	1.2
Memorandum items						
Consumer price index	_	0.8	1.6	1.0	0.6	0.7
Private consumption deflator	_	0.4	0.9	0.9	0.6	0.7
Unemployment rate	_	2.7	2.0	1.9	2.5	2.2
Current account balance [b]	_	11.0	12.9	9.9	10.3	10.6

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 GDP.
Source: OECD.

A balanced federal budget will be difficult to achieve in 2002

The general government balance is estimated to have been in deficit of about ½ per cent of GDP in 2001, after a surplus of 2½ per cent in 2000. This deterioration, which is cyclical as well as structural, affected all levels of government. In 2002, the orientation of budget policy should be neutral overall, with a slight expansion for local governments compensated by the Confederation's restrictive stance. The goal of a federal budget close to equilibrium is unlikely to be achieved, however, because economic conditions will probably be more unfavourable than expected. The federal authorities are considering expenditure reductions of roughly ¼ per cent of GDP for 2003 to ensure that the Confederation's structural balance is in equilibrium, as required by the introduction of the new debt containment rule.

Inflation should stay low despite an upswing in activity

Leading indicators suggest that the trough of the cycle may be past. But investment and exports will probably remain depressed in the coming months because of sluggish market growth, while private consumption may slow down as the labour market worsens. However, in the second half of the year, the expected improvement in the external environment will probably lead to a gradual upswing in activity, with GDP growth attaining 1 per cent in 2002 and 2¼ per cent in 2003, slightly above potential. Given an output gap of close to 1 per cent in 2002-03, and low import prices, inflation should remain at around ½ per cent in 2002 and 2003, whereas the unemployment rate could average 2½ per cent this year before easing somewhat in 2003.

Projections are surrounded by substantial risks

Several risks could affect these projections. First, a sharper downturn in domestic demand cannot be ruled out in the event of a more marked deterioration of the labour market. In addition, the outlook for the external environment remains uncertain, with the strength of the upturn depending particularly on the pace of recovery in the euro zone.

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Turkey

The government continued to satisfy the performance criteria of the previous stand-by agreement, and was able to negotiate a new one, making Turkey the largest debtor to the International Monetary Fund. Developments in early 2002 were in a number of respects moving in the right direction, laying the foundations for a recovery of demand. Nevertheless, the weakness of the financial sector and the burgeoning financial liabilities of the corporate sector suggest that per capita GDP will not return to 2000 levels by 2003.

To maintain the current improvement in financial indicators, the Turkish government should continue with the steady implementation of structural measures, in particular in the financial sector, and adhere to expenditure targets. A restoration of market confidence would lower inflation expectations and interest rates which, with greater political stability, should strengthen the prospects for sustainable economic growth from next year onward.

A new economic programme has been announced…

Even before the 11 September events, stubbornly high real interest rates and a near-doubling of the public sector debt (to a level of 115 per cent of GNP in 2001) were leading to growing doubts about fiscal sustainability. At the same time, GDP was contracting sharply while inflation remained stuck at above 50 per cent. In response, the Turkish authorities indicated their intention to adopt a new medium-term programme by the end of 2001. The Executive Board of the International Monetary Fund (IMF) approved a front-loaded three-year standby credit of $16 billion in February 2002.[1]

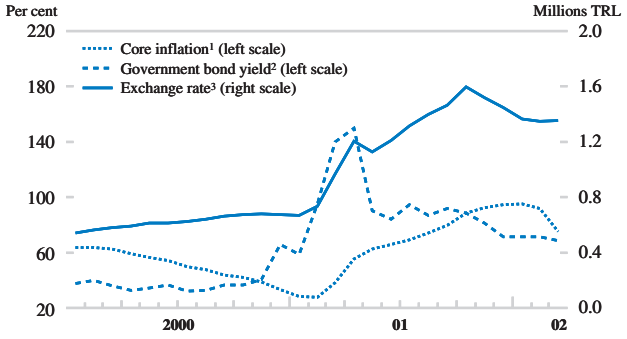
… with some challenging objectives for the economy

The new programme specifies objectives for macroeconomic and structural policies in order to bring public finances and inflation under better control.

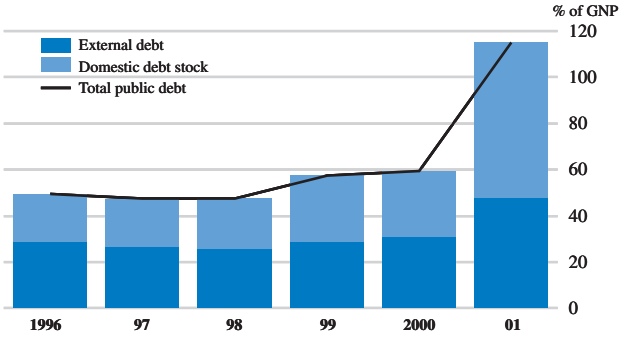
– The primary budget surplus will be increased to 6.5 per cent of GNP in 2002, from an estimated 5.5 per cent in 2001. Fiscal measures are to be based on

Turkey

Core inflation and bond yields are falling



The gross public sector debt ratio has doubled



1. Private manufacturing price index, year-on-year percentage changes.
2. Secondary market, average of 6 month maturity.
3. Millions of Turkish lira per US$.

Source: State Institute of Statistics, Istanbul Stock Exchange, Central Bank of Turkey, Undersecretariat of Treasury, OECD.

1. The total amount of funds available will be $14 billion for the year 2002, while the remaining $2 billion will be made available in 2003-04. Two-thirds of this amount was disbursed up front, of which in turn $6.1 billion was used to repay outstanding resources under the Supplemental Reserve Facility which was a swap of expensive short-term loans with cheaper long-term funds.

Turkey: **Demand, output and prices**

	1998	1999	2000	2001	2002	2003
	Current prices trillion TRL	Percentage changes, volume (1987 prices)				
Private consumption	36 123	-2.6	6.2	-9.0	1.5	2.0
Government consumption	6 633	6.5	7.1	-8.6	-2.3	-0.8
Gross fixed capital formation	12 839	-15.7	16.9	-31.7	5.0	10.9
Final domestic demand	55 595	-5.6	8.9	-15.0	1.9	3.7
Stockbuilding [a]	- 212	2.0	1.1	-4.0	1.8	0.2
Total domestic demand	55 383	-3.7	9.8	-18.4	3.8	3.9
Exports of goods and services	12 713	-7.0	19.2	7.4	2.0	7.2
Imports of goods and services	14 573	-3.7	25.4	-24.8	7.8	8.9
Net exports [a]	-1 860	-0.9	-3.0	12.4	-1.8	-0.3
Statistical discrepancy [a]	-1 298	0.0	0.1	0.0	0.0	0.0
GDP at market prices	52 225	-4.7	7.4	-7.4	1.8	3.5
GDP deflator	_	55.6	49.9	53.0	51.7	26.8
Memorandum items						
Consumer price index	_	64.9	54.9	54.4	48.7	32.2
Private consumption deflator	_	59.0	50.0	51.7	51.0	29.4
Unemployment rate	_	7.5	6.4	8.4	9.2	8.6
Current account balance [b]	_	-0.9	-4.9	2.4	0.2	-0.2

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.

genuine spending cuts including real cuts in public sector wages and employment, the ending of bank credit subsidies, and the elimination of exemptions or discounts from charges of State Economic Enterprises.

– Inflation targeting will be the ultimate monetary policy tool, entailing, as preconditions, an improvement in the government debt position and its management to allow room for manoeuvre, a strengthening of the banking system, less volatility in the exchange rate, and a decline in inflation expectations. The authorities have indicated June 2002 as the date for these preconditions to be met. In the meantime, base money targeting will aim implicitly at an inflation rate of 35 per cent by the end of 2002.
– The comprehensive agenda of banking sector reform will continue to be implemented. This will require, *inter alia*, an accurate evaluation of private banks' loan portfolios and other counterparty risks. The evaluation will be finalised by the end of April 2002 and will be followed by equity injections by shareholders and subordinated debt investment funding by the State Deposit Insurance Fund in viable banks. At the same time, to complete the operational restructuring of state banks, the number of branches will be reduced sharply.

Recent financial indicators have been favourable

The additional financial support approved by the IMF has substantially eased the risk of a further rapid deterioration in Turkey's large domestic public debt burden, and financial markets have reacted favourably. Since October 2001, when the discussion of the new programme with the IMF began, the Turkish lira has appreciated in nominal terms, the country's credit rating has improved and interest rates on Treasury bills have fallen below 60 per cent. These developments have helped to ease banking and public sector finances somewhat. There has also been a marked fall in core inflation and inflation expectations, largely reflecting economic and labour market weakness.

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Market confidence is essential in attaining stronger growth

If the new programme meets its fiscal and monetary objectives, a slow recovery of growth and a decline in inflation are in prospect. Under the OECD projections, the real exchange rate is assumed to remain stable at current levels, which entails a cumulative real depreciation of less than 1 per cent since the ending of the currency peg in February 2001. Moreover, as long as the government achieves its budget targets for this year and thereby lowers the public debt burden, this will eventually restore market confidence and lead to a decline in real interest rates. The stable real exchange rate accompanied by the reduction in interest rates will boost domestic demand. The return of strong export market growth will improve the current account.

The Turkish economy is still facing risks

The Turkish economy still faces major risks. Continuously falling real wages, higher unemployment, weak foreign investor confidence, a fragile banking system and cash-constrained corporate sector could delay the expected domestic recovery. A failure of world demand to pick up or an exacerbation of political instability in the region would greatly amplify risks from the external side. If growth falls below expectations, lower fiscal revenues would require further revenue-raising measures or spending cuts which could be difficult to implement given the already very tight fiscal stance. On the monetary side, the Central Bank should become effectively independent once it shifts to the inflation targeting regime. However, given the stringent preconditions outlined above, June 2002 seems an optimistic starting date for a successful launch of the new policy regime, implying continuing inflation risks once demand starts to recover.

III. DEVELOPMENTS IN SELECTED NON-MEMBER ECONOMIES

Economic prospects in non-member economies have improved with clear evidence that the US economy is recovering and the likelihood that growth in Europe has bottomed out. The degree to which economies will benefit from the recovery in world demand will vary with their exposure to information and communications technology trade and world commodity prices; it will also vary with regional factors such as the crisis in Argentina for Latin America and the shifts in trade and investment patterns in Asia in the wake of China's entry into the World Trade Organisation. Overall, continuing domestic economic strains and constraints on macroeconomic policies are likely to produce, to varying degrees, relatively subdued recoveries through 2003.

Asian non-member economies stand to benefit most from the world recovery by virtue of their high exposure to the turnaround in the information and communication technology sector, which should more than counter-balance the impact of a weaker yen. But banking and corporate financial problems have become more widespread in the region and, along with the need for fiscal restraint, are likely to blunt the upturns and pose downside risks. Growth in China has remained comparatively strong but will become increasingly dependent on progress on structural reforms.

Growth in Russia has held up, but due partly to temporary factors that are expected to abate in 2002. Prospects beyond 2002 depend on progress on the domestic reform agenda.

In South America, the main event has been the culmination of the Argentine crisis with the abandonment of the currency board. But limited contagion in the region creates hopes that the policy framework in place in countries like Brazil or Chile is now more resilient than previously and will support growth in the coming years.

Dynamic Asia was hardest hit in 2001 but is now poised to rebound with world activity

The Dynamic Asian region was most severely hit by the world-wide downturn. Exports of Dynamic Asian Economies (DAE) fell by nearly 10 per cent in 2001. Countries most exposed to trade in the information and communication technology (ICT) sector, notably Singapore, Chinese Taipei, Malaysia and Hong Kong (China), experienced negative or flat real GDP growth for 2001 as a whole, as inventory de-stocking and a fall in domestic fixed investment reinforced the impact of the export slowdown. Indonesia and the Philippines, together with China, were much less affected, due to more limited exposure to ICT or to relative strength in domestic demand. Signs of a levelling off in exports and of a revival in the electronics sectors in some countries beginning late last year suggest that the economic downturns have bottomed out and that economies are poised to rebound as world economic activity recovers.

But ongoing internal strains are likely to subdue the recoveries

The extent to which Asian countries will benefit from the revival in world demand will be limited, to varying degrees, by ongoing internal financial strains and other constraints. Banking and corporate debt problems, which remain severe in Indonesia and Thailand (and to a lesser extent in Malaysia) and have been rising in Chinese Taipei and the Philippines, pose the most serious domestic risks to recovery. Given these financial strains, together with depressed real estate markets and low capacity utilisation in some sectors, capital spending is not expected to recover much before 2003. Fiscal policy, which has been expansionary during the downturn, now faces a period of retrenchment in a number of countries (particularly Thailand, the Philippines and Indonesia) to reduce budget deficits and contain already high public debt levels. Increased competition from China following its World Trade Organisation (WTO) entry represents an important medium-term uncertainty for Chinese Taipei, which faces the prospect of further migration of its ICT business to China. Overall, growth in the

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DAE is expected to pick up only moderately in 2002 and, while gaining momentum in 2003, will remain below long-term potential rates in most cases.

Growth in Russia and NIS economies has held up but may slow in 2002

Despite the world economic slowdown, Russia and most Newly Independent States (NIS) experienced relatively strong growth of over 5 per cent in 2001. Rising domestic demand and weaker exchange rates since the financial turmoil of 1998 and early 1999 underpinned growth for a number of countries in the region. Some of the factors supporting this growth are transitory, however, and the economic expansion is likely to slow somewhat in 2002.

The crisis in Argentina affects the situation in South America…

Despite various reforms aiming at redressing the sustainability of fiscal policy and to offset the impact of an appreciating reserve currency, market sentiment towards Argentina continued to deteriorate throughout 2001, as expressed in widening bond spreads, bank deposit withdrawals and the loss of international reserves. In December, controls on bank deposits were imposed to safeguard against a possible run on the banks and further losses in central bank reserves. This breach of the currency board convertibility provisions exacerbated the crisis of confidence and culminated in outright default. The exchange rate peg was abandoned in early February. The massive exchange rate depreciation is creating fears of an inflationary spiral. This would aggravate the already serious recession, which is now in its fourth year, and add to social distress. The government is presently seeking to bring the budget deficit under control, which is clearly an essential priority. But the impact of exchange rate depreciation on private sector indebtedness, and the scope of the clean-up actions required to deal with this, remains uncertain.

… but with limited financial contagion in the region

The fact that the Argentinean crisis was largely anticipated and priced by markets may explain the limited financial contagion to other countries in the region. Exchange rate pressures calmed down both in Brazil and Chile during the second half of 2001 and growth is picking up moderately in these countries. This financial decoupling may help to limit risk aversion towards emerging markets in the region and avoid a much feared large reduction of private capital flows. The upturn in the OECD countries, notably the United States, would also create favourable conditions. In particular, the resource and energy exporters, such as Venezuela, which have been negatively affected by the global downturn, would benefit from a recovery in energy demand.

China

China's real GDP growth slowed in late 2001 but is now picking up

China's exports slowed progressively during 2001, rising by only 7 per cent in dollar terms for the year as a whole compared to nearly 29 per cent in 2000. Import growth also declined, but the overall contribution of external demand to growth was probably negative for the year as a whole. The effects of the external slowdown on the economy became apparent in the fourth quarter, when real GDP growth fell to 6.4 per cent, year-on-year, significantly below the 8.0 per cent growth recorded in 2000. However, recent data suggest that both external and internal demand are beginning to pick up. Industrial production rose by 9 per cent in December 2001, year-on-year, and exports had already begun to rebound in November. Salary increases and year-end bonuses awarded to civil servants at the end of last year are likely to have boosted consumption and industrial production in early 2002.

Table III.1. **Projections for China**[a]

	2000	2001	2002	2003
Real GDP growth	8.0	7.3	7.1	7.6
Inflation (CPI)	0.4	0.8	0.8	1.4
Fiscal balance (% of GDP)	-2.8	-2.7	-3.3	-3.0
Current account balance ($ billion)	20.5	17.5	15.2	8.9
Current account balance (% of GDP)	1.9	1.5	1.2	0.7

a) The figures given for GDP and inflation are percentage changes from the previous year. Inflation refers to the consumer price index.
Source: Figures for 2000 are from national sources. Figures for 2001-03 are OECD estimates and projections.

Growth has become more dependent on household and business spending

As aggregate real growth has slowed since 2000, its composition has shifted. The contributions from the external sector and from the government budget have declined, as exports have slowed and government infrastructure spending has levelled off. The contribution of the budget to growth is likely to be only moderate in 2002, despite a planned increase of more than 10 per cent in defence spending. In contrast, consumer demand, particularly on housing and related items, has strengthened since 2000, and capital spending by state owned enterprises has picked up. China's external competitiveness remains strong, as indicated by the fact that exports continued to gain market share in 2001. Foreign direct investment (FDI) inflows rose by 15 per cent last year, and FDI contracts, a leading indicator of future flows, surged in January 2002 to 33 per cent above their year-earlier level.

Sustaining adequate growth after WTO will be a challenge

Despite these strengths, China faces significant challenges in the medium term in maintaining rates of real growth similar to those currently experienced as it adjusts to its recent entry into the WTO. The net contribution from external trade is likely to continue to be negative as imports surge in response to the lowering of tariffs and other trade barriers over the next several years. Domestic growth is uneven, as the rise in rural income growth continues to lag considerably behind that of urban areas, and large portions of the enterprise sector record low or negative profits and bear high debt loads. The ability of the financial institutions to support the business restructuring that will be needed with the adjustment to WTO entry remains constrained by the high level of non-performing loans, low profitability, and their still weak commercial orientation. The scope for macroeconomic policies to sustain growth is also likely to be limited. The People's Bank of China reduced the one-year bank lending rate by 50 basis points, to 5.35 per cent, in late February (the first such cut since June 1999). However, the impact is likely to be blunted by the continued reluctance of banks to lend in the face of non-performing loan problems and, with demand-deposit rates now below one percent, there is little room for any further cuts. The scope for further fiscal stimulus is constrained by the already-high government budget deficit, and the prospect that government debt will have to rise substantially in order to pay for the clean-up of the balance sheets of financial institutions and other reforms that are likely to be necessary over the next few years.

Further progress on structural reforms will be essential

As indicated in a new OECD study,[1] domestic structural reforms will be the key to the economy's ability to cope with and realise the benefits from WTO entry. It will be important over the next several years to reduce government and other impediments

1. *China in the World Economy: the Domestic Policy Challenges*, OECD, April 2002. A synthesis report of the study was published in March 2002.

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to business restructuring, improve banks' financial conditions so that they can better support adjustments in the real economy, and establish more sustainable public finances. While progress is being made in these areas, the authorities have been reluctant to announce major new reform initiatives ahead of the change in government leadership in early 2003.

The Russian Federation

Growth continues in Russia, but is slowing

The Russian economy experienced another year of growth in 2001 (5 per cent), spurred by rising domestic demand and high oil and gas prices for much of the year. Nevertheless, the continued real appreciation of the currency, upward adjustments in (still repressed) regulated domestic energy prices, and rising wage costs have reduced profit margins in Russian industry. Seasonally-adjusted industrial output remained essentially flat in the latter part of 2001 and early 2002.

Russia's enormous trade surplus is beginning to shrink

Rapid import growth (18 per cent in 2001) and somewhat lower oil and gas prices are finally reducing Russia's enormous trade surplus. The current account weakened by $10 billion in 2001 relative to 2000, yet still remained at $35 billion. Although the central bank has continued to accumulate foreign reserves, high net outflows of capital, both from foreign debt payments and private investment abroad, continue to be the main counterpart to the large current account surplus.

Macroeconomic policy remains tight as inflation pressures persist

Purchases of foreign reserves to maintain exchange rate stability have been a source of inflationary pressures in Russia. Annual inflation, measured by the consumer price index, registered 19 per cent in 2001. Monthly inflation accelerated to 3 per cent in January 2002, although primarily due to seasonal and one-off factors. Fiscal policy continues to be tight, and the Russian government has expressed a determination to avoid a fiscal deficit in 2002 even in the event of weak oil prices.

Short-term prospects are favourable

The Russian economy should continue to expand in 2002, fuelled by higher domestic demand, but at a slower pace than in 2001. Relatively rapid import growth is likely to continue on the basis of higher demand and a stronger rouble, reducing the current account surplus still further in the absence of substantially higher oil and

Table III.2. **Projections for the Russian Federation**[a]

	2000	2001	2002	2003
Real GDP growth	9.0	5.0	3.5	4.0
Inflation	20.2	18.6	15.0	10.0
Fiscal balance (% of GDP)[b]	2.0	2.5	2.0	0.0
Current account balance ($ billion)	46.3	35.0	30.0	25.0
Current account balance (% of GDP)	16.0	10.0	8.0	6.0

a) The figures given for GDP are percentage changes from previous year. Inflation refers to the end-of-year consumer price index.
b) Includes federal, regional and local budgets.
Source: Figures for 2000 are final figures from national sources. Figures for 2001-03 are OECD estimates and projections.

gas prices. The achievement of another federal budgetary surplus in 2002 appears probable, although exceptionally high foreign debt payments are scheduled in 2003, which could complicate the subsequent fiscal picture if oil prices are weak. As the transitory factors that have supported Russian economic growth in recent years continue to weaken, medium and long-term prospects depend more and more on reforms aimed at improving the climate for business and investment in the country. The Russian government has made some important progress in the realisation of such reforms, but the future challenges remain formidable.

Brazil

GDP growth declined throughout 2001…

GDP growth slowed sharply throughout 2001, before moving into negative territory. By the fourth quarter, output was some 0.7 per cent below its level of a year earlier. This decrease was mainly concentrated in the industrial sector. GDP growth for 2001 as a whole was modest, probably not much more than 1½ per cent. Nevertheless, compared with other countries in the region, the Brazilian economy held up relatively well to domestic and external shocks. On the domestic side, the risks of major energy shortages did not materialise. The continuation of the energy savings programme, increased use of price mechanisms, higher potential for electricity imports and the construction of new thermal and hydro plants are the key elements on which the government relied to end rationing of energy use in early March 2002.

… but Brazil resisted well the financial contagion in the region

The financial contagion from the Argentinean crisis has been contained. The strong demand for hedging on the part of domestic agents abated and the exchange rate to the dollar, which had depreciated by more than 30 per cent from January to September 2001, has stabilised. Reflecting the real exchange rate depreciation, the trade balance in 2001 recorded a surplus ($2.6 billion) for the first time since 1995. This helped to contain the current account deficit at below 5 per cent of GDP. The risk of a major drying-up of capital flows following the 11 September terrorist attacks in the United States was avoided, with the external financing of the Brazilian economy remaining adequate. Despite a significant fall in global private investment flows, Brazil received around $23 billion of foreign direct investments in 2001, approximately the same amount as the current account deficit. Overall, this limited

Table III.3. **Projections for Brazil**[a]

	2000	2001	2002	2003
Real GDP growth	4.5	1.6	2.5	3.0
Inflation	6.0	7.7	5.0	4.0
Fiscal balance (% of GDP)[b]	-1.2	-3.0	-3.5	-3.0
Primary fiscal balance (% of GDP)	3.5	3.7	3.5	3.5
Current account balance ($ billion)	-24.7	-23.0	-22.0	-20.0
Current account balance (% of GDP)	-4.2	-4.6	-4.1	-3.5

a) The figures given for GDP and inflation are average percentage changes from the previous period. Inflation refers to the end-year consumer price index (IPCA).
b) Harmonised concept excluding revaluations of public debt due to changes in the exchange rate.
Source: Figures for 2000 are from national sources. Figures for 2001-03 are OECD estimates and projections.

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financial contagion from Argentina apparently reflected increased confidence of international markets *vis-à-vis* the Brazilian economy.

Macroeconomic policies support a moderate rise in economic activity in 2002-03…

The inflation target for 2001 was overshot, with consumer price inflation reaching 7.7 per cent (year-on-year) in December. Missing the target was due both to the weakness of the exchange rate and to increases in administered prices. Notwithstanding, in February the central bank adopted an easier monetary policy stance by reducing the reference short-term interest rate by 0.25 per cent for the first time, having maintained it at 19 per cent since March 2001. Avoiding an overly restrictive monetary policy, the bank considers this stance to be compatible with a consumer price inflation rate within the target band (3.5 ± 2 per cent) by the end of 2002. Most importantly, the planned fiscal consolidation was pursued, with a 2001 outturn for the primary surplus of 3.75 per cent compared with the initial 3.35 per cent target. Thus, the fiscal legislative framework (notably, the Fiscal Responsibility Law) put in place after the 1999 exchange rate crisis is continuing to deliver results. Indeed, the primary surplus resulted from the consolidation efforts of both the federal and state-level accounts, the latter contributing around 1 per cent of GDP to the surplus.

… depending on risk factors remaining under control

GDP growth is projected to pick up to 2½ to 3 per cent in 2002 and 2003. With a relatively stable exchange rate and no further major increases in administered prices, the inflation rate is likely to converge progressively back to the central bank's target. The external adjustment is also projected to continue, though at a more moderate pace. The main downward risks are related to the burden of the public debt to GDP ratio, which increased by 4 percentage points to reach more than 53 per cent in December, due to the negative impact of the exchange rate depreciation and to the high real interest rates. Maintaining control of the public budget accounts requires a firm continuation of the fiscal adjustment both before and after the October elections. Reduction of the relatively high external debt-to-export ratio will also require rapid growth in export revenues. This growth will take time to materialise, because enhancing the international competitiveness of the enterprise sector is related mainly to structural factors. Meanwhile, some financing pressures on the balance of payments could arise if international private capital flows remain subdued. Political uncertainty linked to the presidential elections will probably dominate the outlook for the next few months, but the resilience of the present policy framework to the various shocks which have affected the Brazilian economy is certainly a positive factor.

IV. ECONOMIC CONSEQUENCES OF TERRORISM

Introduction and summary

The terrorist attacks ushered in a period of greater uncertainty…

On the morning of Tuesday 11 September 2001, the United States was hit by a set of unprecedented terrorist attacks, calculated to inflict massive civilian casualties and damage. Four hijacked commercial jets crashed, two into the World Trade Center towers in Manhattan, which collapsed shortly thereafter, one on the Pentagon in Washington DC, and the last one in Pennsylvania. Over 3 000 people were killed, including hundreds of rescue personnel. The US President declared the aggression to be an act of war and in early October military action commenced in Afghanistan. Even though this was not the first attack in the United States, the horrific scale of destruction and the boldness of the terrorists ushered in a period of greater uncertainty. Half a year later, however, the direct economic effects seem to have largely vanished. The first phase of the military operations in Afghanistan was over in a matter of weeks. Confidence and equity prices bounced back rapidly. Consumption and activity showed more resilience than initially feared, not least thanks to a vigorous response by policymakers and the private sector. Even though the short-term macroeconomic impact has largely dissipated, the attacks and the response they have elicited may still have long-lasting implications. In addition, further terrorist attacks remain a prominent danger, as several subsequent thwarted attempts testify.

… with possible medium-term economic consequences

This paper analyses the economic consequences of terrorism, both in terms of immediate policy response in the aftermath of the attacks and of medium-term policy implications for regulatory, trade and fiscal policy. The first section covers the short-term impact of the attacks and the crisis management decisions taken by the authorities to limit or offset their direct negative economic impact. The second section looks at the reaction of the insurance industry to the increased threat of terrorism and discusses whether governments should intervene when the private insurance sector fails to cover terrorism. The third section examines the impediments to international trade that could result from tighter security screenings of border crossings. The fourth section discusses the rise in national defence and domestic security spending, which may divert resources away from directly productive uses and contribute to a deterioration of the fiscal outlook.

A first main message of this paper is that the vigorous policy response after the attacks has played a very important role in averting a short-term negative economic impact. A second message is that medium-term policies aimed at enhancing protection against the threat of terrorism need to be properly designed. This has several policy implications:

Good crisis management helped restore confidence rapidly

– Crisis management played a key role after 11 September to restore confidence, safeguard the financial system and avoid a self-fulfilling depression. Decisions taken by the Federal Reserve, other central banks and governments were essential in this respect. One lesson of this crisis is that when policymakers have to

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take rapid decisions in an environment of deep uncertainty and imperfect information, priority ought to be given to liquidity management. Financial support to any sector or industry should focus on short-term loans or guarantees, rather than on grants or other direct budget outlays. After the immediate crisis response, more attention can be devoted to longer-term measures, if necessary.

New market-based insurance mechanisms are emerging

– In reaction to the attacks, the insurance industry raised its premiums, reduced coverage and called on governments to step in and cover risks deemed too large for the private sector. Indeed, risks related to terrorism are difficult to price, not least because of the possibility that several catastrophic events occur at once (correlated risk). However, private sector initiatives specifically tailored to provide insurance for this type of risk are emerging. Market-based instruments, such as catastrophe bonds, are also available, although they are at present not actively traded. Private sector coverage of some types of terrorism risk may therefore be restored in the future. Government intervention to fill the gap in the meantime should be considered with caution and limited in time and scope. Mega-terrorism risk poses special challenges that cannot be fully addressed by the private sector and may require international action.

Tighter border controls could have detrimental economic consequences

– The disruptions in the transportation system following the attacks have illustrated the importance of efficient and open borders for the daily operations of firms. The just-in-time supply chain management system, increasingly common in industry, depends to a large degree on the efficiency of border crossings. The severe tightening of border controls following the September attacks resulted in long waiting times that disrupted the operations of manufacturing companies, especially at the US-Canada border. Border controls have now been relaxed and waiting times reduced, but some observers feel that the porosity of borders creates a security threat. Attempts to reinstate comprehensive controls at the borders would have long-lasting detrimental consequences for economic growth. Industrial sources estimate that proposed security measures may increase the *ad valorem* cost of trading internationally by 1 to 3 percentage points. Given that the elasticity of trade flows with respect to transaction costs may be in the –2 to –3 range, this could lead to a significant drop in international trade, negatively affecting openness, productivity and medium-term output growth. Thus, the right balance between efficiency and security at the border needs to be found, preferably in agreement with trading partners and on a non-discriminatory basis.

Public spending on security threatens fiscal consolidation

– To combat terrorism, public spending on homeland security and military operations has been raised significantly in the United States and to a lesser extent in other OECD countries. Private sector spending is likely to be on the rise as well to improve the security of premises, employees and information. This may crowd out the accumulation of directly productive capacity, increase the cost of capital, raise wages and divert research and development (R&D) activities toward military projects. Therefore, the benefits associated with the peace dividend may be reduced. Rough calibrations suggest that an increase in public military-security spending by 1 per cent of GDP and private security spending by 0.5 per cent of GDP would reduce output by about 0.7 per cent after five years. Hence, the step-increase in anti-terrorism spending ought to be accompanied by a hard look at the costs and benefits of other military programmes, along the lines of what is intended more generally in the budget for non-defence spending. In addition, tighter security may reduce the level of productivity as, for instance, waiting times lengthen at airports

and borders. Public financial support to strategic industries (such as aviation) and protectionist measures could also distort competition and reduce productivity growth. Although these effects should remain small based on measures currently announced, caution needs to be exercised.

Short-run impact and crisis management

The scale and impact of the attacks dwarfed earlier ones

The 11 September attacks inflicted casualties and material damages on a far greater scale than any terrorist aggression in recent history. The destruction of physical assets was estimated in the national accounts to amount to $14 billion for private businesses, $1.5 billion for State and local government enterprises and $0.7 billion for Federal government.[1] Rescue, cleanup and related costs have been estimated to amount to at least $11 billion. Lower Manhattan lost approximately 30 per cent of its office space and scores of businesses disappeared. Close to 200 000 jobs were destroyed or relocated out of New York City, at least temporarily.[2] Within weeks of the attacks, bio-terrorism came to the fore. Lethal anthrax spores were found to have contaminated mail, causing several deaths. At the same time, awareness of a number of other sources of threats increased. Concerns were raised about the vulnerability of critical infrastructure (power plants, nuclear facilities, chemical factories, dams, bridges, pipelines and water supply). The threat of mega-terrorism ceased to be considered as pure fiction (Box IV.1).

The adverse conjunctural impact was sharp but temporary…

Confidence sagged…

By early September 2001, household and business confidence in the United States as well as in most other OECD countries had already weakened considerably compared with their 2000 peaks (Figure IV.1). The attacks further dented confidence. In the United States, consumer and business surveys showed falls in the overall confidence measures akin to those observed in the wake of the Iraqi invasion of Kuwait in 1990, and much larger than those following terrorist attacks in the 1990s. In Europe and Japan, confidence was also weakened, albeit less sharply. Forecasters responded with one of the largest one-time collective downward revisions in recent history. Thus, the consensus forecast for US real GDP growth was instantly downgraded by 0.5 percentage point for 2001 and 1.2 percentage points for 2002 (Figure IV.2). The implied projected cumulative loss in national income through the end of 2003 amounted to 5 percentage points of annual GDP, or half a trillion dollars.[3]

… but in the event, activity held up fairly well…

With production severely disrupted and consumers temporarily limiting shop visits, real GDP shrank in the third quarter. But in the fourth quarter, demand held up better than initially feared, and GDP increased. Private sector fixed investment registered a steep decline, and inventories were slashed. Offsetting these forces, however,

1. These property losses are reflected in the national accounts as an increase in the consumption of fixed capital and therefore a reduction in net domestic product, but not in GDP, which measures the production of goods and services.
2. See DRI-WEFA (2002).
3. It should be borne in mind, however, that in September 2001, forecasters were most probably on course to revise their projections downwards anyhow, so that not all of the observed revision can unambiguously be ascribed to the terrorist attacks.

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Box IV.1. How to prepare for the risk of mega-terrorism

Over the past few decades, dozens of aggressive movements have emerged espousing varieties of nationalism, religious fundamentalism, fascism and apocalyptic millenarianism. Terrorist threats and actions have come in many guises, including aircraft hijackings in the 1970s, the 1983 suicide attack on US and French contingents of the multinational peacekeeping force in Beirut, the 1993 attack on the World Trade Center, the 1993 bombing in the City of London, the 1995 sarin gas attack in the Tokyo metro and the 1996 bombing of a US military compound in Saudi Arabia, which put terrorism at the forefront of the subsequent G7 summit. Recent terrorist attacks (Oklahoma City, Khobar Towers, US Embassies in Kenya and Tanzania) have been increasingly more destructive and claimed a growing number of victims.

The 11 September attacks exceeded in scale and audacity those of previous events. Yet, attacks on an even broader scale may occur. The US government, intelligence and military leadership have warned that new attacks may happen in the near future. Attacks using weapons of mass destruction, although considered to have a remote probability, are not ruled out by security experts. The US government is taking the risk seriously and has reportedly activated, immediately after the 11 September attacks, a contingency plan (*Continuity of Operations Plan)* that involves housing senior officials in nuclear shelters.[1] The US Vice-President is also subject to special security procedures.

According to security specialists, terrorists could at some stage attempt to explode a nuclear device or release contagious viruses in a populous metropolitan area.[2] During the Cold War, the Soviet Union developed "suitcase" nuclear bombs that could be carried by a single person. Although the Russian authorities have taken steps to protect nuclear material from theft, it is not clear that all devices can be accounted for.[3] Even a crude nuclear device could create an explosive force of 20 000 tons of TNT, demolishing an area of about three square miles. If detonated in lower Manhattan, the whole Wall Street and financial district would be destroyed. Hundreds of thousands of people would die suddenly.

Assessing the economic impact of such a terrorist attack is nearly impossible. Nonetheless, orders of magnitude may be helpful to evaluate what governments would have to deal with. An attack against, for instance, New York City using a nuclear weapon could leave most of the metropolitan area uninhabitable for years. The direct impact would reduce the country's production potential by about 3 per cent,[4] that is, the equivalent of a small OECD country's GDP. The brunt of the direct impact would be borne by the financial industry, which represents the bulk of the city's economy. Wall Street would be closed for a protracted period of time and the recovery of financial transactions would depend on the availability of back-up facilities and data duplication. Hence, supervisory measures to ensure the continuity of businesses after a destructive attack may be desirable.[5] Another local impact with broad implications would be the severe disruption to the transportation system. New York's port and airports would be closed for a long time, and other transportation facilities would be subject to severe security measures, meaning a much slower and less predictable delivery system.

Nation-wide, both household and business confidence would be badly shaken, as well as the trust in the Government's capacity to protect the country. The displacement of the surviving population to non-contaminated areas would create the need for new housing. As standard insurance policies exclude nuclear attacks, the cost of reconstruction would fall on the budget, and the fiscal outlook would deteriorate markedly. The existing shrinkage of coverage for terrorism-related risks would also leave most businesses dangerously exposed. Over the long term, such an attack would sharply reduce the readiness of persons and businesses to agglomerate in metropolitan areas.[6] The trend would therefore be to disseminate in less populated areas, which may have a negative impact on innovation and productivity growth. Overall, a second terrorist attack could have longer-lasting effects, especially one using weapons of mass destruction. In view of this, preparedness should be seen as essential, even if the possibility of such an attack is considered as remote.

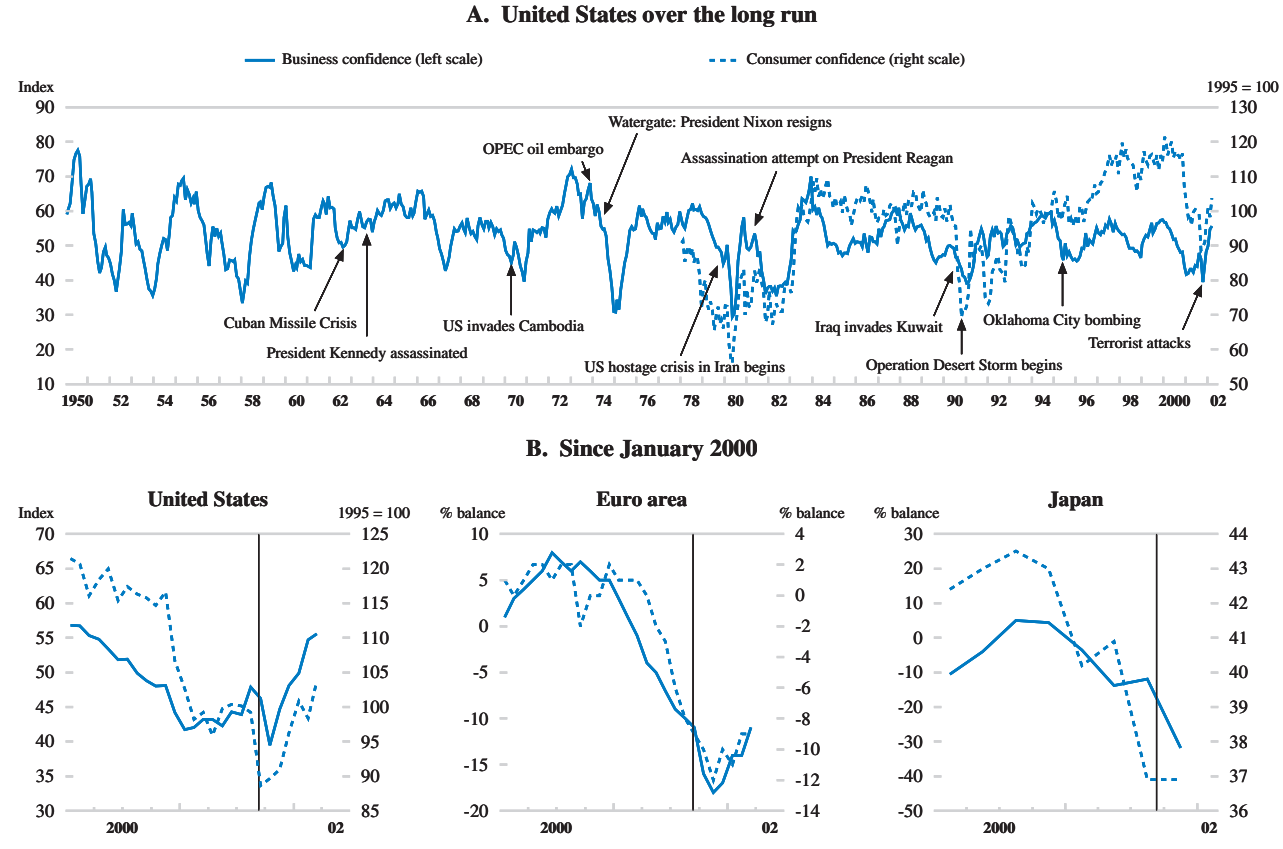
1. *Washington Post*, 3 March 2002.
2. See Stern (1999).
3. See Allison (2001).
4. The gross state product of the State of New York was $755 billion in 1999, about 8 per cent of the country's GDP. Using labour force statistics, the city of New York appears to account for about 40 per cent of the State. Hence, a rough estimate is that New York City represents about 3 per cent of the country's total output.
5. See Ferguson (2002).
6. See Glaeser and Shapiro (2001).

were household consumption, helped by falling energy prices, and government spending. Defence spending, in particular, grew by about 9½ per cent in real terms in the fourth quarter, at a seasonally adjusted annual rate.

… even though some sectors and countries were hard hit

While overall demand proved fairly resilient, a number of sectors were hit hard. Airlines, many of which were already in mediocre financial shape prior to the attacks, suffered a substantial loss in capital and in demand, both in the United

Figure IV.1. **Confidence**



Source: OECD, *Main Economic Indicators.*

States and in many other OECD countries. Aircraft manufacturers almost immediately saw orders curtailed. The insurance sector faced a catastrophe of unprecedented severity. Hotels, restaurants, travel agencies and other tourism-related businesses confronted a sharp drop in demand, in the United States but also in many other countries, in particular in the Caribbean and in the Middle East. Some sectors or firms, however, witnessed an increase in demand, notably in the area of security and information technology.

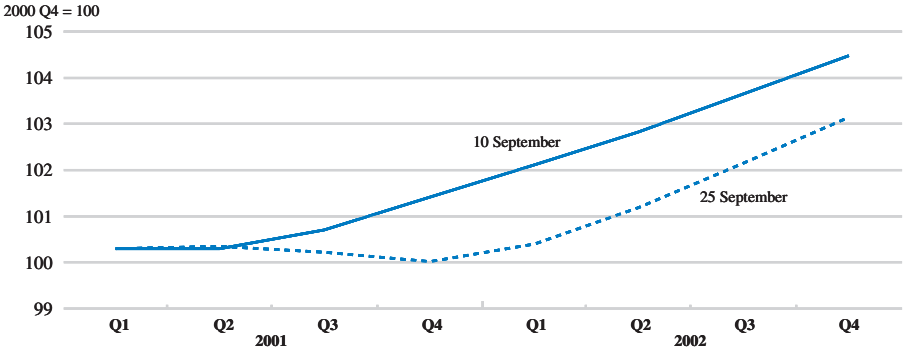
Following a brief dip, asset markets recovered

The initial reaction of the financial markets was a "flight to quality". Equity prices tumbled. Spreads between corporate and government bond yields, as well as spreads between emerging market and US bond index yields widened. Implied volatility as derived from traded options on equity indices, government bond prices, short-term interest rates, exchange rates and commodities spiked upwards. These indicators pointed both to lessened risk appetite and to higher perceived risk.[4] But as during earlier wartime episodes (Table IV.1), equity prices soon bounced back,

4. Separating the two is difficult. For a recent attempt, see Kumar and Persaud (2001).

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Figure IV.2. **A step-adjustment in forecasts**
US real GDP level



Source: Consensus Forecasts, various issues, Consensus Economics Inc.

in many cases to well above their 10 September levels. In addition, spreads had generally narrowed and implied volatility had declined significantly. On the whole, the shock to financial markets thus seems to have been largely transitory.

Table IV.1. **Stock price recoveries**

S&P 500, per cent changes

	Reaction period	Reaction	One year later[a]
Pearl Harbor	7 to 29 Dec. 1941	-10.2	15.3
Korean War	23 June to 17 July 1950	-12.9	31.4
Cuban missile crisis	23 Aug. to 26 Oct. 1961	-8.8	36.6
Tet offensive, Vietnam War	31 Jan. to 5 Mar. 1968	-5.6	13.7
Iraqi invasion of Kuwait	2 Aug. 1990 to 16 Jan. 1991	-11.1	32.3
11 September, 2001	11 to 19 Sep. 2001[b]	-7.0	15.0

a) Six months later in the case of the 11 September attacks.
b) The reaction period is defined as ending when the US military build-up starts.
Sources: Bank of England, *Financial Stability Review* , December 2001 and OECD.

Large temporary liquidity injection by the Federal Reserve safeguarded the financial system

Liquidity was injected on an unprecedented scale

The attacks destroyed or disabled whole portions of New York's financial infrastructure, with potentially devastating domestic and international reverberations. Financial markets were shut down, and remained closed until Monday 17 September. The Federal Reserve instantly indicated that it stood ready to inject virtually unlimited amounts of liquidity to avoid payment failures and cascading defaults.[5] Against this

5. The Federal Reserve's New York trading desk, operating from its primary emergency backup site, engaged in massive repo operations. The Federal Reserve also lent money directly to banks through the discount window, lifting the stigma normally associated with this facility. Furthermore, the Federal Reserve gave credit for deposited checks being cleared through its books before the amounts were deducted from other banks' accounts. It also kept the Fedwire open late into the night to facilitate payment execution.

background, the effective Federal funds rate plunged to levels last seen in the early 1960s, troughing at 1.2 per cent on 19 September. On the international front, the Federal Reserve established or expanded 30-day swap lines with the European Central Bank, the Bank of England and the Bank of Canada, totalling a record $90 billion, so as to enable them to provide dollars to their financial institutions. These and other major central banks also provided their market participants with extra liquidity.

Soon, settlements returned to normal

In the days following the attacks, important efforts were made to rebuild communication and power connections and to ensure the smooth and timely reopening of markets. As the financial markets and payment infrastructure returned to normal, loans were repaid, and the temporarily bloated balance sheet of the Federal Reserve shrank rapidly. Over the next two days, the effective Federal funds rate moved back up to around 3 per cent. As in previous episodes of financial stress – such as the 1987 stock market crash, the 1998 Russian default and Long Term Capital Management (LTCM) debacle, and the Y2K scare – the Federal Reserve managed to preserve the integrity of the financial system.[6]

The macroeconomic policy response was vigorous and swift

Monetary policy was eased and emergency spending was authorised

Monetary policy was eased aggressively, with central banks around the world lowering interest rates substantially in the weeks following the attacks. In the United States, the fiscal response was also swift. On 14 September, just three days after the attacks, Congress cleared a $40 billion emergency spending package.[7] A few days later, Congress authorised $5 billion in direct grants plus $10 billion in federal loan guarantees for the US airlines.[8] Limited discretionary fiscal stimulus action was taken in other OECD countries, not least because many of them had less room for manœuvre. State aid was granted to airlines in the European Union as compensation for the losses resulting directly from the four-day closure of US airspace, but on a smaller scale.[9]

Regulatory policy measures were taken

The US authorities also promptly took a number of regulatory measures. Border controls were tightened. An executive order was issued freezing the US assets of terrorists, terrorist organisations and their sponsors and associates, and banning financial dealings with them. At the international level, the mandate of the Financial Action Task Force (FATF) was broadened.[10] Security-related restrictions were imposed or reinforced in most OECD countries. Governments also stepped in to provide

6. The fact that banks and securities firms generally had strong capital bases and sound liquidity positions also helped to avoid a systemic breakdown after the attacks.
7. At least half of the money was to be used for relief related to the destruction in Manhattan, at the Pentagon and in Pennsylvania.
8. While the grants were swiftly disbursed, only one company requested a loan guarantee. The guarantees are not very attractive as they are conditional on the beneficiary giving the government options on its own stock.
9. For example, France granted 55 million euros. Rescue financing was arranged for Swissair and Sabena, which went bankrupt.
10. On 31 October 2001, the FATF agreed to a set of Special Recommendations on Terrorist Financing which commit members to: take immediate steps to ratify and implement the relevant United Nations instruments; criminalise the financing of terrorism, terrorist acts and terrorist organisations; freeze and confiscate terrorist assets; report suspicious transactions linked to terrorism; provide the widest possible range of assistance to other countries' law enforcement and regulatory authorities for terrorist financing investigations; impose anti-money laundering requirements on alternative remittance systems; strengthen customer identification measures in international and domestic wire transfers; and ensure that entities, in particular non-profit organisations, cannot be misused to finance terrorism.

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temporary backstop insurance for terrorism risk, although in the United States more ambitious initiatives to that effect failed to be approved by Congress.

Overall, good crisis management lessened the economic impact

Overall, the short-term adverse economic impact of the attacks was far less than feared initially, thanks in large part to good economic crisis management. The Federal Reserve, the Administration and Congress acted quickly to restore confidence, inject liquidity and provide resources to deal with the consequences of the attacks. Lowering the price of credit and temporarily providing vast amounts of liquidity helped safeguard the integrity of the financial system and save firms from bankruptcy, and was perhaps more important than bailing out firms with budgetary resources. International co-operation, not least at the level of the monetary authorities, also helped.

Medium-term economic consequences

Medium-term consequences should not be under-estimated

Even though the strong policy response mitigated the short-term direct impact, medium-term implications from the attacks should not be under-estimated. In general, little research is available regarding the long-lasting impact of terrorism. A case study on the terrorism-prone Spanish Basque region suggests a permanent drop in output, but this is largely related to the displacement of economic activities to more secure regions and does not apply to a large national economy.[11] Half a year after the events, nonetheless, it appears clearly that three important consequences will be long-lasting: insurance coverage for terrorism-related activities is more difficult to obtain and premiums have increased considerably; pressure is mounting to tighten security at the borders and better screen the vast flows of merchandise entering OECD countries; public spending on security and military operations is on the rise. These three channels are discussed below.

The shrinkage of affordable insurance coverage: should governments intervene?

Insured losses were the largest ever…

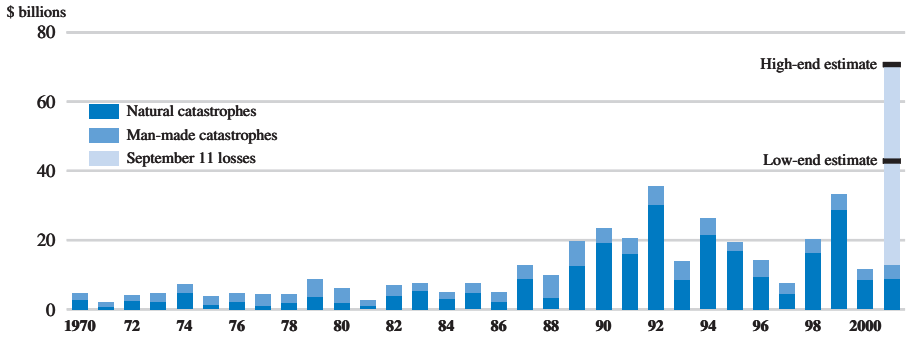
The losses from the terrorist attacks for the insurance industry (including reinsurance) are estimated at between $30 billion and $58 billion, with the main uncertainty deriving from payments on liability insurance. The attacks represented the largest insurance event in history, dwarfing the $21 billion of losses incurred when Hurricane Andrew hit Florida in 1992.[12] Even if the final cost is close to the lower estimate, insured losses in 2001 are likely to have been the highest ever (Figure IV.3).

… but no major bankruptcy has occurred

In spite of the magnitude of these payments, no major bankruptcies have occurred in the industry, in part because the risk was spread over a number of companies and countries. It is estimated that reinsurers, most of them European, will

11. See Abadie and Gardeazabal (2001).
12. As of the end of January 2002, claims for $27.4 billion had been filed, mostly for commercial insurance. Claims from the 1993 bombing of the World Trade Center amounted to $0.5 billion. The 1992 Los Angeles riots were the most expensive man-made disaster to date, with claims of $0.8 billion. These costs were almost entirely concentrated in property insurance claims. In contrast, the 11 September attacks have led to claims on a variety of types of policies: life, property, auto, airplane, workers compensation and business interruption insurance.

Figure IV.3. **Insured losses**
2001 prices



Source: Swiss Re, Economic Research & Consulting and OECD.

incur over half of the losses. The capital base of many insurance and reinsurance companies has been severely hit, the shock having come on top of a series of other recent disasters (including some major storms) and portfolio losses associated with stock market declines. As a result, it is likely that several companies would not be in a position to withstand another shock of a similar magnitude.[13]

Insurance rates have risen from low levels

Following the attacks, primary insurers and reinsurers have hiked their premiums and curtailed or dropped altogether coverage for terrorism-related risk.[14] The hikes in insurance premiums have hit several industries. The strongest impact has been on aviation, but other sectors, including transportation, construction, tourism and energy generation have also been affected. Overall, it is estimated that commercial property and liability insurance rates have been raised by 30 per cent on average, with "target" structures such as chemical and power plants and "iconic" office buildings seeing steeper increases. This should be seen in the context of a sharp decline of premium rates in the 1990s, which in the case of reinsurance, had only started to be reversed in 2000 (Figure IV.4). Even with the projected hikes, reinsurance rates should remain well below the peaks reached in 1993, especially given enhanced competition in the industry, which limits the scope for further rate increases.

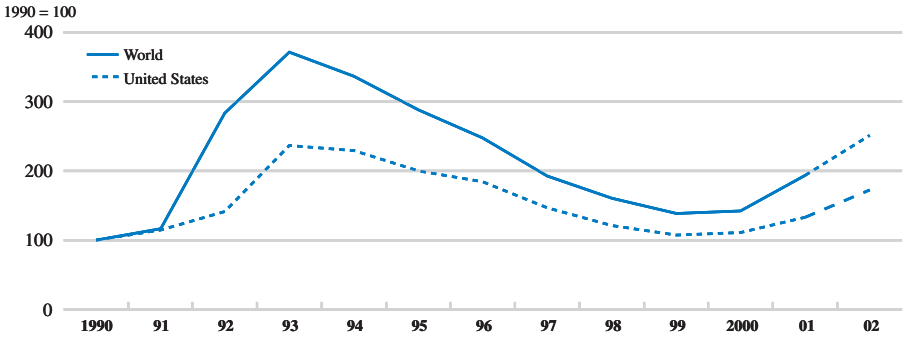
Coverage has been reduced

Another channel through which developments in the insurance sector may have economy-wide implications is the reduction in coverage. Uncertainty negatively affects the capital accumulation process and the existence of instruments to share and limit risk – which help reduce uncertainty – are often associated with increased investment.[15] These instruments have included over time the creation of limited liability corporate structures, the development of hedging instruments in financial markets and the growth of the insurance industry, the size of which is positively correlated with GDP. To the extent that it increases uncertainty related to investment decisions, reduced insurance coverage may thus have a negative impact on growth.

13. See Cummins *et al*. (2002).
14. US General Accounting Office, 2002.
15. See Bassanini and Scarpetta (2001), Dixit and Pyndick (1994), Hartman (1972) and Leahy *et al.* (2001).

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Figure IV.4. **Reinsurance rates**[1]



1. "Rate on line" data, referring to the rate which, when multiplied by the indemnity, would produce the premium. Dotted line for 2002 are Secretariat estimates, assuming a 30 per cent increase in rates.

Source: Guy Carpenter (*www.guycarp.com*) and OECD.

Insurance firms will eventually price terrorism risk

The reduction in the coverage of risks is in large part the result of the difficulties insurance firms face in pricing large terrorist attacks. Until 11 September, the risk of a large magnitude event was considered low and was seldom formally incorporated into premium rates. Primary insurers and reinsurers are now facing the complex task of pricing the risks related to terrorism, which is difficult not least because it involves "correlated risk", *i.e.* the possibility that several catastrophic events occur simultaneously. With time, however, insurance companies will become better equipped to model "patterns" and risks of terrorist attacks, much as they already do for natural catastrophes. Indeed, a group of European insurance and reinsurance companies has recently announced their intention to set up a pool to cover against some types of terrorism risk. In the United States, airlines are in the process of creating a mutual company, Equitime, with similar purposes, although the proposed scheme has the Government act as a reinsurer of last resort.[16] Finally, the use of mechanisms to transfer insurance risks to the financial markets could also play an important role in increasing coverage against terrorism. The market for insurance bonds – sometimes known as "catastrophe bonds" – launched in 1996, has remained thin, as the fear of information asymmetries reduced demand and the availability of cheaper sources of finance discouraged issuance from insurance companies.[17] It is conceivable, however, that the increase in the industry's capital needs and ongoing efforts to repackage insurance bonds in forms more familiar to financial markets may increase liquidity and lead to a larger role for capital markets in providing alternative risk transfer mechanisms in the future.[18]

Hence, long-lasting government intervention is not always justified…

The efficient modelling of "patterns", the building of adequate private insurance capacity and the development of risk transfer mechanisms for terrorism insurance are likely to take a few years. In the meantime, incomplete markets for sharing risk may be construed as a market failure, which could in theory justify government intervention.

16. Several insurance or reinsurance companies, specialised either in terrorism risk insurance or in the aviation industry, have also been created in the Bermudas since the attacks.
17. See Niehaus (2002). Insurance ("catastrophe") bonds are debt instruments carrying a premium reflecting the agreement by investors to forgive some of the principal and/or interest payment in case a specified catastrophe occurs.
18. See A.M. Best's Review, February 2002. Since 1996, approximately $13 billion of insurance bonds have been issued – a relatively small amount.

Indeed, several OECD governments have long had schemes in place to cover terrorism risk (Box IV.2). Many of those schemes were introduced to deal with a particular set of political events, which had led to a re-evaluation of risks and the reduction of coverage. Often, they were thought of as a temporary state response to market failure, in the expectation that with time, the insurance industry's capacity would develop and efficient risk-sharing arrangements would be re-established. The fact that many of these schemes have endured beyond their original mandate is an indication that either the market failure was not temporary or that government intervention crowded out private sector responses. Finally, the design of support schemes is necessarily dependent on the particularities of domestic judicial processes. For instance, the Pool Re scheme in the United Kingdom, which does not provide reinsurance for liability coverage, would be less applicable in the United States, where the judicial system allows a much wider scope for litigation on third-party liability cases. These differences also complicate international pooling efforts.

… and should be limited in scope

Overall, even though it has been hit by the largest amount of reimbursements ever recorded, the insurance industry has escaped bankruptcy, and some large reinsurers are still able to distribute dividends to their shareholders. In reaction to the terrorist attacks, commercial insurance premium rates have been raised significantly, but this partly offsets the decline recorded in the last decade. This pricing power encourages the entry of new capital in the industry, which will spur competition and help contain further rate increases. More worrying is the shrinkage of coverage for

Box IV.2. State mechanisms to provide insurance or reinsurance against terrorism risk

Several OECD countries that have experienced lasting pressures from terrorists have established government-sponsored insurance coverage schemes.

In the UK, a pool reinsurance company, *Pool Re*, was established in 1993 to ensure the continued availability of insurance cover for damage and loss caused by terrorist actions, which had become largely unavailable after a spate of IRA attacks. *Pool Re* functions as a reinsurance company for its (voluntary) members, while the Government provides reinsurance to *Pool Re*. The first £100 000 lies with primary companies, with *Pool Re* intervening only above that amount. Losses from underwriting activities are covered by accumulated premia or, if needed, by an additional call on members (limited to 10 per cent of the annual premium). Beyond that, claims are met by the Government. This scheme enables insurers to cover terrorism without the need to restrict the sums insured, but does not encompass third-party liability insurance.

In Spain, the state insurance compensation fund (*CCS, Consorcio de Compensación de Seguros*) was created in 1928 and now covers a variety of "extraordinary" risks, including terrorism. Premia are collected through a surcharge on all policies in specific risk categories. Traditionally, CCS has provided subsidiary cover and served as a guarantor if a primary insurer is declared insolvent, so it did not technically provide reinsurance. After the 11 September attacks, however, the fund has started providing reinsurance for air transportation against war and terrorism risks (third party liability only).

In France, since December 2001, the state-owned *Caisse Centrale de Réassurance* under government guarantee, covers physical and property damages caused by terrorism attacks above an annual 1.5 billion euros ceiling. Under this amount, the insurance and reinsurance markets cover the risks. Other countries that have special mechanisms to deal with terrorism risks include South Africa (where *SASRIA, the South African Special Risk Insurance Association*, created in 1979, insures against political risks) and Israel (where the Property Tax and Compensation Fund, financed by a nation-wide property tax, covers property and casualty insurance claims from terrorism-related losses). Several countries, including Switzerland and Japan, have some type of government scheme to insure against "catastrophes", but these do not specifically include terrorism.

In the United States, following the 11 September attacks, the administration proposed a transitional three-year "Share Loss Compensation Programme" to address the risk of a shrinkage of affordable insurance. Under the programme, which has not been approved by Congress, the share of insurers in loss compensation would have been capped (as a percentage of total losses), with Government stepping in beyond that limit. The cap was to be increased gradually until 2004, when government involvement would have been phased out.

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commercial properties deemed too risky and for terrorism risk altogether. The private insurance sector may eventually decide to re-enter the market for some types of terrorism-related risks, but such a prospect is at present elusive not in the least because the industry may not be in a position to face losses of a similar magnitude of that of 11 September. Hence, close monitoring is warranted. If government involvement proves justified, it should be limited in scope, be conceived in partnership with the private sector and be accompanied by the introduction of some type of user fee. In that regard, multi-pillar risk sharing mechanisms, involving insurers, reinsurers, pooling structures, capital markets, and possibly governments as a last resort insurer may offer a valid alternative. Government involvement is likely to be especially justified in the case of potential losses arising from mega-terrorism (such as a nuclear attack), which is typically excluded from standard insurance policies. In that regard, international options may also be considered.

Increased shipping costs: is there a trade-off between efficiency and security?

The attacks led to short-term disruptions in transportation

Following the 11 September terrorist attacks, the air transportation system was shut off for four days and the Port Authority of New York and New Jersey closed its operations for two days. More generally, the US transportation system was subject to severe disruptions largely resulting from the tightening of security measures. The most severe disruption occurred at the US-Canada land border, where on average half a million vehicles and $1.4 billion in bilateral trade cross each day. There, beside the opportunity cost of long waits, the slowdown of border crossings had a strong impact on the operations of firms, especially in the automotive industry, where the breakdown of just-in-time supply chains led to several factory shutdowns on both sides of the border.[19] As security measures were gradually lifted, and more security personnel was hired, the flow of trucks across the land borders was brought back close to normal, with the average crossing time only slightly longer than before the attacks. The signing in December 2001 of the US-Canada "smart border" initiative to facilitate trade through improved technology, co-ordination and information sharing helped in this regard.[20]

New security measures have been introduced for air and sea shipments

Beyond the short-term impact, tighter security requirements and a series of surcharges have also affected the cost of transporting goods by sea and air. For international sea shipments, this has included notification requirements, more frequent Coast Guard inspections and tugboat escort obligations, which have resulted in increased costs and longer waiting times. For airfreight, higher security-related costs at airports led to the application of security charges, higher commercial insurance premia and war surcharges for certain sensitive regions.[21]

Underlying transportation costs may have increased

In spite of the new security requirements, six months following the attacks most available indices show little evidence of an increase in shipping costs and some of them have declined. Maritime shipping rates increased by 5 to 10 per cent on average

19. See Andrea and Smith (2002).
20. In March 2002, a similar initiative for the US-Mexico border was unveiled.
21. Security charges for airfreight have been increased by $0.10 to $0.15 per kilogram of cargo in North America, Europe and Asia. Commercial insurance premia were raised for both sea and air cargo, by between 0.03 and 0.05 per cent *ad valorem*. War surcharges have been applied to ocean freight cargo transiting the Middle East, the Red Sea, the Suez Canal and the Eastern Mediterranean. Besides neighbouring countries, this has also affected important Europe-Far East trade lanes (OECD, 2002).

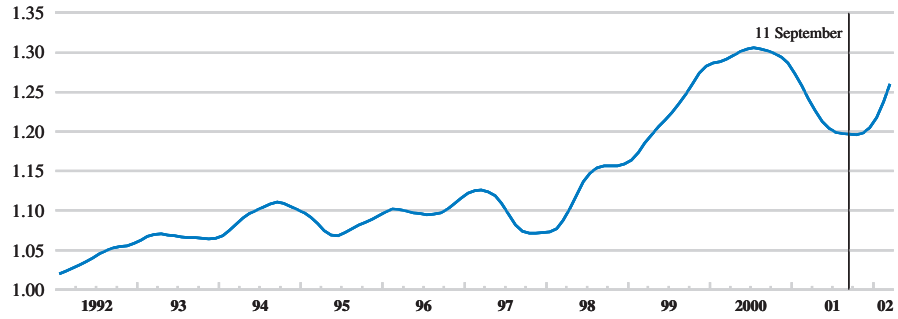
in the two weeks following the attack, but that rise was soon reversed. Airfreight rates, on the other hand, were about 10 per cent higher in late 2001 than before the attacks.[22] Given the sharp deceleration of aggregate demand observed since 2000 and the drop in fuel costs following the attacks,[23] a steeper decline in freight costs should have occurred (Figure IV.5). The relative resilience of freight rates, despite lower fuel costs and under-utilised shipping capacity, would tend to suggest that underlying transportation costs may have increased.

Further security requirements are being advocated…

Even though transportation is subject to more security screening than before the attacks, especially air transport, some observers remain concerned that US borders are still too porous and that, as a consequence, the country is vulnerable to further terrorist attacks.[24] Permanently tighter security measures have been advocated to make the borders less permeable. For example, the US Coast Guard has proposed to the International Maritime Organisation a series of measures for the prevention and suppression of acts of terrorism against shipping, and the US Customs Service has recommended initiatives to increase the security of containers, which account for some 60 per cent of the volume of world trade. For that purpose, it has been proposed that work start in partnership with authorities responsible for the ten large ports that account for nearly half the containers shipped to the United States.[25] This would involve improved procedures and technology, requiring significant capital investment in ports, ships and containers. Cargo originating in one of these ports would then be able to go through

Figure IV.5. **Transportation costs**[1]

Cass Price Index



1. "Transportation costs" refer to an implicit price index based on the Cass Information Systems index of the transport industry in the United States (see *www.cassinfo.com/frtindex.html* for details). The index is calculated as the ratio between shipment expenditure and shipment volumes, is seasonally adjusted and slightly smoothed.

Source: Cass Information Systems and OECD.

22. The Bank of Japan estimates that the international air freight transportation cost index in December 2001 was 11.2 per cent higher than three months earlier. Ocean freight rates on the other hand, were 1.2 per cent down in the same period (Bank of Japan Monthly Report on the Corporate Service Price Index, December 2001).
23. According to the Air Transport Association, the average price of fuel used by the US airline industry has fallen from 92.2 cents a gallon in December 2000 to 79.6 cents in September 2001 and 60.1 cents in December 2001. Fuel costs account for between 10 and 15 per cent of total operating costs in the US airline industry – compared with 0.3 to 0.6 per cent for insurance costs and 1.8 to 2 per cent of total operating expenses for landing fees.
24. See Flynn (2002).
25. The ten ports are Bremerhaven, Genoa, Hong Kong, Kaohsiung, Pusan, Rotterdam, Shanghai, Singapore, Tokyo and Yantian.

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Box IV.3. What future for supply chain management after the attacks?

The disruptions caused by the terrorist attacks have raised concerns for the future of the supply chain management model increasingly used by firms in OECD countries. After 11 September, the US authorities have tightened security compliance requirements. More careful background checks are being required for truck drivers, tugboat escort requirements in ports are more stringent, access to aircraft cargo bays has been restricted and the transport of hazardous material is more closely regulated. Insurance rates have also been raised and security surcharges added. All these security measures involve additional costs and can lead to more unpredictable transit times. Although those effects are small under present circumstances, they may be large enough to encourage industries to reconsider the reliance on just-in-time inventory management and include just-in-case buffers in their stocks. This could have an impact on the cost of carrying inventories.[1]

Business logistics (*i.e.* the management of inbound material resources and outbound products) represent a sizeable, though declining, fraction of overall production costs. Estimates by sector specialists put annual spending on business logistics in the United States at about $1 trillion in 2000.[2] This includes approximately $590 billion in transportation costs, the bulk of it being accounted by truckload and airfreight services.[3] The cost of carrying inventories is estimated at $380 billion per year, which includes capital cost, management of stocks, insurance, inventory depreciation and warehousing facilities. The remainder is accounted by administrative costs.

This cost of business logistics is estimated to have fallen from 16 to 10 per cent of GDP during the last twenty years, for two main reasons. *First*, improved supply chain management models have made it possible for companies to operate with thinner inventories and therefore cut back on carrying costs. Indeed, some companies in the automobile or computer sectors are reported to operate with only one or two days of stocks of material inputs. Thus, the sharp fall in overall inventories, from 25 to 15 per cent of GDP in the last twenty years, presumably stems from the increased reliance on just-in-time models. *Second*, the cost of transportation services has dropped in relation to other producer prices since the deregulation of the early 1980s.

The terrorist attacks could encourage companies to hold larger inventories as a precaution against possible disruptions in the supply chain. It is admittedly difficult to estimate what new level of inventories businesses would be comfortable with. For illustrative purposes, raising inventories back to the level of 1990 in relation to GDP would require approximately $300 billion in working capital. This would in turn impose an inventory carrying cost of about $75 billion per year (0.7 per cent of GDP). Some companies have indeed announced that they would raise their level of input inventories as a precaution against the uncertainty of deliveries. The trend of private stocks therefore should be kept under monitoring, although some time will be needed to distinguish between short-term cyclical movements and structural changes.

1. See MIT Center for Transportation Studies (2001).
2. See Delaney and Wilson (2001).
3. Measuring the production of the transportation sector is fraught with numerous difficulties. The US Bureau of Economic Analysis and the Bureau of Transportation Studies produce Transportation Satellite Accounts attempting to assess the contribution of transportation to overall output. For 1996, the value-added of the transportation sector is estimated at $379 billion, the equivalent of 4.8 per cent GDP, significantly less than the cost measured by sector specialists, perhaps because of differences in definitions and methodology.

more expeditious custom procedures when entering the United States, effectively zooming through a "fast lane".

… but they are likely to lead to higher costs

These proposed new security requirements are likely to affect the cost of transporting goods across borders, through both higher direct costs and longer delivery times. Affordable airfreight and the decline in overall shipping costs have been important factors shaping supply chain management over the last decade.[26] A number of industries have internationalised their supply chains and introduced just-in-time systems, most of them highly dependent on the speed and reliability of delivery provided by an efficient transportation system. This has increased opportunities for global specialisation of production and allowed a reduction in business inventories and their related carrying costs (Box IV.3). This greater openness to international trade has contributed to the increase in productivity levels over the

26. Bovet and Sheffi, 1998.

Box IV.4. The cost of trading internationally

In spite of the long-term decline in transportation and transaction costs, there is strong evidence that national borders and geography still impede international trade and investment. It is estimated that on average trading internationally costs between 10 to 25 per cent more than trading domestically.[1] This is the result of several factors, including tariffs, non-tariff barriers, currency conversion costs and differences in legal and payments systems, as well as shipping costs.

- Average tariff rates in OECD countries (on a domestic-production-weighted basis) vary between 3 and 10 per cent. Non-tariff barriers are estimated to have an effect in the same order of magnitude (Anderson and Neary, 2001). These barriers can be significantly steeper for "sensitive" products however, including steel, textiles, footwear and agricultural products.
- The cost of border clearance, which includes the cost of collecting, producing, transmitting and processing required information and documents, can also be significant. These "compliance" costs are estimated at between 2 and 7 per cent *ad valorem*, but can be considerably higher in some developing countries.[2] Once the cost of time delays is added, border clearance can cost between 5 and 13 per cent of the value of the traded good.[3]
- Shipping costs vary widely, depending *inter alia* on the good shipped, the origin and destination. The share of transportation and insurance costs in the custom value of goods traded by the United States has remained relatively stable at about 3½ per cent in the past few years, with insurance alone typically costing between 0.10 and 0.15 per cent *ad valorem*. There are wide differences however, between for example trade in medicinal and pharmaceutical products (classified under SITC 54) and trade in vegetables and fruits (SITC 05) – with shipping costs at respectively 1 and 15 per cent of customs value in 2000. Average costs are typically higher for other countries, with less efficient port facilities and less significant economies of scale and scope in the shipping industry.

1. See Obstfeld and Rogoff (2001).
2. See OECD (2002), Ernst and Whinney (1987) and European Commission (1999).
3. It is estimated that each extra day of shipping time is worth on average 0.5 per cent *ad valorem* (Hummels, 2001).

last decade, and has therefore helped increase potential output.[27] It has also been an important factor in spurring growth in emerging economies and combating poverty in many regions of the developing world. Reversing the trend towards higher affordability of transportation and tightening border crossing indiscriminately would risk scaling back openness and could have a long-lasting negative impact on growth both OECD-wide and among non-member economies.

Even small increases in costs can have a strong impact on trade

Overall, industry experts have estimated soon after the attacks that the total cost of security-inspired measures could amount to between 1 and 3 per cent *ad valorem*.[28] At first glance, this range pales compared with other costs of trading internationally (Box IV.4). The direct impact on trading costs is, however, of a similar scale to that of the reduction in developed countries' bound tariffs on the imports of industrial goods, of 2.5 percentage points, agreed under the Uruguay Round.[29] To the extent that the extra cost applies to international trade only, it will increase the cost of foreign goods compared with domestic ones. Even small differences in the cost of trading internationally, compared with domestically, may suffice to explain a strong home bias in goods spending. Thus, the trade costs associated with international transactions is found to explain a substantial portion

27. Bassanini and Scarpetta, 2001.
28. See Leonard (2001).
29. Although the direct impact on trading costs is of a similar scale, the welfare effect of changes in tariff rates are different, since account needs to be taken of dynamic (secondary) effects, including on government revenues. Bound tariffs on developed country imports of all industrial products were reduced from 6.3 to 3.8 per cent on average with the Uruguay Round of multilateral trade negotiations.

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Box IV.5. The impact on developing countries

The limited short-term economic impact of the attacks on advanced economies helped allay fears over the fallout on developing countries. The widening of bond spreads, the fall in commodity prices and the weakening of currencies that plagued many emerging markets soon after the attack, have been quickly, if sometimes only partly, reversed. If domestic demand recovers as expected in OECD countries, prospects for emerging markets should improve further.

Over the longer term however, the overall impact of the terrorist attacks on developing countries could be substantial. This impact could come from three main channels: shipping costs, the tourism industry and workers' remittances:

– The effect of the proposed tightening of security on the cost of trading internationally is likely to be asymmetrical. Developing country exports often have higher *ad valorem* transportation costs (notably bulky commodities and perishable goods transported by air) and should thus be affected disproportionately. A "certification" procedure with selected foreign ports could be discriminatory if developing country ports fail to qualify. "Know-your-partner" initiatives, whereby pre-registered intermediaries go through simplified border procedures, may also favour large trading companies over smaller developing country-based firms. These proposed measures risk creating a "slow lane" for developing country exports, increasing relative compliance costs and eroding their competitiveness.

– Heightened fear of travelling following the attacks led to a number of cancellations and a drop in new bookings. Reservations world-wide fell by an estimated 12 to 15 per cent in October 2001 compared with the previous year, and had still not fully recovered by early 2002 according to the World Tourism Organisation. In developing countries, travel services account on average for about 7 per cent of total exports of goods and services and 2 to 3 per cent of GDP. The number is considerably higher in the Caribbean, the South Pacific and for some countries in the Middle East and North Africa region (Egypt, Jordan, Morocco and Tunisia) as well as in South and Southeast Asia (Nepal, Sri Lanka, Thailand and Vietnam). The drop in tourism traffic has also been asymmetrical, with some of the countries that depend most heavily on the industry experiencing the largest number of cancellations. Although the tourism industry is expected to recover as consumers gradually revert to a business-as-usual attitude towards travelling, the increase in the perception of risk for some destinations is likely to be more permanent.

– For security reasons, visa requirements and the control of illegal immigration have started to be tightened in advanced countries.[1] This has the potential to lower the number of developing country workers employed abroad, affecting the level of remittances. The fact that a disproportionate share of these emigrants work in the tourism industry (hotels especially) should also affect transfers. Emigrants' remittances are an important source of income for most of Central America, the Caribbean and South Asia, as well as for some countries in the Pacific and in Southeast Asia. Although the exact level of transfers is difficult to determine, since part of them transit through unofficial channels, emigrants' remittances are higher than exports for several countries.[2]

1. Human Rights Watch, 2001.
2. Puri and Itzema, 1999.

of observed international market segmentation.[30] Hence, the possibility that security measures may have a significant impact on trade flows should not be discarded. Elasticity of trade flows with respect to transaction costs are estimated to range between –2 and –3, implying that even a relatively small increase in the costs of trading internationally in the order of 1 per cent would lead to a drop in trade flows of between 2 and 3 per cent.[31]

A co-operative approach is needed

Even though a trade-off between security and efficiency of border crossings cannot be fully avoided in the short-term, it is likely that this trade-off can be eliminated in the medium-term. New security measures can be formulated in a

30. See Frankel (2000), Obstfeld and Rogoff (2001) and Parsley and Wei (2000). Obstfeld and Rogoff discuss the role of international trading costs in the existence of a strong home bias in goods spending, as well as in the holding of assets and in the financing of investment expenditures.
31. See Limão and Venables (2001).

way that does not diminish the efficiency of merchandise border crossings. New regulations should for instance be subject to risk-management analyses to ensure that they address the most critical risks. The additional costs can also be minimised by a co-operative approach between the private and the public sector in both the design and implementation phases. Security measures should be introduced with a sufficiently long implementation lag and enough flexibility to allow business to find the least costly way of meeting new requirements. The air cargo security regime introduced by the United Kingdom in the wake of the Lockerbie disaster of 1988 is a good example in this regard. The global impact of security measures should also be carefully taken into account. Bilateral agreements between customs authorities to organise "fast lanes" for containers originating from secure ports appear at first glance to be an efficient solution, but they could be discriminatory, especially against developing countries (Box IV.5). International co-operation and consensus building would help make new security measures more efficient while reducing their potentially negative impact on trade flows.

The impact of growing security and military spending: has the "peace dividend" been reversed?

US government spending increased sharply

Immediately after the attacks, the US Administration and (to a lesser extent) other OECD governments increased public spending to help reconstruction, strengthen domestic security and combat terrorism. These additional appropriations resulted in a sharp increase of general government spending in the fourth quarter of 2001, which helped support aggregate demand and avoid a decline in domestic output. Such a temporary increase is not unusual after large catastrophes or natural disasters (Table IV.2) such as the Kobe earthquake or the windstorms that struck part of Europe in December 1999.

Further increases are planned…

Further to this additional appropriation, the President has requested from Congress an expansion of security-related programmes in the context of the budget for FY2003. Additional spending of $48 billion was proposed for national defence (an increase by

Table IV.2. **Fiscal support to domestic demand in the aftermath of selected catastrophes**

saar in per cent

		Public spending in the subsequent quarter	
	Episode	**quarter-on quarter change**	**contribution to GDP**
Italy	November 1980 earthquake	4.1	0.9
Spain	August 1983 flood	3.1	0.5
United States	August 1992 hurricane Andrew	2.1	0.4
United States[a]	January 1994 Los Angeles earthquake	0.7	0.1
Japan[b]	January 1995 Kobe earthquake	3.5	0.8
Turkey[c]	August 1999 earthquake	13.1	1.1
France	December 1999 storms	3.6	0.9
United States	**11 September 2001 attacks**	**10.2**	**1.8[d]**

a) The increase in the next following quarter was much higher (+8%).
b) The increase in the next following quarter was much higher (+15%).
c) Refers to goverment consumption spending only.
d) Of which 0.7 percentage points at the federal level, with half thereof falling under national defence.
Source: OECD.

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14 per cent from the previous year). In addition, the President asked Congress for an appropriation of $38 billion to boost "homeland security", compared to $20 billion spent in 2001. This seeks to improve the preparedness of "first responders" (firemen, police, rescue workers), enhance defences against biological attacks, secure borders and improve information sharing, and includes $8 billion for domestic defence spending.[32]

… and will require additional government borrowing

The additional spending is being financed by government borrowing. There is little indication that taxes will be raised to finance this effort. The Administration has proposed to hold back the increase in other non-discretionary spending to no more than 2 per cent in nominal terms. This would require an unprecedented degree of discipline in such spending, which might not be accepted by Congress.

Spending will increase to a lesser extent in other countries

Other Member countries do not appear to have increased their security-related budgetary spending to a similar extent, but have nonetheless diverted resources within existing budgets to improve preparedness and finance counter-terrorism actions. Thus, additional resources are being devoted to the military and the police in several cases (Table IV.3). Canada has started to implement a five-year programme to fight terrorism, costing 0.7 per cent of GDP. Germany has approved an anti-terror package equivalent to 0.1 per cent of GDP. The armed forces in the United Kingdom have requested an additional 0.7 per cent of GDP to meet the requirements of the war against terrorism. Limited information is readily available for the time being on actions taken by other OECD countries (a better picture will emerge when draft budgets for 2003 are presented). Based on anecdotal evidence, it seems that both military and domestic security spending is set to rise, although less than in the United States.

This additional spending does not entirely reverse the peace dividend

The recent rise in security spending started from a relatively low initial level, as most North Atlantic Treaty Organisation (NATO) countries had reduced military spending since the 1980s. In the United States, defence spending dropped to 3 per cent of GDP in 2000, well below the peak of over 6 per cent of GDP at the climax of

Table IV.3. **Spending on defence and police in selected countries**

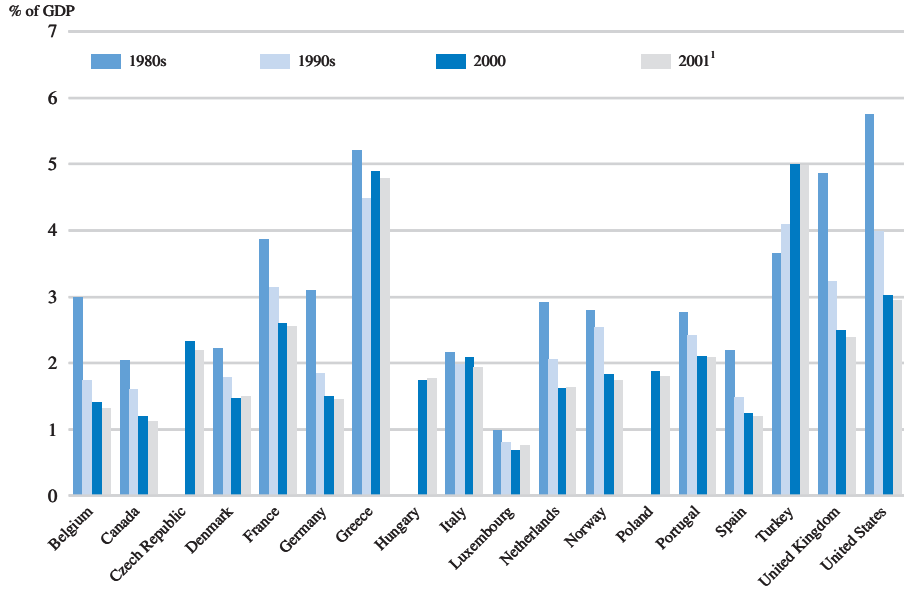
As a percentage of GDP

	2000			2001			2002		
	Defence	Police	Total	Defence	Police	Total	Defence	Police	Total
United States [a]	3.0	0.1	3.1	3.0	0.1	3.1	3.3	0.1	3.4
Japan [a]	1.0	0.1	1.0	1.0	0.1	1.0	1.0	0.1	1.1
Germany [b]	..	..	1.3	..	..	1.3	..	..	1.3
France	2.6	0.3	3.0	2.6	0.3	2.9	2.5	0.3	2.8
Italy [c]	1.1	1.5	2.6	1.2	1.5	2.8	1.3	1.6	2.8
United Kingdom [a]	1.9	0.8	2.7	1.9	0.9	2.7	1.8	0.9	2.7
Canada [a]	..	..	1.3	..	..	1.5	..	..	1.5

Note: Figures in this table are based on national budgets (and not on national accounts) and are therefore not strictly comparable across countries.
a) Fiscal year basis, federal (or central) government only.
b) Includes an anti-terrorism package equivalent to 0.07 per cent of GDP in 2002 which is budgeted as a separate item from defence and public order. There is a break in functional budget definitions between 2000 and 2001 for defence.
c) State sector (central government).
Source: National budgets.

32. In March 2002, an additional $27 billion emergency funding request was made, involving supplemental appropriations for FY2002 (of which $19 billion going to defence and homeland security).

Figure IV.6. **Military spending in NATO countries**
Current spending as a percentage of GDP



1. Estimates.
Source: NATO.

the Cold War build-up in the mid-1980s. The proposed increase of national defence and homeland security outlays in the United States would keep spending below 4 per cent of GDP, *i.e.* below the levels recorded until the mid-1990s (Figure IV.6). The increase in military spending actually started before the recent terrorist attacks. World military expenditure[33] reached a low point in 1998 and increased subsequently. All of this suggests that the era of the so-called "peace dividend" is winding down and that OECD economies have entered a new era of increased spending on military operations and domestic security. If previous periods of military build-ups are used to draw a parallel, such increases in public spending could undermine the trend of fiscal consolidation.

Increased spending may divert resources from productive use

The impact of military spending on economic growth has been the topic of theoretical and empirical research, as the "peace dividend" associated with the end of the Cold War was expected to result in positive welfare gains. Analyses suggest that military spending affects medium-term growth negatively through several channels (such as lower capital accumulation, reduced civilian labour force, losses resulting from capital reallocation). Empirical studies have, however, produced ambiguous results. Econometric studies typically have difficulties identifying the impact of military spending on growth because such spending boosts growth in the short-run, even though it may lower it after a lag. Some earlier research suggests a significant negative impact of military spending on growth using panel data estimation, but more recent work finds no strong relations between military expenditure and either investment or growth.[34] Overall,

33. There are several widely known databases on military spending: data compiled by the Stockholm International Peace Research Institute (SIPRI) are considered to be the best for the purpose of economic analysis because they apply a consistent definition of expenditure across countries (SIPRI, 2002); other publicly available international databases are kept by the NATO and the International Monetary Fund (IMF).
34. See Knight *et al*. (1996), Ramey and Shapiro (1998) and Smith and Dunne (2001).

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the conventional wisdom is that military build-ups are likely to have a detrimental long-term impact on economic growth, but this impact is likely to be small, and in any case much smaller than other traditional determinants of growth.[35]

Private sector spending on security is also on the rise

In addition to the rise in public spending, it is likely that private sector spending on security is rising as well. Limited data are available on private security spending, but it may attain $40 billion annually in the United States.[36] Nearly half of the total spending for security by the private sector is composed of a single category, security guards and other protective service employees. The rest of the spending falls into such categories as alarms systems, computer security, locks and safes, fencing, surveillance cameras, safety lighting and guard dogs. This considerable amount is comparable to what is spent on Federal, State and local police, excluding the armed forces. Higher private spending on security would involve hiring more labour, such as information and communication technology (ICT) experts and security guards protecting commercial premises, and would therefore reduce the level of labour productivity. Like pollution-reducing spending, private efforts to enhance security improve welfare, but do not produce output the way it is traditionally measured. Other security measures, such as time-consuming controls at airports and borders, would also lead to a lower level of productivity. The medium-term impact of a sharp increase in private security spending is, however, generally gauged to be small. A doubling of private security spending might reduce the level of potential output by 0.6 per cent after five years and the level of private sector productivity by 0.8 per cent.[37]

Higher security spending could have adverse effects in the long run

The increase in public and private sector spending on domestic security and the armed forces, even though it does not reverse the peace dividend, cannot be considered as entirely negligible. To calibrate the possible economic impact, the US block of OECD's Interlink model was used to simulate a permanent increase of military spending by 1 per cent of GDP and of government employment by 0.5 per cent of the labour force, spread between 2001 and 2003 and financed by government borrowing. Private spending on security is assumed to increase permanently by 0.5 per cent of GDP. The short-term boost on aggregate demand would increase output above the baseline level during three years. Afterwards, however, higher real long-term interest rates, assumed to exceed the baseline by 30 basis points, would weigh on capital accumulation. The level of labour productivity would be reduced by 0.5 per cent over three years and the real exchange rate would appreciate by about 3 per cent. Hence, starting in the fourth year, output would start falling below the baseline level. After five years, real GDP would be reduced by about 0.7 per cent compared to the baseline.[38] The lesson of this simulation is that public expenditure restraint needs to be exercised, so that high public borrowing does not undermine potential growth and labour productivity is not unduly reduced.[39]

To sum up

Overall, even though the short-term recovery from the terrorist attacks has been faster than expected, negative medium-term consequences through various indirect channels cannot be excluded. As noted, the rise in security-related public and private

35. Smith and Dunne (2001) for instance calculate that, based on commonly accepted parameters, an increase in military spending by one percentage point of GDP is likely to reduce potential output growth by 0.25 per cent during a transition period.
36. See Anderson (1999).
37. See US Council of Economic Advisors (2002) and Hobijn (2002).
38. The decline in welfare from heightened security risks is likely to exceed this figure. This cannot be easily captured by this type of exercise, however.
39. See Baily (2001).

spending is likely to have a small, permanent negative effect on production factors and the level of productivity. The shrinkage of terrorism-related insurance coverage may have a detrimental impact on investment, as lenders become wary of greater potential risks, although there is no strong evidence yet of such a pattern. The international trade system is dangerously exposed, with potentially large repercussions for supply chain management. Another devastating terrorist attack would exacerbate these trends. In sum, close attention needs to be paid to the medium-term consequences of terrorism. Measures to reduce the risk and the economic consequences of further attacks should be both security-effective and growth-friendly.

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V. ONGOING CHANGES IN THE BUSINESS CYCLE

Introduction and summary

The business cycle has changed over recent decades

The recent period of widespread economic weakness has brought to the forefront questions about how closely economic activity is synchronised across national borders and what transmission channels serve to foster synchronisation. This chapter provides an historical context for the discussion of these issues, reviewing the general evidence on the evolution of the business cycle and synchronisation among OECD economies and selected factors affecting international transmission in the recent past.[1]

The amplitude of the cycle has declined…

The general evidence on the evolution of the business cycle suggests that its amplitude has significantly declined for most OECD countries over the past decade or more. Evidence on the length of the cycle is, however, more mixed. For most economies the length does not appear to have changed to any significant degree, while for several economies it appears to have increased towards the norm seen in other economies.

… due to smaller shocks, changed transmission and better policies

In explaining the reduction in the amplitude of the business cycle, it is important to distinguish between changes in impulses (or shocks) and changes in factors that affect their transmission through the economy. It seems likely that part of the reduction in volatility stems from the fact that the size and nature of shocks have changed over time. In particular, the 1970s and early 1980s were marked by large negative supply shocks such as the unprecedented oil price increases, while, in contrast, the 1990s have been affected by relatively smaller and benign supply-side developments.[2] In terms of factors affecting transmission, which is the main focus of this chapter, the most important elements in explaining the reduction in volatility may be the increasing role of services in the economy, the related reduction in the importance of inventories, and the adoption of macroeconomic frameworks that have increasingly focused upon medium-term stability objectives.[3] In contrast, although international trade has markedly increased across the OECD over the past few decades, and net exports in general reduce the amplitude of the business cycle, the contribution this has made in explaining the overall reduction in volatility appears limited. Financial market deregulation in the 1980s and the arrival of the so-called New Economy may also be important factors shaping the cycle; however, this chapter provides only a partial assessment of their net impacts.

1. This chapter draws on a recent study of business cycles: see Dalsgaard, T., J. Elmeskov and C-Y. Park, "Ongoing changes in the business cycle – evidence and causes", *OECD Economics Department Working Papers* No. 315, 2002, available at *www.oecd.org/eco/Working Papers/*.
2. A recent discussion on the role of shocks in shaping the business cycle can be found in the *IMF World Economic Outlook* (2001) and the *OECD Economic Outlook* (2001).
3. The role of inventories in the recent US slowdown, however, is a sobering reminder that this element of the cycle has not been entirely eliminated.

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International divergences have diminished

As the amplitude of the business cycle has fallen for individual countries, international divergences in activity have also diminished. However, available evidence on international business cycle correlations suggests that, apart from the euro area, this has not led to a significant increase in the synchronisation of activity.[4]

Some international linkages are increasingly important

In contrast to the general experience over the past few decades, recent experience suggests that some aspects of synchronisation may have increased. In part this may have been driven by emerging new channels of international transmission that affect domestic demand directly across countries, for example, increasing financial and product market linkages. The main challenge for policy makers that these aspects of economic integration present is that significant shocks emanating in one country, sector, or industry may now more quickly spread across national borders.

Stylised facts about the domestic business cycle and international synchronisation

Measuring the business cycle

Separating output and expenditures into trend and cycle…

A basic premise adopted here is that for any economy there is such a thing as a "typical" business cycle, describing the movements of macroeconomic variables around their long-term trends. In practice, there is no neat separation between trend and cycle; rather, the two interact as exemplified in the phenomenon of unemployment persistence. However, for the purpose of constructing cyclical indicators that can be readily compared across countries, it is assumed that trend and cycle are separable. The extensive literature on detrending methodologies offers a wide range of techniques, where the preference of one methodology over another generally hinges on the objectives of the analysis and the specific characteristics of the time series in question.[5] Results presented in this chapter employ the Hodrick-Prescott (HP) filter, which provides a mechanical decomposition of the cycle into the contributions from individual expenditure components. This contrasts with the production function approach, used more generally at the OECD to measure potential output and the output gap, which offers an assessment of the sources of growth, thereby providing a more useful starting point for examining cyclical pressures, inflation and fiscal developments.[6]

The domestic cycle has become smaller over time

… the output cycle has diminished over time

Visual inspection of the output gaps presented in Figure V.1 suggests that, in general, there has been a decline in their amplitude over time, and this is confirmed in Figure V.2, Panels A and B, which plots the standard deviation and average absolute

4. The lack of evidence of increased synchronisation in general is likely to be influenced, however, by the fact that two relatively large country-specific events occurred in the early 1990s; German re-unification and the bursting of the Japanese asset price bubble.
5. See for example, Canova (1998).
6. See Giorno *et al.* (1995). The aggregate business cycle results are broadly similar under both measures.

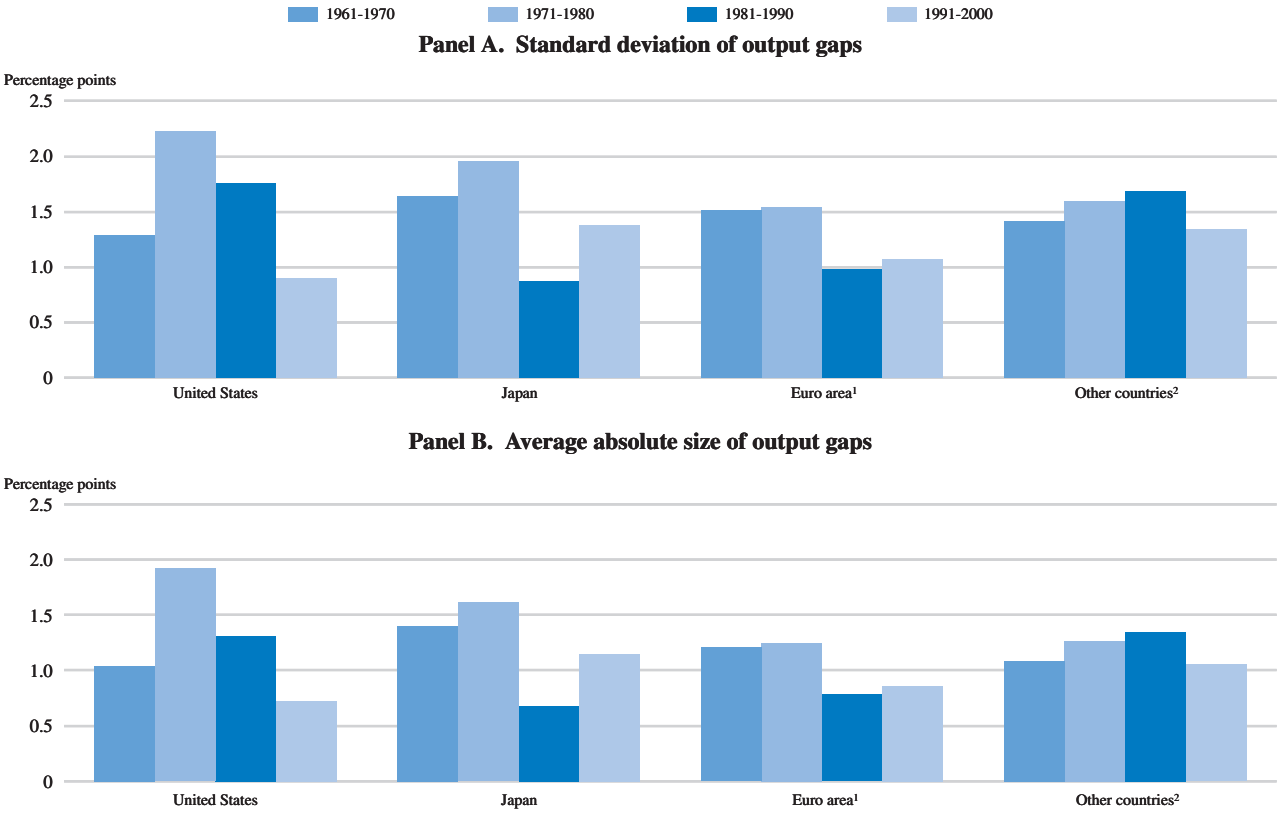
Figure V.1. **Output gaps**



Note: Gaps are calculated using the Hodrick-Prescott Filter, given the objective of this chapter as discussed in the text.
Source: OECD.

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Figure V.2. **The amplitude of output gaps has diminished**



Note: The gap is calculated using an HP 1600 filter.
1. Simple average of Austria, France, Germany, Italy and Spain.
2. Simple average of Australia, Canada, Sweden and the United Kingdom.
Source: OECD.

size of the output gap over ten-year periods.[7] Compared with 30 years ago, the volatility of the business cycle for most of the OECD countries examined appears to be lower.[8] A notable exception is Japan where the amplitude of the cycle markedly increased in the 1990s.

7. The data used are seasonally adjusted quarterly data from the OECD's Analytical Database. The 13 OECD countries for which quarterly national accounts data are generally available from 1960 onwards are: United States, Japan, Germany France, Italy, the United Kingdom, Canada, Australia, Austria, Spain, Sweden, Norway and New Zealand. Note that due to data limitations Norway and New Zealand were not included in some of the analyses. As the default, an HP filter with $\lambda = 1600$ is used uniformly across all time series and all countries. Gaps are calculated as 100*[log(X)–HP(log(X)], except for ratios, where the HP filter is applied directly to the ratio. For the purpose of filtering the time series, data have been extended to 2006q4 and backcasted to 1955q1 in order to mitigate potential bias in both ends of the sample. These extensions of the dataset have been constructed by replicating the growth path of the previous/next 20 quarters.
8. In general, the decline in volatility occurs across both small and large OECD economies and is also apparent using a levels-based definition of the business cycle, see *IMF World Economic Outlook* (2002) for details.

Table V.1. **Contributions to the variance of output gaps**

	Total output gap variance[a]	Contribution from total domestic demand	Contribution from trade	Residual
United States				
1961-1970	1.8	2.1	-0.2	0.0
1971-1980	4.6	6.7	-1.6	-0.5
1981-1990	3.1	4.2	-1.0	-0.1
1991-2000	0.7	1.3	-0.6	0.0
Japan				
1961-1970	2.9	2.7	-0.4	0.5
1971-1980	3.3	5.2	-1.8	-0.1
1981-1990	1.1	1.5	-0.3	0.0
1991-2000	1.8	2.2	-0.4	0.0
Euro countries[b]				
1961-1970	2.1	3.1	-0.9	-0.1
1971-1980	2.8	4.5	-1.7	0.0
1981-1990	0.9	1.5	-0.6	0.0
1991-2000	1.0	2.0	-1.0	0.0
Other countries[c]				
1961-1970	1.9	2.5	-0.7	0.1
1971-1980	2.8	3.9	-1.3	0.2
1981-1990	2.8	4.7	-2.3	0.4
1991-2000	1.7	2.2	-0.5	0.0

Note: The variance of the output gaps is a proxy for the average size of the gap (since it measures the squared average distance from the gap mean, which is close to zero). The contributions to total output gap variance from the total domestic demand gap and the trade gap are calculated as a weighted average of their individual variances and their covariance. The residual is the discrepancy between the total output variance and the sum of its components, which is due to statistical discrepancies, averaging effects as well as the non-additivity of real expenditure components for countries using chain-weighted accounts. See Dalsgaard et al. (2002) for more detail.

a) Total output gap variance is equal to contribution from total domestic demand + contribution from trade + residual.

b) Euro countries in the sample include Austria, France, Germany, Italy and Spain. Simple average.

c) Other countries include Canada, Sweden and the United Kingdom (Australia, New Zealand and Norway are not included due to lack of data). Simple average.

Source: OECD.

Domestic demand has become more stable…

Looking at the contribution of individual demand components to the overall output gap (Table V.1), the decreasing amplitude of output gaps in the OECD countries is accounted for mainly by the increased stability of domestic demand, in particular, private consumption and stockbuilding. For most countries, the contribution to overall economic fluctuations from government consumption and investment is quite small and fairly stable over time. The declining volatility stemming from inventories partly reflects the increased size of the service sector and partly the improved methods of inventory control.[9]

… while net trade has acted as a buffer for some countries

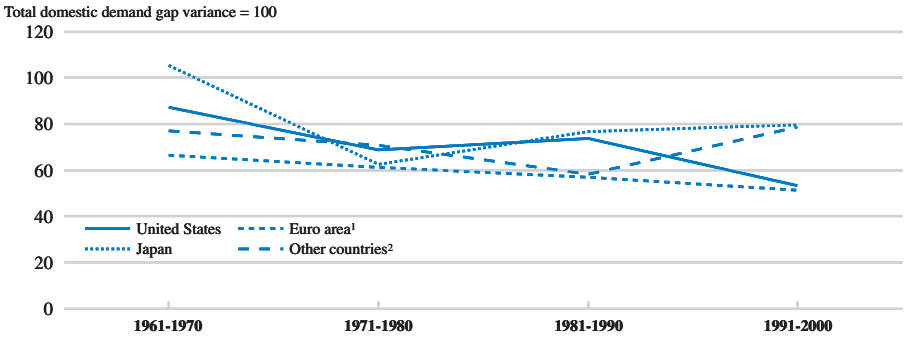
The net contribution from trade to output gap variance has been negative for most countries and in most periods – in other words, net trade has generally, and often in a substantial way, acted to dampen the cycle in OECD countries.[10] The stabilising role of

9. The share of services in total GDP increased from 56 per cent in 1970 to 70 per cent in 1999 for a weighted average of the 13 OECD countries reported upon in this chapter. Part of this increase, however, reflects a re-labelling of activity given a trend towards outsourcing and division of labour.
10. The only exceptions are Austria in the 1990s where trade contributed slightly to increased output gap variance, and Germany in the 1980s and 1990s where trade on net did not affect total output gap variance.

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Figure V.3. **Cushioning from trade has increased in some regions**

Output gap variance relative to domestic demand variance



Note: The figure shows the variance of output gaps relative to that of total domestic demand gaps. It indicates the net cushioning effect from trade on overall output gap variance, *i.e.* the more distant from 100, the more cushioning.
1. Simple average of Austria, France, Germany, Italy and Spain.
2. Simple average of Australia, Canada, Sweden and the United Kingdom.

Source: OECD.

net trade reflects offsetting influences on domestic demand from exports and imports. In general, both tend to move in a pro-cyclical direction; however, for exports this positively contributes to output gap volatility while for imports it makes a negative contribution. Overall, imports are more responsive to domestic demand conditions than exports; hence, net exports tend to move in a counter-cyclical fashion, cushioning the cycle.[11] However, the extent to which this occurs varies considerably over time and across countries. For the United States as well as for the euro area on average, net trade has to an increasing extent acted to stabilise output over the past four decades (Figure V.3).[12] For Japan post-1970, there has been a tendency for net trade to become less stabilising.

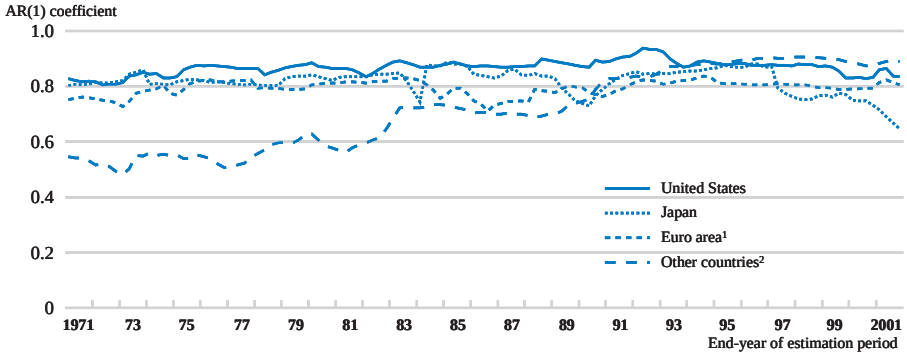
The duration of the cycle

The length of the cycle is largely unchanged…

There are not enough full business cycles in OECD economies from the 1960s onwards to make any firm statements on trends in their duration. Nonetheless, changes in the duration of the cycle can be roughly gauged from changes in the persistence of output gaps, measured as the change over time in the first order auto-correlations.[13] Using this measure of duration, the persistence of the business cycle appears to have been more or less unchanged for the euro area, United States and Japan (Figure V.4).

11. Changes in exchange rate regimes for OECD countries over the past decades are also likely to have had a bearing on how trade influences the cycle but is outside the scope of this chapter.
12. The euro area average, however, disguises major differences across countries: net trade is now less of a stabiliser for Austria and Germany than it was 20-30 years ago while, for Italy and Spain, the stabilisation effects have increased substantially. The effect for France is almost unchanged over the past three decades (see Table A1 of Dalsgaard *et al.* (2002) for details).
13. This is akin to the concept used in a number of other business cycle studies (see *e.g.* Christodoulakis *et al.*, (1995), or Barro (1988) in an examination of unemployment persistence). By focusing only on the first-order auto-correlation, no specific assumptions about the dynamic process driving the output-gap are required (other than it contains an autoregressive element, which is clearly the case). See also Greene (1997).

Figure V.4. **The persistence of output gaps is mostly stable**



Note: The persistence of the gaps is measured by the first order autocorrelation of the gap. An AR(1) process is fitted to a moving 10-year window.
1. Simple average of Austria, France, Germany, Italy and Spain.
2. Simple average of Australia, Canada, Sweden and the United Kingdom.
Source: OECD.

For other countries (Australia, Canada, New Zealand, Norway, Sweden and the United Kingdom) there is a relatively clear tendency for the previously short duration of the cycle to converge towards the same duration as the other countries.[14]

International divergences in the cycle and synchronisation

… and international divergences have diminished but synchronisation has not increased

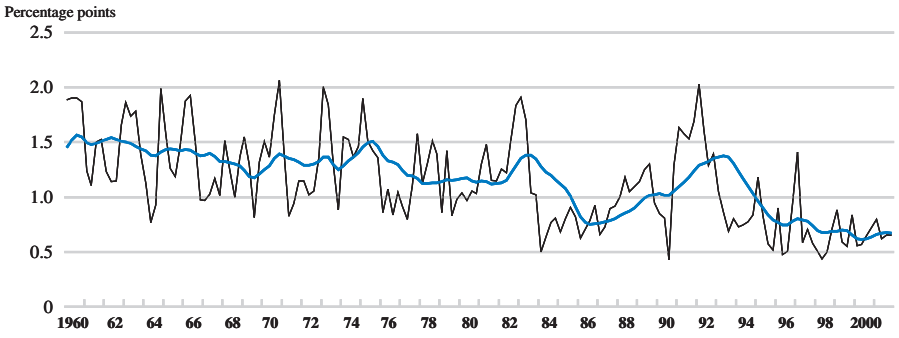
Greater economic integration among a group of countries might be expected to lead to more similar cycles with respect to intensity, duration and timing. One measure of the degree of business cycle divergence across countries is the standard deviation of output gaps across countries. This would be zero across all time periods if the business cycle had the same periodicity and amplitude in all countries. Hence, the smaller the standard deviation, the less divergent business cycles are. On this basis, cycles indeed seem to have become gradually less divergent over time, most clearly since the early 1990s (Figure V.5).[15] However, the reduction in the cross-country dispersion of gaps seems to be related mainly to the fact that output gaps on averag have become smaller over time rather than being the result of business cycles becoming increasingly in phase across countries. That is, a number of indicators of business cycle synchronisation do not point to clear trends, except possibly a closer alignment in the timing of Euro area business cycles.[16]

14. Possible contributing factors to this are improving data quality and/or a reduced incidence of negative shocks, given that contractions to the level of output appear to be becoming less frequent than expansions, see *IMF World Economic Outlook* (2002) for details.
15. Daalsgard *et al.* (2002) find this result is robust to a number of different detrending methods, including the OECD's standard measures of the output gap.
16. This is found in a number of other studies, see Daalsgard *et al.* (2002) for references.

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Figure V.5. **Reduced divergencies of output gaps**

Cross-country standard deviation of gaps



Note: The degree of synchronisation is measured by the standard deviation of the gap across 11 OECD countries in each period of time. The thick line shows the 12 quarter moving average. The gap is calculated using an HP 1600 filter.
Source: OECD.

Factors shaping changes in the business cycle

Several factors may have reduced cyclical fluctuations…

Aside from changes in the size and nature of disturbances to the world economy, the tendency for smaller output gaps appears to have been associated with the shift towards a more service-based economy and better management of inventories. In addition several other, inherently harder to quantify, factors may also have played an important role in shaping the cycle both in the past and going forward. In particular, the shift in monetary and fiscal policy regimes towards stability-oriented frameworks, the so-called "New Economy", and deregulation and increased globalisation of financial markets, may also have played a role.[17] These factors are discussed in the following sections.

Monetary and fiscal policy

… including price-stability oriented monetary policies…

Over the 1980s and into the early 1990s, macroeconomic policies aimed to establish low inflation and to check and reduce burgeoning government debt levels. Although the policies applied involved some initial non-negligible output sacrifice, over the longer term one of the benefits sought was a more stable business cycle, as has been the case since the early 1990s.[18] For example, the successful reduction and maintenance of low inflation rates have seemingly better anchored inflation expectations, reducing the risk that excessive price and wage increases might occur as activity expands or as prices temporarily rise due to negative supply influences.[19] The need for producers to control so-called "cost-push" factors has increased because the

17. Ongoing structural changes in other areas – such as labour-market reform, strengthening of competition policies, privatisation and deregulation of network industries in many OECD countries – have undoubtedly also exerted some influence on the business cycle. Exploring such effects, however, is outside the scope of this chapter.
18. See Turner and Seghezza (1999) for estimates of the output sacrifice involved in reducing inflation for OECD economies.
19. It is difficult to measure accurately changes in inflation expectations, but an indication can be derived from the variability of inflation relative to that of the output gap. A reduction in this ratio is consistent with a firmer anchoring of inflation expectations. As shown in Dalsgaard *et al.* (2002) such a development seems to have taken place in most OECD countries over the past 20 years, except for Germany and the United States, where the ratio has been relatively constant, and Italy and Norway, where it has increased.

maintenance of low inflation rates has made relative price changes more transparent. Across a number of OECD countries, it appears that the pass-through of exchange rate or import price movements onto final consumption prices has declined.[20] These are likely to be stabilising influences on the cycle in the sense that policy can be conducted in a way that may involve relatively less dislocation to the real economy.

… and counter-cyclical policies

For fiscal policy, a distinction must be made between automatic stabilisation and discretionary fiscal changes. Automatic stabilisers, by definition, exert a damping effect on the cycle, and countries with large stabilisers will experience smaller fluctuations, *ceteris paribus*.[21] Since taxes and government transfers have increased significantly as a share of total income in most OECD countries over the past 40 years, such an effect from fiscal stabilisers is likely to have become stronger.[22] Although there is no evidence readily available about changes over time in the magnitude of automatic fiscal stabilisation, there is some evidence to suggest that the discretionary fiscal policy changes (which for well-known reasons can be de-stabilising) have been counter-cyclical in more countries throughout the 1990s compared to earlier periods.[23]

The new economy and technological change

ICT and the "New Economy" have changed trend growth…

The term "New Economy" is used to capture, among other things, the effect that production and use of information and communications technology (ICT) has on the economy. So far, most interest has focused on the role of ICT for trend growth where the evidence, in spite of the current slowdown, points to considerable positive effects for the United States but much more limited effects elsewhere. In addition to the trend, ICT use is also likely to affect the shape of cyclical fluctuations over possibly two, in practice difficult to separate, phases. First, the cycle may well be affected in the transition path to the higher trend growth associated with increasing ICT use. Second, once the transition path is complete, the greater share of ICT in the economy may, in itself, affect the cycle.

… but may also provide a cyclical impulse…

The economic effects that occur in shifting to an apparently higher trend growth path are uncertain. If the shift in trend growth is not well perceived, it may imply that the impact on wealth, consumption, and overall activity, is spread out over some time. On the other hand, it could lead to mistakenly optimistic growth expectations, resulting in excessive equity price reactions as seemed to have been recently the case in the United States.[24] For major continental European countries, stock market

20. See Taylor (2000) and Hampton (2002). Note that the decline in pass-through can be attributable to a combination of factors: foreign suppliers increasingly pricing goods at local market prices, domestic importers and producers increasingly absorbing import price fluctuations in margins, and domestic importers increasingly shifting foreign suppliers should bilateral exchange rate movements or prices become unfavourable.
21. Of course, this may be achieved at the cost of efficiency losses to the extent large stabilisers reflect highly distortive taxes and/or government expenditure.
22. Taxes in per cent of GDP have increased by almost 12 percentage points for the average OECD country since 1965 (from around 25 per cent to 37-38 per cent). Government transfers have, on average, doubled over the same period (from around 8 per cent of GDP in the mid-1960s to around 16 per cent today). However, there is not necessarily a simple, linear, relationship between the size of taxes and government transfers and the size of fiscal stabilisation. The stabilisation effect depends, among other things, on the degree of progressivity in the tax and transfer system as well as the composition of taxes on income, consumption and property taxes.
23. See Dalsgaard *et al.* (2002) and Van den Noord (2000).
24. This uncertainty may also have a bearing on labour market developments. In particular, Meyer (2000) argues that because real wage aspirations are slow to catch up with higher trend productivity growth, the NAIRU may temporarily have dropped by as much as a full percentage point in the United States. Considering the experience of most OECD countries, however, Richardson *et al.* (2000) find little cross-country empirical support for the NAIRU being significantly affected by temporary increases in productivity growth that at the time were also associated with declining wage shares.

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capitalisation and marginal propensities to consume out of stock market wealth are lower than for the United States, suggesting that the effect on spending from the financial wealth channel may be much more moderate should any significant "New Economy" effects on European growth materialise. Furthermore, given the experience in the United States, it is perhaps less likely that such overly optimistic growth expectations will be repeated.

… and permanently affect features of the cycle

Moving to the effects on the business cycle of a greater role for ICT in the economy, several selected effects may be relevant. First, ICT use entails a greater ability to control inventories which may further reduce the volatility arising from the stock cycle. Second, relating to aggregate investment flows, the higher depreciation rate and declining relative price of ICT goods will, *ceteris paribus*, tend to raise the gross investment rate, increasing the weight in GDP of a typically volatile component. However, an opposing, though possibly smaller, effect is that the volatility of investment over longer time frames may be reduced as more rapid depreciation implies a more rapid return of investment to equilibrium following a shock. Finally, another characteristic of the ICT industry is the use of vertical supply linkages across national borders, emphasising the increasing link between cycles in trade and domestic cycles. Although the development of vertical supply linkages is not limited to the ICT sector, the use of ICT often facilitates such developments in other industries.

Financial deregulation and liberalisation

Credit constraints are eased, but asset price cycles may be larger

Another potent factor affecting the nature of the business cycle over past decades is deregulation and liberalisation of financial markets. As for the "New Economy", these changes are likely to have opposing effects on the nature of the business cycle. On the one hand, easier and cheaper access to credit implies that income and liquidity constraints are loosened, likely exerting a stabilising influence on private consumption and investment. On the other hand, deregulation may also lead to greater instability insofar as it amplifies the role of the financial accelerator and the risk of excessive asset-price cycles. In line with the mechanisms driving the financial accelerator, developments in asset prices are typically procyclical (Figure V.6) and the two are often mutually reinforcing.[25] However, formal evidence that asset prices have become more procyclical following deregulation is scarce.

Asset price and balance sheet changes have become more important

In any case, the financial accelerator may now play a larger role in shaping the cycle because financial liberalisation has spurred a significant financial deepening of private sector balance sheets, including a marked increase in corporate debt levels and larger household holdings of market-linked financial assets. The larger financial exposure of households has increased the sensitivity of domestic demand to changes in financial asset prices. Likewise, enterprise balance sheets, and thereby their capacity to borrow, has become more dependent on asset prices.

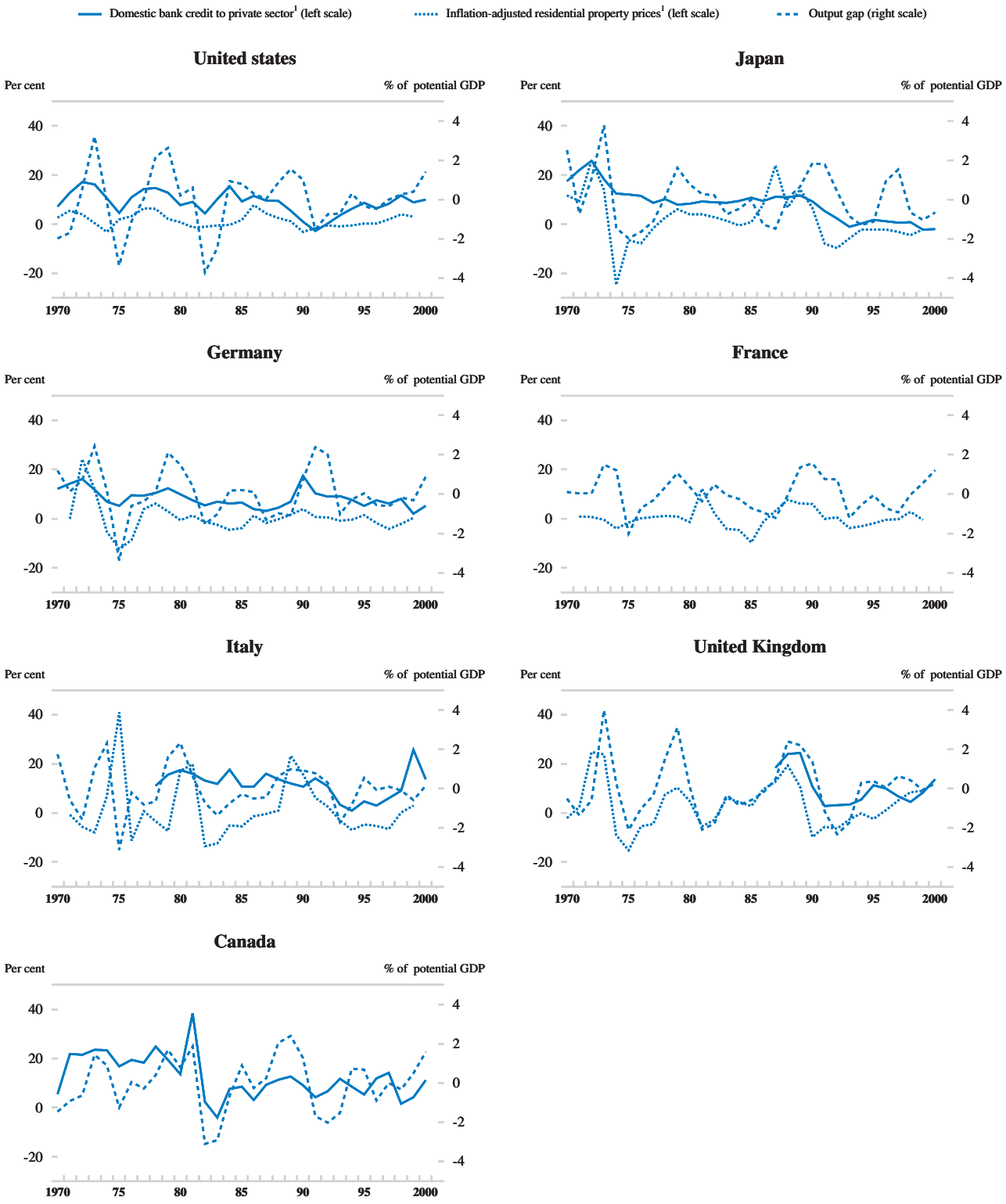
Factors shaping recent synchronisation

Recent events show stronger synchronisation…

The finding that there is little historical evidence of increasing synchronisation of economic cycles is somewhat at odds with the recent global slowdown impacting trade and activity across the OECD. In part, the recent synchronised downturn

25. See Bank for International Settlements (2001).

Figure V.6. **Cyclicality of credit and asset prices**



1. Percentage change from previous period.
Source: Bank for International Settlements; OECD.

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reflects adjustment to a common shock, in particular, global over capacity in the ICT sector. The increases in oil prices over 2000 are also likely to have played a role in the slowdown. In addition, it may also in part reflect new channels of synchronisation that may be growing in importance, as next discussed.

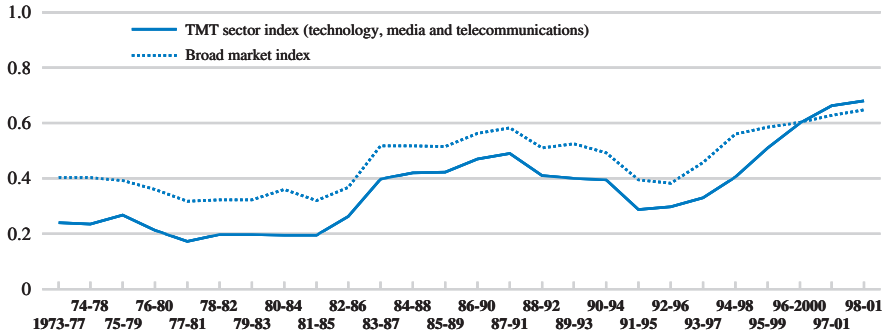
… reflecting common shocks to ICT and asset prices…

The slowdown in the US economy starting in the ICT sector was accompanied by a major adjustment to stock prices across many countries. This reflects that a significant shock to any large economy in general may also be transmitted to the rest of the world through financial market linkages. Cross-country correlation coefficients of returns on broad stock market and TMT (technology, media and telecommunications) sector indices have risen significantly in the 1990s in almost all cases, except those involving Japan (Figure V.7).[26] The associated wealth effects of equity price correlations across countries constitute a potentially important transmission channel given the increasing share ownership of households in the OECD.[27] For North America and the United Kingdom, wealth effects from equity markets are estimated to be relatively large, given the greater importance of shareholding in household wealth compared with the euro area and Japan.

… greater internationalisation of enterprises…

Another harder-to-measure channel for increased synchronisation is the internationalisation of enterprises – over and above the effect it may have on share prices. For example, to the extent that enterprises are multinational, the need to retrench because of developments in one market may cause cutbacks in activities in other countries, and *vice versa* in case of buoyant conditions.[28] It is difficult to obtain an

Figure V.7. **Stock market returns have become more correlated**



Note: Monthly stock returns are calculated as log differences between end-of-month prices for the broad market and TMT sector indices of the G7 countries; *i.e.* United States, Japan, Germany, France, Italy, United Kingdom and Canada. Bivariate correlation coefficients are then calculated for each pair of the G7 countries' stock returns from 1973 to May 2001 in 5-year moving windows. Average correlation coefficients are constructed as arithmetic averages of the estimated bivariate correlation coefficients.
Source: Datastream, OECD.

26. This would be consistent with the observation that, at least in the ICT and finance sectors, the value of individual firms' shares has become more highly correlated with sectoral (cross-country) indices than with national (cross-sector) indices. See G. Galati and K. Tsatsaronis (2001).
27. It is estimated that a 10 per cent decline in the stock market index would generate a decline of around 0.6 per cent in consumption in the United States but only of two-tenths of a per cent or less in Japan, Germany, France and Italy. For details see Boone *et al.* (1998).
28. Conceivably, this may be the case even where no cross-border trade is concerned. By contrast, where a downturn in one market affects activities elsewhere through trade linkages, it should not matter for the international propagation whether these trade linkages occur within or between firms.

accurate picture of the potential importance of such effects. However, foreign direct investment flows have expanded strongly in recent years pointing to a potentially rising influence of this channel.

… and confidence effects

The transmission of cyclical fluctuations over time may also be affected by "soft" factors such as confidence. There is some evidence that consumer confidence is increasingly influenced by equity price changes. This may contribute to magnifying the impact of stock market developments on private consumption even in countries where household shareholding is not very widespread. Considering that the correlation with equity returns is even stronger in the case of business confidence, a decline in demand in a large economy or across a large region, *via* the same channel, could affect private investment in other countries. More generally, however, it is not clear that cross-country correlations of confidence indicators have increased in a systematic manner over time increasing the importance of this transmission channel, or the equity price transmission channel.

Some policy implications of international transmission

New channels pose a challenge to monetary policies

As discussed above, the declining amplitude of national business cycles may be partly related to the greater emphasis on medium-term oriented monetary and fiscal policies. However, within this overall orientation, additional challenges to monetary policy in particular may arise from the apparent increasing synchronisation of activity and through the related rising importance of non-trade channels of international spillover. In what follows, some aspects of this are illustrated through simulations of the OECD Interlink model.

A simulated shock to the US economy…

The simulations conducted concern the effects of a hypothetical upturn in the United States, through exogenous shocks to domestic demand and equity prices.[29] Some outcomes for the United States, euro area and world trade volumes are presented in Table V.2. The Federal Reserve is assumed to respond to the positive shock by raising short-term interest rates by 200 basis points, while long-term US interest rates are assumed to increase by half the rise in short rates. In the model, this increase in interest rates is sufficient to bring inflation and output back towards baseline over the medium term. Three variants of the simulation are considered in order to gauge the effect of the US economy on the euro area through different mechanisms. In all cases, the ECB is assumed to raise interest rates sufficiently to bring inflation back towards baseline over the medium term and nominal exchange rates remain unchanged. In the first simulation, activity is affected only through trade links, while European share prices remain unchanged and bond yields respond only partly to the tightening in ECB interest rates. In the second simulation, European share prices increase to the same extent as in the United States. The third simulation combines this with the assumption that European bond yields are affected by their US counterparts.

… spreads more quickly and requires larger policy responses…

The assumptions adopted for these simulations are obviously rough-and-ready but they nevertheless illustrate the potential importance of non-trade linkages. With only the trade channel in operation, the required short-term interest rate increase in the euro area peaks at 125 basis points. As in the case for the United States, long

29. The US shock is an expansion in domestic demand of 2 per cent over one year, and over the same time it is assumed that this will lead to an increase in US share prices of 20 per cent.

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Table V.2. **Impact of the shocks on GDP and world trade volumes**

Per cent deviation from baseline

Impact of the shocks on the level of US and euro-area GDP

	Peak effect		Impact after one year	
Simulation	**United States**	**Euro area**	**United States**	**Euro area**
Trade channel only operating	1.5	0.5	1.2	0.3
Plus euro equity prices fall	1.6	0.7	1.2	0.5
Plus alternative euro long-bond rate reaction	1.5	0.6	1.2	0.4

Impact of the shocks on world trade volumes

	Effect on world trade volume			
Simulation	**year 1**	**year 2**	**year 3**	**year 4**
Trade channel only operating	1.1	2.5	1.8	0.6
Plus euro equity prices fall	1.4	3.2	2.3	0.7
Plus alternative euro long-bond rate reaction	1.2	3.0	2.1	0.7

Source: OECD

rates are assumed to rise by half this amount. Output rises by a little more than ½ per cent before returning to its baseline, while world trade volumes increase at most by 2½ per cent relative to the baseline level. Despite equity prices having smaller impacts on consumption and investment in Europe than in the United States, the second simulation shows that more monetary restraint is needed when incorporating the wider effects of international share price movements. Concretely, short rates are increased by 175 basis points in the euro area (and the pass-through to long rates maintained at 50 per cent), but despite the additional monetary restraint, the peak increase in output and world trade are now around ¾ per cent. The third simulation illustrates the importance of reactions in the long rates: euro area short rates are raised by 150 basis points, but since European long rates now reacts to US long rates as well as euro area short rates, the ensuing increase in the euro area long rates turns out to be similar to the increase in short rates, *i.e.* 150 basis points. In this case, the increase in output is contained at around 0.6 per cent, while world trade volumes increase 3 per cent at peak, *i.e.* an intermediate position compared with the two former simulations.

… because of the growing strength of new transmission channels

The broad conclusion of these model simulations is that non-trade spillovers are potentially powerful. Thus, monetary policy may need to react more forcefully than in a situation where trade is the only cross-country transmission channel. At the same time, however, asset prices – including not only shares and bonds, but also fixed property – have become more important for the monetary transmission mechanism through wealth and balance-sheet effects.[30] This might be an argument for a more gradual approach to monetary policy given that the links between interest rates and asset prices may be tenuous and unstable.[31] The "optimal" balance between these

30. Exchange rate effects are potentially even more important, but given equilibrium positions are uncertain, and long rates are assumed to fall across countries, they have been left unchanged.
31. As may the links between asset prices and activity, see OECD (2000).

two potentially conflicting factors is, of course, something that cannot be readily quantified. An awareness of their possible implications, however, may become increasingly important for policy makers.

Concluding remarks

A changing economic environment has affected the cycle…

Overall, the evidence suggests that the amplitude of the business cycle has significantly declined for most OECD countries over the past decade or more. It seems likely that part of the reduction in volatility stems from the fact that the size and nature of shocks have changed over time. In addition, the increasing role of services in the economy, the related reduction in the importance of inventories, and the adoption of macroeconomic frameworks that have increasingly focused upon medium-term stability objectives, may also have played a role.

… and may pose new challenges for policy

As the amplitude of the business cycle has fallen for individual countries, international divergences in activity have also diminished. However, evidence on international business cycle correlations suggests that so far, over the period examined this has not led to a significant increase in the synchronisation of activity across the OECD as a whole. Nonetheless, more recent experience suggests that certain aspects of synchronisation, such as financial market linkages, have become more important. The main challenge this presents for policy makers is that significant shocks emanating in one country, sector, or industry, may now spread more quickly across national borders, through a possibly wider range of transmission mechanisms.

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VI. INTRA-INDUSTRY AND INTRA-FIRM TRADE AND THE INTERNATIONALISATION OF PRODUCTION

Introduction and summary

Internationalisation of production has important effects on world trade

The growing "internationalisation" of production systems, which increasingly involve vertical trading chains spanning a number of countries, each specialising in a particular stage of production, is an important feature behind the changing nature and increasing scale of world trade. Although there is considerable anecdotal evidence concerning this phenomenon, there is surprisingly little in the way of data at the aggregate level to gauge its overall importance, and measurement problems attach to available macro data. Subject to these limitations, this chapter reviews recent evidence relating to the internationalisation of production over the past decade, firstly based on intra-industry trade data and then analysing intra-firm trade data.[1] The broader macroeconomic significance of these trends is also considered. Tentative conclusions are that: the impact of some shocks on output (as measured by value added) may be more dispersed internationally; the speed with which certain shocks are transmitted as well as the volatility of world trade may have increased; and trade may be less sensitive in the short-term to changes in price competitiveness.

Intra-industry trade

Intra-industry trade has risen significantly in many OECD countries…

Intra-industry trade involves the import and export of similar goods. While taking account of measurement limitations (Box VI.1), it would appear that the intra-industry share of manufacturing trade has increased significantly since the late 1980s across many OECD countries (Table VI.1).[2] This follows trend increases in intra-industry trade for all the major OECD economies between 1970 and 1990.[3]

1. Input-output tables can also be used to measure the usage of imported inputs in the production of export goods, although these are usually only available for snapshot years, often with a long time lag. Using input-output tables from ten OECD countries and four emerging market economies Hummels *et al*. (2001) calculate that this form of trade, which they refer to as "vertical specialisation", accounted for 21 per cent of these countries' exports in 1990 and 30 per cent of the growth in exports between 1970 and 1990. However, given the infrequent publication of input-output tables, for the major OECD countries the latest year included in their analysis is 1990.
2. The absolute level of summary statistics of intra-industry trade are in themselves not very meaningful, because they depend on the level of disaggregation that is chosen for the analysis (see Box VI.1). Instead the focus here is on changes in intra-industry trade through time and comparisons across countries. This will also be affected by aggregation structures but may, nonetheless, to a larger extent than absolute levels reflect real economic developments and differences.
3. See OECD (1994).

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Box VI.1. The measurement of intra-industry trade

Intra-industry trade flows are conventionally defined as the two-way exchange of goods within standard industrial classifications. The extent of intra-industry trade is commonly measured by Grubel-Lloyd indexes based on commodity group transactions. Thus, for any particular product class *i*, an index of the extent of intra-industry trade in the product class *i* between countries A and B is given by the following ratio:

$$IIT_{i,AB} = \left[\frac{(X_i + M_i) - |X_i - M_i|}{(X_i + M_i)}\right] \cdot 100 \qquad [1]$$

This index takes the minimum value of zero when there are no products in the same class that are both imported and exported, and the maximum value of 100 when all trade is intra-industry (in this case X_i is equal to M_i). The indices reported in this chapter have been computed according to [1] for each pair of trading partners and for each two-digit SITC revision 3 product class. Bilateral indices of intra-industry trade in the product class *i* between country A and all its trading partners are obtained as a weighted average of the bilateral indices [1] for each partner country B, using as weights the share of total trade of A accounted for by trade with B. Bilateral indices of intra-industry trade between country A and country B for total manufacturing are the weighted average of the indexes in [1] for all product classes *i*, with weights given by the share of total trade of *i* over total manufacturing trade:

$$ITT_{AB} = \sum_i \left[\frac{X_i + M_i - |X_i - M_i|}{X_i + M_i}\right] \cdot \left[\frac{(X_i + M_i)}{\sum_i (X_i + M_i)}\right] \cdot 100 \qquad [2]$$

A degree of caution must be used when comparing and interpreting intra-industry indices because their measurement crucially depends on the level of disaggregation chosen for the analysis. In the current context of assessing the importance of the division of the production process across countries, it should be recognised that, as well as measuring trade in intermediate goods at various stages of production, much intra-industry trade is trade in similar, but often highly differentiated, finished products.

… reflecting a number of different factors…

Different types of trade are captured in measurements of intra-industry trade: horizontal trade in similar products with differentiated varieties (*e.g.* cars of a similar class and price range); trade in vertically differentiated products distinguished by quality and price (*e.g.* Italy exports high-quality clothing and imports lower-quality clothing); and vertical specialisation of production that results in trade in similar goods at different stages of production.[4] Horizontal intra-industry trade enables countries with similar factor endowments to benefit from economies of scale by specialising in "niche" products. Trade in vertically differentiated products may reflect different factor endowments, particular skills of the workforce or high fixed research and development costs.[5] Vertical specialisation of production across countries may be driven by comparative advantage, for example to use cheap unskilled labour for assembly purposes or specialised personnel for research and development.[6]

The extent of intra-industry trade is typically much higher across categories of manufactured goods than it is across trade in non-manufactured goods, and highest for the more sophisticated manufactured products such as chemicals, machinery and

4. Arguably exchanges of goods at different stages of production should not strictly be classified as intra-industry trade, particularly because they would be excluded if the analysis was carried out at finer levels of disaggregation, see Fontagné and Freudenberg (2002). However, the current analysis (based on two-digit SITC classes) is intentionally not so highly disaggregated as to exclude this form of trade.
5. Standard calculations of intra-industry trade do not allow the causes of intra-industry trade to be identified. However, employing a more detailed disaggregated analysis that makes use of information on unit values, Fontagné and Freudenberg find that most of the increase in intra-industry trade in Europe over the 1980s and 1990s relates to trade in vertically differentiated products rather than horizontal trade, where the former is defined as being where import and export unit values differ by more than 15 per cent.
6. See OECD (1998).

Table VI.1. **Manufacturing intra-industry trade as a percentage of total manufacturing trade**

	1988-91	1992-95	1996-2000	Change
High and increasing intra-industry trade				
Czech Republic	n.a.	66.3	77.4	11.1
Slovak Republic	n.a.	69.8	76.0	6.2
Mexico	62.5	74.4	73.4	10.9
Hungary	54.9	64.3	72.1	17.2
Germany	67.1	72.0	72.0	5.0
United States	63.5	65.3	68.5	5.0
Poland	56.4	61.7	62.6	6.2
Portugal	52.4	56.3	61.3	8.9
High and stable intra-industry trade				
France	75.9	77.6	77.5	1.6
Canada	73.5	74.7	76.2	2.7
Austria	71.8	74.3	74.2	2.4
United Kingdom	70.1	73.1	73.7	3.6
Switzerland	69.8	71.8	72.0	2.2
Belgium/Luxembourg	77.6	77.7	71.4	-6.2
Spain	68.2	72.1	71.2	3.0
Netherlands	69.2	70.4	68.9	-0.3
Sweden	64.2	64.6	66.6	2.4
Denmark	61.6	63.4	64.8	3.2
Italy	61.6	64.0	64.7	3.1
Ireland	58.6	57.2	54.6	-4.0
Finland	53.8	53.2	53.9	0.1
Low and increasing intra-industry trade				
Korea	41.4	50.6	57.5	16.1
Japan	37.6	40.8	47.6	10.0
Low and stable intra-industry trade				
New Zealand	37.2	38.4	40.6	3.4
Turkey	36.7	36.2	40.0	3.3
Norway	40.0	37.5	37.1	-2.9
Greece	42.8	39.5	36.9	-5.9
Australia	28.6	29.8	29.8	1.2
Iceland	19.0	19.1	20.1	1.1

Note: Countries are classified as having 'high' or 'low' level of intra-industry trade according to whether intra-industry trade is above or below 50 per cent of total manufacturing trade on average over all periods shown and 'increasing' or 'stable' according to whether intra-industry trade increases by more than 5 percentage points between the first and last periods, as shown in the final column.

Source: OECD calculations, see Box VI.1 for details, based on OECD International Trade Statistics.

transport equipment, electrical equipment and electronics.[7] This is because sophisticated manufacturing products are more likely to benefit from economies of scale in production and are easier to "differentiate" to the final consumer, and so facilitate trade in similar products. More complex manufactured products which rely on many components and/or processes may also benefit more readily from splitting up production across countries.

7. Across all OECD countries, and based on the measurement described in Box VI.1, intra-industry trade in more sophisticated products such as chemicals or machinery and transport equipment is typically around 60 or 70 per cent, whereas for manufactured goods involving simpler transformation processes, such as food products, it is typically around 40 per cent or less.

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… and notably for those countries with a high trade share in GDP

Of particular interest when considering intra-industry trade and the internationalisation of production are those countries where exports and imports account for a very high proportion of GDP. There are currently eight OECD economies (Austria, Belgium, Czech Republic, Hungary, Ireland, Luxembourg, Netherlands, and Slovakia) where both imports and exports account for more than half of GDP.[8] Although there is far from a perfect correspondence, these countries all tend to have relatively high intra-industry trade (upper two panels of Table VI.1); all but one (Ireland) having measures of intra-industry trade that are well above the average across all OECD countries and four of them being in the top eight countries for the period 1996-2000. Krugman (1995) argues that the emergence of such "*supertrading*" economies is essentially dependent on the "slicing up of the value added chain" on an international basis. This implies that the value of exports is substantially larger than the value added in the export industries, and so reconciles high trade exposure with the likelihood that the dominant shares of employment and value added are generated in non-tradable sectors. The number of these *supertrading* economies has doubled over the 1990s; Krugman reckoned that in 1990 there were six, but by 2000 there were at least twelve.[9]

It is high for economies where FDI inflows have risen sharply…

Among the countries with the most rapid increase in intra-industry trade over the 1990s are the Eastern European "transition economies" of the Czech Republic, Hungary, Poland and Slovakia (see top panel of Table VI.1). All of these countries are characterised by high and increasing inflows of foreign direct investment (FDI) over the 1990s, especially from Germany.[10] The combination of rising intra-industry trade and high foreign direct investment inflows is consistent with the increasing extent to which multinational firms have located parts of their production operations in these countries.[11] Partly reflecting the trends in these countries, and the fact that there has been a steady increase in foreign direct investment outflows over the 1990s, Germany has also experienced a relatively rapid increase in intra-industry trade over the 1990s.

… and for Mexico where NAFTA has strengthened production linkages

Mexico is another country with a rapid increase in intra-industry trade since the late 1980s (see top panel of Table VI.1). This reflects the importance of its trading links with the United States that have been strengthened following implementation of various stages of the North American Free Trade Agreement. In terms of broad product categories, the two largest US exports to Mexico, namely electrical machinery and appliances and motor vehicles, are also the most important exports from Mexico to the United States.[12] The elimination of tariff barriers and Mexico's relatively low labour costs has led to the set-up of a plethora of plants known as "*maquiladora*", which are under foreign control, located in the border region with the United States and devoted to the assembly and re-export of goods. Their operations have become especially concentrated in ICT products, accounting for more than half of total *maquiladora* production in 2000.[13]

8. Historical disaggregated manufacturing trade data is not readily available for Luxembourg separately, but Luxembourg is combined with Belgium for the analysis of intra-industry trade summarised in Table VI.1.
9. Krugman's six *supertrading* economies in 1990 were Belgium, Hong Kong, Ireland, Malaysia, the Netherlands and Singapore, (although he appears to have omitted Luxembourg). In 2000 there are at least twelve; in addition to the eight OECD countries mentioned in the text, Thailand has joined the three non-OECD countries in Krugman's original list (with the Chinese Taipei and Philippines close to qualifying).
10. See OECD (2000*a*).
11. For example, in the Czech Republic, Hungary and Slovakia the largest exporting firm is owned by the German Volkswagen group. See OECD (2000*b* and 2001).
12. See Vargas, 2000*a*.
13. See Vargas, 2000*b*.

Intra-industry trade is relatively low but rising in Japan and Korea…

The extent of intra-industry trade in Japan and Korea is comparatively low, although in both countries it has risen relatively rapidly over the 1990s, (third panel of Table VI.1). The low level of intra-industry trade in these countries is consistent with the substantial trade surpluses these countries have generated in particular manufacturing products such as electrical machinery and appliances, "high tech" goods and transport equipment. Over the course of the 1990s imports of electrical machinery and appliances and "high tech" goods have, however, risen in relation to exports. In the case of Korea this partly reflects the gradual relaxation of import restrictions on specific manufacturing products, and for Japan it partly reflects the increasing importance of intra-firm imports from Japanese foreign affiliates located elsewhere in Asia, as discussed in the following section.

… and low for those economies specialising in non-manufactures

Most of the countries that have relatively low and stable intra-industry manufacturing trade (lower panel of Table VI.1), are also those that are most heavily dependent on non-manufactured goods in total exports.[14] This indicates that the low share of intra-industry trade reflects a tendency for a high proportion of these countries' manufactured exports to consist of relatively simple transformations of the raw materials with which the country is endowed, and that such transformations are not suited to division across different countries.

Intra-firm trade

Intra-firm trade accounts for a substantial share of US and Japanese trade

Cross-border trade between multinational companies and their affiliates, often referred to as "intra-firm" or sometimes "related party" trade, accounts for a large share of international trade in goods, although aggregate data are only available for a few countries, most notably the United States and Japan. Intra-firm trade accounts for around one-third of goods exports from Japan and the United States, and a similar proportion of all US goods imports and one-quarter of all Japanese goods imports (Table VI.2).[15] In the case of the United States these shares have been broadly stable over the last decade, but in the case of Japan they have increased substantially. Moreover, given the increasing importance of foreign direct investment relative to both world trade and output, it is likely that the importance of intra-firm trade has increased at the global level.

The nature and extent of intra-firm trade seem to vary systematically with the income level of the trading partners:[16]

Much intra-firm trade involves little additional processing…

– Much intra-firm trade between high-income countries is probably of nearly finished goods destined for affiliate companies that are mainly involved in marketing and distribution with little additional manufacturing processing taking place. For example, about two-thirds of US intra-firm imports by multinationals with a foreign-based parent company is to an affiliate primarily

14. For Australia, Iceland, New Zealand and Norway non-manufactures were at least 40 per cent of the total value of exports in 2000, more than double the world average, see Le Fouler *et al.* (2001).
15. There are, however, differences in the level and, to a lesser extent, trend movements in US intra-firm trade reported by different US sources. In particular, data reported by the US Department of Commerce (2001) suggest that the level of intra-firm (or related party) trade was 32 per cent of goods exports and 47 per cent of goods imports in 1998, compared to the corresponding figures of 36 per cent and 39 per cent from the Bureau of Economic Analysis source cited in Table VI.2. The Department of Commerce figures also suggest greater stability in the share of both intra-firm exports and imports than those of the Bureau of Economic Analysis.
16. The discussion in this paragraph draws heavily on the analysis of US intra-firm trade by Zeile (1997).

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Table VI.2. **The importance of intra-firm trade for the United States and Japan**

Share of all goods trade

	Exports			Imports		
	1990	1999[a]	Change	1990	1999[a]	Change
United States	32.8	36.2	3.4	43.7	39.4	-4.3
of which						
Domestically-based parent company	23.1	27.7	4.6	16.1	17.2	1.1
Foreign-based parent company	9.7	8.6	-1.1	27.6	22.2	-5.4
Japan	16.6	30.8	14.2	14.7	23.6	8.9
of which						
Domestically-based parent company	14.5	28.6	14.1	4.2	14.8	10.6
Foreign-based parent company	2.1	2.2	0.1	10.5	8.8	-1.7

a) For United States data are for 1998 not 1999.
Sources: Lowe (2001); Japanese Ministry of Economics, Trade and Industry; OECD calculations.

involved in marketing and distribution. In these cases, the share of intra-firm imports in total imports from the partner country is strongly related to the GDP/capita of the trading partner country. This suggests that the local presence of affiliates is often required for the marketing of sophisticated manufacturing products, which tend to be from, and sold to, higher income countries.

– Even when the affiliate receiving the goods is primarily involved in further manufacturing, it is likely that much of the production is destined for local markets. This is consistent with the finding that the export share of US multinationals to manufacturing affiliates is also positively correlated with per capita GDP of the trading partner country. For Japan, around 95 per cent of the sales of Japanese affiliates located in North America and Europe were within the same region in 1999,[17] while the share of intra-firm imports of Japanese parent companies from North America and Europe remains very low (Table VI.3).

… which is more important between rich and middle-income countries

– There are, however, some middle-income countries where intra-firm trade with rich countries accounts for a high share of their bilateral trade. The primary role of the foreign affiliates located in such countries is more likely to be manufacturing to produce goods that are destined for other markets, including the country of the parent company. For example, in the year 2000, two-thirds of US imports from Mexico were intra-firm due to the extensive *maquiladora* operations. This type of phenomenon is reflected in the absence of any positive correlation between the share of US intra-firm imports by US parent companies in total goods imports from a trading partner country and the per capita/GDP of that country. For Japan, the share of intra-firm imports of domestic based multinationals in total goods imports is much

17. In both cases about half of the intermediate goods used in production were from within the same region where the Japanese affiliate was located, with most of the remaining share coming from Japan.

Table VI.3. **Intra-firm trade of Japan, where parent company is Japanese, with main trading blocs**

As a per cent of all goods trade with partner region

	1990	1999	Change
Exports			
Total	14.5	28.6	14.1
Rest of Asia	10.1	22.4	12.3
North America	20.9	36.8	15.8
Europe	12.0	29.0	17.0
Imports			
Total	4.2	14.8	10.6
Rest of Asia	6.3	22.5	16.1
North America	3.1	6.8	3.7
Europe	1.1	3.9	2.9

Sources: Japanese Ministry of Economy, Trade and Industry, OECD.

higher from the rest of Asia than from North America or Europe (Table VI.3). Moreover, in contrast to Japanese affiliates located in Europe and North America, a significant share (about one-third in 1999) of the sales of Japanese affiliates in the rest of Asia are to countries outside the region in which they are located (mainly back to Japan).

Table VI.4. **Intra-firm trade of the United States, with selected trading partners**

As a per cent of all goods trade with partner country

	Level 1999	Change, 1992-99
Imports		
Japan	73.7	-1.3
Mexico	66.4	3.1
Korea	49.3	22.5
Canada	43.1	-2.9
Eastern Europe	32.1	20.1
Taiwan	20.8	4.9
China	17.6	7.1
Total	46.7	1.7
Exports		
Mexico	44.3	5.6
Canada	42.4	-2.9
Japan	36.3	0.1
Taiwan	16.0	6.0
Eastern Europe	12.3	2.6
China	11.6	5.0
Total	32.1	1.2

Note: Partner countries shown are those with the highest level of intra-firm trade in 1999 or the largest increase over the period 1992-99.
Source: United States Department of Commerce (2001).

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– There is some evidence to suggest that the importance of this form of intra-firm trade between rich and middle-income countries, which is most directly related to the internationalisation of production, has been increasing over the 1990s. For the United States, while the aggregate share of intra-firm trade has remained relatively stable over the 1990s, those countries where the share has increased most, such as China, Korea, Mexico, Taiwan and those of Eastern Europe have all tended to be low- or middle-income countries (Table VI.4). For Japan, intra-firm imports from the rest of Asia have increased by much more than from other regions over the 1990s.

The manufacturing products subject to a high degree of intra-firm trade are also those with a high degree of intra-industry trade, in particular the more sophisticated manufacturing products. Thus, US intra-firm trade is particularly concentrated in transportation equipment, computer and electronic products, machinery and chemicals (Table VI.5).[18]

Table VI.5. **US trade in products with a high degree of intra-firm trade**

per cent

	Share of total imports/exports	Intra-firm trade
Imports		
Transportation equipment	17.7	75.6
Computer & electronic products	20.8	66.3
Chemicals	6.4	59.3
Machinery, except electrical	6.6	50.3
Electrical equipment, appliances & components	3.3	50.0
Exports		
Transportation equipment	15.6	41.2
Plastics & rubber products	2.2	40.7
Chemicals	9.9	39.3
Computer & electronic products	20.7	36.9
Electrical equipment, appliances & components	3.3	35.1

Source: United States Department of Commerce (2001).

Macroeconomic significance

Increasing internationalisation of production…

A large part of intra-industry trade reflects trade in "similar" but highly differentiated products, and a large part of intra-firm trade is of finished goods with foreign affiliates mainly engaged in marketing and distribution activities. Nevertheless, the increasing importance of foreign direct investment flows, particularly to low- or middle-income countries from the most advanced economies,[19] and the increasing number of *supertrading* economies, together suggest that the trends in intra-industry and intra-firm trade also partly reflect the increasing importance of the internationalisation of production.

18. The concentration of intra-firm trade in particular product categories is reflected in the fact that of the 31 product categories distinguished in the three-digit North American Industrial Classification System code, only five are above the average for total exports and imports.
19. The share of world-wide FDI received by the developing and transition economies increased from one-quarter in the period 1988-93 to one-third in the period 1994-99, see Navaretti *et al.* (2002).

… implies increasing correlation between exports and imports…

To the extent that a country's trade is dominated by goods that are part of a vertically-integrated production chain spread across more than one country, the correlation between changes in exports and imports is likely to be high. This is supported by the positive relationship between intra-industry trade and the correlation between movements in export and import volumes over the 1990s (Figure VI.1). Changes in export and import volumes are most strongly aligned for the established *supertrading* nations, Austria, Belgium, Ireland and Netherlands (Figure VI.2). Moreover, while such correlation is less apparent for the Eastern European economies on average over the 1990s, it is clear that movements in import and export volumes have become increasingly aligned over the period as intra-industry trade has expanded and the trade share of GDP increased (Figure VI.2).

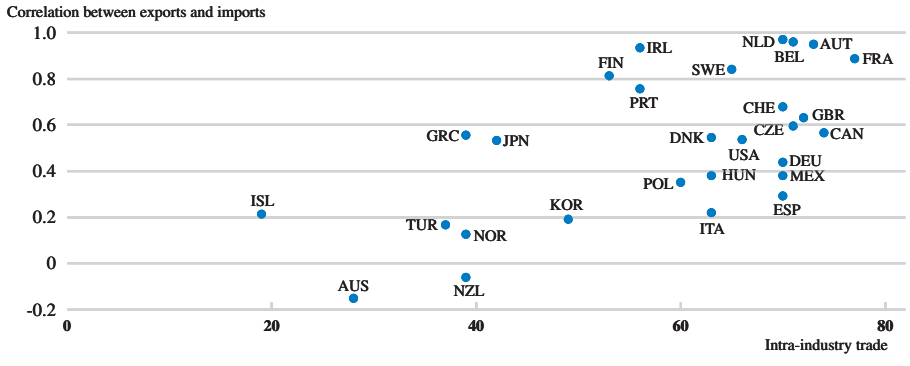
… which may dampen the impact of downturns in trade on GDP

If movements in export and import volumes are closely aligned, then changes in net export volumes will be small, which complicates any assessment of the vulnerability of countries to cyclical movements in their main trading partners. For example, the very high share of Mexican exports going to the United States exaggerates the initial impact of a slowdown in US demand on Mexican GDP, because there is likely to be a coincident downturn in Mexican imports of components. Hence the impact effect on value added produced in Mexico may be smaller than might otherwise be expected. Nevertheless, sustained weakness in US demand may have more important "second round" implications for Mexico if, for example, it leads to falling employment and cutbacks in foreign direct investment inflows.

World trade may become more volatile…

More generally, the internationalisation of production may mean that the initial consequences for value added of any shock to demand are more dispersed across countries. A corollary is that world trade at the global level is likely to be more responsive to the state of the world economy than in the past. For example, the recent global slowdown has been accompanied by a severe downturn in world trade growth unprecedented since the first and second oil shocks, although the downturn in global

Figure VI.1. **Relationship between intra-industry trade and the correlation of export/import movements over the 1990s**

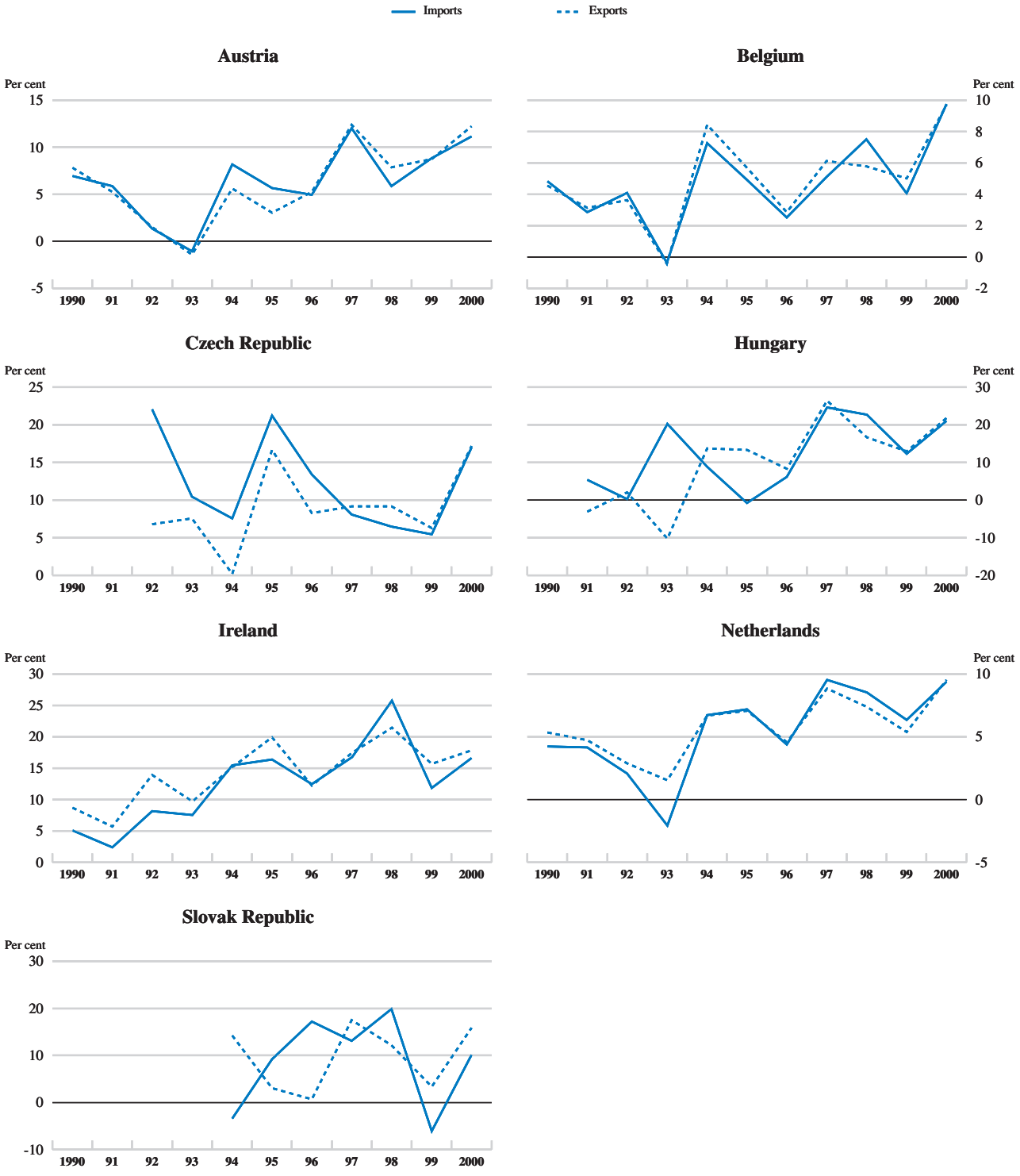


Note: The horizontal axis measures the average manufacturing intra-industry trade as reported in Table VI.1. The vertical axis measures the correlation coefficient between annual changes in export and import volumes of trade in goods and services from 1990 to 2000.
Source: OECD.

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Figure VI.2. **Correlation between export and import volume growth for OECD "supertrading" economies**

Goods and services trade volumes, national accounts, percentage changes over previous year



Note: Scales differ accross countries.
Source: OECD.

GDP growth has so far been relatively modest.[20] Thus, past historical relationships may be a misleading guide to interpreting current and future movements in world trade, and these trends also caution against using world trade as a leading indicator.

… the transmission of certain shocks may become more rapid…

The concentration of intra-industry and intra-firm trade in particular products means that the international transmission of certain industry- or product-specific shocks may be especially rapid. An obvious recent example of this is the speed of the collapse in trade in ICT products, particularly as regards bilateral trade between the United States and certain Asian countries, and also between the United States and Mexico.

… and trade less sensitive to changes in price competitiveness

These trends may also mean that trade is less responsive to short-term changes in price competitiveness than in the past. If an increasing proportion of trade is in intermediate goods as part of an international production chain, then it is unlikely that short-term movements in costs or exchange rates will be allowed to disrupt it.[21] However, persistent exchange-rate realignments or permanent shifts in relative unit labour costs may eventually lead to the relocation of entire plants to more cost competitive countries. There is also evidence that imports do not "discipline" wages or domestic prices, in terms of keeping down price-cost margins, when they are intra-firm.[22]

20. Following the first oil shock, world trade growth fell by 6 percentage points in 1974 and a further 8 percentage points in 1975, with OECD real GDP growth falling over 5 percentage points in 1974 and further in 1975. While the recent fall in world trade growth amounts to nearly 12 percentage points in 2001 (compared to 2000), OECD growth is estimated to have fallen by only 2¾ percentage points.
21. There is evidence that intra-firm imports are less price elastic than other imports (see Jarrett, 1985).
22. See Jarrett (1979).

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VII. PRODUCTIVITY AND INNOVATION: THE IMPACT OF PRODUCT AND LABOUR MARKET POLICIES

Introduction and summary

Product and labour market policies influence growth

A substantial part of economic growth cannot be explained by increased utilisation of capital and labour. This part of growth, commonly labelled "multi-factor productivity", represents improvements in the efficiency of production. It is usually seen as the result of innovation by best-practice firms, technological catch-up by other firms, and reallocation of resources across firms and industries. This chapter focuses on the impact that policies affecting product market competition and labour market adaptability have on multi-factor productivity and some of its main determinants, *i.e.* innovation and the diffusion of new production techniques.[1]

The next section provides a brief overview of multi-factor productivity outcomes, innovative activity, and selected product and labour market policies in the OECD area, showing persisting cross-country differences in both performance and regulatory patterns. The following section explores the implications of product market regulations and hiring and firing rules for productivity, partly drawing on firm-level evidence. The final section looks at the linkages between product and labour market policies and research and development activity.

The analysis leads to the following main policy conclusions:

Easing regulatory restrictions enhances productivity

– Easing product market regulation and employment protection positively affects multi-factor productivity levels and technological catch-up by raising the incentives to improve efficiency and lowering the costs of doing so. These effects are likely to come about mostly through within-firm productivity gains but also through reallocation of output to more efficient firms, which are often new entrants in industries with rapidly evolving technologies (*e.g.* industries producing and using information and communication technologies).

Policies that favour competition spur innovation

– Product market liberalisation also has positive effects on the innovative effort of firms (as measured by research and development expenditure). These beneficial effects are best exploited when intellectual property rights provide sufficient incentives to innovate, and the scope for potentially anti-competition strategic use of innovation spending or patenting is restricted.

1. This chapter follows on from previous OECD work on growth (OECD, 2001*a*; Scarpetta *et al.*, 2002) and product/labour market interactions (Nicoletti *et al.*, 2001; OECD, 2001*b*), bringing together firm and industry-level empirical evidence concerning the determinants of multifactor productivity and the cross-market effects of regulatory policies.

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The effects on innovation of easing job protection are complex

– The effects on research and development of easing hiring and firing rules are more ambiguous. On the one hand, innovation-driven changes in the skill mix of jobs often imply hiring and firing of workers, which is easier with less statutory job protection. On the other hand, in countries where industrial relations systems are centralised, changes in the skill mix are often implemented by in-house training of the existing workforce and restrictions on worker turnover may therefore not be an impediment to innovations. The effects of job protection on innovation also depend on the way innovations are implemented in industries with different technological characteristics.

Performance and regulatory patterns in the OECD area

Productivity performance varies across countries…

Improvements in multi-factor productivity (henceforth MFP) play a crucial role in the process of economic growth. Recent OECD estimates suggest that, in most countries, MFP growth accounted for between one third and one half of the average business sector GDP growth observed over the past two decades.[2] Cross-country growth differentials were heavily affected by differences in MFP growth rates over the 1990s. Australia, Canada, Ireland, New Zealand, the Nordic countries and the United States experienced an acceleration in MFP growth, recovering to various degrees from the slowdown that occurred in the previous two decades (Figure VII.1, vertical axis). In other OECD countries for which data are available, MFP performance worsened, significantly so in France, Japan and Spain.

… reflecting the ability to reach and shift the technological frontier…

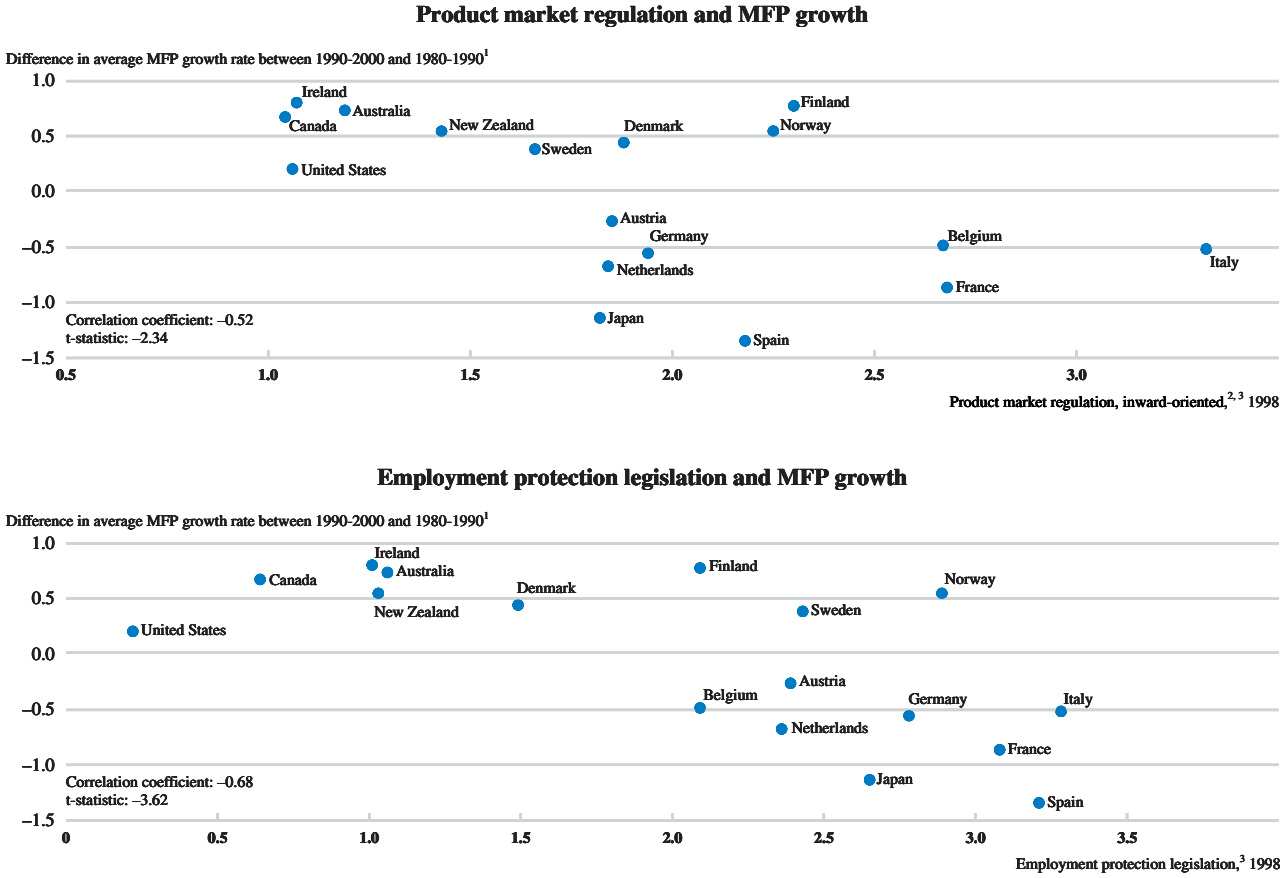
Since it reflects changes in output over and above those resulting from changes in factor inputs, MFP improvement is the component of growth that is most closely related to technological progress. MFP growth results from both innovations that improve upon best-practice production techniques and the catch-up *via* the adoption of state-of-the-art technologies and organisational practices. For instance, the recovery in MFP growth in the United States over the 1990s has been linked to innovations in information and communication technology industries and the subsequent boost to overall technical progress implied by the diffusion of this technology in other industries. It is likely that similar innovation and diffusion processes also played an important role in other OECD countries, though this effect is more difficult to identify.[3]

… which depends on innovative effort

There is a wide consensus that innovative activity is one of the main sources of technological progress and, ultimately, economic growth.[4] Measurement of innovative activity is notoriously difficult in part because of data limitations. A commonly used measure is reported expenditure for research and development (henceforth R&D), which has a wide country, industry and time coverage. This measure is attractive because of this wide coverage, but it is imperfect since it does not account for

2. MFP growth represents the residual output growth once the direct contribution of changes in the quality and quantity of capital and labour inputs are accounted for. Therefore, MFP estimates involve a number of difficult measurement problems. For instance, it is hard to make adjustment for quality and compositional changes in the labour input and, especially, the capital stock. Other potential sources of measurement error are economies of scale and mark-up pricing, see Morrison (1999). For detailed results on growth decomposition in OECD countries, see Scarpetta *et al.* (2000).
3. See Bassanini *et al.* (2000). In the major European countries and Japan the contribution to growth of investment related to information and communication technologies has been less important than in the United States, but it did play an important role in the pick up of growth in Australia and Finland (Colecchia and Schreyer, 2001).
4. OECD (2000*a*, 2000*b*) and Scarpetta *et al.* (2002), among others, provide evidence on the linkage between research and development and growth.

Figure VII.1. **Multifactor productivity acceleration, product market regulation and employment protection legislation**



1. Adjusted for hours worked.
2. Excluding barriers to trade and investment.
3. The scale of indicators is 0-6 from least to most restrictive. See Nicoletti *et al.* (1999).

Source: OECD.

the economic significance of R&D output.[5] Figure VII.2 shows that business R&D intensity (*i.e.* the ratio of R&D expenditure to output) varies significantly across countries, with the highest intensity in Sweden, the United States and Japan, and the lowest in Portugal, Greece and Poland. In a majority of countries, relatively low intensity in individual industries explains most of the deviations of aggregate R&D intensity from the OECD average. However, industry composition effects are

5. As well, R&D data usually capture only activities that are explicitly classified under R&D expenditures or employment in companies' accounts. However, a large part of innovative activity, notably in service sectors, occurs through organisational changes within firms, which are not reported in statistics. Moreover, innovative activity by small and medium-sized firms is typically under-reported in official statistics concerning R&D. Innovation counts and patents are imperfect indicators of innovation output mainly because they often convey little information about the economic significance (*i.e.* the "quality") of innovations. See Nicoletti *et al.* (2001) and Ahn (2002) for brief discussions of these measurement issues.

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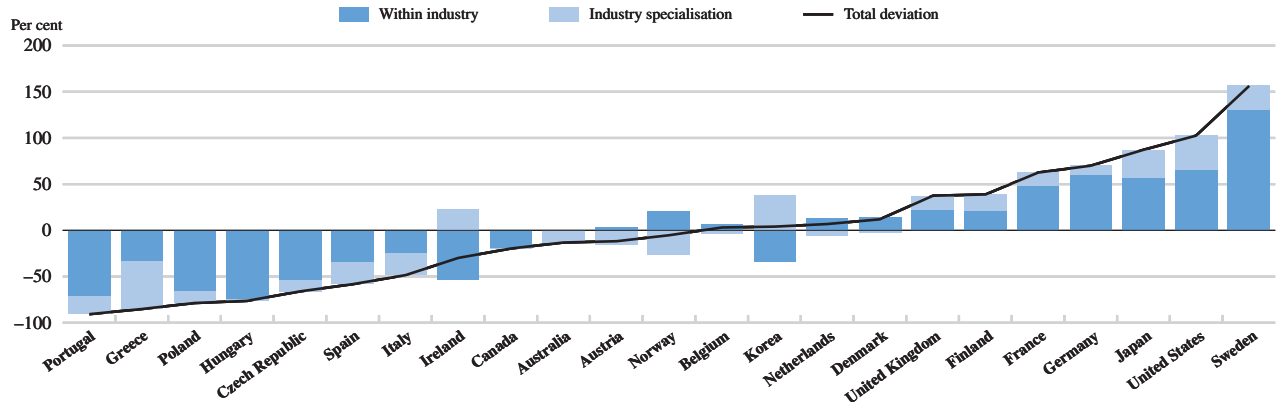
sizeable in several countries and account for the bulk of these deviations in Australia, Austria, Finland, Greece, Italy, Korea and Norway.[6]

Regulatory policies help explain performance differentials

Cross-country patterns of innovation and MFP depend on several factors,[7] but OECD work suggests that the policy environment may bear critically on performance differentials. Differences in product and labour market regulations were still significant in the late 1990s in the OECD area. Focusing on domestic product market regulations and employment protection legislation (EPL), Figure VII.1 (horizontal axis) shows that the regulatory policies against which MFP performances were achieved in the past decade differed a lot across countries.[8] By affecting the incentives to innovate and improve efficiency, regulations that limit product market competition (*e.g.* by imposing entry or operational restrictions) or affect labour market adaptability (*e.g.* hiring and firing rules) can have important side effects on innovation, technology diffusion and MFP performance. Thus, as shown in Figure VII.1, the ability of some OECD countries to recover from the earlier productivity slowdown may have been impaired by excessively restrictive rules in product and labour

Figure VII.2. **Differences in business R&D intensity across countries: within-industry and industry specialisation effects**

Percentage deviations from OECD average



Source: Nicoletti *et al.* (2001).

6. The cross-country variability observed in patents per capita, another widely-used indicator of innovative activity, is similar to that of R&D intensity (Bassanini and Ernst, 2002*a*).
7. Differences in industry structure influence the potential for innovation and MFP growth, particularly as the contribution of particular industrial sub-sectors (such as industries producing and using information and communication technologies) becomes stronger. Moreover, despite increasing convergence across the OECD, differences in human capital, trade openness, industrial relations regimes, financial structure and governance systems are important structural determinants of cross-country variation in innovative activity and economic growth, on which policies have only limited leverage, at least in the short to medium term.
8. More details on these differences can be found in OECD (1999*a*, 1999*b*). Figure VII.1 illustrates cross-country differences in domestic inward-oriented product market regulation and employment protection legislation in 1998. The focus is on domestic regulations because OECD countries are much more similar in their outward policy orientation (*e.g.* regulations concerning international trade and foreign direct investment). The summary indicators developed by the OECD rank countries on a scale 0-6 which is increasing in the level of restrictions to competition and the severity of employment protection legislation. Nicoletti *et al.* (1999) provides details on these indicators. Since 1998, OECD countries have implemented labour and product market reforms that may have altered these rankings. Reforms implemented recently in some OECD countries are reported in the *OECD Reviews of Regulatory Reform* and the *OECD Economic Surveys*.

markets.[9] The correlations in the figure are illustrative but are borne out by more rigorous multivariate empirical evidence (discussed below). They indeed suggest that cross-country differences in regulatory policies may explain differences in productivity performance, even after accounting for other factors that are known to affect productivity.

The influence on technological catch-up and multifactor productivity

Pro-competition policies encourage productivity growth and catch up…

There are basically three ways in which MFP improvements can be achieved: eliminating slack in the use of resources, adopting more efficient technologies and increasing innovative effort. Firm-level evidence recently gathered by the OECD shows that, at least over the short to medium term, both labour and multifactor productivity growth is dominated by within-firm productivity growth.[10] Therefore, good framework conditions for within-firm adjustment are crucial for robust aggregate MFP performance.

The main effect of product market regulations that favour competition is to strengthen the *incentives* to improve MFP and adopt new technologies. In weakly competitive markets, there are relatively few opportunities for comparing firm performances, and firm survival is not immediately threatened by inefficient practices. Therefore, slack and the suboptimal use of factor inputs can persist. As competitive pressures increase, performance comparisons become easier and the risk of losing market shares encourages the elimination of slack. In parallel, the need to meet the cost efficiency of competing firms provides a powerful motivation for adjusting technology and work organisation to best practice. Cross-country empirical evidence at the industry level indeed suggests that MFP is positively affected by regulatory environments that favour competition, even after accounting for other potential influences, such as R&D and country and industry-specific factors.[11] Pro-competition regulation appears to improve MFP performance both directly and, especially, by enabling a faster catch up to best practice in countries that are far from the technological frontier. For example, product market reforms that would align the overall regulatory stance with that of the most liberal OECD country are estimated to reduce in the long run the MFP gap *vis-à-vis* the leading country by around 10 per cent in high-gap countries such as Greece and Portugal, and by 2 to 4 per cent in several other continental European countries and Japan.

… by making required adjustments in factors of production easier…

Although labour market regulations are primarily designed to ensure desirable social outcomes,[12] certain regulations in this area can change the *costs* of measures to improve efficiency and catch up to best practice. For instance, excessively strict hiring and firing rules can raise the cost of the workforce reorganisations that are implied by a better utilisation of inputs or new vintages of technology. If firms cannot shift those costs onto lower wages, the net returns of such efficiency improvements are reduced. In this case, easing employment protection legislation can encourage adjustments towards the technological frontier. Empirical analysis of the experience of

9. The indicators of product and labour market regulation in Figure VII.1 relate to 1998. However, since the cross-country pattern of regulation appears to be highly persistent over time, the indicators are likely to portray the influences on productivity growth over the 1990s.
10. See OECD (2001*a*).
11. The cross-country, cross-industry evidence discussed here is drawn from Scarpetta *et al.* (2002).
12. For instance, well-designed policies can provide insurance against the risk of job loss, improve matching and commitment in worker-firm relationships and encourage skill upgrading.

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OECD countries in the past two decades confirms that employment protection legislation influences MFP performance, at least under certain wage-bargaining regimes. According to these estimates, a lowering of hiring and firing costs would improve MFP performance where employers were not able to offset these costs through bargaining over aggregate and relative wages (*e.g.* in countries where bargaining is mostly at the industry level and not co-ordinated nationally). At the same time, empirical estimates suggest that low hiring and firing costs (*e.g.* shorter and simpler procedures) may speed up the convergence of MFP to best practice in countries that are far from the technological frontier, independent of their bargaining regimes.

… as well as facilitating new entry…

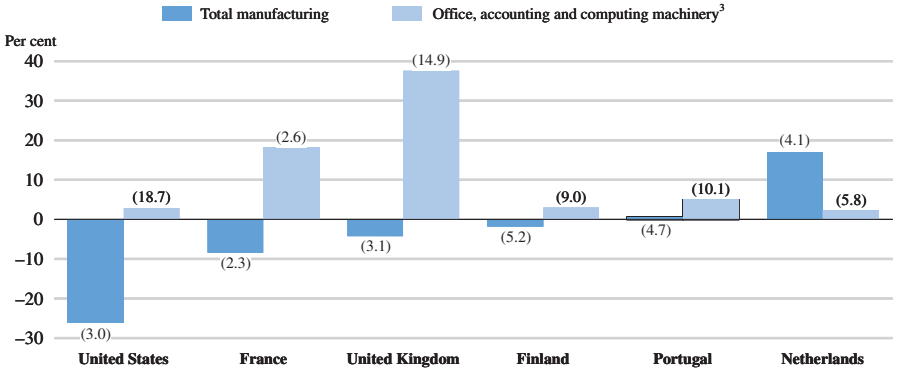
Product and labour market policies can also have repercussions on the turnover of firms, which is an important determinant of economy-wide MFP improvements. Product market regulations that raise the cost of entry (*e.g.* administrative burdens) or prevent it altogether (*e.g.* legal limitations on the number of competitors) tend to lower industry-specific and aggregate entry rates. A similar effect can result from some labour market regulations. For instance, minimum wage provisions, administrative extension of collective agreements, and strict hiring and firing rules can raise the costs faced by new entrants, which are often small-sized firms.[13] Recent OECD empirical work based on firm-level data covering both manufacturing and services in ten OECD countries over a decade shows that countries with relatively low administrative barriers, pro-competition sector-specific regulations and flexible hiring and firing rules typically experienced higher entry rates of small-sized firms, though not very small firms that are often exempted from such regulations.[14]

… which is a source of growth in rapidly evolving industries

The effect of regulations on entry is particularly important for productivity performance in industries in which technology is rapidly evolving, such as information and communication technology industries or industries characterised by high adoption of this technology. In these industries new entry contributes more strongly to productivity growth than in the rest of the economy (Figure VII.3), because new

Figure VII.3. **Contribution of new entry to labour productivity growth in manufacturing and selected ICT industries, 1992-97**[1]

Percentage share of total productivity growth[2]



1. Except for Finland 1989-94 and France 1987-92.
2. Total productivity growth in parentheses.
3. Electrical machinery and apparatus n.e.c. for France, the Netherlands and Portugal.

Source: OECD.

13. Strict employment protection provisions, for instance concerning collective dismissals, can also make exit more burdensome for inefficient firms.
14. Entry rates in different countries by industry were estimated from firm-level data collected and harmonised by the OECD, see Scarpetta *et al*. (2002).

entrants play an important role in introducing new vintages of technology. Therefore, product and labour market regulations that minimise the prospective costs faced by new entrants are likely to create favourable conditions for increasing the contribution of information and communication technology to productivity growth.

The influence on incentives to invest in research and development

Pro-competition product market regulations encourage innovation…

Recent economic analyses suggest that vibrant product market competition is essential to generate the *ex ante* incentives to engage in innovative activity.[15] Thus, regulations concerning entry and business activity (*e.g.* licensing, administrative procedures and barriers to trade) need to be made friendly to competition by liberalising potentially competitive markets, reducing administrative burdens, lifting price and other operational controls. At the same time, R&D may be encouraged when innovating firms are granted some degree of market power over new products (or processes) after they innovate. Therefore, the right policy environment for innovative activity is one that generates expected rents that are sufficiently high to cover the cost of innovation, while unleashing competitive pressures that force firms to strive for survival by implementing innovations. In practice, it is difficult to strike the right balance between competition and the protection of intellectual property rights (*e.g.* patents, trade marks, copyright). Nonetheless, appropriate rules and institutions, including international agreements, can guarantee the protection of intellectual property rights while making sure that the diffusion and transfer of technological progress is not thwarted (see Box).

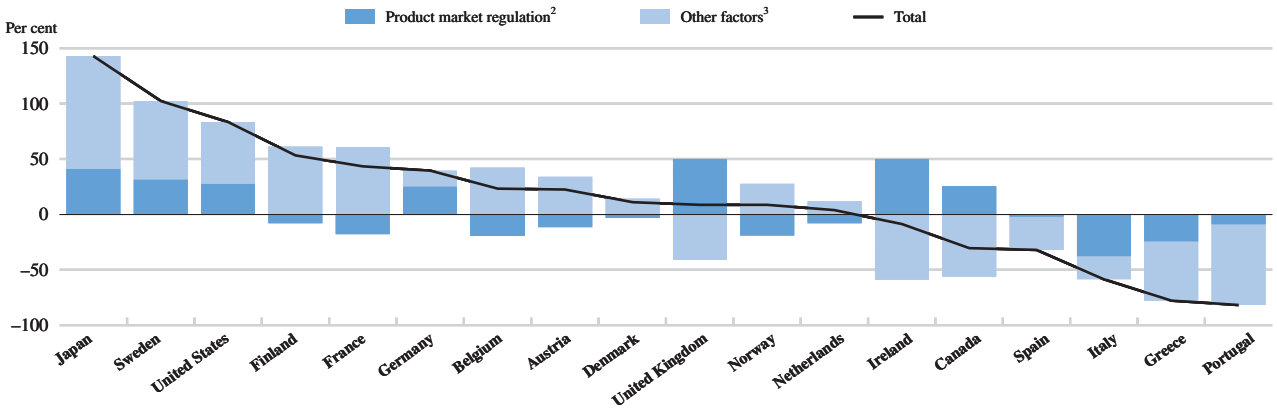
Recent empirical research has shown that product market regulations conducive to competition have a positive effect on R&D intensity in manufacturing.[16] Cross-country differences in such regulations explain a good deal of the industry-by-industry deviations of Member countries' R&D intensity from the OECD average in the late 1990s (Figure VII.4). They were estimated to account for almost one third of the higher R&D intensity in the United States, Japan, Germany and Sweden relative to the OECD average and provide a large positive contribution in the United Kingdom, Canada and Ireland. The opposite effect was particularly strong in Italy and Greece, where regulatory restrictions to competition accounted for one third and two thirds, respectively, of their shortfall in R&D intensity. Regulatory restrictions also provided a large negative contribution to R&D in France, Belgium and Norway. These estimates, together with *prima facie* evidence that excessive regulation may discourage specialisation in innovative industries (see below), suggest that further liberalisation of product markets might spur innovative activity significantly in several OECD countries.

15. At the same time, co-operation between firms (*e.g.* collaborative R&D, joint R&D ventures or technology licensing agreements) and with other institutions (*e.g.* universities and public research organisations) is increasingly used to efficiently exploit potential synergies in innovative activity (Shapiro, 2002).
16. There is a growing body of empirical evidence showing that strong product market competition is beneficial for innovative activity when IPR are adequately protected. See, for instance, Bassanini and Ernst (2002*a*) and, for a review, Ahn (2002).

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Figure VII.4. **The contribution of product market regulation to differences in R&D intensity across countries**

Percentage deviations from OECD average[1]



1. Adjusted for industry composition.
2. Includes administrative and economic regulations.
3. Includes EPL, other controls, country-specific effects and unexplained residual.

Source: OECD.

… by stimulating efficiency increases and product diversification

The impacts of competition on R&D may manifest themselves differently across industries. In low-technology industries (*e.g.* textiles), competitive pressures encourage R&D investment and innovations that are primarily aimed at preserving market shares by reducing costs and cutting prices. In high-technology industries where firms share relatively homogeneous "dominant" technologies (*e.g.* motor vehicles), competition compels firms to engage in a process of "cumulative" innovation aimed at reducing costs and improving product quality relative to those of competitors (so-called "neck-and-neck" competition). Empirical evidence based on industry-level data shows that R&D investment in both sets of industries leads to significant improvements in their MFP.[17] In other high-technology industries (*e.g.* precision instruments), free entry leads to competition between several different technological trajectories, each promoted by different innovating firms. As a result, R&D investments are mainly aimed at differentiating products and acquire shares in "niche" markets, with an impact on MFP that is more difficult to identify.[18]

Labour arrangements have side effects on innovative activity…

In much the same way as they influence MFP, labour market policies can have side effects on aggregate R&D spending and innovation. For instance, policies that make hiring and firing difficult can increase the cost of implementing innovations, when these require labour downsizing or reorganisation; and policies that favour the bargaining power of insiders can reduce the ability of firms to appropriate innovation rents, especially when post-innovation wage re-negotiation is possible. These potential side effects on innovative activity need to be taken into account when assessing the costs and benefits of maintaining or reforming policy settings in the labour market.[19]

17. See Scarpetta *et al.* (2002).
18. In these industries, the main result of innovative activity is product diversification, a phenomenon that translates into increased consumer welfare rather than enhanced productive efficiency.
19. Another potentially important side effect of strict hiring and firing rules is to lower worker mobility. Mobility has been shown to help diffuse technology among firms, between industry sectors, and between universities (or government laboratories) and industry.

Box VII.1. The role of intellectual property rights

Intellectual property rights (IPR) confer on the owner the right to prohibit others from making, using, selling or importing the protected idea or invention for a defined period. They also impose on the owner certain obligations, for instance concerning disclosure. There are several types of IPR, including patents, copyrights, trademarks, trade secrets and other *sui generis* protections. The most relevant for high technology industries are utility patents (applying to inventions of new, useful processes and products), copyrights and trade secrets. The most patent-intensive products are pharmaceuticals and chemicals, biotechnology products, mechanical products, information technology products, telecommunications and software. IPR are covered by international agreements, but are granted and enforced nationally. There is a wide variation across countries in subject matters covered by IPR, their administration and interpretation and the way they are legally enforced, leading to international differences in their value.

The goal of IPR is to provide innovators with the incentive to create, discover and disclose new knowledge and information. Their economic rationale is that, because new ideas and research results are common knowledge, absence of protection would thwart incentives to innovate, keeping investment in research and development below its socially optimal level.[1] However, by conferring an exclusive right over a resource, IPR may curb product market competition by raising the costs of entry into a market. There is evidence that incumbent firms sometimes use patents strategically to block their competitors from developing products or as bargaining "chips" in cross-licensing agreements. Escalating R&D investment can be used to increase the fixed (sunk) costs faced by potential new entrants and patenting can be used in ways that deter competition, for instance to fence off new products against possible substitutes or block entry into the potential market niches in which competitors could thrive (Shapiro, 2002). Moreover, to the extent that innovations are cumulative and interrelated, excessive IPR protection may also hinder the development of new processes and products that build on previous innovations.[2] Therefore, the design of IPR involves a delicate balance between incentives to innovators and stimulus to competition, also calling for effective competition law enforcement in the field of IPR. The table below shows that there is a positive correlation across countries between innovation and a widely-used index of IPR protection. However, the direction of causation is unclear, since the strength and accuracy of IPR could be driven by the propensity of a country to innovate.

Intellectual property rights and innovative activity

Cross-country correlation coefficients [a]

	Intellectual property rights index[b]
Patents per capita[c]	0.68
	(4.41)
R&D intensity	0.64
	(3.94)

Note: t-statistics in parentheses.
a) All OECD countries except Iceland, Luxembourg, Mexico, Slovak Republic and Turkey.
b) The index is a composite of five indicators: the extent of coverage, the membership in international patent agreements, provisions for loss of protection, enforcement mechanisms and duration of protection (see Ginarte and Park, 1997).
c) Patents are defined as consolidated family of patent at European patent office (EPO), US patent office (USPTO) and Japanese patent office (JPO) by country of invention and in year 1993.
Source: OECD.

1. In fact, even though new ideas and research results are a public good, developing the capacity to absorb the related knowledge involves costs for competing firms.
2. At the same time, patenting can also allow firms to codify knowledge in such a way that it can be disseminated via licenses, while continuing to appropriate some of the returns of R&D (*via* royalties).

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… whose size depends on the interplay of policies and institutions…

The side effects of labour market policies on innovative activity differ across OECD countries, due to the interaction with other country-specific labour market institutions, such as industrial relations regimes. For instance, some estimates suggest that the impact of hiring and firing restrictions on R&D may depend on the degree of co-ordination of collective bargaining.[20] Employment protection legislation typically reinforces the bargaining power of insiders and reduces worker turnover (*i.e.* the process of laying off workers and hiring new workers on the labour market). Therefore, it can be expected to deter innovative activity. However, this negative side effect of employment protection is likely to be weaker where there is little scope for post-innovation wage re-negotiation and little recourse to worker turnover for reshuffling the workforce in the wake of innovations. In turn, the extent of wage re-negotiation and worker turnover during the innovation process are influenced by the features of collective bargaining institutions.

Although empirical estimates of the effects of employment protection legislation on innovative activity are not very precise, policies aimed at lowering hiring and firing costs are estimated to have on average (across industries) a positive effect on R&D intensity, especially in countries with a low or intermediate level of bargaining co-ordination (Table VII.1). In these countries, wage bargaining is decentralised, the scope for wage re-negotiation is relatively wide and adjustments in the composition of the workforce are typically made through worker turnover. Effects are estimated to be smaller in countries with highly co-ordinated bargaining systems, reflecting nation-wide wage setting and greater recourse to workforce adjustments internal to the firm, including firm-sponsored training aimed at creating the new skills required by innovations.[21]

… as well as on the characteristics of each industry

The impact of employment protection legislation on innovative activity also varies across industries, reflecting the degree to which innovation-driven workforce adjustments are accommodated through worker turnover. Empirical estimates indicate that employment protection legislation can significantly deter R&D in industries where the innovation process is driven by product differentiation, with technologies often being renewed through entry and exit of firms and extensive worker turnover (*e.g.* precision instruments and software). A significant depressing effect of employment protection on R&D is also found in (mainly low-technology) industries characterised by product lines at the end of their life-cycles, where innovation often leads to downsizing. Conversely, employment protection appears to play no constraining role on R&D in high-technology industries characterised by a cumulative innovation process, supported by worker skills that are highly specific to individual firms (*e.g.* electronic components and aircraft). In these industries, the best worker competencies to complement innovations are often found within the firm, and upgrading skills of existing employees is likely to be less costly than training new workers.

The evidence concerning interactions between labour market policies, industrial relations systems and technological characteristics of different industries suggests that, depending on their institutional and policy setting, countries may have comparative advantages in different industries from the standpoint of innovative activity.[22] In countries with high bargaining co-ordination and relatively strict hiring and firing

20. The evidence discussed here and below is drawn mostly from Bassanini and Ernst (2002*a*).
21. In highly-co-ordinated systems, wages are usually compressed across skills (see *e.g.* Blau and Kahn, 1996; Gottschalk and Smeeding, 1997). This makes in-house training more profitable for firms because they can reap the greater difference between the marginal productivity of skilled workers and their earnings.
22. See Bassanini and Ernst (2002*b*).

Table VII.1. **Estimated effects on manufacturing R&D intensity of aligning employment protection to that of the United States**

(percentage points)

Industrial relations context[a]	Point estimate	Lower bound estimate	Upper bound estimate	Baseline R&D intensity (weighted average)
High coordination countries	0.25	0.03	0.72	1.36
Intermediate and low coordination countries	1.22	0.01	2.43	1.50

a) Average effect in countries with high collective bargaining coordination or intermediate or low collective bargaining coordination:
High coordination countries include Austria, Czech Republic, Denmark, Germany, Greece, Ireland, Italy, Japan, Korea, the Netherlands, Norway and Poland
Intermediate or low coordination countries include Australia, Belgium, Canada, Finland, France, New Zealand, Portugal, Spain, Sweden and the United Kingdom
Source: OECD.

rules (*e.g.* Germany), innovative activity is likely to thrive in industries characterised by a dominant technology and a cumulative innovation process. Countries that have a decentralised bargaining system and laxer hiring and firing rules (*e.g.* the United States) are better equipped to innovate in industries characterised by multiple and rapidly evolving technologies. This can, at the same time, be seen as indicating that countries with low or intermediate levels of bargaining co-ordination and relatively strict employment protection (*e.g.* France and Spain) could enhance overall innovative activity by easing hiring and firing rules.

Pro-competition policies also help shifting output to innovative industries

Besides their effects on R&D intensity in individual industries, product and labour market policies can also affect the propensity of a country to concentrate production in innovative industries, for instance by affecting the pace of resource reallocation in the economy. Policies that reduce the adaptability of labour markets, of which employment protection was explored in this chapter, are associated with specialisation patterns that are unfavourable to innovative industries (OECD, 2001*b*). Such correlations are found also with regulations that increase costs for R&D-intensive firms (*e.g.* administrative burdens and barriers to competition).[23] These cross-country patterns of industry specialisation suggest that policies aimed at strengthening competitive forces and making labour markets more adaptable could stimulate structural adjustment towards innovative industries, thereby raising overall innovative activity.

23. For instance, there is a significant negative cross-country correlation between industry specialisation in innovative industries and the OECD indicators of excess administrative burdens on corporations (*i.e.* the difference between burdens imposed on corporations and sole-proprietor enterprises) and anti-competition product market regulations (see Nicoletti *et al.*, 2001).

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VIII. EXCHANGE MARKET VOLATILITY AND SECURITIES TRANSACTION TAXES

Introduction and summary

Foreign exchange markets, at times, appear volatile and disruptive…

Foreign exchange markets are essential to the functioning of the international economy. However, they sometimes appear to be excessively volatile and occasionally their movements have been disruptive. Exchange rates that are overly volatile and out of line with economic fundamentals can impose real costs on the economy, not least through their effects on international trade and investment. Moreover, at times, pressures from exchange markets have complicated the setting of monetary policy.

… a feature that has led some to advocate a "Tobin tax"

Concerns about foreign exchange market volatility have led a number of economists, policy makers and others to advocate countervailing measures. The most well known proposal consists of levying a tax on all foreign exchange transactions. This proposal, often referred to as the "Tobin tax",[1] is a special case of a securities transaction tax. Such a tax imposes a particularly heavy burden on those who hold assets, such as foreign currency, for relatively short periods. Because the volume of transactions in exchange markets is very high – over one trillion dollars a day – some more recent advocates have also argued for the "Tobin tax" on grounds of its potentially very large revenue yield. These funds, it is thought, could be used to finance worthwhile initiatives and in this regard official development assistance is often mentioned.

This chapter addresses a number of issues related to exchange market volatility and the potential effect of a "Tobin tax". In the succeeding sections the following questions will be addressed and the main conclusions are briefly summarised here:

Are exchange markets excessively volatile?

Evidence supports the view that exchange rates are overly volatile

It appears well established that movements in exchange rates, especially short-term movements, are often greater than can be explained by the "underlying economic fundamentals". It is not clear how far this reflects movements clearly unrelated to fundamentals as opposed to over-reaction by traders to new economic data assessed as implying changes to fundamental determinants of exchange rates.

1. His proposal was first laid out in the wake of the breakdown of the Bretton-Woods system of fixed (but adjustable) exchange rates. Others have also proposed such a tax, see for example, Dornbusch (1986), Stiglitz (1989) and Summers and Summers (1989). Recent interpretations of this proposal, while described as a "Tobin tax", have in fact been at variance in important ways with the original idea, a point made by Tobin himself (Tobin, 2001). For the original proposal, see his Janeway lecture, delivered in 1971 and published in Tobin (1974). See as well, Tobin (1978).

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Would a "Tobin tax" reduce volatility?

A "Tobin tax" cannot distinguish among types of transactions

No firm answer can be given to this question. A "Tobin tax" penalises high-frequency trading without discriminating between trades which may be de-stabilising and those which help to anchor markets by providing liquidity and information. Indirect evidence from other financial markets where a securities transaction tax has been in place suggests a substantial effect on trading volume but either no effect, or a small one of uncertain direction, on price volatility.

Do the potential benefits offset or balance the costs of such a tax in terms of economic efficiency?

Potential benefits appear to be small and the costs could be large

The evidence on whether or not exchange-market volatility hampers trade and investment is mixed – perhaps surprisingly so – and even those studies that find a negative effect estimate that it is small. This may be due to the general availability of low-cost hedging instruments. Nevertheless, if a "Tobin tax" were to reduce volatility, the price of hedging instruments might decline significantly. At the same time, there would be less of a need for them. On the cost side, volatility could rise rather than fall, because of an indirect effect on liquidity, and the "Tobin tax" could hit particularly hard at those trades that enable low-cost hedging to take place. On balance, the downside risks would appear to outweigh the potential benefits.

Could such a tax be implemented?

Implementation difficulties could well prove insurmountable

In principle, a "Tobin tax" would have to be implemented on a world-wide basis and possibly also across other financial (and some real) markets. If not, trading would tend to migrate to other, non-taxed jurisdictions, which may well be less regulated than existing venues, or participants could use other financial (or real) vehicles to achieve the same end. The political mechanisms to implement and enforce such a tax are not currently in place.

What is the potential revenue yield from a "Tobin tax"?

Revenues would probably be less than some have suggested

If it were possible to implement, the revenue yield from such a tax could be significant, though probably much smaller than suggested by current turnover in exchange markets, in good part because the tax base itself is likely to fall. Even so, earmarking the revenues from such a tax for specific, albeit highly legitimate, expenditures, like official development assistance, would seem to be neither an economically efficient nor a politically appropriate way in which to finance such expenditures.

Are exchange markets exessively volatile?

Foreign exchange markets are more volatile than bond markets but less so than those for equities

Interest in a "Tobin tax" has increased, despite the fact that foreign exchange rate volatility has shown no particular trend over the past two decades (Table VIII.1). Compared with other financial markets, for which there has been less discussion of transaction taxes, volatility of exchange markets is generally lower than that of equity markets but higher than for relatively safe, fixed-income securities such as government bonds (Tables VIII.2 and VIII.3). Whether such exchange rate volatility as can be observed is excessive remains a somewhat controversial issue. However, volatility in foreign exchange markets at monthly frequencies cannot easily be explained by looking at

Table VIII.1. **Historical volatility of foreign exchange rates *vis-à-vis* the US dollar**

Standard deviation of annualised daily returns in per cent

	Japan	Germany	France	Italy	United Kingdom	Canada	Switzerland
1980-2001	10.75	10.64	10.46	10.30	9.99	4.44	11.65
1980-1984	10.05	10.44	10.90	9.73	9.91	3.70	11.49
1985-1989	10.34	11.42	11.05	10.79	11.92	4.30	12.53
1990-1994	9.69	11.18	10.68	11.65	10.87	4.33	12.12
1995-2001	12.13	9.75	9.45	9.23	7.56	5.05	10.72
Maximum[a]	31.86 (26-10-1998)	25.13 (08-10-1992)	23.69 (08-10-1992)	39.82 (08-10-1992)	26.72 (04-04-1985)	12.56 (08-10-1998)	27.28 (31-03-1995)
Minimum[a]	3.30 (12-03-1987)	3.16 (26-12-1994)	2.67 (26-12-1994)	1.92 (26-12-1994)	2.55 (15-03-1996)	0.66 (21-11-1983)	4.48 (16-05-1988)

Note: The exchange rates are noon buying in New York for cable transfers payable in foreign currencies.
a) Maximum and minimum of historical volatility are the highest and lowest level of one-month historical volatility during the whole time period 1980-2001. The one-month historical volatility is computed over moving windows of one-month (20 business days).
Sources: Federal Reserve Bank of New York and OECD.

Table VIII.2. **Historical volatility of equity market indices**[a]

Per cent, per annum

United States S&P500	Japan TOPIX	Europe DJ Euro Stoxx	United Kingdom FTSE100
1980-2001	1980-2001	1987-2001	1984-2001
16.18	17.28	16.59	15.72
	1995-2001		
17.45	19.67	18.79	16.65

a) Historical volatility is computed as the standard deviation of annualised daily returns over the time period specified.
Sources: Datastream and OECD.

Table VIII.3. **Historical volatility of 10-year government bonds**[a]

Per cent, per annum

United States	Japan	Germany	France	Italy	United Kingdom	Canada
1980-2001	1984-2001	1980-2001	1985:2-2001	1991:4-2001	1980-2001	1985-2001
8.27	5.91	5.16	6.56	7.28	8.56	7.39
			1995-2001			
6.70	5.35	5.08	6.09	6.25	6.22	6.50

a) Historical volatility is computed as the standard deviation of annualised daily returns over the time period specified.
Sources: Datastream and OECD.

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Figure VIII.1. **Historical volatility of exchange rates**

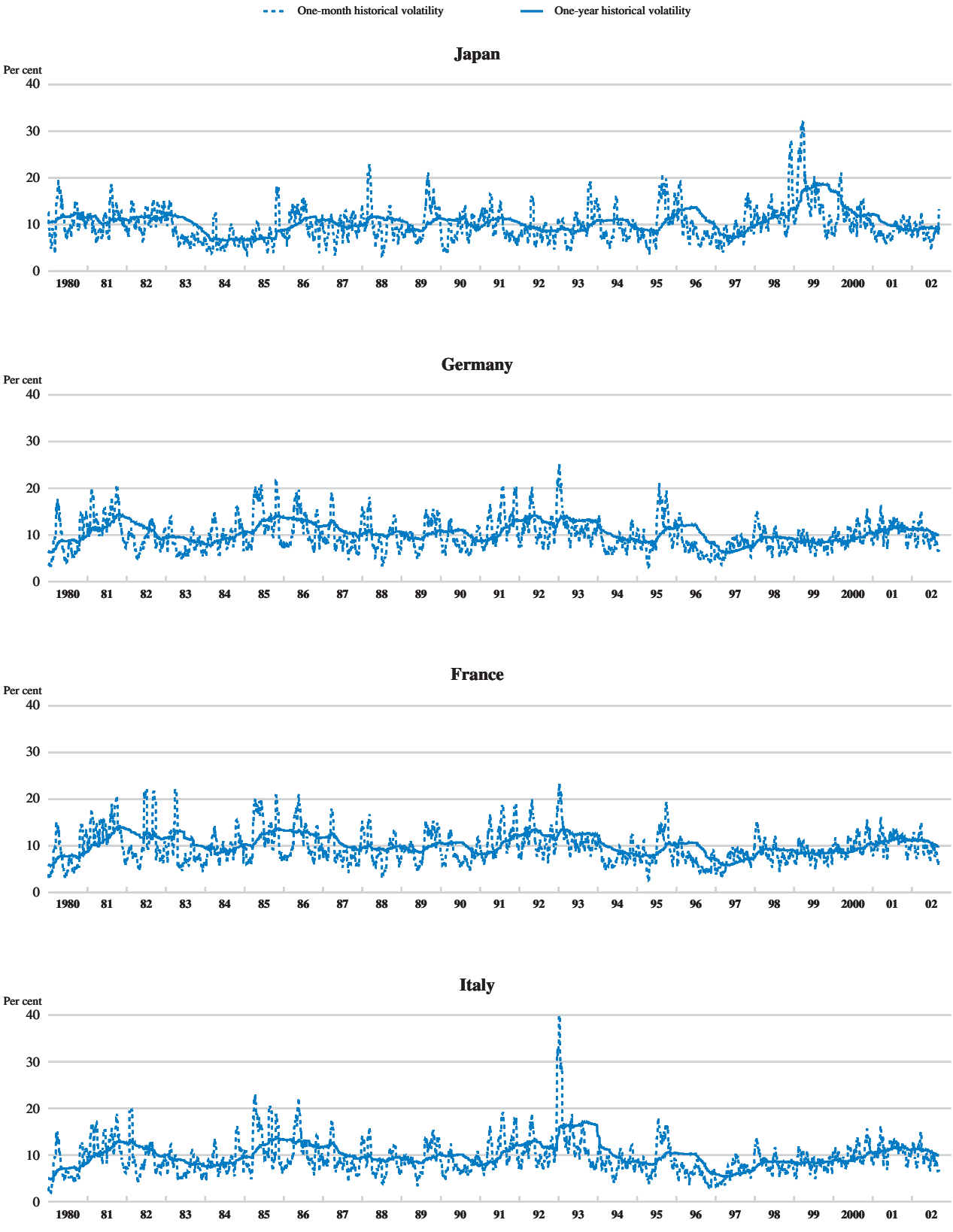
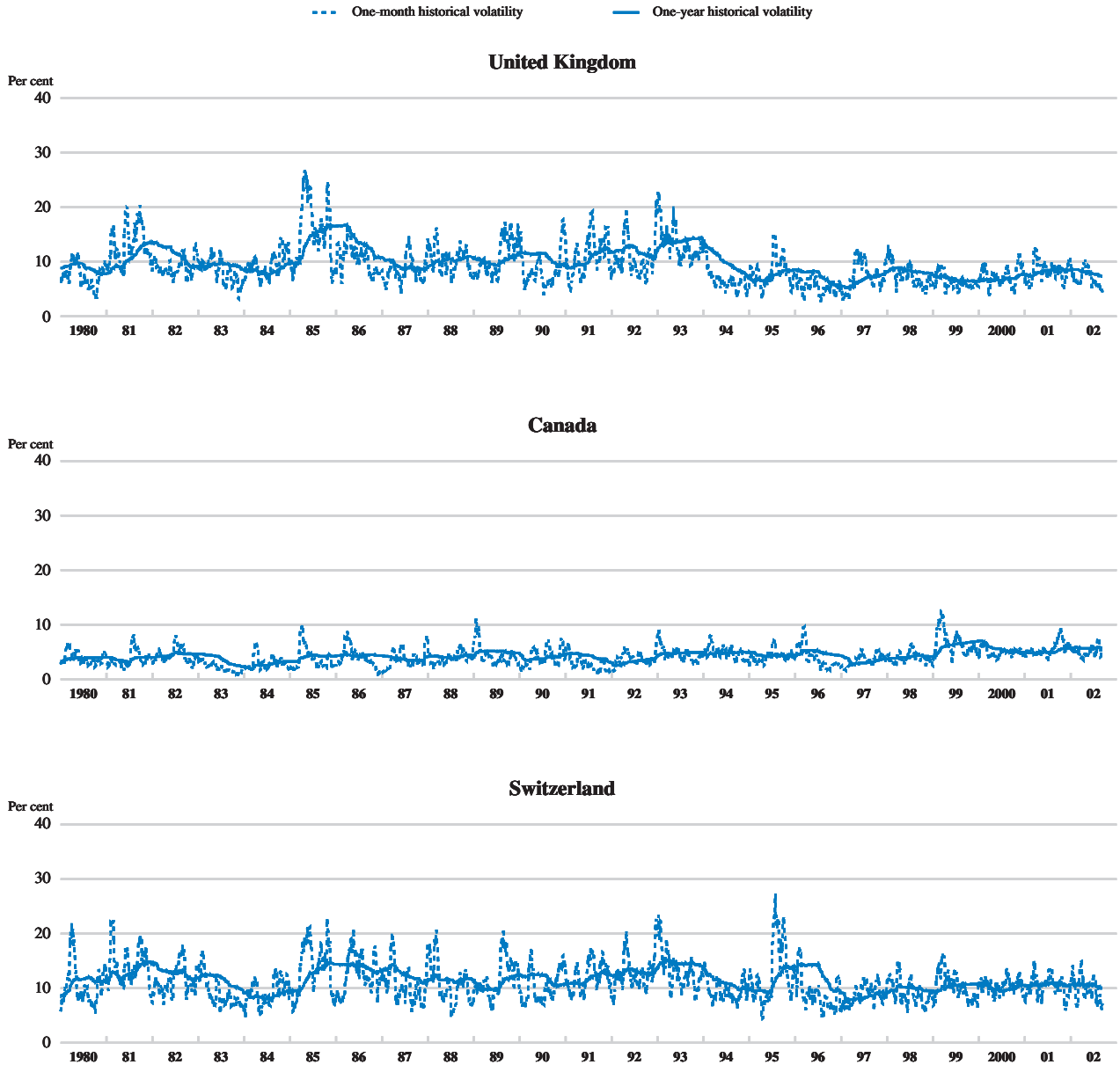


Figure VIII.1. **Historical volatility of exchange rates** *(cont.)*



Note: The one-month historical volatility is computed daily as standard deviations over moving windows of one month (20 business days) and the one-year historical volatility over moving windows of one year.
Source: Federal Reserve Bank of New York and OECD.

movements of what are thought to be underlying economic fundamentals.[2] Moreover, at high frequencies, such as daily observations, exchange rate volatility is higher still (Figure VIII.1),[3] which is suggestive of "noise" in the setting of exchange rates. It is in this sense that volatility has often been labelled as excessive.

2. See Flood and Rose (1999) and Bartolini and Giorgianni (2001). These findings are in line with those in other financial markets. Shiller (1981) was the first to point out this fact by noting that stock prices were excessively volatile with respect to underlying fundamentals.
3. The volatility of exchange rates at an intra-day level is even larger.

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The causes of excess volatility are unclear…

The observed positive correlation between the extent of trading and volatility has led to a focus on trading behaviour with suggestions that destabilising speculation ("noise trading") is what drives prices. However, correlation does not necessarily indicate causation but could reflect that both trading volumes and prices respond to the arrival of new information. Hence the correlation between trading and volatility does not provide any conclusive evidence.

… with little evidence that it reflects over-reaction to news

Alternatively, excess volatility could be the result of traders over-reacting to new information or incorporating into prices information that is not relevant. Empirical evidence on what type of information affects markets is still relatively scarce and not yet conclusive. Some studies distinguish between public information, such as the publication of new statistics, and private information not shared by others, such as knowledge that a particularly large amount of currency had to be converted. Indeed it appears that a sizeable part of volatility is associated with private information, but this does not necessarily imply that such information is not related to fundamental developments. Finally, insofar as the arrival of new information involves some initial mispricing, the subsequent correction would imply more trading and price movements, further strengthening the correlation between trading and volatility. However, the very limited evidence on this question ascribes only 4 to 12 per cent of the daily exchange rate variance to such mispricing.[4]

Would a "Tobin tax" reduce excess volatility?

The "Tobin tax" is targeted at frequent traders…

The appeal of a "Tobin tax" is that it would have a strong deterrent effect on traders with very short-term holding periods who, despite the lack of corroborative evidence discussed above, are often thought to be the main cause of excessive volatility. As an illustration, for a 0.5 per cent transaction tax and an assumed holding period of a day, these participants would require a 287.7 per cent return (annualised) before tax to get an after-tax return of 4 per cent. Such high returns may be available, even in risk-weighted terms, at times of intense pressure on a currency and the tax may have limited impacts in such episodes (see Box VIII.1).[5] In more normal times, however, such a tax may discourage short-term holdings. For traders with one-year or longer holding periods, on the other hand, the burden of the tax is small to negligible. The implication is that such a tax has the potential to severely limit short-term activity but would have only small effects on traders who take longer-term positions.[6]

4. See French and Roll (1986); Ito *et al.* (1998); and Melvin and Yin (2000) on some of the issues covered in this paragraph.
5. See Hakkio (1994). Most analysts feel that such a tax would not be able to prevent speculative attacks like those experienced against various emerging market currencies as well as those against some of the ERM countries during the early 1990s. Nonetheless, the tax may reduce the extent of open positions that can be closed out as an attack unfolds.
6. A "Tobin tax" could conceivably also encourage structural change in exchange markets. A feature of these markets is their lack of transparency; the lack of publicly available information on prices and volumes of transactions can lead to both more trading and higher volatility. By raising transaction costs, a "Tobin tax" could create an incentive to change the structure to a more transparent one, where less trading would be required and where liquidity could be provided by customers who would stand ready to buy or sell at agreed upon prices. It is not clear, however, that more transparency would be associated with lower volatility since it would lower the value of private information, reduce the ability of dealers to manage risk and lead to lower holdings of inventories. As a result, market liquidity could be hampered, bid-ask spreads widened and price volatility increased.

Box VIII.1. Volatility and misalignments

Not all volatility is harmful. Indeed, when fundamentals change, it makes sense for exchange rates to change as well. Moreover, sometimes exchange rate changes may assist economic policy. For example, a fall in the value of the exchange rate when monetary policy is relaxed during a period of economic weakness would help the economy to return towards its equilibrium level. The same is true if a country suffers an adverse terms-of-trade shock. At the other extreme, a rise in the exchange rate in response, say, to a very expansionary fiscal policy or a positive terms-of-trade shock when growth is already healthy, would tend to limit potential inflationary implications. In each case, exchange rate changes can be helpful.

It is possible to keep volatility low, through a fixed (but sometimes adjustable) peg of the currency to another. This, however, can be a mixed blessing. Artificially low volatility may induce enterprises, financial intermediaries and even private citizens to take on more foreign exchange exposure (and extra risks) than can be safely borne. If the currency arrangement proves impossible to maintain, perhaps because of underlying domestic imbalances and problems, then a speculative attack is likely. This will lead to disruptive adjustments, the intensity of which will depend, in part, on the size of the underlying positions that have been accumulated. For the country involved, it can be particularly painful if the domestic financial system is not well developed. This is why countries with fragile financial systems are encouraged to bring these into better shape before fully opening up to all capital flows.[1]

A "Tobin tax" is unlikely to prove effective in helping a country maintain an exchange rate arrangement that has become untenable. The returns that have typically been earned in speculating against a currency in these circumstances have been more than large enough to offset the burden of the tax. This appears to have been true for a number of emerging-market economies but as well for advanced economies.[2]

Exchange rates at times have become misaligned in relation to fundamentals. An example that is sometimes quoted is the appreciation of the Japanese yen against the dollar (to 80 yen by April 1995) and its subsequent depreciation. Developments such as these have proven to be very disruptive to both the functioning of exchange markets, but also for economic activity in general. These events are not well understood but, at the same time, it is not clear whether a "Tobin tax" would be able to play a preventive role.

1. See OECD (1999) and Dornbusch (2000).
2. See Frankel (1996).

… but may make markets less liquid

Limiting high-frequency trading does not necessarily reduce volatility, however. By raising transaction costs, the tax would penalise high-frequency activity undertaken by traders attempting to manage risk exposure, which, in turn, could have adverse effects on market liquidity. And in a thin market, each trade would tend to have a larger impact on the price, possibly implying an increase in volatility. Indeed, dealers in foreign exchange markets, who serve the important role of providing liquidity, will have to adjust their inventories of foreign exchange at times, particularly if they receive large orders.[7] In the process of finding other dealers or brokers to take their positions, trading can exceed the size of the initial order. This activity, however, is the result of risk management activity on the part of liquidity providers. A "Tobin tax" would interfere with this process and in the end raise the costs of those participants who are providing liquidity to markets.[8]

Experience in other financial markets suggests a small, uncertain effect

Since a "Tobin tax" has not yet been implemented, there is little direct evidence of its effects on volatility. The above-mentioned broad constancy of exchange rate volatility over the past couple of decades, when technological change and regulatory reform acted to lower transaction costs, does not support the argument that a rise in the latter would damp volatility. Apart from such circumstantial evidence, some indications may be had from experiences with types of securities transaction taxes

7. This is sometimes referred to as "hot potato" trading. See Lyons (2001).
8. As well, such a tax would discourage the entry of new traders and in the process reduce opportunities for risk sharing.

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imposed on other financial markets, and here the evidence has tended to be mixed. Analysis of the UK stamp duty (which in 1986 was reduced to 0.5 per cent on the purchase of shares and debentures) has shown that it tended to lower the price of securities but had no effect on volatility.[9] Studies on both US markets and those of East Asia have come to similar conclusions.[10] Germany also had in place a securities transaction tax until 1 January 1991. Just prior to its elimination volatility peaked and declined thereafter. The existence of these taxes in a number of equity markets did not appear to reduce volatility in the wake of the world-wide stock market crash in 1987.[11] Recent work looking at proxies for transaction costs on the Paris stock exchange, identified the potential upper limit of a reduction in volatility and concluded that the effect was, at best, economically small.[12] By contrast, a cross-country study found no significant influences of securities transaction taxes on stock market volatility.[13]

What is the balance between the potential benefits and costs?

Lowering volatility could reduce the costs of financial insurance

Lower volatility would directly affect the cost of insuring against adverse movements in exchange rates. Judged by the impact of volatility on the price of foreign currency options – important instruments for hedging foreign currency exposure – those cost savings could be significant (see Box VIII.2).

The effects of volatility on trade and investment are uncertain

While the cost of insuring could potentially be lowered, such costs are not high in the first place. Indeed, the availability of low-cost means to insure those engaged in international trade against adverse changes in currencies is often cited as a reason why empirically, a number of studies have found that, although volatility can potentially reduce the level of trade, the effect does not appear to be large.[14]

The tax could also have negative effects

The tax also has potential negative effects. To be effective, it would have to be applied to all instruments, including options and other vehicles used to insure against risk. This, however, would directly raise the cost of insuring, possibly by more than it would be lowered by any reduction in volatility. And as argued above, the risk is real that the tax would raise rather than lower volatility. Finally, and more controversial, to the extent that the tax reduced the ability of markets to respond to policy changes, it would reduce market discipline on policy.

Could a "Tobin tax" be implemented?

To be effective it would have to cover all foreign exchange markets…

If a "Tobin tax" is not implemented on a world-wide basis, activity will tend to migrate to tax-free jurisdictions. An illustrative example is provided by the transaction taxes on equities and bonds in Sweden. Following the doubling of the excise tax on share transactions to 1 per cent for both buyers and sellers and the introduction of

9. See Saporta and Kan (1997).
10. See Jones and Seguin (1997) and Hu *et al.* (1997).
11. See Hakkio (1994).
12. Hau (2001) looked at "tick" size changes (the minimum price variation rule) on the Paris stock exchange. He found that these variations were an important determinant of transactions costs and that an increase in tick size, roughly equivalent to 0.5 per cent STT, could lower volatility by 6 to 15 per cent.
13. See Roll (1989).
14. In fact, at a theoretical level, there does not appear to be a consensus about the direction or size of the relationship between trade and volatility. For a review of a number of theoretical and empirical studies on the relationship between trade and exchange rate volatility, see Côté (1994).

Box VIII.2. Option prices and volatility

Purchasing a currency option is one of the various methods (futures, forwards, foreign exchange swaps, etc.) employed to insure against foreign exchange risks. For example, a US exporter, with future receipts in euros but simultaneously facing domestic liabilities, may wish to hedge against adverse exchange rate movements, while benefiting from favourable ones. By buying a "euro put/dollar call" option contract, the option holder obtains the right, but not the obligation, to sell euros (buy dollars) at an agreed price (strike price) on a future date. If the strike price (quoted in US cents per unit of euro) is higher than the spot exchange rate at the future date, the holder would exercise the option. In exchange for insuring against an adverse exchange risk, the buyer of an option has to pay a price called the premium. Normally, higher volatility will mean higher option premiums, since that will imply that it is more likely that the option will pay off (*i.e.* the option will be in the money).[1]

The change in the price of an option with respect to a change in volatility is measured by the option's *vega*.[2] For example, a *vega* of 0.15 for euros against dollars indicates that the premium for this option will change in absolute terms by 0.15 US cents per euro if volatility (measured by standard deviation) changes by 1 percentage point. In Table VIII.4, the values of *vega* for option contracts for euros, yen, pounds and Swiss francs are shown. *Vega* tends to be the highest for those options for which the hedging incentive is most relevant. The relative change in the cost of an option as a result of a 1 percentage point change in volatility is *vega* divided by the initial option price and in Table VIII.4 these are shown as per cent. Assuming that volatility can be lowered by 1 percentage point (perhaps by imposing a "Tobin tax"), the saving on buying a standard option would range from about 7 to 11 per cent depending on the currency.

The calculations shown here have to be interpreted with some care. The results are based on the "Black-Scholes" model of option prices, which assumes that volatility is constant. In reality, volatility is not constant and other models, which try to incorporate this feature could give different results.[3] Nevertheless, the "Black-Scholes" model remains the most widely used for these types of calculations.

1. In relation to the price of the underlying asset, the option can be categorised into three different positions. If the strike price of the option is more favourable compared with the spot exchange rate for the holder, the option is said to be "in-the-money"; if the difference between the strike price and the spot rate is zero, "at-the-money"; if the strike price is less advantageous than the spot rate, "out-of-the-money".
2. Technically, *vega* is the name given to the value of the first derivative of the price of an option with respect to volatility.
3. See as well Hull (1999) for various types of option price models that incorporate these features.

a 0.15 per cent excise tax on money market instruments and bonds in 1984, about half of the turnover in Swedish stocks moved to London, and trade with monetary instruments and bonds in Sweden declined by 80 per cent.[15] The tax appeared to have no effect on domestic market volatility, while it was associated with a 2.2 per cent drop in the Swedish All-equity index the day it was announced and an increase in bid-ask spreads (a measure of transaction costs).

… as well as other markets

Other financial or real markets would also offer ways to avoid a "Tobin tax". For example, oil or commodities contracts denominated in different currencies could be exchanged against each other. However, costs of transacting in foreign exchange would likely be higher and resource allocation to unproductive financial engineering would be encouraged.[16] Finally, such a tax could increase the attractiveness of tax havens and off-shore centres.

15. The tax was levied on domestic securities brokers and this made it easy to avoid taxation by shifting trading abroad. Some observers have argued that a tax levied at the point of settlement would be less exposed to such shifting. See Umlauf (1993).
16. Such a tendency might offset one of the potential benefits of the "Tobin tax", which would be a lower commitment of capital and labour to the activity of trading foreign exchange.

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Table VIII.4. **Currency options contracts on Philadelphia Stock Exchange**

3 December 2001 (expiring in February 2002)

	Call option				Put option			
Underlying price	**Strike price**	**Vega**	**Option premium**	**Per cent change in premium**	**Strike price**	**Vega**	**Option premium**	**Per cent change in premium**
Euro								
89.06	88.00	0.15	2.31	6.67	90.00	0.15	2.03	7.54
Japanese yen								
80.55	80.50	0.14	1.67	8.56	81.00	0.14	1.47	9.83
British pound								
142.21	142.00	0.25	2.28	11.05	142.00	0.25	2.31	10.93
Swiss franc								
60.51	60.50	0.11	1.22	8.87	60.50	0.11	1.27	8.52

Note : Contracts shown are at-the-money. Underlying and strike prices are quoted in US cents per unit of foreign currency (with the exception of Japanese yen in hundredths of a cent). Option premiums are quoted in US cents per unit of the underlying currency (with the exception of Japanese yen in hundredths of a cent). Accordingly, a premium of 2.31 for a given call on euros is $0.0231 per euro. *Vega* measures the price sensitivity of an option to a 1 percentage point change in volatility. For example, if volatility falls from 10 to 9 per cent, with a *vega* of 0.15, the option premium should decline from 2.31 to 2.16 for a call on euros.

Sources: Datastream, Philadelphia Stock Exchange and OECD.

What are the potential revenues from such a tax?

The revenues could be significant…

Given the high volume of trading in foreign exchange markets, some recent advocates of the "Tobin tax" suggest that it would raise substantial revenues that could be used for development assistance. In 2001, based on a survey of market activity by the Bank of International Settlements, the daily trading volume was estimated to be 1¼ trillion dollars (Figure VIII.2). Assuming 240 trading days and a tax of 0.5 per cent, the potential upper limit of tax revenues would be about 1½ trillion dollars, a sum out of proportion with that currently spent on overseas development assistance.

… although much less than some advocates have suggested

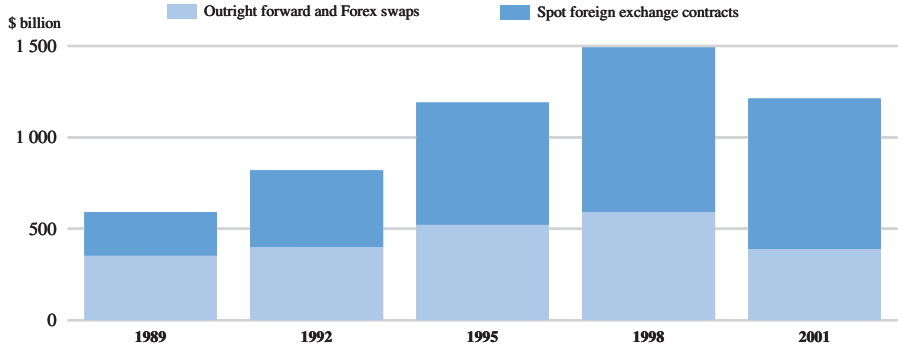
Abstracting from implementation issues, any estimate of potential revenues would have to allow for the effect that the tax would have on the base itself. A recent official report[17] notes the following features of the foreign exchange markets:

– Transaction costs in this market are low. For interbank-market trading in major currencies, the price spread between buyers and sellers is 0.02 per cent, while for trading between banks and non-banking customers, the spread is about 0.10 per cent. Acknowledging a lack of empirical evidence on the sensitivity of trading volumes with respect to these spreads, the report argues that it is likely large for big customers and narrower for smaller ones, and suggests an elasticity in the range of –1.5 to –0.5.[18]

17. See Ministry of Finance, Finland (2001), particularly, pp. 47-50.
18. An elasticity is the percentage change in demand divided by the percentage change in prices. The latter is directly affected by a securities transaction tax.

Figure VIII.2. **Summary of global transactions in foreign exchange markets**

Average daily turnover



Note: Adjusted for local and cross-border double counting ("net-net"). Includes estimates for gaps in reporting.
Source: BIS, Triennial Central Bank Survey, Foreign exchange and derivatives market activity in 2001, March 2002.

– Even in a best-case scenario – using the lower elasticity and assuming a tax rate of 0.5 per cent, with initial transaction costs of 0.10 per cent – the drop in the tax base would be quite large, approximately 66 per cent. If the elasticity were higher and the initial transaction costs lower, then the reduction in the base would be dramatic.

Such calculations suggest that the revenue take could be significantly reduced by the tax, although it would remain substantial.

Earmarking the revenues for aid is likely not efficient

Another question is whether or not a "Tobin tax" is the best way to finance overseas development assistance. From an economic perspective, the use of earmarked taxes may not be the most efficient option. Rather, provided that such assistance is worthwhile, it would be best to finance it in a way that implies as little distortion and as much certainty about revenues as possible. This is unlikely to be achieved through a "Tobin tax". Its popular appeal may nonetheless reflect a view that it would be paid by relatively well-to-do taxpayers. This argument rests on the confusion that a tax is being paid by those on whom it is levied. In practice, taxes are being shifted through changes in prices and wages and the ultimate payer of the tax may be a quite different person from the one handing over the tax revenue. In the case of a "Tobin tax", its final incidence is not very clear but it cannot be excluded that some of those paying the tax would be the same developing countries that it was meant to help. Finally, the linking of a "Tobin tax" to overseas development assistance may divert political attention away from the issue of whether such transfers should be increased.

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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 2001-2003 are OECD estimates and projections. The data in some of the tables have been adjusted to internationally agreed concepts and definitions in order to make them more comparable 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 rates for values and base-year exchange rates for volumes.

The Annex Tables have been reorganised as it has been decided not to resume the publication of three previously suspended tables (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"). Three new tables have been added under the heading "Key Supply-side Data". Also an additional table has been added to the section "Fiscal Balances and Public Indebtedness", as Annex Table 31 "General government structural primary balances".

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*).
- *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 the previous year, the Czech Republic, Hungary, Poland and the Slovak Republic are included from 1994 onwards.
- 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.

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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	2.96
Austria	0.82	Netherlands	1.56
Belgium	1.06	New Zealand	0.30
Canada	3.27	Norway	0.48
Czech Republic	0.61	Poland	1.29
Denmark	0.57	Portugal	0.65
Finland	0.46	Slovak Republic	0.22
France	5.71	Spain	2.84
Germany	8.31	Sweden	0.84
Greece	0.64	Switzerland	0.86
Hungary	0.44	Turkey	1.65
Iceland	0.03	United Kingdom	5.23
Ireland	0.31	United States	35.19
Italy	5.48	Total OECD	100.00
Japan	13.93	*Memorandum items:*	
Korea	2.46	European Union	34.53
Luxembourg	0.07	Euro area	27.90

Note: Based on 1995 GDP and purchasing power parities (PPPs).

Irrevocable euro conversion rates

National currency unit per euro

Austria	13.7603	Ireland	0.787564
Belgium	40.3399	Italy	1936.27
Finland	5.94573	Luxembourg	40.3399
France	6.55957	Netherlands	2.20371
Germany	1.95583	Portugal	200.482
Greece	340.750	Spain	166.386

Source: European Central Bank.

National accounts reporting systems and base-years

Many countries are changing from the SNA68/ESA79 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 (1959)	SNA93 (1959)	SNA93 (1959)	YES	1999/00
Austria	ESA95 (1988)	ESA95 (1995)	ESA95 (1976)	NO	1995
Belgium	ESA95 (1970)	ESA95 (1995)	ESA95 (1970)	NO	1995
Canada	SNA93 (1955)	SNA93 (1955)	SNA93 (1955)	YES	1997
Czech Republic	SNA93 (1994)	SNA93 (1994)	GFS (adjusted by OECD)	NO	1995
Denmark	ESA95 (1988)	ESA95 (1988)	ESA95 (1988)	NO	1995
Finland	ESA95 (1975)	ESA95 (1975)	ESA95 (1975)	NO	1995
France	ESA95 (1978)	ESA95 (1978)	ESA95 (1978)	NO	1995
Germany[b]	ESA95 (1991)	ESA95 (1991)	ESA95 (1991)	NO	1995
Greece	ESA95 (1960)	Not available	ESA95 (1960)	NO	1995[a]
Hungary	SNA93 (1995)	Not available	Not available	NO	1998
Iceland	SNA93 (1970)	Not available	SNA93 (1970)[c]	NO	1990
Ireland	ESA95 (1990)	ESA95 (1990)	ESA95 (1990)	NO	1995
Italy	ESA95 (1982)	ESA79	ESA95 (1995)	NO	1995
Japan	SNA93 (1980q1)[d]	SNA93 (1990)[d]	SNA93 (1990)[d]	NO	1995
Korea	SNA93 (1970)	SNA93 (1975)	SNA93 (1975)	NO	1995
Luxembourg	ESA95 (1970)	Not available	SNA95 (1990)	NO	1995
Mexico	SNA93 (1980)	Not available	Not available	NO	1993
Netherlands	ESA95 (1995)	ESA95 (1995)	ESA95 (1995)	YES	1995
New Zealand	SNA93 (1987)	SNA68	SNA93	YES	1995/96
Norway	SNA93 (1978)	SNA93 (1978)	SNA93 (1978)	NO	1997[a]
Poland	SNA93 (1991)	SNA93 (1991)	SNA93 (1991)	YES	1995
Portugal	ESA95 (1995)	ESA95 (1995)	ESA95 (1995)	NO	1995
Slovak Republic	SNA93 (1993)	SNA93 (1996)	SNA93 (1994)[c]	NO	1995
Spain	ESA95 (1995)	ESA95 (1995)	ESA95 (1995)	NO	1995
Sweden	ESA95 (1980)	ESA95 (1993)	ESA95 (1980)	YES	1995
Switzerland	SNA68	SNA68	Not available	NO	1990
Turkey	SNA68	SNA68	SNA68	NO	1987
United Kingdom	ESA95 (1987)	ESA95 (1987)	ESA95 (1987)	NO	1995
United States	NIPA (SNA93) (1959q1)	NIPA (SNA93) (1959q1)	NIPA (SNA93) (1960q1)	YES	1996

Note: SNA: System of National Accounts. ESA: European Standardised Accounts. NIPA: National Income and Product Accounts. GFS: Government Financial Statistics. The numbers in brackets indicate the starting year for the time series.
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.
c) Estimated.
d) Spliced to SNA68.

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Annex Table 1. **Real GDP**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	2.7	5.1	1.9	4.8	4.5	4.5	1.4	-0.7	2.4	3.8	4.6	3.9	4.0	3.5	5.4	4.5	3.4	2.4	3.7	4.0
Austria	2.1	2.4	2.1	1.6	3.4	4.2	4.7	3.3	2.3	0.4	2.6	1.6	2.0	1.6	3.5	2.8	3.0	1.0	1.2	2.8
Belgium	1.7	2.0	1.7	2.8	4.6	3.9	2.9	1.8	1.6	-1.5	2.8	2.6	1.2	3.6	2.2	3.0	4.0	1.1	1.1	2.7
Canada	2.9	4.7	2.4	4.2	4.9	2.6	0.2	-2.1	0.9	2.4	4.7	2.8	1.6	4.3	3.9	5.1	4.4	1.5	3.2	4.0
Czech Republic	..	..	..	..	..	..	..	..	..	..	2.6	5.9	4.3	-0.8	-1.2	-0.4	2.9	3.6	3.0	3.7
Denmark	2.1	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	2.5	2.3	3.0	0.9	1.9	2.2
Finland	2.7	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	4.1	5.6	0.7	1.5	3.4
France	2.1	1.5	2.3	2.5	4.2	4.3	2.6	1.0	1.3	-0.9	1.9	1.8	1.1	1.9	3.5	3.0	3.6	2.0	1.4	3.0
Germany	1.9	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	2.0	1.8	3.0	0.6	0.7	2.5
Greece	2.5	2.5	0.5	-2.3	4.3	3.6	0.0	3.2	0.5	-1.5	2.1	2.2	2.4	3.6	3.4	3.6	4.1	4.1	3.5	4.2
Hungary	..	..	..	..	..	..	..	..	..	..	2.9	1.5	1.3	4.6	4.9	4.2	5.2	3.8	3.5	4.3
Iceland	4.0	3.3	6.3	8.5	-0.1	0.3	1.1	0.7	-3.3	0.6	4.5	0.1	5.2	2.7	5.7	3.7	5.5	3.0	-0.8	2.3
Ireland	3.8	3.1	-0.4	4.7	5.2	5.8	8.5	1.9	3.3	2.7	5.8	10.0	7.8	10.8	8.6	10.8	11.5	6.6	3.5	6.3
Italy	2.5	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	1.8	1.5	2.8
Japan	3.7	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	0.7	2.4	-0.4	-0.7	0.3
Korea	7.6	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	9.3	3.0	6.0	6.5
Luxembourg	1.4	2.9	7.8	2.3	10.4	9.8	2.2	6.1	4.5	8.7	4.2	3.8	3.6	9.0	5.8	6.0	7.5	5.1	2.7	6.8
Mexico	4.6	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	-0.3	1.8	4.5
Netherlands	1.6	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	4.3	3.7	3.5	1.1	1.4	2.6
New Zealand	1.0	1.6	0.6	0.8	2.6	0.6	0.6	-1.9	0.8	4.7	6.1	4.0	3.3	3.1	-0.7	4.2	3.6	1.8	2.9	3.5
Norway	3.9	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	2.4	1.1	2.3	1.4	2.1	2.5
Poland	..	..	..	..	..	..	..	..	..	..	5.2	7.0	6.0	6.8	4.9	4.0	4.0	1.1	1.3	2.7
Portugal	2.2	2.8	4.1	6.4	7.5	6.4	4.0	4.4	1.1	-2.0	1.0	4.3	3.8	3.9	4.5	3.4	3.4	1.9	1.7	2.7
Slovak Republic	..	..	..	..	..	..	..	..	..	..	4.9	6.7	6.2	6.2	4.1	1.9	2.2	3.3	4.0	4.1
Spain	1.4	2.3	3.3	5.5	5.1	4.8	3.8	2.5	0.9	-1.0	2.4	2.8	2.4	4.0	4.3	4.1	4.1	2.8	2.1	3.3
Sweden	1.6	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	4.5	3.6	1.2	2.1	3.2
Switzerland	0.5	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	2.4	1.6	3.0	1.3	1.0	2.3
Turkey	3.9	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	7.4	-7.4	1.8	3.5
United Kingdom	1.5	3.8	4.2	4.2	5.2	2.2	0.8	-1.4	0.2	2.5	4.7	2.9	2.6	3.4	3.0	2.1	3.0	2.2	1.9	2.8
United States	3.0	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	4.3	4.1	4.1	1.2	2.5	3.5
Euro area	2.0	2.2	2.4	2.5	4.1	3.9	3.6	2.5	1.4	-0.9	2.3	2.3	1.4	2.3	2.9	2.7	3.5	1.6	1.3	2.9
European Union	2.0	2.5	2.7	2.8	4.2	3.6	3.1	1.8	1.2	-0.3	2.8	2.5	1.7	2.6	2.9	2.6	3.4	1.7	1.5	2.8
Total OECD	2.9	3.6	3.1	3.6	4.6	3.8	3.1	1.2	2.1	1.4	3.2	2.5	3.0	3.5	2.7	3.1	3.9	1.0	1.8	3.0

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).*

Source: OECD.

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Annex Table 2. **Nominal GDP**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	13.2	11.0	8.5	13.0	13.5	11.9	6.4	1.6	3.7	5.1	5.7	5.6	6.5	5.3	5.7	5.4	7.6	5.7	6.4	6.5
Austria	7.5	5.5	5.1	3.8	4.7	7.3	8.2	7.2	6.0	3.4	5.4	4.2	3.3	2.5	4.1	3.5	4.2	2.9	2.8	4.7
Belgium	8.2	6.4	4.7	4.2	7.1	9.0	6.0	4.6	5.3	2.2	4.6	4.4	2.4	5.0	3.9	4.3	5.4	2.9	3.6	5.3
Canada	11.3	8.0	5.5	9.1	9.7	7.3	3.4	0.8	2.2	3.9	5.9	5.1	3.3	5.5	3.5	6.5	8.3	2.7	3.8	6.1
Czech Republic	..	..	..	..	..	..	..	..	..	..	13.9	16.8	13.5	7.2	9.4	2.7	3.8	9.5	7.1	7.1
Denmark	11.3	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	3.5	5.0	6.8	3.6	3.7	4.8
Finland	12.9	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	3.9	8.9	2.9	2.7	5.5
France	12.8	7.0	7.5	5.4	7.6	7.7	5.6	4.0	3.3	1.5	3.7	3.6	2.5	3.2	4.4	3.3	4.4	3.6	3.1	4.4
Germany	5.9	4.1	5.6	3.4	5.3	6.1	9.1	9.1	7.4	2.5	4.9	3.8	1.8	2.1	3.1	2.3	2.6	1.9	2.1	3.5
Greece	21.7	22.0	19.5	12.6	21.7	18.6	20.7	23.7	15.5	12.6	13.5	12.2	9.9	10.7	8.8	6.7	7.6	7.4	6.6	7.2
Hungary	..	..	..	..	..	..	..	..	..	..	23.0	27.4	22.8	23.9	18.1	12.9	14.8	13.1	9.0	9.7
Iceland	50.3	35.6	33.3	29.7	22.7	20.1	18.2	8.4	0.3	2.9	6.5	2.9	7.2	6.1	10.8	7.2	8.6	12.4	5.0	6.1
Ireland	18.6	8.4	6.1	7.0	8.6	11.6	7.7	3.8	6.2	8.0	7.5	13.3	10.2	15.4	15.1	15.5	16.7	11.2	7.7	10.2
Italy	19.5	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	4.6	3.3	5.1	4.4	4.1	5.0
Japan	8.4	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	-0.8	0.3	-1.9	-2.1	-1.3
Korea	25.4	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	8.1	4.4	8.7	8.9
Luxembourg	7.5	6.0	8.5	5.2	11.1	14.6	7.5	8.6	7.1	9.3	9.1	4.1	5.5	12.1	8.6	8.7	11.5	6.5	3.9	10.2
Mexico	41.1	60.4	67.0	145.2	103.8	31.7	34.6	28.5	18.6	11.6	13.3	29.4	37.3	25.7	21.1	19.2	19.8	5.2	6.5	8.8
Netherlands	7.2	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	5.5	7.3	5.8	5.1	5.6
New Zealand	14.7	17.2	16.0	14.1	10.3	5.7	3.8	-1.4	2.3	7.8	7.2	6.5	5.7	3.2	0.6	3.8	6.2	6.8	4.6	6.2
Norway	12.9	10.7	2.6	9.1	4.8	6.7	5.9	5.7	2.8	4.9	5.3	7.1	9.4	7.8	1.7	7.4	19.0	3.4	4.0	6.0
Poland	..	..	..	..	..	..	..	..	..	..	44.5	36.9	25.9	21.8	17.2	11.1	11.3	5.5	4.0	6.0
Portugal	23.6	25.2	25.4	17.1	19.5	17.6	17.6	14.9	12.7	5.2	8.3	7.8	7.0	7.9	8.6	6.8	6.2	6.7	5.8	6.1
Slovak Republic	..	..	..	..	..	..	..	..	..	..	19.4	17.1	11.0	13.2	9.4	8.6	8.8	8.7	10.8	12.0
Spain	17.2	11.1	14.5	11.8	11.3	12.0	11.4	9.7	7.7	3.4	6.4	7.8	6.0	6.4	6.8	7.1	7.7	6.8	4.8	5.8
Sweden	12.3	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	5.2	4.7	3.3	4.7	5.7
Switzerland	4.2	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	2.3	2.3	4.1	3.1	2.5	3.5
Turkey	45.4	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	60.9	41.6	54.4	31.2
United Kingdom	14.5	9.6	7.5	9.9	11.6	9.8	8.4	5.2	4.2	5.2	6.1	5.6	6.0	6.4	6.0	4.8	4.8	4.7	5.2	5.4
United States	10.1	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	5.6	5.5	6.5	3.4	4.0	5.2
Euro area	11.7	7.8	8.1	6.0	8.0	8.3	8.6	7.5	5.8	2.8	5.2	5.2	3.6	4.0	4.7	3.8	4.8	3.8	3.5	4.7
European Union	12.9	8.6	8.4	7.0	8.9	8.8	8.8	7.3	5.5	3.2	5.5	5.5	4.2	4.5	4.9	4.1	4.9	4.0	3.8	4.8
Total OECD	13.0	10.4	9.5	11.8	12.7	10.1	9.4	7.1	6.6	5.4	7.9	7.8	7.4	7.4	6.0	5.5	6.6	3.8	4.2	4.9
Memorandum item																				
OECD *less* high inflation countries [a]	11.4	7.9	6.9	6.9	8.5	8.1	7.5	5.5	5.1	3.9	5.5	5.0	4.8	5.1	4.0	4.1	5.1	2.9	3.2	4.2

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).*

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 3. **Real private consumption expenditure**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	2.7	4.6	1.8	1.9	3.9	5.6	2.7	0.6	2.6	1.6	3.7	4.7	3.2	4.0	4.7	5.1	2.7	3.2	4.0	3.7
Austria	2.6	1.8	1.9	2.6	3.1	4.3	4.5	2.5	3.0	0.8	2.4	2.6	3.2	1.7	2.8	2.7	2.5	1.3	1.6	2.2
Belgium	1.9	2.2	3.1	1.8	3.7	3.9	3.2	3.1	2.2	-1.0	2.0	0.7	1.2	2.0	2.9	2.1	3.8	1.7	1.0	2.2
Canada	2.6	4.9	3.7	4.1	4.3	3.4	1.2	-1.6	1.6	1.8	3.0	2.1	2.6	4.6	3.0	3.4	3.6	2.5	2.8	3.1
Czech Republic	..	..	..	..	..	..	..	..	..	..	5.3	5.9	7.9	2.4	-2.0	1.9	1.9	3.7	3.2	3.5
Denmark	1.6	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	2.3	0.2	-0.4	0.6	1.2	1.9
Finland	2.5	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	4.0	2.2	1.4	2.1	2.4
France	2.2	1.4	3.3	2.7	2.4	3.2	2.6	0.8	0.8	-0.3	0.9	1.4	1.3	0.1	3.6	3.2	2.9	2.9	2.1	2.6
Germany	2.1	1.7	3.5	3.4	2.7	2.8	5.4	5.6	2.7	0.1	1.1	2.1	1.0	0.6	1.8	3.1	1.4	1.1	0.6	1.8
Greece	4.1	0.5	-1.5	2.7	6.1	6.3	2.6	2.9	2.3	-0.8	1.9	2.5	2.4	2.7	3.5	2.9	3.3	3.2	2.8	3.2
Hungary	..	..	..	..	..	..	..	..	..	..	0.2	-7.1	-4.3	1.9	4.8	5.4	4.5	5.1	4.6	4.9
Iceland	3.1	4.2	6.9	16.2	-3.8	-4.2	0.5	2.9	-3.1	-4.7	2.9	2.2	5.4	5.1	10.4	7.2	4.2	-2.8	-1.2	1.5
Ireland	2.1	4.6	2.0	3.3	4.5	6.5	1.4	1.8	2.9	2.9	4.4	4.1	6.4	7.4	7.3	8.3	10.0	4.5	3.5	5.5
Italy	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	3.2	2.4	2.7	1.1	1.4	2.5
Japan	3.5	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	0.6	0.4	-0.4	0.5
Korea	6.3	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	7.9	4.2	5.0	4.2
Luxembourg	2.4	2.7	5.7	4.6	4.6	5.1	5.7	6.3	-0.9	1.7	2.4	2.4	3.7	3.6	4.0	2.1	3.1	3.4	3.8	3.6
Mexico	3.9	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	3.4	1.6	4.6
Netherlands	1.8	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	4.8	4.5	3.8	1.2	2.2	3.1
New Zealand	0.2	0.5	4.0	2.4	2.7	1.1	0.1	-1.3	0.1	2.8	5.8	4.0	4.5	2.3	1.7	4.2	2.1	2.1	2.8	3.1
Norway	2.9	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	3.4	2.2	2.4	2.2	3.1	3.3
Poland	..	..	..	..	..	..	..	..	..	..	4.5	3.2	8.6	6.9	4.8	5.3	2.7	2.1	0.8	1.9
Portugal	0.6	0.6	5.6	5.3	6.8	2.9	6.4	4.2	4.7	1.1	1.0	0.5	3.2	3.4	5.1	4.8	2.6	0.8	1.1	2.0
Slovak Republic	..	..	..	..	..	..	..	..	..	..	1.0	3.4	8.0	5.4	5.8	-0.2	-3.4	4.0	3.5	3.5
Spain	1.1	2.3	3.4	6.0	4.9	5.4	3.5	2.9	2.2	-1.9	1.1	1.7	2.2	3.2	4.5	4.7	4.0	2.7	1.8	3.1
Sweden	0.6	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	3.9	4.6	0.2	2.5	2.7
Switzerland	1.1	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	2.3	2.2	2.0	2.3	1.6	2.2
Turkey	5.6	-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	6.2	-9.0	1.5	2.0
United Kingdom	1.7	3.9	6.6	5.0	7.5	3.3	1.0	-1.5	0.6	3.2	3.3	1.9	3.8	3.8	3.8	4.2	4.1	3.9	3.1	2.5
United States	3.2	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	4.8	5.0	4.8	3.1	3.0	2.6
Euro area	2.2	2.1	3.4	3.5	3.2	3.6	3.5	3.0	2.0	-0.9	1.3	1.8	1.6	1.6	3.1	3.3	2.6	1.8	1.4	2.4
European Union	2.1	2.4	4.0	3.7	3.9	3.5	3.0	2.3	1.7	-0.3	1.7	1.8	2.0	2.1	3.3	3.4	2.9	2.0	1.7	2.5
Total OECD	3.0	3.8	3.8	3.5	4.1	3.6	3.1	1.5	2.5	1.8	2.8	2.1	2.9	2.9	3.0	3.8	3.6	2.2	2.0	2.4

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).*

Source: OECD.

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Annex Table 4. **Real public consumption expenditure**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	4.1	6.0	4.2	2.0	2.3	3.7	3.7	3.1	0.4	0.3	3.1	4.0	2.9	2.6	3.4	4.2	5.4	1.2	1.5	2.0
Austria	2.5	1.3	1.8	0.1	1.1	1.7	2.3	3.2	3.5	3.7	3.0	1.3	1.2	-1.5	2.8	2.2	0.9	-0.2	0.0	0.5
Belgium	2.4	2.9	1.3	2.6	-0.7	1.1	-0.4	3.6	1.5	-0.2	1.4	1.3	2.4	0.3	1.5	3.2	2.5	2.1	0.9	1.4
Canada	2.6	4.2	1.8	1.4	4.5	2.7	3.5	2.9	0.9	0.0	-1.3	-0.6	-1.4	-0.8	1.8	2.6	2.2	2.2	2.5	2.5
Czech Republic	..	..	..	..	..	..	..	..	..	..	-2.4	-4.3	3.6	-4.4	-2.4	-0.1	-1.3	-1.0	1.0	0.5
Denmark	3.0	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	1.8	0.6	1.4	1.3	0.8
Finland	3.8	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	1.9	-0.2	1.7	1.3	1.3
France	3.5	2.1	2.4	2.2	3.1	1.7	2.5	2.6	3.6	4.3	0.5	0.0	2.2	2.1	-0.1	2.0	2.3	2.1	1.9	1.5
Germany	2.0	2.1	2.5	1.5	2.1	-1.6	2.2	0.4	5.0	0.1	2.4	1.5	1.8	0.3	1.2	1.6	1.2	1.7	1.4	0.9
Greece	4.4	3.8	-1.1	0.2	-5.5	5.4	0.6	-1.5	-3.0	2.6	-1.1	5.6	0.9	3.0	1.7	0.9	0.7	1.8	-0.3	0.9
Hungary	..	..	..	..	..	..	..	..	..	..	-7.4	-5.7	-1.9	3.1	2.8	1.5	2.8	0.0	2.1	2.2
Iceland	5.0	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	4.4	3.7	3.0	3.2	3.2
Ireland	3.5	1.8	2.6	-4.8	-5.0	-1.3	5.4	2.7	3.0	0.1	4.1	3.9	3.3	5.3	5.7	6.3	5.4	6.7	5.7	4.1
Italy	3.0	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	0.2	1.3	1.7	2.3	1.1	0.6
Japan	5.3	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	4.5	4.6	3.2	2.5	2.2
Korea	4.3	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	0.1	0.2	1.5	1.2
Luxembourg	2.3	2.0	2.7	4.7	4.9	3.9	3.1	3.9	1.5	3.7	2.0	2.2	5.5	3.0	1.4	7.7	4.7	4.4	3.7	3.5
Mexico	6.9	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	-1.4	0.9	2.5
Netherlands	2.8	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	3.6	2.8	1.9	3.3	2.2	2.0
New Zealand	2.1	1.5	2.1	0.5	0.1	3.6	1.6	-0.6	1.1	1.2	0.8	4.7	2.6	7.0	-0.8	5.7	-2.5	2.1	2.0	2.8
Norway	4.4	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	3.3	1.4	1.5	1.9	2.0
Poland	..	..	..	..	..	..	..	..	..	..	2.3	3.7	2.0	4.5	0.0	1.0	1.1	0.5	0.4	0.5
Portugal	5.7	6.4	7.2	3.8	8.6	6.4	4.2	9.6	-0.9	-0.2	4.3	1.0	3.4	2.2	3.8	4.5	2.5	2.5	2.0	1.7
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-11.4	2.1	21.0	4.0	4.0	-6.9	-0.9	5.2	6.0	4.5
Spain	4.4	4.3	4.7	9.2	3.6	8.3	6.3	6.0	3.5	2.7	0.5	2.4	1.3	2.9	3.7	4.2	4.0	3.1	2.8	2.0
Sweden	2.7	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	-0.9	1.4	1.3	0.9
Switzerland	1.8	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	1.3	0.5	-0.4	0.1	0.0	0.0
Turkey	6.0	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	-8.6	-2.3	-0.8
United Kingdom	1.5	-0.2	1.6	-0.4	0.2	1.0	2.2	3.0	0.7	-0.7	1.0	1.7	1.2	0.1	1.5	2.8	3.3	2.7	2.8	4.0
United States	1.7	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	1.4	2.2	2.9	3.1	4.2	4.2
Euro area	2.9	2.5	2.6	2.9	2.5	1.0	2.6	2.1	2.9	1.4	1.1	0.6	1.7	1.3	1.2	2.1	1.9	2.2	1.6	1.3
European Union	2.8	2.2	2.5	2.6	2.1	1.3	2.6	2.4	2.4	1.0	1.0	0.8	1.6	1.0	1.4	2.2	2.1	2.2	1.8	1.6
Total OECD	3.0	3.3	3.9	2.7	2.2	2.3	2.8	2.4	1.7	1.1	0.9	1.0	1.6	1.5	1.6	2.6	2.8	2.2	2.6	2.6

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. 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).*

Source: OECD.

Annex Table 5. **Real total gross fixed capital formation**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	2.8	11.2	-2.5	3.8	8.9	10.2	-7.5	-8.6	1.4	5.0	11.8	2.9	4.5	9.6	7.4	6.6	0.3	-3.0	8.3	6.5
Austria	0.0	6.2	1.3	3.8	7.4	4.1	6.2	6.6	0.6	-0.9	4.6	1.3	2.2	2.0	3.4	1.5	5.1	-1.5	0.3	4.4
Belgium	-1.6	7.0	3.2	6.2	15.7	12.6	8.5	-4.1	1.7	-3.1	-0.1	5.6	1.3	6.8	4.3	3.3	2.6	0.3	0.7	3.2
Canada	3.4	8.7	4.6	10.5	9.3	5.6	-3.9	-5.4	-2.7	-2.0	7.5	-2.1	4.4	15.2	2.4	7.3	6.7	1.0	2.5	5.0
Czech Republic	..	..	..	..	..	..	..	..	..	..	17.1	19.8	8.2	-2.9	0.1	-0.6	4.2	7.0	5.4	6.9
Denmark	-1.3	12.6	17.1	-3.8	-6.6	-0.8	-2.1	-3.3	-2.0	-4.0	7.6	11.6	4.0	10.9	10.1	1.0	10.7	0.0	2.8	2.9
Finland	0.6	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	3.0	4.8	2.1	-1.1	2.6
France	-0.3	2.5	4.7	5.7	9.1	7.6	3.3	-1.5	-1.8	-6.6	1.5	2.1	0.0	-0.1	7.2	6.2	6.2	2.8	-0.1	3.2
Germany	0.7	-0.5	3.3	1.8	4.4	6.3	8.5	6.0	4.5	-4.4	4.0	-0.6	-0.8	0.6	3.0	4.2	2.3	-4.8	-2.3	2.3
Greece	0.3	9.3	0.1	-5.6	2.6	4.9	4.7	5.0	-4.2	-3.7	-2.5	4.5	8.4	6.8	10.6	6.2	7.8	7.4	8.0	8.3
Hungary	..	..	..	..	..	..	..	..	..	..	12.5	-4.3	6.7	9.2	13.3	5.9	7.7	3.1	4.0	4.8
Iceland	0.1	1.0	-1.6	18.8	-0.2	-7.9	3.0	3.3	-11.1	-10.7	0.6	-1.1	25.7	1.1	32.9	-3.7	14.9	-6.0	-12.8	2.1
Ireland	3.2	-7.7	-2.8	-1.1	5.2	10.1	13.4	-7.0	0.0	-5.1	11.8	13.4	16.6	17.8	15.7	13.5	7.3	1.1	-2.7	5.8
Italy	0.4	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	4.0	5.7	6.5	2.4	1.5	4.4
Japan	2.2	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	-0.8	3.2	-1.7	-5.8	-4.3
Korea	11.8	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	11.4	-1.7	8.1	5.0
Luxembourg	-1.6	-9.5	31.0	17.9	15.0	7.0	2.7	31.6	-9.0	28.4	-14.9	3.5	1.7	14.3	2.8	19.6	-3.0	5.9	-1.0	3.3
Mexico	1.9	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	-5.9	5.2	7.7
Netherlands	-0.3	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	4.2	7.8	3.8	-1.1	-0.5	2.4
New Zealand	-0.3	4.0	-1.8	-0.2	0.1	4.5	-0.7	-18.3	0.2	14.5	15.3	12.4	8.6	1.1	-4.8	3.1	7.3	-0.6	11.1	5.2
Norway	2.3	-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	10.6	-8.2	-1.1	-5.9	-0.6	4.2
Poland	..	..	..	..	..	..	..	..	..	..	9.2	16.5	19.7	23.2	15.6	9.2	-2.0	-10.0	0.9	6.2
Portugal	-0.6	-3.5	10.9	18.0	14.8	3.7	7.6	3.3	4.5	-5.5	2.7	6.6	6.2	13.9	11.2	7.1	5.3	0.6	2.9	5.0
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-5.0	5.3	32.0	12.0	11.1	-18.8	-0.7	11.6	8.0	8.0
Spain	-1.9	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	8.8	5.7	2.5	1.9	4.6
Sweden	0.7	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	9.6	5.0	1.5	-0.4	3.1
Switzerland	0.2	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	3.7	5.8	-1.3	-0.9	3.8
Turkey	-1.1	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	16.9	-31.7	5.0	10.9
United Kingdom	0.9	4.0	2.1	9.0	14.9	6.0	-2.6	-8.2	-0.9	0.3	4.7	3.1	4.7	7.1	13.2	0.9	3.9	0.1	-0.2	3.3
United States	3.9	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	10.3	7.9	6.7	-0.7	-0.7	5.5
Euro area	0.0	2.0	4.1	4.3	7.6	7.0	5.2	1.3	0.1	-6.4	2.3	2.6	1.4	2.4	5.3	5.6	4.6	-0.2	-0.1	3.5
European Union	0.2	2.7	4.2	5.3	8.6	6.8	4.0	-0.2	-0.4	-5.6	2.6	3.6	2.4	3.4	6.8	5.0	4.7	0.1	0.0	3.4
Total OECD	2.4	5.2	3.4	5.3	6.8	5.7	3.7	-1.5	1.7	0.3	4.4	3.2	6.3	6.3	5.7	4.9	5.6	-1.3	-0.3	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. 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).*

Source: OECD.

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Annex Table 6. **Real gross private non-residential fixed capital formation**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	3.2	14.4	-2.4	7.2	8.8	10.3	-7.6	-11.6	-1.8	2.1	12.4	8.3	10.2	8.5	6.3	6.1	-2.0	-1.2	9.1	9.2
Austria	0.4	12.0	-0.8	8.0	10.4	6.3	13.2	6.1	-3.1	-4.4	3.7	-2.2	4.0	10.7	6.9	3.6	10.9	0.2	1.5	5.8
Belgium	-0.5	8.9	6.5	9.0	13.8	17.8	10.7	-3.6	0.1	-6.8	-2.4	7.8	4.9	8.0	5.3	2.7	3.6	1.2	0.6	3.8
Canada	5.3	8.0	1.3	9.3	15.4	5.5	-2.3	-2.8	-7.8	-1.4	9.4	4.8	4.3	22.6	5.3	7.2	8.0	-1.2	-0.7	6.2
Denmark	1.2	18.5	18.1	-4.8	-7.3	3.6	2.2	-1.4	-4.2	-8.3	7.6	13.9	2.7	13.7	13.5	0.4	11.1	3.2	3.4	3.3
Finland	0.7	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	1.0	8.1	5.0	-1.5	3.0
France	0.8	3.9	6.9	7.5	9.7	8.2	5.7	-1.1	-2.5	-8.0	0.7	3.2	-0.1	1.0	10.2	6.3	7.4	4.1	-0.4	4.5
Germany	2.0	5.0	4.3	3.8	5.6	7.4	10.1	7.5	0.7	-9.0	0.7	1.0	-0.8	2.2	5.0	5.4	5.6	-3.8	-2.6	4.3
Greece	-0.9	4.0	-10.5	0.6	2.8	15.3	6.5	5.2	0.7	1.1	0.9	2.9	14.7	5.4	12.0	7.0	13.4	8.9	10.1	10.2
Iceland	0.3	7.0	3.9	22.0	-9.3	-14.0	6.1	5.5	-16.5	-21.9	1.2	8.7	46.1	3.6	49.3	-5.5	15.1	-11.2	-20.0	2.0
Ireland	6.3	-14.9	-4.4	6.4	19.4	9.5	18.9	-11.7	-2.5	-5.7	8.2	14.0	17.9	20.5	20.9	13.3	1.4	-3.4	-7.2	7.6
Italy	0.3	0.7	5.0	7.5	10.2	5.4	4.8	0.3	-1.3	-14.7	4.4	10.4	5.0	4.0	4.6	7.3	8.1	3.6	1.2	4.6
Japan	3.6	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	10.4	0.5	-8.2	-0.6
Korea	..	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	18.7	-5.2	8.4	5.1
Mexico	..	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	-5.5	6.3	9.0
Netherlands	0.1	14.8	12.0	0.3	1.2	8.1	2.5	2.2	-3.4	-4.3	0.1	7.7	7.0	9.7	5.2	10.3	4.4	-2.3	-0.5	2.2
New Zealand	2.0	2.5	-5.3	12.1	0.2	6.0	-5.1	-18.9	8.2	23.1	17.0	15.1	9.0	-6.1	1.7	1.0	11.5	5.6	6.5	5.5
Norway	2.7	-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	14.0	-10.6	-1.8	-8.3	-2.4	4.8
Spain	-1.6	0.1	17.3	19.6	14.0	12.1	3.9	3.7	-1.0	-13.5	3.5	12.4	3.6	6.9	8.8	10.2	6.9	1.3	0.3	4.5
Sweden	1.2	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	10.1	7.0	0.6	-2.5	1.9
Switzerland	0.1	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	4.9	7.6	-2.7	-2.5	4.4
United Kingdom	2.3	9.2	-3.2	12.2	16.9	13.0	0.6	-7.3	-2.9	-3.5	4.8	7.8	9.1	10.5	18.9	1.7	4.4	-1.1	-1.7	2.6
United States	4.6	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	12.5	8.2	9.9	-3.2	-3.2	7.6
Euro area	0.7	4.2	6.4	7.0	8.7	8.4	6.4	1.9	-1.2	-9.8	1.4	5.0	2.2	4.4	7.0	6.7	6.7	0.6	-0.4	4.5
European Union	1.0	5.4	5.0	7.8	9.7	9.2	5.4	0.1	-1.9	-8.8	2.7	6.5	3.7	5.2	9.0	5.9	6.5	0.5	-0.6	4.1
Total OECD	3.3	7.4	1.4	4.9	9.5	8.6	4.8	-0.5	-0.2	-1.7	4.3	5.9	7.7	10.3	7.8	5.4	8.7	-1.3	-2.1	5.1

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).*

Source: OECD.

Annex Table 7. **Real gross private residential fixed capital formation**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	4.1	2.8	-7.7	-2.2	20.1	8.8	-10.8	-5.7	11.4	12.8	12.1	-7.6	-10.6	15.3	14.7	5.2	3.4	-10.7	9.0	0.1
Austria	0.6	-1.2	2.2	2.6	7.3	-0.6	-8.2	9.4	10.7	4.3	7.7	13.1	2.4	-1.7	-2.5	-2.5	-6.2	-3.2	-3.3	1.2
Belgium	-6.4	20.4	0.0	8.5	25.2	17.6	8.0	-8.9	4.9	1.8	5.3	5.6	-4.1	4.8	2.7	-0.2	0.9	2.8	0.5	1.2
Canada	1.5	8.7	12.4	14.7	2.1	4.1	-10.5	-14.8	7.1	-3.4	4.1	-14.8	9.6	8.2	-3.5	5.3	2.7	4.4	9.8	2.6
Denmark	-3.5	-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	4.2	2.5	11.0	-13.1	0.2	1.5
Finland	-0.3	-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	12.7	3.4	-7.0	-2.3	2.1
France	-1.9	-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	3.8	7.6	4.6	-0.2	0.1	1.3
Germany	0.5	-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	1.6	-2.9	-7.0	-2.2	-0.7
Greece	0.1	19.3	20.9	-5.8	-0.6	-1.8	5.5	-0.3	-15.6	-10.5	-11.3	2.6	-1.2	6.6	8.8	3.5	-4.3	2.9	2.2	3.0
Iceland	0.1	-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	10.6	13.2	2.5	1.5
Ireland	0.7	-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	11.3	13.5	1.6	2.0	2.0
Italy	-0.5	-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	5.2	3.0	2.6	4.1
Japan	-0.7	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	1.2	1.6	-7.8	-1.8	1.2
Korea	5.8	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	-10.0	5.3	10.2	5.0
Mexico	3.7	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	-4.8	3.0	5.7
Netherlands	-0.3	-0.8	4.2	1.6	11.3	0.7	-2.5	-5.4	6.4	-0.3	6.2	0.9	3.9	5.3	1.4	2.0	-0.1	-2.3	-1.0	2.0
New Zealand	-3.7	-0.5	-3.1	-3.9	4.7	15.5	2.4	-15.5	3.8	17.1	13.2	3.0	8.1	6.4	-16.1	11.0	-0.4	-9.6	21.5	4.3
Norway	1.8	-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	-1.8	-2.5	12.2	7.8	3.5	4.5
Spain	-4.0	6.5	2.1	6.3	11.4	3.3	6.4	-3.7	-4.0	-4.1	0.4	7.1	9.3	1.8	9.8	9.8	6.6	3.5	4.2	5.3
Sweden	0.2	-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	12.1	9.3	8.3	10.0	10.0
Switzerland	0.7	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	0.7	1.5	3.3
United Kingdom	1.7	-2.7	12.0	8.1	19.0	-11.6	-17.5	-15.1	0.2	8.1	2.5	-3.0	6.9	5.1	-1.9	-1.3	0.4	-0.6	-0.5	2.1
United States	2.5	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	8.0	6.7	0.8	1.5	2.4	1.1
Euro area	-1.1	-3.4	0.4	0.9	6.0	5.0	3.1	-1.0	2.8	-0.1	6.1	1.9	0.9	1.1	2.1	3.7	1.1	-2.0	0.1	1.7
European Union	-0.4	-2.3	2.7	2.2	7.9	2.2	-0.1	-3.2	1.8	-0.1	3.6	0.8	2.3	1.5	1.7	3.3	1.9	-1.2	0.3	2.0
Total OECD	1.5	0.7	7.3	5.0	5.3	0.4	-1.5	-7.2	6.2	3.6	6.8	-2.6	5.7	-0.5	1.5	3.8	1.4	-1.1	1.7	1.8

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).*

Source: OECD.

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Annex Table 8. **Real total domestic demand**

Percentage change from previous period

	Average 1974-84[a]	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	3.1	5.4	0.6	2.8	5.5	6.9	-0.6	-2.1	2.5	2.9	5.0	4.6	3.1	3.3	6.8	5.6	2.1	1.0	4.9	4.1
Austria	1.9	2.0	1.8	2.4	3.2	3.8	4.5	3.2	2.1	0.7	3.2	3.0	1.9	1.4	3.0	2.5	2.4	0.1	0.7	2.5
Belgium	1.2	2.1	2.5	3.6	4.8	4.5	3.0	1.6	1.8	-1.5	1.9	2.0	0.9	2.8	3.3	2.2	3.8	0.4	1.5	2.3
Canada	2.7	5.4	3.3	4.9	5.4	4.1	-0.3	-1.9	0.5	1.6	3.2	1.8	1.2	6.1	2.3	4.0	4.5	0.7	2.7	3.9
Czech Republic	..	..	..	..	..	..	..	..	..	..	6.3	8.4	7.3	-0.7	-2.1	-0.5	3.7	5.6	3.4	4.0
Denmark	1.5	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	4.0	-0.5	2.6	1.1	1.6	1.9
Finland	2.0	3.2	2.8	5.1	6.5	6.9	-1.5	-8.5	-5.8	-5.7	3.7	4.4	2.9	6.0	5.8	2.0	3.6	0.7	1.4	2.2
France	1.9	1.9	3.4	3.3	4.3	3.9	2.7	0.5	0.6	-1.7	1.9	1.8	0.7	0.7	4.2	3.0	3.9	1.7	1.6	2.9
Germany	1.7	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	2.6	2.0	-1.0	0.2	2.2
Greece	2.4	2.9	0.4	-2.7	5.9	5.1	2.2	3.7	-0.7	-0.9	1.2	3.5	3.3	3.5	4.6	2.7	4.1	3.8	3.5	4.1
Hungary	..	..	..	..	..	..	..	..	..	..	2.0	-2.8	0.6	3.9	7.6	4.0	5.1	2.1	3.8	4.4
Iceland	2.4	2.8	4.6	15.7	-0.7	-4.4	1.5	4.5	-4.6	-4.2	2.5	2.2	7.2	3.8	13.5	4.0	6.6	-3.1	-2.9	2.1
Ireland	2.3	1.2	1.2	-0.4	1.9	6.9	6.3	0.1	-0.3	1.1	5.6	7.3	7.7	9.8	9.4	7.0	9.2	4.1	2.6	5.3
Italy	2.2	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	2.1	1.6	1.3	2.6
Japan	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	0.8	1.9	0.3	-1.5	-0.4
Korea	6.9	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	8.1	1.9	6.2	4.3
Luxembourg	2.0	0.8	7.9	5.3	6.5	8.0	3.2	8.2	-1.2	8.9	-0.2	3.1	4.1	6.7	2.9	7.3	1.9	4.6	2.2	3.5
Mexico	3.7	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	0.4	2.2	5.2
Netherlands	1.3	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	4.8	4.2	3.1	1.1	1.7	2.7
New Zealand	-0.2	-0.6	1.4	1.5	0.8	4.3	0.3	-6.0	2.0	4.9	6.9	5.5	4.5	2.7	-0.7	5.5	1.4	1.7	4.3	3.4
Norway	2.6	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	-0.7	2.2	-0.6	1.9	3.1
Poland	..	..	..	..	..	..	..	..	..	..	4.7	7.0	9.5	9.3	6.0	5.0	2.8	-1.8	0.8	2.6
Portugal	1.2	1.6	6.0	8.8	9.9	4.9	5.3	6.1	3.4	-2.1	1.5	4.1	3.3	5.1	6.7	5.5	3.0	1.0	1.7	2.7
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-5.0	10.6	16.1	4.3	9.5	-4.6	-1.3	7.3	5.0	4.4
Spain	0.7	3.2	5.3	7.9	6.8	7.3	4.6	3.0	1.0	-3.3	1.5	3.1	1.9	3.5	5.7	5.6	4.2	2.8	2.1	3.3
Sweden	0.9	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	3.6	3.8	0.2	1.6	2.3
Switzerland	0.6	1.9	4.5	2.0	2.6	4.3	3.9	-1.0	-2.4	-1.0	2.5	1.9	0.1	0.8	3.5	2.6	2.4	0.9	0.7	2.3
Turkey	3.7	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	9.8	-18.4	3.8	3.9
United Kingdom	1.4	3.1	4.7	4.6	8.1	2.9	-0.3	-2.5	0.9	2.3	3.8	2.0	3.1	3.9	5.1	3.4	3.6	2.8	2.5	2.9
United States	3.2	4.2	3.6	3.1	3.2	2.9	1.4	-1.1	3.1	3.2	4.4	2.5	3.7	4.7	5.4	5.0	4.8	1.3	3.0	3.9
Euro area	1.8	2.2	3.3	3.4	4.2	3.9	3.6	2.4	1.4	-2.1	2.1	2.1	1.1	1.8	3.6	3.2	2.9	0.9	1.2	2.7
European Union	1.7	2.4	3.7	3.7	4.8	3.8	2.9	1.6	1.3	-1.6	2.4	2.2	1.4	2.3	3.9	3.2	3.1	1.2	1.4	2.7
Total OECD	2.7	3.6	3.5	3.9	4.6	4.0	3.1	0.8	2.1	1.2	3.1	2.3	3.2	3.4	3.1	3.7	3.9	0.7	1.9	2.9

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)*.

a) Average 1975-84 in the case of Australia.

Source: OECD.

Annex Table 9. **Real exports of goods and services**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	4.7	11.1	4.3	12.2	3.5	2.9	8.5	13.1	5.4	8.0	9.0	5.0	10.6	11.5	-0.2	4.6	10.6	1.1	2.8	7.8
Austria	5.1	7.7	-4.8	2.3	9.8	9.7	7.8	5.2	1.5	-1.4	5.6	3.0	5.2	12.4	7.9	8.7	12.2	5.5	4.7	8.0
Belgium	2.9	0.4	2.8	5.0	9.6	8.3	4.6	3.1	3.6	-0.4	8.4	5.7	2.9	6.1	5.8	5.0	9.7	-0.4	1.0	7.4
Canada	5.3	4.8	4.3	2.9	8.9	1.0	4.7	1.8	7.2	10.8	12.7	8.5	5.6	8.3	8.9	9.9	7.6	-3.7	2.8	9.1
Czech Republic	..	..	..	..	..	..	..	..	..	..	0.2	16.7	8.2	9.2	9.1	6.3	17.1	12.0	7.0	11.2
Denmark	4.0	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	4.3	10.8	11.5	3.1	2.9	6.9
Finland	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	6.8	18.2	-0.7	2.7	9.0
France	4.4	2.2	-0.8	2.8	8.6	10.8	4.9	5.4	5.2	-0.1	8.0	7.8	3.1	12.1	8.2	3.9	13.3	1.1	-2.0	7.8
Germany	3.7	7.6	-0.6	0.4	5.5	10.2	11.0	12.6	-0.8	-5.5	7.6	5.7	5.1	11.2	6.8	5.6	13.2	4.7	3.2	7.5
Greece	6.5	1.8	16.8	5.9	-2.1	1.9	-3.5	4.1	10.0	-2.6	7.4	3.0	3.5	20.0	5.3	8.1	18.9	2.3	3.3	7.3
Hungary	..	..	..	..	..	..	..	..	..	..	13.7	13.4	8.4	26.4	16.7	13.1	21.8	9.1	5.5	9.4
Iceland	5.4	11.1	5.9	3.3	-3.6	2.9	0.0	-5.9	-1.9	7.0	9.9	-2.1	9.9	4.8	2.1	4.8	6.0	7.6	1.5	5.5
Ireland	8.9	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	15.7	17.8	7.4	3.3	9.4
Italy	4.8	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	3.4	0.3	11.7	0.8	2.3	7.2
Japan	7.8	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	12.4	-6.6	1.9	9.0
Korea	14.5	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	20.5	1.0	5.4	13.0
Luxembourg	1.5	9.5	3.3	4.4	11.7	8.1	3.4	6.7	4.8	2.8	4.4	4.4	5.4	13.4	12.9	13.3	16.4	8.4	3.5	8.8
Mexico	10.3	-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	-5.1	2.4	8.7
Netherlands	2.9	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	5.4	9.5	1.1	2.8	7.4
New Zealand	5.3	8.0	-0.4	5.6	6.1	-1.5	4.9	10.8	3.7	4.6	10.0	3.8	3.6	3.7	1.2	7.1	7.6	2.1	1.4	7.5
Norway	5.0	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	2.8	2.7	5.3	3.2	2.9
Poland	..	..	..	..	..	..	..	..	..	..	13.1	22.8	12.0	14.5	17.0	-3.2	23.6	10.6	5.8	10.7
Portugal	5.3	6.7	6.8	11.2	8.2	12.2	9.5	1.2	3.2	-3.3	8.4	8.8	7.1	7.1	9.2	3.2	8.1	3.2	3.4	7.8
Slovak Republic	..	..	..	..	..	..	..	..	..	..	14.2	3.0	0.7	17.6	12.2	3.4	15.9	6.5	8.4	9.5
Spain	7.3	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	8.2	7.6	9.6	3.4	3.3	7.4
Sweden	3.5	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	6.5	10.3	-1.4	2.5	9.2
Switzerland	3.1	8.0	-0.4	2.3	6.5	-0.7	2.6	-0.7	3.1	1.0	2.7	2.8	2.4	8.4	5.4	5.2	10.0	1.0	0.5	5.1
Turkey	12.2	-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	19.2	7.4	2.0	7.2
United Kingdom	2.6	6.0	4.5	6.0	0.6	4.5	5.4	-0.1	4.3	4.4	9.2	9.0	8.2	8.3	3.0	5.4	10.3	1.0	0.7	8.8
United States	3.7	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	2.1	3.2	9.5	-4.5	-2.8	7.3
Total OECD	5.3	3.8	3.3	7.0	9.8	8.4	7.2	5.5	5.2	3.0	8.9	9.5	7.3	11.6	4.2	4.2	11.6	-1.5	0.4	8.0

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)*.

Source: OECD.

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Annex Table 10. **Real imports of goods and services**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	3.0	3.5	-3.3	2.7	17.1	20.6	-4.0	-2.4	7.1	4.2	14.3	7.9	8.3	10.5	6.0	9.2	7.1	-4.4	8.0	8.0
Austria	4.3	6.4	-6.0	4.8	9.3	8.0	6.9	5.8	1.4	-1.1	8.2	5.6	4.9	12.0	5.9	8.8	11.1	3.6	3.9	7.6
Belgium	2.0	0.4	4.5	6.7	10.4	9.6	4.8	2.9	4.1	-0.4	7.3	4.9	2.5	5.1	7.5	4.1	9.7	-1.3	1.4	7.2
Canada	4.4	8.3	7.2	5.3	13.5	5.9	2.0	2.5	4.7	7.4	8.0	5.7	5.1	14.2	4.9	7.3	8.1	-5.7	1.6	9.5
Czech Republic	..	..	..	..	..	..	..	..	..	..	7.6	21.2	13.4	8.1	6.5	5.4	17.0	13.7	7.1	10.8
Denmark	1.7	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	8.9	3.3	11.2	3.8	2.4	6.6
Finland	2.4	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	4.0	16.2	-1.0	3.0	7.9
France	2.9	4.7	6.3	7.5	8.5	8.4	5.3	2.6	1.7	-3.9	8.6	7.8	1.4	7.2	11.9	4.2	15.4	-0.2	-1.7	7.9
Germany	3.5	4.5	2.7	4.2	5.1	8.3	10.3	13.1	1.5	-5.5	7.4	5.6	3.1	8.3	8.9	8.5	10.0	0.1	2.2	7.3
Greece	4.8	4.4	13.9	2.1	7.3	10.5	8.4	5.8	1.1	0.6	1.5	8.9	7.0	14.2	9.2	3.6	15.0	1.9	3.5	6.2
Hungary	..	..	..	..	..	..	..	..	..	..	8.8	-0.7	6.2	24.6	22.8	12.3	21.1	6.3	5.9	9.5
Iceland	1.5	9.4	0.9	23.3	-4.6	-10.3	1.0	5.3	-5.9	-7.7	4.2	4.0	16.7	7.8	23.3	5.5	8.7	-7.8	-4.0	5.0
Ireland	5.2	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	11.9	16.6	5.2	2.4	9.3
Italy	2.9	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	8.9	5.3	9.4	0.2	1.8	6.9
Japan	1.6	-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	9.6	-0.5	-5.6	3.1
Korea	10.6	-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	-2.8	5.8	10.7
Luxembourg	1.9	7.0	3.8	7.5	8.2	6.6	4.5	9.0	-0.8	2.8	-0.1	3.8	6.1	11.8	11.5	15.6	13.8	8.6	3.3	7.0
Mexico	0.8	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	-2.8	3.6	10.2
Netherlands	2.3	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	8.5	6.3	9.4	1.1	3.3	8.0
New Zealand	0.0	0.6	2.8	8.6	-0.9	13.5	3.6	-5.2	8.3	5.3	13.1	9.0	7.7	2.4	1.4	11.7	1.1	1.7	5.2	7.5
Norway	2.1	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	8.0	-1.6	2.5	0.3	2.9	4.7
Poland	..	..	..	..	..	..	..	..	..	..	11.2	24.3	28.0	23.9	19.1	1.1	15.5	-0.1	3.7	9.4
Portugal	0.0	1.4	16.9	23.1	18.0	5.9	14.5	7.2	10.7	-3.3	8.8	7.4	5.0	10.0	14.2	8.7	6.0	0.8	3.0	6.7
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-3.4	9.2	17.2	13.1	19.8	-6.0	10.2	11.7	9.5	9.5
Spain	1.5	7.6	17.2	24.8	16.1	17.7	9.6	10.3	6.8	-5.2	11.4	11.1	8.0	13.2	13.3	12.8	9.8	3.7	3.0	7.2
Sweden	1.3	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	4.4	11.5	-3.9	1.4	8.0
Switzerland	3.7	3.7	8.1	6.2	5.2	-0.8	3.0	-1.4	-3.7	-0.5	8.9	6.9	1.9	6.1	8.3	7.5	8.5	0.0	-0.3	5.3
Turkey	8.8	-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	-24.8	7.8	8.9
United Kingdom	2.8	2.5	6.9	7.9	12.8	7.4	0.5	-4.5	6.8	3.3	5.7	5.4	9.6	9.7	9.6	8.9	10.9	2.8	2.6	8.3
United States	5.6	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	11.8	10.5	13.4	-2.7	2.3	8.8
Total OECD	4.2	4.3	6.0	8.3	9.4	8.6	6.4	2.1	4.9	2.9	9.7	8.7	8.5	10.6	7.5	8.2	12.3	-1.4	1.4	7.6

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. 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)*.

Source: OECD.

Annex Table 11. **Output gaps**

Deviations of actual GDP from potential GDP as a percentage of potential GDP

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	-1.2	0.5	-1.2	-0.1	0.6	1.1	-1.1	-4.6	-4.7	-3.4	-1.6	-1.2	-0.5	-0.7	0.5	1.1	0.5	-0.8	-0.5	-0.2
Austria	-2.5	-2.5	-2.1	-2.3	-1.2	0.8	2.5	2.6	2.4	-0.5	-0.3	-0.7	-0.7	-0.8	0.5	0.8	1.2	-0.2	-1.4	-1.0
Belgium	-3.6	-3.1	-3.0	-1.7	1.1	2.8	3.6	2.8	1.9	-2.0	-1.9	-1.6	-2.7	-1.4	-1.5	-0.8	0.9	-0.3	-1.6	-1.0
Canada	-2.7	-0.3	0.0	1.7	3.9	3.6	1.5	-2.8	-4.0	-3.8	-1.7	-1.5	-2.8	-2.0	-1.4	0.4	1.9	0.3	0.4	1.3
Denmark	0.0	2.1	3.8	2.3	1.3	-0.1	-0.7	-1.1	-1.9	-3.3	0.0	0.3	0.7	1.4	1.7	1.8	2.4	1.2	0.8	0.9
Finland	-1.3	-1.0	-1.2	0.4	2.6	5.0	3.3	-4.2	-8.2	-10.5	-8.3	-6.5	-5.0	-2.2	-0.6	-0.1	2.2	-0.2	-1.8	-1.5
France	-3.9	-4.3	-3.7	-3.1	-1.1	0.9	1.5	0.6	0.2	-2.4	-2.1	-2.0	-2.9	-3.0	-1.5	-0.7	0.7	0.5	-0.5	0.1
Germany	-3.0	-2.4	-1.5	-1.6	0.1	0.4	2.7	2.3	1.2	-2.0	-1.4	-1.2	-1.9	-2.0	-1.7	-1.5	-0.2	-1.4	-2.6	-1.9
Greece	-3.8	-2.0	-2.0	-4.8	-1.5	1.2	-0.1	0.9	-0.6	-3.7	-3.4	-3.2	-3.0	-1.7	-2.6	-1.8	-0.6	0.3	0.4	0.9
Iceland	-1.6	-1.1	2.3	7.5	3.9	1.8	1.0	-0.7	-5.7	-6.3	-3.3	-4.4	-1.5	-1.0	1.0	1.1	2.7	2.8	-0.3	-0.3
Ireland	-2.2	-1.9	-5.1	-4.2	-2.6	-0.5	3.0	-0.1	-2.2	-4.6	-4.8	-2.3	-2.1	0.4	-0.1	2.2	6.2	5.6	1.7	0.6
Italy	-2.5	-2.0	-1.5	-0.8	1.0	1.8	1.6	0.8	-0.5	-2.7	-1.7	0.1	-0.5	-0.5	-0.8	-1.4	-0.8	-1.4	-2.3	-1.7
Japan	-1.8	-1.9	-2.9	-2.7	-0.4	1.0	3.1	3.0	1.1	-0.5	-1.2	-1.4	0.6	1.5	-0.8	-1.2	0.1	-1.4	-3.0	-3.5
Netherlands	-2.3	-0.7	-0.4	-1.1	-1.1	0.9	2.5	2.0	1.3	-0.2	0.6	0.3	0.4	0.7	1.4	1.8	2.0	0.0	-1.3	-1.2
New Zealand	3.2	2.8	2.5	1.5	-0.4	-0.7	-2.5	-5.5	-5.5	-2.3	1.0	1.7	1.6	0.8	-1.9	-0.3	1.0	0.6	0.1	0.5
Norway [a]	-1.2	2.2	2.7	2.0	-1.0	-3.8	-3.4	-3.3	-2.7	-2.1	-0.5	-0.2	0.7	1.9	2.9	1.4	0.8	-0.2	-0.2	0.4
Portugal	-6.7	-7.0	-6.2	-3.4	0.5	3.6	4.3	5.5	3.4	-1.8	-3.8	-2.7	-2.0	-1.2	0.3	0.6	1.1	0.1	-1.1	-1.2
Spain	-3.5	-2.5	-3.0	-1.0	1.3	2.7	3.3	2.9	0.7	-3.0	-3.4	-3.9	-4.9	-4.0	-2.5	-1.0	-0.1	-0.4	-1.2	-0.6
Sweden	-0.7	-0.1	1.0	2.5	3.5	4.1	3.2	0.2	-3.4	-6.0	-3.8	-2.3	-3.1	-3.2	-2.1	-0.3	0.5	-0.9	-1.0	-0.2
Switzerland	-0.6	1.3	0.9	-0.4	0.4	5.2	4.2	0.8	-1.0	-2.3	-2.7	-2.7	-3.2	-2.3	-0.9	-1.4	-0.6	-0.9	-1.3	-0.6
United Kingdom	-4.4	-2.7	-0.4	1.8	4.5	4.4	2.6	-1.7	-3.9	-4.0	-2.0	-1.5	-1.3	-0.4	0.0	-0.5	0.2	0.1	-0.3	0.3
United States	-1.3	-0.7	-0.6	-0.2	1.1	1.8	0.6	-2.4	-1.8	-1.8	-0.5	-0.8	-0.4	0.4	1.0	1.3	1.7	-0.7	-1.2	-0.9
Total of above Euro area countries	-3.0	-2.5	-2.1	-1.6	0.2	1.4	2.3	1.6	0.5	-2.4	-1.9	-1.5	-2.1	-1.9	-1.3	-0.9	0.3	-0.5	-1.6	-1.1
Total of above European Union countries	-3.2	-2.6	-1.8	-1.1	0.9	1.8	2.3	1.0	-0.3	-2.7	-2.0	-1.5	-2.0	-1.6	-1.0	-0.8	0.3	-0.5	-1.4	-0.8
Total of above OECD countries	-2.1	-1.5	-1.3	-0.8	0.8	1.7	1.6	-0.3	-0.9	-2.1	-1.3	-1.2	-0.9	-0.3	-0.2	0.0	0.8	-0.7	-1.5	-1.2

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. Using this methodology, two broad changes have been made to the calculation of potential output since the last *OECD Economic Outlook*. First, the "smoothing parameters" applied in the calculations have been standardised across the OECD countries. Second, as was previously the case for the major seven economies only, the calculations now incorporate trend working hours for other Member economies also, excepting Austria and Portugal where the data span is insufficient. 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).*

a) Mainland Norway.

Source: OECD.

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Annex Table 12. **Compensation per employee in the business sector**

Percentage change from previous period

	Average 1974-84[a]	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	9.4	5.0	6.7	5.5	6.5	7.7	8.3	2.4	3.8	3.4	0.9	3.1	6.4	3.3	2.7	2.4	3.6	4.4	3.7	3.7
Austria	7.7	5.5	5.7	4.1	4.2	4.5	5.2	6.0	5.5	4.3	3.7	3.5	0.9	2.8	2.4	1.8	2.8	3.1	2.4	2.8
Belgium	9.6	6.7	4.3	2.5	2.8	3.0	8.2	6.9	5.5	2.8	3.3	2.3	1.6	3.0	1.8	3.4	3.5	2.9	3.8	3.1
Canada	8.8	5.5	2.9	6.9	7.1	4.9	5.0	4.9	3.2	2.3	0.5	2.3	2.9	5.9	2.5	3.9	3.1	2.1	2.5	3.3
Czech Republic	..	..	..	..	..	..	..	..	..	..	17.1	17.1	17.5	8.2	4.8	4.9	7.2	7.5	7.3	7.7
Denmark	10.5	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	4.1	3.0	4.0	4.5	4.2	4.2
Finland	12.9	10.3	7.7	8.1	9.6	10.8	8.9	4.9	1.8	1.3	4.6	4.1	2.1	2.8	4.4	2.3	4.5	4.0	4.0	3.9
France	13.1	5.6	4.1	4.7	4.2	4.0	3.5	4.2	3.8	1.9	0.8	0.9	1.8	1.7	0.7	1.9	1.6	2.1	2.4	2.4
Germany	5.8	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	1.1	1.3	1.6	2.6	2.6
Greece	21.8	21.9	12.9	10.7	17.3	22.5	16.3	16.3	12.7	8.7	11.7	12.4	10.6	11.3	4.7	5.0	5.3	6.3	5.6	5.5
Hungary	..	..	..	..	..	..	..	..	..	..	..	25.1	23.9	19.0	12.1	4.0	12.8	15.0	10.5	7.9
Iceland	44.0	39.9	29.1	44.3	28.3	13.2	16.9	25.5	2.8	-3.3	4.3	7.6	5.2	2.7	7.4	6.9	6.8	7.7	7.0	4.9
Ireland	17.5	4.1	6.2	6.1	5.3	6.8	3.3	3.2	7.8	4.9	1.7	2.9	1.8	6.0	0.3	5.6	8.6	7.9	6.6	5.5
Italy	18.5	10.3	7.0	7.3	7.3	8.8	8.4	9.0	6.2	5.2	3.1	4.8	4.8	3.2	-0.8	2.4	2.7	3.0	2.7	2.3
Japan	7.2	3.4	2.5	2.0	3.0	3.8	4.1	4.4	0.8	0.6	1.3	1.1	0.2	1.6	-0.7	-1.2	0.5	-0.1	-1.3	-1.1
Korea	19.9	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	1.9	7.1	5.8	6.0	6.3
Luxembourg	6.9	5.0	4.4	2.4	3.7	7.9	4.8	5.1	6.4	4.9	4.9	1.3	0.9	2.7	2.9	4.6	5.0	5.2	3.5	3.9
Mexico	..	..	..	..	..	26.9	27.9	29.9	24.1	15.2	11.4	17.6	23.1	21.0	18.0	13.5	11.5	9.3	6.5	6.0
Netherlands	6.6	1.8	2.7	1.5	1.3	0.9	3.3	4.5	4.2	3.0	2.8	1.3	1.7	0.9	3.7	3.0	4.9	4.5	4.9	4.1
New Zealand	12.2	12.3	18.8	14.3	11.2	6.9	1.1	2.0	0.9	2.3	1.9	-0.3	1.2	2.4	0.8	2.8	3.5	3.6	3.5	3.5
Norway	9.8	7.1	9.8	9.1	8.5	4.6	5.1	5.5	4.4	2.2	2.9	2.9	2.5	2.4	7.7	5.7	4.2	4.8	5.0	5.0
Poland	..	..	..	..	..	..	..	..	..	..	45.1	30.8	29.4	20.5	15.3	14.1	9.7	7.5	5.3	4.5
Portugal	22.2	19.3	18.8	13.7	9.4	12.8	17.3	18.4	15.7	6.7	5.8	25.5	9.7	4.4	3.3	4.2	5.3	5.4	4.3	4.2
Spain	20.9	9.6	11.1	6.6	7.2	7.5	10.1	10.2	10.5	8.2	4.1	3.4	4.4	3.4	2.5	2.9	3.7	4.8	3.2	3.2
Sweden	11.4	8.5	8.3	7.5	8.1	12.3	9.8	6.2	3.2	8.5	5.7	2.4	6.2	3.5	4.1	1.0	7.5	5.0	4.6	4.5
Switzerland	5.1	4.1	4.2	3.3	3.6	4.6	5.2	6.5	4.6	2.0	2.4	2.8	0.7	3.9	1.0	1.9	1.4	3.1	2.4	2.0
United Kingdom	14.2	5.9	8.4	4.8	6.8	9.1	10.1	8.5	5.1	3.6	4.4	3.2	3.0	3.9	6.0	4.8	3.4	5.2	4.0	4.2
United States	7.7	4.0	3.9	4.5	4.8	3.2	4.9	3.9	5.7	2.8	2.3	1.9	2.5	3.2	5.0	4.3	5.6	5.1	3.1	3.5
Euro area	12.0	6.7	6.1	5.1	4.7	5.9	5.7	6.3	8.0	5.5	3.2	3.8	1.7	1.6	0.8	1.4	1.9	2.3	2.8	2.7
European Union	12.9	6.7	6.4	5.2	5.6	6.3	6.9	7.0	7.0	4.2	3.3	3.6	2.9	2.5	2.0	2.5	2.8	3.3	3.2	3.1
Total OECD	10.0	5.1	4.9	4.7	5.3	5.5	6.6	6.3	6.0	3.5	3.6	3.8	3.8	3.7	3.5	3.2	4.1	3.9	2.8	2.9
Memorandum item *OECD less* high inflation countries[b]	10.0	5.1	4.9	4.7	5.3	4.8	5.9	5.6	5.4	3.2	2.8	2.9	2.7	2.9	2.8	2.7	3.7	3.6	2.6	2.8

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).*

a) Average 1975-84 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 13. **Labour productivity in the business sector**

Percentage change from previous period

	Average 1974-84[a]	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	1.9	1.9	-2.2	2.9	0.8	-0.4	-0.2	1.5	3.6	4.0	1.4	-0.3	2.9	2.8	4.1	2.3	0.4	1.4	2.6	2.5
Austria	2.4	2.6	2.0	1.9	3.3	3.5	3.6	2.2	2.5	1.2	3.2	2.0	3.0	1.9	3.2	1.8	2.9	0.7	1.9	2.3
Belgium	2.7	1.6	1.3	2.7	3.5	2.7	2.2	1.3	1.9	-1.2	3.1	2.0	0.8	3.4	1.2	1.8	2.8	0.1	1.1	2.6
Canada	0.8	1.9	-0.8	1.7	1.8	0.5	0.3	-0.2	2.1	1.8	2.9	0.8	0.6	1.9	1.3	2.6	2.1	0.3	1.7	2.5
Czech Republic	..	..	..	..	..	..	..	..	..	..	1.5	5.6	4.4	-0.3	0.1	2.1	3.9	3.1	3.7	4.0
Denmark	2.4	1.3	0.1	0.7	-0.5	2.0	0.5	2.1	1.3	3.2	7.7	0.5	1.8	1.7	2.8	1.6	2.8	0.9	2.2	2.3
Finland	2.8	3.7	3.6	4.6	4.6	5.1	0.6	-0.3	5.5	6.6	6.6	2.6	3.0	3.4	3.2	1.2	4.1	-1.6	1.7	2.5
France	2.5	2.0	2.3	2.7	3.6	3.2	1.9	1.3	2.7	0.7	1.9	0.9	0.8	1.4	1.9	0.9	1.0	0.6	1.3	2.5
Germany	2.3	1.5	1.1	0.9	3.3	5.1	2.8	2.6	4.3	0.2	2.7	1.5	1.1	1.6	0.8	0.5	1.4	0.3	0.9	2.1
Greece	1.6	1.7	0.2	-2.4	2.9	3.9	-1.4	6.5	-1.0	-2.7	0.2	1.4	3.1	4.8	-0.9	5.0	4.9	4.6	3.5	3.7
Hungary	..	..	..	..	..	..	..	..	..	..	..	3.7	1.4	4.3	3.5	-0.3	4.4	3.8	3.5	4.3
Iceland	2.3	-0.7	3.5	3.1	4.0	2.1	2.7	1.0	-1.9	1.6	4.7	-1.0	3.2	1.0	2.5	0.8	4.4	2.7	-0.4	1.4
Ireland	4.2	3.0	0.1	4.8	6.5	6.9	4.4	2.5	3.3	1.3	2.7	5.4	4.0	7.6	-1.8	4.7	7.0	3.9	2.7	4.5
Italy	1.9	2.4	1.9	2.9	3.3	3.0	1.1	0.7	1.6	2.5	3.8	3.3	0.8	1.7	0.7	0.8	1.1	0.2	0.1	1.1
Japan	2.7	4.0	2.1	3.7	5.0	3.5	3.8	1.3	-0.2	0.2	0.9	1.4	3.0	0.8	-0.7	1.2	2.6	-0.1	0.7	0.7
Korea	6.0	3.0	8.8	6.4	8.8	2.4	5.1	6.4	3.8	4.2	5.5	6.5	5.1	3.9	-1.5	10.2	5.5	1.5	4.3	4.6
Luxembourg	..	..	..	..	..	..	-5.5	2.2	1.9	7.5	1.8	1.4	0.9	6.4	1.6	0.8	2.0	-0.4	0.0	3.7
Mexico	..	..	..	..	..	1.3	2.3	1.5	-0.3	-2.0	1.2	-6.5	0.9	0.5	1.5	2.7	2.7	-0.8	0.1	1.8
Netherlands	2.1	1.2	0.6	-0.5	0.9	2.9	1.8	0.8	0.8	0.7	3.9	0.9	0.4	0.5	1.5	1.3	1.2	-1.0	0.9	2.3
New Zealand	0.2	-2.7	1.9	0.1	3.4	3.9	-1.3	-0.6	-0.3	2.9	1.2	-1.4	-0.2	1.9	0.4	2.7	2.3	-0.1	1.3	2.4
Norway	1.9	4.0	-1.3	-0.4	-0.3	2.0	2.9	3.8	3.3	4.0	2.5	0.2	1.2	0.9	1.8	0.9	1.5	0.8	1.6	2.3
Poland	..	..	..	..	..	..	..	..	..	..	8.8	7.1	5.5	6.1	4.0	9.2	6.4	3.9	3.1	2.7
Portugal	0.8	3.8	4.6	4.2	5.5	5.4	1.8	-0.5	1.4	-3.2	2.6	6.0	3.9	2.4	2.4	1.7	1.9	0.2	1.0	1.4
Spain	3.1	4.0	1.2	0.8	1.7	1.4	0.0	1.6	2.8	2.3	3.3	1.0	1.3	1.0	0.4	0.5	1.1	0.4	1.4	1.8
Sweden	1.5	1.4	2.5	2.7	1.4	1.4	0.1	0.5	3.5	6.3	5.6	2.2	1.7	3.5	2.6	2.5	0.6	0.7	2.5	2.9
Switzerland	0.4	1.9	-0.9	-1.7	0.7	2.6	-1.9	-3.6	1.0	0.1	2.3	0.1	-0.2	2.4	1.4	0.7	2.0	-0.3	0.6	1.6
United Kingdom	2.4	2.0	4.9	1.1	0.0	-0.8	0.3	1.5	2.8	2.3	3.2	1.0	0.8	0.7	1.6	0.8	2.1	1.6	1.8	2.4
United States	1.3	1.2	1.7	0.7	1.1	1.2	0.6	0.4	3.7	0.9	1.3	0.4	1.8	2.2	2.2	2.4	2.5	1.0	3.3	2.1
Euro area	2.3	2.3	1.8	1.8	3.2	2.9	1.9	..	2.9	1.0	3.0	1.7	1.0	1.7	1.0	0.6	1.3	0.1	0.9	2.0
European Union	2.3	2.1	2.1	1.7	2.6	2.8	1.5	1.6	2.8	1.3	3.1	1.7	1.1	1.6	1.3	1.0	1.6	0.6	1.2	2.1
Total OECD	2.0	2.1	1.9	1.7	2.5	2.1	1.5	1.1	2.6	1.0	2.2	1.1	1.8	1.8	1.4	2.0	2.3	0.7	2.0	2.0
Memorandum item																				
OECD less high inflation countries[b]	2.0	2.1	1.9	1.7	2.5	2.2	1.5	1.1	2.7	1.1	2.1	1.2	1.8	1.8	1.3	1.9	2.2	0.7	2.0	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).*

a) Average 1975-84 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.

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Annex Table 14. **Unemployment rates: commonly used definitions**

	1998 Unemployment (thousands)	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	723	8.2	7.9	7.9	6.9	5.9	6.8	9.2	10.4	10.6	9.4	8.2	8.1	8.2	7.7	6.9	6.3	6.8	6.6	6.3
Austria	240	3.7	4.0	4.3	4.1	3.8	4.1	4.5	4.7	5.4	5.3	5.3	5.6	5.7	5.7	5.3	4.7	4.9	5.6	5.1
Belgium	397	10.1	10.0	9.8	8.8	7.4	6.6	6.4	7.1	8.6	9.8	9.7	9.5	9.2	9.3	8.6	6.9	6.6	6.7	6.7
Canada	1 278	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	7.6	7.2
Czech Republic	336	..	..	..	..	..	..	..	..	4.3	4.4	4.1	3.9	4.8	6.5	8.8	8.9	8.2	8.6	8.6
Denmark	138	6.6	5.0	5.0	5.7	6.8	7.2	7.9	8.6	9.6	7.7	6.8	6.3	5.3	4.9	4.8	4.4	4.3	4.3	4.2
Finland	286	5.1	5.4	5.1	4.6	3.1	3.2	6.6	11.7	16.4	16.6	15.4	14.6	12.7	11.4	10.3	9.8	9.1	9.4	9.3
France	2 997	10.2	10.4	10.5	10.0	9.3	8.9	9.4	10.4	11.7	12.0	11.4	12.1	12.2	11.5	10.8	9.4	8.7	9.2	9.0
Germany	3 684	8.0	7.7	7.6	7.6	6.9	6.2	5.4	6.4	7.6	8.1	7.9	8.5	9.4	8.9	8.2	7.5	7.4	7.8	7.6
Greece	494	7.8	7.4	7.4	7.7	7.5	7.0	7.7	8.7	9.7	9.6	9.1	9.8	9.8	11.1	12.0	11.2	10.4	10.3	10.0
Hungary	313	..	..	..	..	..	..	..	..	12.1	11.0	10.4	10.1	8.9	8.0	7.1	6.5	5.7	5.8	5.7
Iceland	4	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	1.4	1.5	2.5	2.6
Ireland	125	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	4.9	4.9
Italy	2 745	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	9.6	9.1	9.0
Japan	2 791	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	5.0	5.8	6.0
Korea	1 461	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	3.7	3.3	3.0
Luxembourg	6	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	2.6	2.9	3.1
Mexico[a]	602	..	..	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	2.2	2.5	2.7	2.5
Netherlands	286	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	2.6	2.2	2.7	3.2
New Zealand	140	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	5.3	5.7	5.3
Norway	72	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	3.1	3.2	3.4	3.6	3.6	3.5
Poland	1 816	..	..	..	..	..	..	..	..	14.0	14.4	13.3	12.3	11.2	10.6	13.9	16.1	18.2	19.6	19.5
Portugal	248	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	4.4	4.3
Slovak Republic	317	..	..	..	..	..	..	..	..	12.2	13.6	13.1	11.3	11.9	12.6	16.4	18.8	19.3	19.1	18.6
Spain[b]	2 523	17.8	17.4	16.7	15.9	14.2	13.3	13.4	15.1	18.9	20.2	19.1	18.5	17.2	15.4	12.9	11.4	10.5	10.7	10.5
Sweden	278	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	4.0	4.2	4.0
Switzerland	140	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	2.5	2.2
Turkey[c]	1 527	6.9	7.7	8.1	8.2	8.4	7.8	7.9	8.1	8.5	8.2	7.3	6.4	6.6	6.7	7.5	6.4	8.4	9.2	8.6
United Kingdom	1 716	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	5.1	5.3	5.3
United States	6 206	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	4.8	5.6	5.3
Euro area	14 030	9.8	9.9	9.8	9.6	8.8	8.1	7.8	8.7	10.3	11.0	10.7	10.9	11.0	10.3	9.5	8.5	8.0	8.2	8.1
European Union	16 161	9.9	9.9	9.6	8.9	8.1	7.5	7.7	8.8	10.2	10.6	10.1	10.3	10.0	9.4	8.7	7.8	7.4	7.6	7.5
Total OECD	33 885	7.4	7.4	7.0	6.3	5.8	5.7	6.3	7.0	7.7	7.6	7.3	7.2	6.9	6.7	6.6	6.1	6.4	6.9	6.7

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).*

a) Data based on the National Survey of Urban Employment; see *OECD Economic Outlook* Sources and Methods.

b) Spanish data on unemployment are revised since 1976 using the methodology to be applied by the LFS as from 2002. Revisions are OECD calculations based on information from INE in Spain

c) The figures incorporate important revisions to Turkish data; see *OECD Economic Outlook* Sources and Methods.

Source: OECD.

Annex Table 15. **Standardised unemployment rates**[a]

Per cent of civilian labour force

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Australia	10.0	9.0	8.3	7.9	7.9	7.0	6.0	6.7	9.3	10.5	10.6	9.5	8.2	8.2	8.3	7.7	7.0	6.3	6.7
Austria	..	..	..	..	..	..	..	..	..	..	4.0	3.8	3.9	4.4	4.4	4.5	4.0	3.7	3.6
Belgium	10.7	10.8	10.1	10.0	9.8	8.8	7.4	6.6	6.4	7.1	8.6	9.8	9.7	9.5	9.2	9.3	8.6	6.9	6.6
Canada	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	7.2
Czech Republic	..	..	..	..	..	..	..	..	..	..	4.4	4.4	4.1	3.9	4.8	6.5	8.8	8.9	8.2
Denmark	8.4	7.9	6.6	5.0	5.0	5.7	6.8	7.2	7.9	8.6	9.6	7.7	6.8	6.3	5.3	4.9	4.8	4.4	4.3
Finland	..	5.9	6.0	6.7	4.9	4.2	3.1	3.2	6.6	11.6	16.4	16.8	15.2	14.5	12.6	11.4	10.2	9.7	9.1
France	7.9	9.4	9.8	9.9	10.1	9.6	9.1	8.6	9.1	10.0	11.3	11.8	11.4	11.9	11.8	11.4	10.7	9.3	8.6
Germany[b]	6.9	7.1	7.2	6.5	6.3	6.2	5.6	4.8	4.2	6.6	7.9	8.4	8.2	8.9	9.9	9.3	8.6	7.9	7.9
Hungary	..	..	..	..	..	..	..	..	..	9.9	12.1	11.0	10.4	10.1	8.9	8.0	7.1	6.5	5.8
Ireland	13.9	15.5	16.8	16.8	16.6	16.2	14.7	13.4	14.7	15.4	15.6	14.3	12.3	11.7	9.9	7.5	5.6	4.2	3.8
Italy	7.4	7.9	8.1	8.9	9.6	9.7	9.7	8.9	8.5	8.7	10.1	11.0	11.5	11.5	11.6	11.7	11.2	10.4	9.5
Japan	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	5.0
Luxembourg	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	2.4
Netherlands	9.2	8.9	7.9	7.8	7.7	7.2	6.6	5.9	5.5	5.3	6.2	6.8	6.6	6.0	4.9	3.8	3.2	2.8	2.4
New Zealand	5.7	5.7	4.2	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	5.3
Norway	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	3.6
Poland	..	..	..	..	..	..	..	..	..	..	14.0	14.4	13.3	12.3	11.2	10.6	..	16.1	18.2
Portugal	8.2	8.9	9.2	8.8	7.2	5.8	5.2	4.8	4.2	4.3	5.6	6.9	7.3	7.3	6.8	5.2	4.5	4.1	4.1
Spain	17.3	20.0	21.5	21.1	20.4	19.4	17.1	16.1	16.2	18.3	22.5	23.9	22.7	22.0	20.6	18.6	15.8	14.0	13.0
Sweden	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	5.1
Switzerland	..	..	..	..	..	..	..	..	2.0	3.1	4.0	3.8	3.5	3.9	4.2	3.5	3.0	2.6	..
United Kingdom	10.8	10.9	11.2	11.2	10.3	8.5	7.1	6.9	8.6	9.8	10.2	9.4	8.5	8.0	6.9	6.1	5.8	5.3	5.0
United States	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	4.8
Euro area	..	..	..	..	..	..	..	..	8.1	9.0	10.6	11.4	11.1	11.3	11.3	10.7	9.8	8.8	8.3
European Union	..	..	..	..	..	..	..	..	8.1	9.0	10.5	10.9	10.5	10.6	10.4	9.8	9.0	8.1	7.6
Total OECD	..	..	..	..	..	..	..	..	..	..	7.9	7.8	7.4	7.4	7.1	7.0	6.7	6.3	6.5

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, he 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.

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Annex Table 16. **Labour force, employment and unemployment**

Millions

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Labour force																			
Major seven countries	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	340.4	343.4	346.0	347.6	348.7	351.2
Total of smaller countries[a]	95.0	96.8	112.5	114.9	117.3	119.3	121.7	122.8	152.0	154.2	156.0	158.4	160.1	162.1	164.3	165.6	167.5	169.3	171.3
European Union	149.7	151.0	152.3	154.0	154.9	156.3	167.0	166.9	166.6	167.0	167.6	168.8	170.0	171.8	173.8	175.6	177.0	178.2	179.6
Euro area	114.8	115.9	117.0	118.1	118.8	120.1	131.0	130.9	130.9	131.5	131.9	132.9	134.1	135.7	137.2	138.8	140.0	141.0	142.3
Total OECD[a]	386.7	392.6	411.8	418.0	424.3	430.3	444.8	448.2	478.6	483.3	486.8	492.2	497.9	502.5	507.7	511.5	515.1	518.0	522.5
Employment																			
Major seven countries	270.4	274.2	278.9	284.4	289.6	293.6	302.8	302.6	303.1	306.1	308.7	311.3	315.8	319.0	322.4	326.2	327.0	326.1	329.0
Total of smaller countries[a]	87.6	89.3	104.6	107.2	110.0	112.1	114.0	114.2	138.5	140.5	142.7	145.6	148.0	149.6	151.7	153.9	155.2	156.3	158.6
European Union	134.9	136.0	137.7	140.2	142.4	144.6	154.0	152.1	149.5	149.4	150.6	151.5	153.0	155.7	158.6	161.8	163.9	164.7	166.2
Euro area	103.5	104.5	105.5	106.8	108.4	110.4	120.7	119.6	117.4	117.1	117.8	118.4	119.4	121.7	124.2	127.0	128.8	129.4	130.8
Total OECD[a]	358.0	363.6	383.4	391.6	399.5	405.7	416.8	416.9	441.6	446.6	451.5	456.9	463.8	468.6	474.1	480.1	482.2	482.4	487.6
Unemployment																			
Major seven countries	21.2	21.5	20.4	18.7	17.5	17.4	20.4	22.8	23.5	23.0	22.1	22.4	22.0	21.4	21.0	19.7	20.6	22.6	22.3
Total of smaller countries[a]	7.5	7.5	8.0	7.7	7.3	7.1	7.7	8.6	13.5	13.7	13.3	12.8	12.2	12.5	12.6	11.7	12.3	13.0	12.7
European Union	14.8	15.0	14.6	13.8	12.5	11.7	12.9	14.8	17.1	17.6	17.0	17.3	17.1	16.2	15.2	13.8	13.0	13.5	13.4
Euro area	11.2	11.5	11.5	11.3	10.5	9.7	10.2	11.4	13.5	14.4	14.0	14.5	14.7	14.0	13.0	11.8	11.2	11.6	11.5
Total OECD[a]	28.7	29.0	28.3	26.4	24.8	24.6	28.0	31.3	37.0	36.7	35.4	35.2	34.2	33.9	33.6	31.4	32.9	35.6	34.9

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 17. **GDP deflators**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	10.2	5.6	6.5	7.9	8.5	7.1	4.9	2.3	1.3	1.2	1.1	1.6	2.4	1.7	0.2	0.8	4.1	3.2	2.5	2.4
Austria	5.3	3.0	2.9	2.2	1.2	2.9	3.3	3.8	3.6	2.9	2.7	2.5	1.3	0.9	0.5	0.7	1.2	1.8	1.5	1.9
Belgium	6.4	4.3	2.9	1.4	2.3	4.9	3.0	2.7	3.6	3.7	1.8	1.8	1.2	1.3	1.6	1.2	1.3	1.8	2.4	2.5
Canada	8.1	3.1	3.0	4.6	4.5	4.6	3.2	3.0	1.4	1.4	1.2	2.3	1.7	1.1	-0.4	1.4	3.7	1.2	0.5	2.0
Czech Republic	..	..	..	..	..	..	..	..	..	..	11.0	10.2	8.8	8.0	10.7	3.1	0.9	5.7	4.0	3.3
Denmark	9.0	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	1.0	2.7	3.7	2.7	1.8	2.5
Finland	9.9	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	-0.2	3.2	2.2	1.2	2.0
France	10.4	5.5	5.1	2.8	3.2	3.3	2.9	3.0	2.0	2.4	1.8	1.7	1.4	1.2	0.9	0.3	0.8	1.6	1.6	1.4
Germany	4.0	2.1	3.2	1.9	1.5	2.4	3.2	3.9	5.0	3.7	2.5	2.0	1.0	0.7	1.1	0.5	-0.4	1.3	1.4	0.9
Greece	18.7	19.0	18.9	15.3	16.7	14.5	20.7	19.8	14.8	14.4	11.2	9.8	7.4	6.8	5.2	3.0	3.4	3.2	3.0	2.9
Hungary	..	..	..	..	..	..	..	..	..	..	19.5	25.6	21.2	18.5	12.6	8.4	9.1	9.0	5.3	5.2
Iceland	44.6	31.3	25.5	19.5	22.8	19.8	16.9	7.6	3.7	2.3	1.9	2.7	1.9	3.2	4.8	3.4	3.0	9.1	5.8	3.7
Ireland	14.2	5.2	6.5	2.2	3.2	5.5	-0.7	1.8	2.8	5.2	1.7	3.0	2.2	4.1	5.9	4.2	4.7	4.2	4.0	3.7
Italy	16.6	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	1.7	2.1	2.6	2.6	2.2
Japan	4.5	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	-2.0	-1.4	-1.4	-1.7
Korea	16.6	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	-1.1	1.4	2.6	2.2
Luxembourg	6.0	3.0	0.7	2.8	0.6	4.3	5.2	2.3	2.6	0.6	4.7	0.3	1.8	2.8	2.6	2.5	3.7	1.4	1.2	3.2
Mexico	34.9	56.5	73.4	140.7	101.2	26.4	28.1	23.3	14.4	9.5	8.5	38.0	30.6	17.7	15.4	14.8	12.0	5.4	4.6	4.1
Netherlands	5.5	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	1.7	1.7	3.7	4.7	3.6	2.9
New Zealand	13.5	15.4	15.3	13.2	7.5	5.1	3.3	0.5	1.4	3.0	1.1	2.4	2.4	0.1	1.4	-0.4	2.5	4.9	1.6	2.6
Norway	8.7	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	-0.7	6.2	16.3	1.9	1.9	3.4
Poland	..	..	..	..	..	..	..	..	..	..	37.3	27.9	18.7	14.0	11.8	6.9	7.1	4.4	2.6	3.2
Portugal	20.9	21.7	20.5	10.1	11.2	10.5	13.1	10.1	11.4	7.4	7.3	3.4	3.1	3.8	3.9	3.3	2.7	4.7	4.0	3.3
Slovak Republic	..	..	..	..	..	..	..	..	..	..	13.8	9.7	4.5	6.6	5.1	6.6	6.5	5.3	6.5	7.5
Spain	15.6	8.6	10.9	5.9	5.9	6.9	7.3	7.0	6.7	4.5	3.9	4.9	3.5	2.3	2.4	2.9	3.4	3.9	2.6	2.4
Sweden	10.6	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	0.7	1.0	2.0	2.5	2.4
Switzerland	3.6	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	0.0	0.6	1.1	1.8	1.4	1.2
Turkey	40.0	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	49.9	53.0	51.7	26.8
United Kingdom	12.8	5.6	3.1	5.5	6.1	7.5	7.5	6.6	4.0	2.6	1.4	2.6	3.3	2.9	2.9	2.6	1.7	2.4	3.2	2.5
United States	6.9	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	1.2	1.4	2.3	2.2	1.5	1.6
Euro area	9.4	5.4	5.5	3.5	3.8	4.3	4.9	4.9	4.3	3.6	2.8	2.9	2.1	1.6	1.7	1.1	1.3	2.2	2.1	1.8
European Union	10.7	5.9	5.5	4.1	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	2.3	2.3	1.9
Total OECD	9.8	6.6	6.3	7.9	7.7	6.0	6.1	5.8	4.5	3.9	4.6	5.2	4.3	3.7	3.2	2.3	2.6	2.7	2.3	1.8
Memorandum item																				
OECD *less* high inflation countries [a]	8.3	4.2	3.6	3.2	3.6	4.1	4.5	4.3	3.1	2.6	2.2	2.3	1.8	1.7	1.4	0.9	1.4	1.7	1.4	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).*

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.

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Annex Table 18. **Private consumption deflators**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	10.4	6.7	8.0	8.6	7.5	5.6	6.4	4.4	2.2	2.2	1.2	2.3	1.9	1.6	1.3	0.8	3.2	3.4	2.8	2.6
Austria	5.5	3.5	1.7	1.2	1.5	2.6	3.3	3.5	3.9	3.5	2.8	2.0	1.9	1.5	0.5	0.7	1.5	2.3	1.8	1.7
Belgium	7.1	5.7	-0.1	2.1	1.0	3.9	2.8	2.6	1.9	2.8	2.9	2.6	2.1	1.8	1.2	1.0	2.2	2.2	2.2	2.3
Canada	8.7	4.1	4.3	3.9	3.9	4.4	4.3	5.0	1.7	2.3	1.0	1.3	1.6	1.6	1.1	1.6	2.0	1.9	1.8	1.9
Czech Republic	..	..	..	..	..	..	..	..	..	..	10.7	9.2	8.1	7.4	9.1	3.8	2.8	3.6	3.0	3.2
Denmark	9.6	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	1.3	2.6	3.0	2.1	2.1	2.1
Finland	10.4	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	1.0	3.8	2.7	1.7	1.8
France	10.7	5.9	2.8	3.4	2.9	3.8	3.1	3.5	2.5	2.5	2.2	2.0	1.9	1.4	0.6	0.2	1.2	1.2	1.5	1.4
Germany	4.3	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	0.4	1.4	1.8	1.4	1.6
Greece	17.4	19.6	22.4	17.3	15.1	13.5	19.8	19.7	15.7	14.1	11.0	9.0	8.2	5.6	4.5	2.1	3.1	3.0	3.0	2.9
Hungary	..	..	..	..	..	..	..	..	..	..	19.7	27.0	23.7	18.0	13.7	10.7	9.9	9.1	5.5	5.1
Iceland	46.7	32.6	20.1	15.9	25.4	23.3	16.7	6.7	3.6	3.6	1.4	1.9	2.4	1.8	0.9	2.7	4.6	7.8	6.0	3.4
Ireland	14.4	5.0	4.6	2.4	3.8	4.1	2.1	2.7	3.0	2.2	2.7	2.8	2.6	2.7	3.5	3.3	5.1	4.7	4.0	3.2
Italy	16.1	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	2.8	2.9	2.5	2.1
Japan	5.7	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	-0.5	-1.1	-1.5	-1.6	-1.7
Korea	15.9	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	2.2	4.0	3.2	3.5
Luxembourg	7.5	4.3	-2.4	1.0	0.7	2.0	1.6	2.8	2.6	2.6	3.6	1.1	1.8	1.4	1.3	1.4	2.8	2.8	2.2	2.3
Mexico	33.9	59.2	82.0	135.1	109.1	25.0	27.8	24.4	15.4	10.1	7.6	34.1	30.4	16.5	20.7	13.8	10.7	5.9	4.6	4.0
Netherlands	5.7	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	1.7	1.9	2.8	4.6	3.0	2.2
New Zealand	13.8	17.3	12.8	13.0	6.3	6.2	5.6	2.2	1.1	1.2	1.1	2.7	2.0	1.1	1.7	0.3	2.2	2.0	1.8	2.0
Norway	9.0	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	2.6	2.0	3.1	2.5	1.2	2.5
Poland	..	..	..	..	..	..	..	..	..	..	37.1	27.9	20.0	14.7	11.5	6.9	10.0	5.1	3.5	3.6
Portugal	22.5	19.5	13.8	9.9	11.5	12.8	11.6	11.8	9.2	6.9	5.6	4.3	3.7	3.0	2.9	2.3	2.8	4.4	3.3	2.8
Slovak Republic	..	..	..	..	..	..	..	..	..	..	13.0	10.2	5.2	6.0	6.1	10.2	11.3	5.5	5.6	6.8
Spain	13.1	8.1	9.3	5.5	4.8	6.7	6.6	6.4	6.6	5.3	4.9	4.8	3.5	2.6	2.2	2.4	3.2	3.2	2.8	2.6
Sweden	10.7	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	1.0	0.9	1.6	2.4	2.4
Switzerland	3.7	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	-0.2	0.4	0.9	0.9	0.6	0.7
Turkey	38.1	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	50.0	51.7	51.0	29.4
United Kingdom	12.1	5.2	4.0	4.7	5.2	6.3	7.5	7.9	4.7	3.2	1.9	3.1	3.1	2.3	2.7	1.5	0.6	1.5	2.3	2.3
United States	6.9	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	1.6	2.7	1.9	1.4	1.8
Euro area	9.6	5.7	3.4	3.1	3.4	4.6	4.5	5.0	4.6	4.2	3.4	3.1	2.5	2.0	1.5	1.1	2.1	2.3	2.0	1.9
European Union	10.5	5.9	3.8	3.6	3.9	5.0	5.1	5.6	4.5	4.0	3.2	3.2	2.7	2.1	1.7	1.2	1.9	2.2	2.1	2.0
Total OECD	9.8	6.7	5.8	8.2	7.7	6.3	6.3	6.2	4.9	4.2	4.9	5.2	4.4	4.0	3.5	2.6	3.0	2.6	2.2	2.0
Memorandum item																				
OECD *less* high inflation countries [a]	8.5	4.2	2.9	3.3	3.5	4.3	4.7	4.6	3.5	2.9	2.5	2.4	2.1	2.0	1.4	1.1	1.8	1.6	1.3	1.4

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).*

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 19. **Consumer prices**

Percentage change from previous period

	Average 1974-84	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	10.2	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	4.4	2.8	2.6
Austria	5.5	3.2	1.7	1.5	1.9	2.6	3.3	3.1	3.5	3.2	2.7	1.6	1.8	1.2	0.8	0.5	2.0	2.3	1.7	1.7
Belgium	7.5	4.9	1.3	1.6	1.2	3.1	3.4	3.9	2.2	2.5	2.4	1.3	1.8	1.5	0.9	1.1	2.7	2.4	1.8	2.0
Canada	8.8	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	2.5	1.9	2.2
Czech Republic	..	..	..	..	..	..	..	..	..	..	10.0	9.1	8.8	8.5	10.7	2.1	3.9	4.8	3.2	3.3
Denmark	9.7	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	2.4	2.1	2.2
Finland	10.7	5.2	2.9	4.1	5.1	6.6	6.1	4.6	3.2	3.3	1.6	0.4	1.1	1.2	1.4	1.3	3.0	2.7	1.7	1.8
France	10.7	5.8	2.5	3.3	2.7	3.5	3.6	3.4	2.4	2.2	1.7	1.8	2.1	1.3	0.7	0.6	1.8	1.8	1.6	1.7
Germany	4.3	2.1	-0.1	0.2	1.3	2.8	2.7	4.0	5.1	4.4	2.8	1.7	1.2	1.5	0.6	0.6	2.1	2.4	1.5	1.6
Greece	17.9	19.3	23.0	16.4	13.5	13.7	20.4	19.5	15.9	14.4	10.9	8.9	7.9	5.4	4.5	2.1	2.9	3.7	3.4	2.9
Hungary	..	..	..	..	..	..	..	..	..	..	18.9	28.3	23.5	18.3	14.2	10.0	9.8	9.2	5.5	5.1
Iceland[a]	..	32.0	22.1	18.3	25.7	20.8	15.5	6.8	4.0	4.0	1.6	1.7	2.3	1.8	1.7	3.2	5.0	6.7	6.2	3.8
Ireland	14.7	5.5	3.8	3.1	2.2	4.0	3.3	3.2	3.1	1.4	2.3	2.5	2.2	1.2	2.1	2.5	5.3	4.0	3.7	3.1
Italy	15.8	9.2	5.8	4.7	5.1	6.3	6.5	6.2	5.0	4.5	4.2	5.4	4.0	1.9	2.0	1.7	2.6	2.3	2.3	1.9
Japan	5.6	2.0	0.6	0.1	0.7	2.3	3.1	3.2	1.7	1.3	0.7	-0.1	0.1	1.7	0.7	-0.3	-0.7	-0.7	-1.2	-1.2
Korea	14.3	2.5	2.3	3.5	7.1	5.7	8.5	9.3	6.2	4.8	6.3	4.5	4.9	4.4	7.5	0.8	2.3	4.1	3.3	3.0
Luxembourg	7.3	4.1	0.3	-0.1	1.4	3.4	3.3	3.1	3.2	3.6	2.2	1.9	1.2	1.4	1.0	1.0	3.8	2.4	2.1	2.4
Mexico	35.2	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	6.4	4.6	4.1
Netherlands	5.9	2.3	0.1	-0.7	0.7	1.1	2.5	3.1	2.8	1.7	2.2	1.6	1.4	1.9	1.8	2.0	2.3	5.1	3.4	2.4
New Zealand	13.3	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	2.6	2.5	2.0
Norway	9.3	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	3.0	1.2	2.5
Poland	..	..	..	..	..	..	..	..	..	..	33.2	28.3	19.9	14.9	11.6	7.3	10.1	5.5	3.5	3.6
Portugal	22.8	19.6	11.8	9.4	9.7	12.6	14.6	11.4	8.9	5.9	5.0	4.0	2.9	1.9	2.2	2.2	2.8	4.4	3.1	2.8
Slovak Republic	..	..	..	..	..	..	..	..	..	..	13.4	9.9	5.8	6.1	6.7	10.6	12.0	7.4	5.5	7.0
Spain	16.2	8.8	8.8	5.2	4.8	6.8	6.7	5.9	5.9	4.9	4.6	4.6	3.6	1.9	1.8	2.2	3.5	3.2	2.8	2.6
Sweden	10.0	7.4	4.2	4.2	5.8	6.4	10.4	9.7	2.6	4.6	2.4	2.9	0.8	0.9	0.4	0.3	1.3	2.6	2.6	2.8
Switzerland	3.6	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	1.0	0.6	0.7
Turkey[b]	41.4	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	54.4	48.7	32.2
United Kingdom	..	5.2	3.6	3.7	4.6	5.9	8.1	6.8	4.7	3.0	2.4	2.8	2.9	2.8	2.7	2.3	2.1	2.1	2.3	2.3
United States[c]	7.7	3.5	1.9	3.6	4.1	4.8	5.4	4.2	3.0	3.0	2.6	2.8	2.9	2.3	1.5	2.2	3.4	2.8	1.8	2.4
Euro area	8.0	4.9	2.4	2.4	2.7	4.0	4.0	4.3	3.8	3.4	2.8	2.6	2.3	1.7	1.2	1.1	2.4	2.5	2.0	1.9

Note: Consumer price index. For the euro area countries and the euro area aggregate: harmonised index of consumer prices (HICP) and United Kingdom: retail price index excluding mortgage payments (RPIX).

a) Excluding rent, but including imputed rent.

b) Until 1981: Istanbul index (154 items); from 1982, Turkish index.

c) The methodology for calculating the Consumer Price Index has changed considerably over the past years, lowering measured inflation substantially.

Source: OECD.

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Annex Table 20. **Oil and other primary commodity markets**

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Oil market conditions[a] (in million barrels per day)																		
Demand																		
OECD[b]	38.6	39.3	40.6	41.2	41.5	41.9	42.9	43.2	44.4	44.9	45.9	46.7	46.8	47.7	47.8	47.7	47.7	..
of which: North America	19.6	20.1	20.8	21.0	20.7	20.5	20.8	21.1	21.7	21.6	22.2	22.7	23.1	23.8	24.1	23.9	24.0	..
Europe[c]	13.1	13.2	13.4	13.5	13.6	14.0	14.2	14.2	14.3	14.6	14.9	15.0	15.3	15.2	15.1	15.2	15.2	..
Pacific	5.8	5.9	6.4	6.7	7.2	7.5	7.9	8.0	8.4	8.7	8.8	9.0	8.4	8.7	8.7	8.6	8.5	..
Non-OECD[d]	22.8	23.5	24.1	24.5	24.5	24.6	24.2	24.4	23.8	24.5	25.4	26.6	26.8	27.6	28.0	28.3	28.7	..
Total	61.3	62.8	64.7	65.7	66.0	66.5	67.1	67.6	68.2	69.4	71.3	73.3	73.6	75.2	75.9	76.0	76.4	..
Supply																		
OECD[b]	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	21.8	22.1	..
OPEC total	19.9	19.7	21.8	23.8	25.1	25.3	26.5	26.7	27.0	27.6	28.4	29.9	30.8	29.4	30.8	30.2	..	..
Former USSR	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	8.6	9.1	..
Other non-OECD[a]	10.0	10.4	10.8	11.2	11.4	11.6	12.1	12.9	13.6	14.4	14.9	15.3	15.6	15.8	16.2	16.4	..	..
Total	62.0	62.4	64.8	66.1	66.9	66.8	67.2	67.5	68.7	70.2	72.1	74.5	75.6	74.2	76.9	76.9	..	..
Trade																		
OECD net imports[b]	19.2	19.8	20.8	22.5	22.8	22.4	23.1	23.5	23.8	23.4	24.2	24.9	25.2	25.5	26.0	26.2	25.6	..
Former USSR net exports	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	3.8	4.3	4.9	5.4	..
Other non-OECD net exports[d]	15.8	16.2	17.2	19.0	19.7	20.2	21.1	21.4	21.1	20.6	21.1	21.5	21.7	21.7	21.7	21.3	20.3	..
Prices[e]																		
OECD crude oil import price (cif, $ per bl)	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	23.5	23.9	25.0
Prices of other primary commodities[e] (US$ indices)																		
Food and tropical beverages	97	80	93	88	79	74	72	73	98	100	99	104	91	74	67	59	53	53
of which: Food	73	71	99	96	85	83	87	88	95	100	118	104	91	77	73	70	68	69
Tropical beverages	114	86	90	82	75	68	62	63	100	100	86	103	91	72	62	51	43	43
Agricultural raw materials	58	72	80	82	90	78	79	75	86	100	86	83	71	71	74	67	62	64
Minerals, ores and metals	69	78	112	107	99	88	85	74	85	100	90	91	78	75	83	77	74	80
Total	71	76	94	92	90	80	79	74	89	100	90	91	78	73	75	68	63	66
Memorandum item																		
Export prices of OECD manufactures (dollar index)	70	79	84	84	91	90	93	89	91	100	97	89	86	83	79	78	77	78

a) Based on data published in in varoius issues of IEA, Oil Market Report and Annual Statistical Supplement, August 2001.
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 2001 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 2002 and 2003.
Source: OECD.

Annex Table 21. **Employment rates, participation rates and labour force**

	Employment rates						Labour force participation rates						Labour force					
	Average 1980-82	Average 1990-92	2000	2001	2002	2003	Average 1980-82	Average 1990-92	2000	2001	2002	2003	Average 1980-89	Average 1990-99	2000	2001	2002	2003
	Per cent						*Per cent*						*Percentage change*					
Australia	65.9	67.5	70.6	70.3	70.2	70.4	70.4	74.0	75.4	75.4	75.2	75.1	2.3	1.2	2.3	1.5	1.2	1.5
Austria	77.7	74.8	73.1	73.1	72.6	72.9	79.3	78.3	76.7	76.9	76.8	76.9	0.3	0.4	-0.2	0.4	0.2	0.3
Belgium	56.8	56.8	59.1	59.7	59.8	60.1	62.0	60.8	63.4	64.0	64.1	64.4	0.1	0.6	-0.3	0.8	0.3	0.5
Canada	67.0	69.5	72.1	71.9	72.1	72.4	73.4	77.1	77.4	77.5	78.1	78.0	1.9	1.1	1.8	1.5	2.1	1.3
Czech Republic	..	..	65.3	65.6	65.3	65.2	..	..	71.6	71.5	71.4	71.4	..	0.3	-0.6	0.0	0.0	0.0
Denmark	72.1	75.9	76.6	76.7	76.8	77.0	77.9	82.4	80.1	80.1	80.2	80.3	1.0	0.0	0.2	0.2	0.2	0.2
Finland	72.0	69.8	67.1	68.0	68.3	69.0	75.8	75.2	74.5	74.8	75.3	76.1	0.6	-0.1	1.2	0.6	0.9	1.2
France	63.1	60.4	63.0	63.7	63.6	63.9	68.0	66.8	69.5	69.7	70.1	70.2	0.6	0.7	0.9	0.7	1.0	0.6
Germany	64.9	67.7	69.3	69.5	69.5	69.9	68.1	72.0	74.9	75.1	75.4	75.7	0.7	3.5	0.8	0.1	0.2	0.3
Greece	57.5	55.8	56.6	56.5	56.5	56.7	60.1	60.5	63.8	63.0	63.0	63.1	1.6	1.2	-1.2	-1.0	0.3	0.4
Hungary	..	..	55.2	..	..	..	..	..	59.1	..	..	..	..	-0.3	0.3	-0.5	0.1	0.1
Iceland	75.9	74.8	75.9	75.6	74.7	74.9	76.2	76.4	77.0	76.8	76.7	76.9	2.1	1.0	1.0	0.8	0.6	1.1
Ireland	56.7	53.3	66.6	67.6	67.2	67.6	62.9	62.1	69.6	70.4	70.7	71.0	0.5	2.8	3.3	2.5	2.0	2.0
Italy	56.7	54.5	53.8	54.9	55.9	57.2	60.9	59.8	60.2	60.8	61.5	62.9	0.6	0.0	0.9	0.8	0.9	1.9
Japan	70.3	73.4	74.4	74.2	73.3	73.2	71.9	75.0	78.1	78.2	77.8	77.9	1.2	0.7	-0.2	-0.2	-0.7	-0.3
Korea	57.7	61.7	62.5	62.9	63.4	64.0	60.6	63.2	65.2	65.3	65.5	66.0	2.5	1.7	1.5	1.1	1.3	1.7
Luxembourg	60.3	61.0	62.6	63.6	63.6	64.0	60.9	61.9	64.3	65.3	65.5	66.0	0.8	1.3	2.5	2.5	1.3	1.7
Mexico	..	51.5	55.1	54.4	54.1	54.5	..	52.9	56.3	55.7	55.6	55.8	..	2.9	4.2	1.0	1.8	2.5
Netherlands	54.0	55.7	64.4	65.5	65.8	66.0	57.5	59.0	66.2	67.0	67.6	68.2	1.0	1.8	1.7	1.5	1.2	1.0
New Zealand	72.8	65.0	71.1	72.4	..	..	75.2	71.8	75.6	76.5	..	..	0.7	1.8	0.7	1.8	1.8	0.9
Norway	74.3	73.0	78.0	77.9	77.9	77.9	75.9	77.3	80.7	80.7	80.8	80.8	1.2	1.0	0.7	0.5	0.5	0.5
Poland	..	..	54.8	53.2	52.2	52.1	..	..	65.3	65.1	65.0	64.7	..	0.0	1.0	0.4	0.3	0.1
Portugal	61.8	68.6	71.7	72.6	72.9	73.6	67.2	71.8	74.7	75.7	76.2	76.9	0.9	0.8	1.4	1.7	1.1	1.3
Slovak Republic	..	..	56.1	56.1	56.9	57.8	..	..	69.0	69.5	70.3	71.0	..	0.8	1.5	1.7	1.2	1.0
Spain	52.4	52.4	59.9	62.0	62.6	63.6	59.1	60.9	67.6	69.3	70.1	71.0	1.3	1.3	3.7	2.7	1.4	1.5
Sweden	79.0	79.0	72.9	74.0	73.8	74.0	81.1	81.6	76.4	77.0	77.0	77.1	0.5	-0.6	1.2	1.3	0.4	0.5
Switzerland	75.6	82.2	79.7	80.5	80.3	80.4	75.8	83.2	81.1	81.8	82.1	82.0	1.6	0.4	0.3	1.6	1.0	0.7
Turkey	63.8	55.4	48.6	47.2	46.2	46.0	68.8	60.2	51.9	51.5	50.9	50.3	1.6	1.5	-4.9	1.8	1.2	1.3
United Kingdom	67.7	70.0	71.7	72.1	72.0	72.2	73.9	76.2	75.9	75.9	76.1	76.3	0.8	0.3	0.5	0.4	0.5	0.5
United States	65.4	71.3	74.3	..	..	..	71.3	76.4	77.4	..	..	..	1.6	1.1	1.1	0.7	0.4	1.1
Euro area	60.3	60.4	63.0	63.8	64.1	64.7	64.7	65.8	68.9	69.4	69.8	70.4	0.7	1.5	1.2	0.8	0.7	0.9
European Union	62.2	62.6	64.8	65.5	65.7	66.3	66.8	68.0	70.3	70.7	71.1	71.6	0.7	1.3	1.0	0.8	0.7	0.8
Total OECD	64.6	65.7	66.8	64.4	64.2	64.4	69.1	70.1	71.2	69.3	69.3	69.4	1.3	1.2	0.8	0.7	0.6	0.9

Note: Employment rates are calculated as the ratio of total employment to the population of working age. The working age population concept used here and in the labour force participation rate is defined as all persons of the age 15 to 64 years (16 to 65 years for Spain). This definition does not correspond to the commonly-used working age population concepts for the United States (16 years and above), Hungary and New Zealand (15 years and above). Hence for these countries no projections are available. For information about sources and definitions, see *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*

Source: OECD.

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Annex Table 22. **Potential GDP, employment and capital stock**

Percentage change from previous period

	Potential GDP						Employment						Capital stock					
	Average 1980-89	Average 1990-99	2000	2001	2002	2003	Average 1980-89	Average 1990-99	2000	2001	2002	2003	Average 1980-89	Average 1990-99	2000	2001	2002	2003
Australia	3.4	3.2	4.0	3.7	3.5	3.6	2.3	1.2	3.0	1.0	1.4	1.8	4.8	4.0	4.6	3.3	3.6	4.2
Austria	2.2	2.4	2.6	2.4	2.4	2.5	0.0	0.3	0.5	0.2	-0.5	0.8	4.1	4.3	4.7	4.4	4.2	4.4
Belgium	1.9	2.4	2.2	2.3	2.5	2.1	0.0	0.3	1.6	1.1	0.2	0.5	2.7	3.1	3.2	3.0	2.9	2.9
Canada	2.7	2.7	2.9	3.1	3.1	3.2	1.9	1.2	2.6	1.1	1.6	1.7	3.4	1.3	-0.6	-0.2	0.2	0.9
Czech Republic	..	..	..	..	..	..	..	-0.6	-0.7	0.7	-0.4	0.0	..	..	..	..	..	..
Denmark	1.9	2.0	2.4	2.2	2.3	2.1	0.9	0.2	0.7	0.4	0.2	0.4	3.0	2.7	3.8	3.8	3.7	3.7
Finland	3.0	2.2	3.2	3.2	3.2	3.1	0.8	-1.0	1.7	1.4	0.6	1.3	3.2	0.6	1.2	1.3	1.1	1.1
France	2.3	1.8	2.1	2.3	2.4	2.4	0.2	0.4	2.5	1.5	0.4	0.8	3.3	2.6	3.1	3.1	3.1	3.2
Germany	2.1	3.1	1.6	1.9	1.8	1.8	0.3	3.3	1.6	0.2	-0.3	0.5	2.9	3.7	1.7	1.6	1.4	1.5
Greece	1.2	2.4	2.8	3.1	3.4	3.6	1.0	0.6	-0.3	-0.1	0.3	0.8	2.4	3.2	3.5	4.2	4.9	5.5
Hungary	..	..	..	..	..	..	..	0.6	0.9	0.3	0.1	0.2	..	..	..	..	..	..
Iceland	3.4	2.2	3.8	2.9	2.3	2.3	2.0	1.0	1.5	0.7	-0.4	1.0	3.4	1.8	6.0	3.9	1.4	1.4
Ireland	3.7	6.9	7.3	7.2	7.5	7.4	-0.4	3.7	4.7	2.9	1.0	2.0	2.7	3.3	5.7	4.9	4.0	4.2
Italy	2.5	1.8	2.3	2.4	2.4	2.2	0.2	-0.3	1.9	2.0	1.5	2.0	3.0	2.9	3.6	3.6	3.5	3.5
Japan	3.9	1.8	1.1	1.1	0.9	0.9	1.1	0.4	-0.2	-0.5	-1.5	-0.4	5.9	3.8	2.8	2.7	1.9	1.7
Korea	..	..	..	..	..	..	2.8	1.3	3.8	1.4	1.8	2.0	..	..	..	..	..	..
Luxembourg	..	..	..	..	..	..	0.7	1.1	2.8	2.6	0.9	1.5	..	..	..	..	..	..
Mexico	..	..	..	..	..	..	..	2.9	4.6	0.7	1.5	2.7	..	..	..	..	..	..
Netherlands	1.9	2.9	3.3	3.0	2.7	2.5	0.6	2.1	2.3	1.9	0.7	0.5	1.6	2.5	3.7	3.2	3.0	2.9
New Zealand	1.8	2.4	2.5	2.8	3.1	3.1	0.1	1.9	1.6	2.5	1.4	1.3	3.5	2.1	3.8	4.1	4.3	4.4
Norway	2.2	2.3	2.5	1.9	1.7	1.8	0.8	1.2	0.5	0.4	0.5	0.6	2.4	1.9	2.8	1.9	1.4	1.3
Poland	..	..	..	..	..	..	..	0.1	-1.6	-2.2	-1.3	0.2	..	..	..	..	..	..
Portugal	3.2	3.1	3.0	2.9	2.9	2.8	1.3	0.9	1.8	1.6	0.8	1.4	..	..	..	..	..	..
Slovak Republic	..	..	..	..	..	..	..	0.2	-1.4	1.0	1.5	1.6	..	..	..	..	..	..
Spain	2.1	3.0	3.1	3.1	2.9	2.7	0.7	1.3	5.5	3.7	1.2	1.8	3.3	4.1	4.3	3.9	3.4	3.3
Sweden	1.8	2.0	2.8	2.6	2.3	2.3	0.5	-1.1	2.2	2.0	0.2	0.7	2.4	2.0	3.0	2.7	2.3	2.1
Switzerland	1.6	1.2	2.1	1.6	1.5	1.5	1.6	0.1	1.0	1.8	0.5	0.9	2.6	2.4	2.9	2.7	2.4	2.6
Turkey	..	..	..	..	..	..	1.6	1.6	-3.8	-0.3	0.3	2.0	..	..	..	..	..	..
United Kingdom	2.0	2.6	2.3	2.3	2.3	2.2	0.8	0.2	1.0	0.8	0.3	0.6	1.7	2.7	3.6	3.3	3.1	3.0
United States	3.0	3.1	3.7	3.6	3.1	3.1	1.9	1.3	1.3	-0.1	-0.4	1.4	3.0	2.7	4.2	2.8	1.6	1.7
Euro area	2.3	2.5	2.3	2.4	2.4	2.4	0.4	1.3	2.3	1.4	0.5	1.1	3.0	3.1	3.0	2.8	2.7	2.8
European Union	2.2	2.5	2.3	2.4	2.4	2.3	0.4	1.1	2.0	1.3	0.4	0.9	2.8	3.1	3.1	3.0	2.8	2.8
Total OECD	2.8	2.6	2.7	2.7	2.5	2.5	1.3	1.1	1.3	0.4	0.0	1.1	3.4	3.0	3.4	2.7	2.1	2.2

Note: Potential output is estimated using a Cobb-Douglas production function approach. For information about definitions, sources and data coverage, see *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*

Source: OECD.

Annex Table 23. **Structural unemployment, wage shares and unit labor costs**

	Structural unemployment rate						Wage shares in the business sector						Unit labour costs in the business sector					
	Average 1980-82	Average 1990-92	2000	2001	2002	2003	Average 1980-82	Average 1990-92	2000	2001	2002	2003	Average 1980-89	Average 1990-99	2000	2001	2002	2003
	Per cent						*Per cent of business GDP*						*Percentage change*					
Australia	5.7	6.9	6.5	6.2	6.0	6.0	46.7	45.5	45.7	46.2	45.9	45.7	6.8	0.6	3.2	3.0	1.1	1.1
Austria	2.2	4.8	5.1	4.9	4.9	4.8	59.3	55.1	52.1	53.2	53.0	52.5	2.8	1.1	-0.1	2.4	0.5	0.5
Belgium	6.3	8.8	7.5	7.2	6.9	6.9	52.4	51.6	50.3	50.5	50.3	49.7	2.9	1.8	0.6	2.8	2.7	0.5
Canada	8.7	8.8	7.2	6.9	6.8	6.8	45.9	47.4	49.5	49.7	50.0	49.6	5.3	1.6	1.0	1.8	0.8	0.8
Czech Republic	..	..	..	..	..	..	..	..	47.5	47.3	46.0	46.6	..	7.8	3.2	4.2	3.5	3.6
Denmark	5.8	7.3	5.1	4.9	4.9	4.9	40.7	42.2	39.6	39.9	40.1	40.0	6.0	0.9	1.1	3.6	1.9	1.8
Finland	4.1	6.8	8.8	8.6	8.3	8.2	48.7	44.9	39.3	40.5	40.9	40.7	6.2	-0.4	0.4	5.7	2.3	1.4
France	5.7	9.7	9.4	9.3	9.2	9.1	52.9	45.7	42.4	42.4	42.1	41.8	4.9	0.6	0.6	1.6	1.0	0.0
Germany	4.1	6.7	7.3	7.3	7.2	7.2	54.6	51.7	52.0	52.1	52.5	52.6	1.9	2.1	-0.1	1.3	1.6	0.5
Greece	4.8	8.3	9.9	9.8	9.8	9.8	54.8	47.6	44.1	43.5	43.2	42.9	19.4	8.4	0.4	1.6	2.0	1.7
Hungary	..	..	..	..	..	..	..	..	41.3	41.2	41.5	41.4	..	12.0	8.0	10.8	6.7	3.5
Iceland	0.6	1.5	3.5	3.5	3.5	3.4	47.8	53.1	52.8	49.8	50.2	50.1	35.7	5.0	2.3	4.9	7.5	3.5
Ireland	13.2	14.2	6.9	6.4	5.9	5.7	58.2	51.5	42.3	41.5	41.6	40.7	4.8	0.5	1.5	3.9	3.8	1.0
Italy	6.9	9.3	9.4	9.2	9.0	8.9	55.4	50.8	47.4	47.4	47.5	47.3	9.4	2.4	1.6	2.8	2.7	1.1
Japan	1.8	2.4	3.8	3.9	3.9	3.9	66.1	60.2	57.6	58.2	57.6	57.4	0.6	0.0	-2.1	0.0	-2.0	-1.7
Korea	..	..	..	..	..	..	79.3	72.4	70.2	72.8	72.5	72.3	4.8	4.3	1.5	4.2	1.7	1.6
Luxembourg	..	..	..	..	..	..	..	47.2	46.0	47.7	48.7	47.3	..	1.0	2.9	5.6	3.5	0.1
Mexico	..	..	..	..	..	..	..	33.5	32.3	33.9	34.5	34.6	..	19.3	8.5	10.2	6.4	4.1
Netherlands	5.1	7.1	4.4	4.0	3.5	3.3	47.8	46.6	46.8	47.0	47.0	46.5	0.9	1.6	3.6	5.5	4.0	1.7
New Zealand	1.8	7.0	5.4	5.4	5.4	5.4	47.6	44.3	43.5	43.1	43.2	42.5	9.3	0.8	1.1	3.8	2.2	1.1
Norway	2.2	4.9	3.6	3.6	3.6	3.6	41.9	38.7	32.7	33.0	33.1	32.9	7.7	1.9	2.7	4.0	3.3	2.7
Poland	..	..	..	..	..	..	..	..	49.7	48.9	48.8	48.0	..	14.5	3.1	3.5	2.2	1.7
Portugal	6.3	4.7	3.7	3.8	3.8	3.8	53.9	44.6	49.4	49.3	48.9	48.9	14.5	8.2	3.3	5.1	3.2	2.8
Slovak Republic	..	..	..	..	..	..	..	..	35.6	36.2	35.3	35.2	..	5.8	1.3	5.8	3.9	6.1
Spain	8.0	15.5	11.4	10.7	10.1	9.8	55.4	50.1	49.1	49.3	48.9	48.7	7.9	3.8	2.6	4.4	1.7	1.4
Sweden	2.2	4.0	5.1	5.1	5.1	5.1	42.1	41.7	44.5	45.4	45.3	45.1	6.5	1.3	6.8	4.3	2.0	1.6
Switzerland	1.2	1.7	2.0	1.8	1.8	1.8	50.2	51.8	53.9	54.4	54.6	54.3	4.2	2.4	-0.5	3.5	1.8	0.4
Turkey	..	..	..	..	..	..	..	70.4	46.5	46.4	42.5	40.7	..	..	..	..	..	..
United Kingdom	4.7	8.1	5.8	5.5	5.3	5.3	..	53.9	58.9	59.3	58.7	58.3	5.4	3.0	1.3	3.5	2.2	1.8
United States	5.9	5.4	5.2	5.1	5.1	5.1	51.3	49.8	51.0	51.8	51.0	51.0	3.6	1.8	3.1	4.1	-0.1	1.4
Euro area	5.8	8.9	8.3	8.1	7.9	7.8	54.7	50.4	48.8	48.7	48.7	48.4	5.2	2.1	0.6	2.2	1.8	0.6
European Union	5.4	8.6	7.8	7.6	7.4	7.3	53.5	49.9	49.3	49.5	49.5	49.2	5.5	2.3	1.2	2.7	2.0	1.0
Total OECD	5.1	6.3	6.1	5.9	5.9	5.8	54.8	51.5	50.9	51.4	50.9	50.8	4.1	2.5	1.7	3.1	0.8	0.9

Note: The structural unemployment rate corresponds to "NAIRU". For more information about sources and definitions, see *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*
Source: OECD.

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Annex Table 24. **Household saving rates**

Percentage of disposable household income

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	13.1	10.7	10.1	8.0	6.7	8.4	9.1	6.0	5.5	4.3	5.6	4.5	5.5	3.7	2.3	2.1	4.2	3.6	3.6	3.6
Austria	9.9	10.3	12.1	13.7	11.7	12.6	13.8	14.7	11.8	10.7	11.6	11.5	9.6	7.1	8.0	7.7	6.7	5.4	5.5	6.1
Belgium	15.7	13.4	15.8	14.6	15.7	15.7	16.9	18.3	19.5	19.2	18.4	18.0	15.9	14.7	14.0	14.4	12.8	12.6	13.0	12.4
Canada	16.6	15.7	13.4	11.9	12.3	13.0	12.9	13.2	13.0	11.9	9.4	9.2	7.0	4.9	4.4	4.2	3.9	3.6	3.5	3.4
Czech Republic	..	..	..	..	..	..	..	..	..	10.5	6.7	21.3	22.1	20.6	18.9	18.3	14.0	13.8	14.7	15.3
Denmark	..	..	..	..	7.4	8.4	11.2	10.8	9.7	8.3	4.2	6.9	5.6	3.6	5.0	1.7	4.0	5.1	5.2	5.5
Finland	5.8	4.3	2.9	4.4	0.2	0.5	2.9	7.8	10.0	7.6	2.6	6.0	2.0	4.4	3.1	3.8	1.6	3.2	4.2	4.2
France	14.1	13.4	12.7	11.2	12.2	12.4	13.0	13.8	14.6	15.3	14.8	15.9	14.8	16.0	15.5	15.1	15.7	15.8	15.4	14.8
Germany	9.5	9.5	10.4	10.7	10.9	11.8	13.2	13.0	13.0	12.3	11.6	11.2	10.8	10.4	10.3	9.9	9.8	10.2	10.4	10.4
Italy	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	14.6	12.7	11.3	10.7	10.9	11.2	10.9
Japan	19.0	18.5	18.5	16.0	15.0	15.3	13.4	14.8	14.1	14.3	12.1	11.9	10.9	10.2	11.6	10.6	10.3	10.5	10.8	11.0
Korea	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	23.0	16.0	15.5	12.6	10.3	10.1
Netherlands	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	13.4	12.9	9.5	7.6	10.3	11.1	11.3
New Zealand	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	-1.3	-1.2	0.5	0.2	0.3
Norway	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	6.9	7.3	7.6	7.3	8.1	7.8
Portugal	23.2	24.3	21.8	21.4	16.4	15.1	16.4	17.0	14.8	12.6	10.2	12.1	11.3	9.9	9.0	8.6	8.2	9.2	9.6	10.0
Spain	11.6	11.1	12.1	10.6	11.0	10.2	12.3	13.4	11.9	14.4	11.9	14.4	14.2	12.1	11.1	11.7	11.2	11.2	11.6	11.2
Sweden	2.9	2.7	1.5	-3.0	-5.0	-4.9	-0.4	3.0	7.6	11.4	11.1	8.6	7.1	4.5	3.2	2.8	1.5	4.5	6.3	6.1
Switzerland	1.4	1.2	2.3	4.0	6.4	-34.5	8.7	9.9	10.1	10.8	9.1	9.4	8.7	10.1	8.6	9.1	8.8	9.2	9.3	9.1
United Kingdom	10.3	9.8	8.2	6.4	4.9	6.6	8.0	10.0	11.4	10.8	9.3	10.0	9.1	9.5	5.7	4.8	4.3	5.6	5.6	6.1
United States	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	4.7	2.4	1.0	1.6	1.7	2.2

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)*. 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 thehouseholds 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.

Annex Table 25. **Gross national saving**

As a percentage of nominal GDP

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Australia	18.4	20.2	20.1	18.9	19.4	21.3	22.7	21.7	18.2	16.2	17.2	18.6	17.5	17.8	18.9	19.0	18.5	18.6	18.3
Austria	23.9	22.2	23.2	23.1	23.2	23.3	23.9	24.4	25.0	24.8	23.9	22.4	22.3	21.8	21.5	21.7	21.9	21.0	21.8
Belgium	16.7	16.4	17.8	17.6	18.7	19.6	22.2	23.3	23.6	22.7	23.2	24.2	25.5	25.4	24.3	25.4	25.5	26.0	26.2
Canada	20.1	20.0	20.8	20.2	18.7	20.0	20.8	20.0	17.5	14.9	13.6	14.2	16.4	18.5	19.1	19.9	19.5	21.0	23.7
Czech Republic	..	..	..	..	..	..	..	..	..	..	27.9	28.1	27.3	29.9	27.4	26.1	26.5	25.0	..
Denmark	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	20.8	21.8	23.3
Finland	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	25.1	27.8
France	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	21.4	21.7	21.8
Germany	..	..	..	..	..	..	..	..	..	23.3	23.1	21.9	21.9	21.8	21.3	21.4	21.5	21.0	21.3
Greece	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	17.9	17.8	18.7	18.2
Iceland	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	19.3	18.2	16.0	14.3
Ireland	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	20.6	22.1	23.8	25.3	24.3	24.1
Italy	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	21.6	21.2	20.8	20.2
Japan	31.0	30.3	31.2	32.0	32.2	32.7	33.6	33.6	33.5	34.4	33.6	32.0	30.1	29.6	29.9	30.2	29.1	27.6	27.7
Korea	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	33.7	32.6	32.1
Mexico	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	20.6	..
Netherlands	23.5	24.0	25.2	25.7	25.8	23.8	25.6	27.2	26.0	25.4	24.4	24.6	26.3	27.4	26.7	27.9	25.2	26.7	27.6
New Zealand	17.5	18.8	19.1	18.6	18.9	18.0	18.6	17.8	16.2	13.0	13.9	16.6	17.3	17.2	16.4	15.7	15.8	14.9	..
Norway	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	27.3	28.6	36.4
Poland	..	..	..	..	..	..	..	..	..	15.9	15.4	15.8	20.0	21.2	20.7	20.9	22.0	20.9	..
Portugal	8.5	8.2	7.5	8.7	10.6	11.9	11.6	12.4	11.1	8.6	8.0	5.0	4.1	4.7	3.8	3.6	4.3	3.2	2.7
Spain	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	22.2	22.3
Sweden	16.2	18.3	20.5	19.9	20.6	20.7	21.2	21.7	20.0	17.9	15.2	13.4	17.1	20.3	19.4	19.9	20.6	21.2	21.6
Switzerland	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	30.7	31.6	..
Turkey	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	13.7	15.2
United Kingdom	17.0	17.7	18.2	18.2	17.3	17.4	17.3	17.1	16.2	15.4	14.1	14.0	15.5	15.8	15.7	17.0	17.7	15.8	15.7
United States	18.5	16.3	18.5	17.2	15.4	15.9	17.2	16.7	15.9	16.1	15.1	15.0	15.8	16.4	16.7	17.6	18.3	18.0	17.7
European Union	19.5	19.7	20.2	20.0	20.3	20.1	20.8	20.9	20.5	20.5	19.6	19.1	19.7	20.4	20.1	20.7	20.9	20.5	20.6
Total OECD	21.4	20.6	21.8	21.4	20.7	21.3	22.3	21.9	21.2	21.0	20.1	19.7	20.0	20.7	20.8	21.5	21.5	20.9	20.9

Note: Based on SNA93 or ESA95 except for Switzerland and Turkey that report on SNA68 basis.
Source: OECD.

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Annex Table 26. **General government total outlays**

As a percentage of nominal GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	37.7	37.5	36.1	33.3	32.2	33.0	34.6	36.3	36.3	35.6	35.7	34.9	33.7	33.2	32.4	33.0	33.1	32.5	32.1
Austria	50.3	51.2	51.6	50.8	49.3	48.8	49.9	50.5	53.3	52.6	52.5	52.1	49.9	50.3	49.9	48.8	49.6	48.8	47.8
Belgium	57.1	56.3	54.3	52.2	50.5	50.5	51.5	51.6	53.0	51.1	50.2	50.2	48.6	48.0	47.4	46.7	46.4	46.2	45.3
Canada	45.2	44.6	43.2	42.5	43.0	45.7	48.9	49.9	48.7	46.3	45.0	43.1	40.5	40.2	38.7	37.7	38.2	38.2	37.7
Czech Republic	..	..	..	..	..	..	..	..	43.1	44.8	43.9	42.9	42.5	41.6	43.8	46.1	45.0	47.9	47.7
Denmark	..	..	..	54.2	54.3	53.6	54.5	55.5	58.1	58.0	56.6	56.3	54.4	54.0	52.5	50.6	50.8	50.1	49.3
Finland	42.6	43.5	44.0	42.6	40.9	44.4	52.7	57.7	59.1	57.5	54.3	54.0	51.3	48.1	47.1	43.6	44.6	45.2	44.3
France	49.8	49.2	48.2	47.8	46.9	47.5	47.9	49.7	51.8	51.6	51.4	51.5	50.5	49.9	49.6	48.7	48.6	49.0	48.5
Germany [a]	45.6	45.0	45.3	44.9	43.5	43.8	44.2	45.0	46.2	45.9	46.3	47.3	46.5	46.0	46.2	43.3	45.9	46.3	45.4
Greece	43.8	42.9	43.1	41.4	43.2	47.5	43.8	46.0	48.1	46.0	46.7	44.3	42.8	42.7	43.3	43.3	41.5	41.5	40.9
Hungary	..	..	..	..	..	..	..	..	59.8	63.4	56.2	53.2	52.2	53.1	50.0	47.5	49.3	49.7	48.8
Iceland	35.3	37.3	34.3	39.0	41.5	39.0	40.1	40.5	40.4	39.9	39.2	38.6	38.0	38.3	39.1	38.8	39.7	40.3	40.2
Ireland	50.7	50.6	48.1	45.4	39.2	39.9	41.3	41.7	41.3	41.1	38.0	36.4	34.2	32.2	31.9	29.2	30.6	31.8	31.9
Italy	49.5	50.0	49.4	50.1	51.4	52.9	54.0	53.2	55.4	52.7	51.1	51.3	48.5	47.6	46.7	44.8	45.7	45.5	45.4
Japan [b]	29.4	29.6	30.0	29.4	28.9	30.5	30.3	31.0	32.8	33.3	34.4	34.9	33.8	34.8	36.1	36.8	36.9	37.9	37.6
Korea	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	23.3	22.9	23.6	23.2	22.8
Luxembourg	..	..	..	..	..	41.3	43.3	44.0	44.1	42.5	42.8	43.2	41.2	40.1	39.8	38.5	38.9	40.5	39.7
Netherlands [c]	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	43.4	43.3	41.6	41.7	41.8	41.6
New Zealand	..	51.8	48.1	49.1	47.5	48.1	45.3	44.8	41.4	39.3	38.6	37.6	38.4	39.5	38.8	38.2	38.4	39.0	39.0
Norway	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	46.3	45.8	40.8	41.8	42.3	41.9
Poland	..	..	..	..	..	..	..	..	54.3	49.4	47.0	46.1	45.6	43.8	43.4	43.7	45.5	46.3	46.4
Portugal	39.3	39.8	38.4	37.0	36.3	39.3	41.6	42.2	44.0	42.7	41.0	41.3	39.7	39.8	40.6	40.3	41.1	40.8	40.2
Slovak Republic	..	..	..	..	..	..	..	..	..	54.8	53.6	59.1	59.8	58.7	54.2	52.2	52.9	52.2	51.1
Spain	39.7	40.6	39.6	39.0	40.7	41.6	42.7	43.9	47.2	45.1	44.0	42.8	41.2	40.6	39.6	38.8	38.5	38.8	38.4
Sweden	60.4	58.6	54.8	55.2	55.1	55.9	58.9	64.3	67.5	64.8	61.9	59.9	58.0	55.5	55.0	52.2	52.5	52.6	51.8
United Kingdom	..	..	40.5	38.1	37.3	39.1	41.1	43.0	43.2	42.6	42.2	40.7	38.9	37.7	37.1	37.3	38.3	39.1	39.4
United States [d]	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	30.2	29.9	30.4	30.9	30.5
Euro area	47.1	47.0	46.7	46.2	46.1	46.8	47.4	48.0	49.9	48.8	48.4	48.6	47.1	46.4	46.1	44.2	45.1	45.3	44.7
Total of above European Union countries	47.8	47.7	46.1	45.5	45.0	46.0	46.9	48.0	49.6	48.5	47.9	47.7	46.1	45.3	44.9	43.4	44.4	44.6	44.2
Total of above OECD countries	37.8	37.9	37.8	37.1	36.8	37.9	38.6	39.5	40.4	39.5	39.2	39.0	37.7	37.3	37.2	36.5	37.1	37.6	37.2

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 *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*

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. The 2000 outlays include capital transfers to the Deposit Insurance Company.

c) The 1995 outlays would be 4.9 percentage points of GDP higher if capital transfers to social rental companies were taken into account.

d) These data include outlays net of operating surpluses of public enterprises.

Source: OECD.

Annex Table 27. **General government current tax and non-tax receipts**

As a percentage of nominal GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	32.6	33.3	33.9	32.9	32.2	31.8	30.8	30.3	30.8	31.0	31.9	32.8	33.2	33.9	34.1	33.1	33.2	32.6	32.3
Austria	47.7	47.4	47.2	47.3	46.2	46.4	46.9	48.5	49.0	47.6	47.3	48.1	47.9	47.8	47.5	47.1	49.5	48.5	47.9
Belgium	46.8	46.1	46.3	44.9	42.9	43.7	44.1	43.6	45.6	46.0	45.8	46.4	46.6	47.1	46.8	46.7	46.6	46.2	45.3
Canada	36.7	37.5	37.8	38.2	38.4	39.9	40.6	40.8	40.0	39.7	39.7	40.3	40.7	40.7	40.4	40.9	40.6	39.2	38.9
Czech Republic	..	..	..	..	..	..	..	..	39.7	39.6	38.8	37.2	36.3	35.4	36.2	40.6	40.4	39.2	39.8
Denmark	..	..	..	55.7	54.6	52.5	52.1	53.3	55.2	55.6	54.3	55.3	54.8	55.2	55.6	53.1	53.5	52.2	51.6
Finland	45.9	47.3	45.4	47.7	47.6	49.6	51.6	52.0	51.8	51.8	50.6	50.9	49.8	49.4	49.0	50.6	49.4	48.4	47.6
France	46.8	46.0	46.2	45.3	45.1	45.4	45.5	45.5	45.9	46.1	45.9	47.5	47.4	47.3	48.0	47.4	47.2	47.0	46.7
Germany	44.5	43.8	43.5	42.8	43.6	41.8	41.2	42.5	43.1	43.5	43.0	43.9	43.8	43.8	44.6	44.4	43.1	43.5	43.2
Greece	32.2	33.3	33.5	30.0	29.0	31.6	32.5	33.4	34.5	36.1	36.4	36.9	38.7	40.3	41.6	42.5	41.6	41.8	41.9
Hungary	..	..	..	..	..	..	..	..	53.2	52.3	48.7	47.3	45.0	44.9	44.8	44.5	44.1	44.1	44.4
Iceland	33.6	33.3	33.5	37.0	37.0	35.8	37.2	37.7	35.9	35.2	36.2	37.0	38.0	38.8	41.5	41.2	39.5	39.8	40.0
Ireland	40.3	40.4	39.9	41.1	37.5	37.1	38.5	38.8	38.6	39.1	35.9	36.2	35.4	34.5	34.2	33.8	32.0	31.9	31.6
Italy	36.8	37.7	37.7	38.8	39.6	41.2	42.3	42.6	45.2	43.4	43.5	44.2	45.8	44.5	44.9	44.2	44.3	44.1	44.1
Japan [a]	28.8	28.9	30.3	30.5	30.7	32.4	32.1	31.8	30.4	30.5	30.2	30.0	30.0	29.3	29.1	29.4	29.8	29.9	29.8
Korea	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	26.3	29.8	30.4	30.2	29.9
Luxembourg	..	..	..	..	..	46.5	44.8	44.2	46.3	45.2	45.5	45.3	44.1	43.3	43.5	44.3	43.9	42.6	41.4
Netherlands	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	42.6	43.7	43.8	42.0	41.9	41.4
New Zealand	..	45.4	46.0	44.5	44.1	43.5	41.7	41.7	41.0	42.4	41.5	40.5	40.0	39.3	39.7	40.1	39.2	39.1	39.0
Norway	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	49.8	51.6	55.5	56.9	56.3	55.8
Poland	..	..	..	..	..	..	..	..	49.8	45.9	44.5	43.3	42.8	41.5	41.4	41.6	40.6	40.9	40.9
Portugal	32.2	33.6	33.0	33.6	34.0	34.4	35.8	39.4	38.0	36.8	36.7	37.5	37.2	37.5	38.3	38.7	38.5	38.4	38.4
Slovak Republic	..	..	..	..	..	..	..	..	..	51.0	51.0	51.0	54.1	53.8	47.6	46.1	46.4	45.8	45.4
Spain	34.1	34.5	35.9	35.7	37.2	37.5	38.3	39.9	40.5	39.0	37.4	37.8	38.0	38.0	38.5	38.5	38.5	38.5	38.5
Sweden	56.5	57.3	58.7	58.1	60.0	59.7	57.0	56.5	55.6	54.0	54.2	56.8	56.4	57.6	56.4	55.9	57.3	54.6	54.2
United Kingdom	..	..	38.7	38.6	38.1	37.5	38.0	36.6	35.3	35.9	36.5	36.3	36.7	38.1	38.2	38.9	39.3	38.3	38.1
United States [b]	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	31.1	31.6	30.9	29.8	29.8
Euro area	42.2	42.0	42.0	41.7	42.2	42.1	42.4	43.0	44.1	43.7	43.4	44.3	44.5	44.2	44.7	44.4	43.8	43.7	43.5
Total of above European Union countries	42.5	42.4	41.9	41.9	42.0	41.9	42.2	42.6	43.2	42.8	42.6	43.3	43.6	43.6	44.1	43.9	43.6	43.4	43.1
Total of above OECD countries	33.5	33.6	34.5	34.4	34.6	34.8	34.9	34.9	35.3	35.3	35.3	35.7	35.9	36.0	36.2	36.5	36.2	35.7	35.5

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 *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods)* .

a) Includes deferred tax payments on postal savings accounts in 2000, 2001 and 2002.

b) Excludes the operating surpluses of public enterprises.

Source: OECD.

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Annex Table 28. **General government financial balances**

Surplus (+) or deficit (-) as a percentage of nominal GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	-5.1	-4.2	-2.2	-0.4	0.0	-1.2	-3.8	-6.0	-5.6	-4.6	-3.7	-2.2	-0.5	0.6	1.6	0.1	0.0	0.1	0.2
Austria	-2.6	-3.8	-4.4	-3.5	-3.1	-2.4	-3.0	-2.0	-4.2	-5.0	-5.3	-4.0	-2.0	-2.5	-2.4	-1.7	-0.1	-0.3	0.0
Belgium	-10.2	-10.1	-7.9	-7.3	-7.6	-6.8	-7.4	-8.0	-7.3	-5.1	-4.4	-3.8	-2.0	-0.9	-0.6	0.0	0.2	0.0	0.0
Canada	-8.6	-7.1	-5.4	-4.3	-4.6	-5.8	-8.3	-9.1	-8.7	-6.7	-5.3	-2.8	0.2	0.5	1.6	3.2	2.4	1.0	1.1
Czech Republic	..	..	..	..	..	..	..	..	-3.4	-5.1	-5.1	-5.7	-6.2	-6.3	-7.6	-5.5	-4.6	-8.7	-7.8
Denmark	..	..	..	1.5	0.3	-1.0	-2.4	-2.2	-2.9	-2.4	-2.3	-1.0	0.4	1.1	3.2	2.5	2.8	2.2	2.3
Finland	3.3	3.8	1.4	5.1	6.7	5.3	-1.1	-5.7	-7.3	-5.7	-3.7	-3.2	-1.5	1.3	1.9	7.0	4.9	3.2	3.3
France	-3.0	-3.2	-2.0	-2.5	-1.8	-2.1	-2.4	-4.2	-6.0	-5.5	-5.5	-4.1	-3.0	-2.7	-1.6	-1.4	-1.4	-2.0	-1.8
Germany	-1.1	-1.3	-1.8	-2.1	0.1	-2.0	-2.9	-2.6	-3.1	-2.4	-3.3	-3.4	-2.7	-2.2	-1.6	1.2	-2.7	-2.8	-2.1
Greece	-11.6	-9.6	-9.6	-11.4	-14.3	-15.9	-11.4	-12.6	-13.6	-9.9	-10.2	-7.4	-4.0	-2.4	-1.7	-0.8	0.1	0.4	1.0
Hungary	..	..	..	..	..	..	..	..	-6.6	-11.0	-7.6	-5.9	-7.2	-8.3	-5.2	-3.0	-5.2	-5.5	-4.4
Iceland	-1.6	-4.0	-0.8	-2.0	-4.5	-3.3	-2.9	-2.8	-4.5	-4.7	-3.0	-1.6	0.0	0.5	2.4	2.5	-0.1	-0.5	-0.2
Ireland	-10.3	-10.2	-8.2	-4.2	-1.7	-2.8	-2.9	-3.0	-2.7	-2.0	-2.2	-0.2	1.2	2.3	2.3	4.5	1.4	0.1	-0.3
Italy	-12.7	-12.2	-11.8	-11.3	-11.7	-11.8	-11.7	-10.7	-10.3	-9.3	-7.6	-7.1	-2.7	-3.1	-1.8	-0.6	-1.5	-1.4	-1.3
Japan [a]	-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	-7.1	-7.4	-7.1	-8.0	-7.8
Korea	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	3.1	6.9	6.8	7.0	7.1
Luxembourg	..	..	..	..	..	5.2	1.5	0.2	2.1	2.8	2.7	2.0	2.8	3.2	3.8	5.8	5.0	2.2	1.8
Netherlands	-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	-0.8	0.4	2.2	0.3	0.1	-0.3
New Zealand	..	-6.4	-2.1	-4.6	-3.4	-4.6	-3.5	-3.1	-0.4	3.1	2.9	2.9	1.6	-0.2	0.9	1.9	0.9	0.1	0.0
Norway	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	3.5	5.9	14.8	15.2	14.0	13.9
Poland	..	..	..	..	..	..	..	..	-4.5	-3.5	-2.5	-2.9	-2.8	-2.3	-2.0	-2.1	-5.0	-5.4	-5.5
Portugal	-7.2	-6.2	-5.4	-3.4	-2.3	-4.9	-5.8	-2.9	-5.9	-5.9	-4.4	-3.8	-2.6	-2.3	-2.3	-1.6	-2.5	-2.4	-1.8
Slovak Republic	..	..	..	..	..	..	..	..	..	-3.8	-2.7	-8.1	-5.7	-4.9	-6.6	-6.1	-6.4	-6.3	-5.7
Spain	-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	-0.3	0.0
Sweden	-3.9	-1.4	3.9	3.0	4.9	3.8	-2.0	-7.8	-11.9	-10.8	-7.7	-3.1	-1.6	2.1	1.3	3.7	4.8	2.1	2.4
United Kingdom [b]	-2.9	-2.6	-1.8	0.5	0.8	-1.6	-3.1	-6.4	-7.9	-6.7	-5.8	-4.4	-2.2	0.4	1.1	1.6	1.0	-0.8	-1.3
United States [c]	-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	0.8	1.7	0.5	-1.0	-0.7
Euro area	-4.9	-5.0	-4.7	-4.5	-3.9	-4.7	-5.0	-5.1	-5.8	-5.1	-5.0	-4.3	-2.6	-2.3	-1.3	0.2	-1.3	-1.5	-1.2
Total of above European Union countries	-4.9	-4.9	-4.2	-3.6	-3.0	-4.1	-4.7	-5.4	-6.4	-5.6	-5.3	-4.3	-2.5	-1.7	-0.8	0.5	-0.8	-1.3	-1.1
Total of above OECD countries	-4.2	-4.2	-3.3	-2.7	-2.2	-3.0	-3.7	-4.6	-5.0	-4.2	-3.9	-3.2	-1.8	-1.4	-0.9	0.0	-1.0	-1.9	-1.7
Memorandum items																			
General government financial balances excluding social security																			
United States	-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	-0.6	0.2	-1.1	-2.5	-2.4
Japan [d]	-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	-8.1	-7.9	-7.6	-8.4	-7.8

Note: Financial balances include one-off revenues from the sale of the mobile telephone licenses where reported revenues are substantial: *i.e.* Australia (2000-2001), Austria (2000), Belgium (2001), Denmark (2001), France (2001), Germany (2000), Greece (2001), Italy (2000), Netherlands (2000), New Zealand (2001), Portugal (2000) and Spain (2000). For some EU countries, the figures may change once a treatment has been agreed for the securitisation of some public assets or receivables. Finally, being on a national account basis, government financial balance may differ for some EU countries and for some years from the numbers reported to the European Commission under the Excessive Deficit Procedure. See *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods)* .

a) Deferred tax payments on postal savings accounts are included in 2000, 2001 and 2002. The 2000 outlays include capital transfers to the Deposit Insurance Company.

b) 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.

c) The general government sector includes public enterprises.

d) From 1991 onwards data are based on SNA93 and thus exclude private pension funds.

Source: OECD.

Annex Table 29. **General government structural balances**

Surplus (+) or deficit (-) as a percentage of potential GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	-5.2	-3.9	-2.1	-0.5	-0.3	-0.9	-2.5	-4.6	-4.6	-4.1	-3.4	-2.0	-0.3	0.5	1.4	-0.2	0.0	0.2	0.3
Austria	-1.9	-3.2	-3.7	-3.1	-3.4	-3.1	-3.8	-2.7	-4.1	-4.9	-5.0	-3.8	-1.8	-2.7	-2.6	-2.4	0.0	0.1	0.3
Belgium	-8.0	-8.0	-6.8	-8.0	-9.4	-9.1	-9.2	-9.2	-6.0	-3.9	-3.3	-2.1	-1.1	0.0	-0.1	-0.5	0.2	0.9	0.6
Canada	-8.4	-7.1	-6.2	-6.0	-6.1	-6.5	-6.9	-7.1	-6.8	-5.9	-4.6	-1.6	1.0	1.0	1.5	2.5	2.3	0.9	0.7
Denmark	..	..	..	0.5	0.3	-0.5	-1.6	-0.8	-0.2	-2.4	-2.5	-1.5	-0.8	-0.2	1.8	0.7	1.8	1.6	1.7
Finland	3.9	4.4	1.2	3.6	3.9	3.3	1.8	0.6	0.8	0.8	1.0	0.5	0.0	1.7	2.0	5.7	5.0	4.3	4.2
France	-1.3	-1.7	-0.7	-2.1	-2.2	-2.7	-2.7	-4.2	-5.0	-4.6	-4.6	-2.8	-1.8	-2.0	-1.3	-1.7	-1.7	-1.8	-1.8
Germany	0.0	-0.6	-1.1	-2.1	-0.1	-3.2	-3.6	-3.2	-2.1	-1.7	-2.7	-2.4	-1.7	-1.3	-0.8	-1.3	-2.0	-1.5	-1.1
Greece	-10.7	-8.8	-7.5	-10.7	-14.7	-15.9	-11.8	-12.4	-11.9	-8.4	-8.7	-6.1	-3.3	-1.3	-0.9	-0.5	-0.4	0.2	0.6
Iceland	-1.3	-4.9	-3.4	-3.5	-5.2	-3.7	-2.6	-0.5	-1.9	-3.4	-1.2	-1.0	0.4	0.1	2.0	1.4	-1.3	-0.4	-0.1
Ireland	-9.4	-7.7	-6.2	-3.1	-1.5	-4.0	-2.8	-2.1	-0.9	0.0	-1.3	0.5	1.0	2.3	1.6	2.8	-0.4	-0.4	-0.5
Italy	-11.7	-11.5	-11.4	-11.8	-12.6	-12.6	-12.1	-10.4	-8.8	-8.4	-7.6	-6.9	-2.5	-2.7	-1.1	-1.4	-0.8	-0.4	-0.5
Japan[a]	-0.2	0.0	0.9	1.2	1.6	1.3	1.4	0.6	-2.3	-2.6	-3.9	-5.1	-4.1	-5.3	-6.8	-7.4	-6.7	-7.2	-6.8
Netherlands	-3.6	-5.4	-5.8	-4.3	-6.0	-7.6	-4.8	-5.4	-3.5	-4.7	-4.3	-2.1	-1.6	-1.7	-0.7	0.3	0.3	0.9	0.5
New Zealand	..	-7.9	-3.0	-4.4	-3.0	-3.1	-0.5	0.0	0.8	2.6	2.1	2.1	1.2	0.7	1.0	1.4	0.5	0.0	-0.2
Norway[b]	-0.9	1.1	0.3	0.8	0.2	-1.5	-4.4	-6.4	-6.7	-5.6	-2.2	-2.1	-1.4	-2.7	-1.2	0.1	0.0	-0.9	-1.5
Portugal	-4.7	-4.1	-4.3	-3.5	-3.4	-6.4	-7.8	-4.1	-5.2	-4.4	-3.3	-3.1	-2.1	-2.4	-2.5	-2.4	-2.5	-2.0	-1.4
Spain	-4.6	-4.9	-3.3	-3.8	-4.7	-5.6	-5.5	-4.3	-5.4	-4.6	-4.9	-2.9	-1.5	-1.5	-0.7	-0.4	0.1	0.2	0.3
Sweden	-3.8	-2.1	2.2	0.7	2.2	1.6	-2.1	-5.2	-7.2	-7.9	-6.0	-0.9	0.6	3.5	1.6	3.4	5.4	2.8	2.5
United Kingdom	..	..	-2.7	-1.8	-1.3	-2.9	-2.2	-4.2	-5.6	-5.6	-5.0	-3.7	-2.0	0.4	1.4	1.5	0.9	-0.6	-1.4
United States	-4.9	-5.1	-4.3	-3.9	-3.7	-4.5	-4.3	-5.3	-4.4	-3.5	-2.8	-2.1	-1.0	0.0	0.5	1.3	0.6	-0.7	-0.5
Euro area	-3.7	-4.0	-3.9	-4.6	-4.5	-5.8	-5.8	-5.3	-4.5	-4.1	-4.3	-3.2	-1.7	-1.6	-0.9	-1.0	-1.1	-0.7	-0.7
Total of above European Union countries	-4.1	-4.3	-3.8	-4.1	-3.9	-5.2	-5.1	-5.2	-5.0	-4.6	-4.6	-3.4	-1.8	-1.2	-0.5	-0.5	-0.6	-0.6	-0.7
Total of above OECD countries	-3.9	-4.0	-3.3	-3.2	-3.0	-3.9	-3.7	-4.4	-4.4	-3.9	-3.7	-3.0	-1.7	-1.3	-1.0	-0.7	-0.9	-1.6	-1.5

Note: Structural balances exclude one-off revenues from the sale of the mobile telephone licenses for those countries that have recorded the proceeds as negative expenditure at the time the license was allocated (see note to Table 28). See *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods)* for details on the methodology used for estimating the structural component of government balances.

a) Includes deferred tax payments on postal savings accounts in 2000, 2001 and 2002. The 2000 outlays include capital transfers to the Deposit Insurance Company.

b) As a percentage of mainland potential GDP. The financial balances shown exclude revenues from oil production.

Source: OECD.

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Annex Table 30. **General government primary balances**

Surplus (+) or deficit (-) as a percentage of nominal GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	-1.3	-0.1	1.8	3.3	3.6	2.1	-0.9	-2.6	-2.6	-0.6	0.1	1.1	2.1	2.7	3.6	2.0	1.7	1.7	1.8
Austria	0.2	-0.9	-1.3	-0.3	0.0	0.8	0.3	1.4	-0.7	-1.5	-1.7	-0.1	1.5	0.8	0.7	1.4	1.8	1.4	1.5
Belgium	0.0	0.6	2.2	2.5	3.2	4.4	3.3	2.6	3.2	4.2	4.5	4.7	5.6	6.4	6.1	6.5	6.5	5.7	5.4
Canada	-4.6	-3.0	-1.3	-0.1	0.1	-0.6	-3.2	-4.1	-3.8	-1.7	0.2	2.4	5.0	5.3	6.0	6.6	5.4	4.2	4.1
Denmark	..	..	..	5.8	4.3	2.8	1.6	1.0	0.6	0.9	0.9	1.9	3.3	3.6	5.5	4.4	4.3	3.8	3.8
Finland	2.4	2.7	0.5	4.2	5.5	3.6	-3.1	-7.6	-7.7	-4.6	-2.8	-1.7	0.4	3.0	3.5	8.0	5.6	3.9	3.9
France	-0.9	-1.0	0.2	-0.3	0.4	0.3	0.1	-1.4	-3.0	-2.4	-2.2	-0.6	0.2	0.5	1.4	1.6	1.5	0.9	1.0
Germany	1.1	1.0	0.4	0.2	2.2	-0.1	-0.8	0.0	-0.5	0.3	-0.3	-0.3	0.3	0.9	1.5	4.0	0.0	0.1	0.8
Greece	-6.6	-4.2	-2.8	-4.0	-6.8	-5.9	-2.1	-1.1	-1.0	4.0	0.9	3.1	4.2	5.3	5.6	6.2	6.3	5.9	6.1
Iceland	-1.5	-3.4	-0.5	-0.8	-3.1	-1.1	-0.8	-0.6	-2.1	-2.2	-0.1	1.0	2.5	2.9	4.7	4.4	1.9	1.1	1.4
Ireland	-3.3	-3.4	-0.5	2.1	4.3	3.4	2.8	2.2	2.1	2.6	1.8	3.0	4.1	4.6	3.7	5.5	1.6	0.2	0.0
Italy	-4.6	-3.9	-4.2	-3.3	-2.7	-1.8	-0.4	1.5	2.3	1.7	3.3	3.8	6.1	4.7	4.4	5.4	4.4	4.3	4.5
Japan	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	-5.8	-6.0	-5.7	-6.8	-6.3
Korea	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	2.0	5.8	5.7	6.0	6.2
Luxembourg	..	..	..	..	..	3.0	-0.6	-1.7	0.5	1.5	1.5	1.1	2.0	2.2	3.0	4.8	4.1	1.3	1.0
Netherlands	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	3.4	4.3	5.4	2.8	2.3	1.4
New Zealand	..	-2.1	1.9	-1.3	0.4	-0.5	-0.7	-0.2	1.9	4.4	4.4	3.5	2.2	-1.4	1.3	2.3	1.1	0.3	0.0
Norway	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	3.2	4.8	13.7	14.1	13.0	12.8
Portugal	0.9	2.2	2.1	3.3	3.7	2.9	1.8	4.1	0.1	0.2	1.9	1.5	1.7	1.1	0.9	1.5	0.6	0.7	1.2
Slovak Republic	..	..	..	..	..	..	..	..	..	-0.2	-0.2	-5.5	-3.4	-2.4	-3.1	-3.2	-3.2	-3.1	-2.5
Spain	-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	2.9	2.5	2.7
Sweden	-0.9	0.8	5.6	3.9	5.4	3.9	-1.8	-7.5	-11.0	-8.9	-5.1	-0.1	1.7	4.9	4.0	5.8	7.0	2.8	2.9
United Kingdom	0.5	0.6	1.3	3.2	3.2	0.8	-1.1	-4.4	-5.7	-4.1	-2.8	-1.6	0.8	3.2	3.5	3.7	2.6	1.1	0.6
United States	-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	3.7	4.4	2.8	1.0	1.2
Euro area	-1.2	-1.1	-0.8	-0.6	0.3	-0.2	-0.3	0.0	-0.6	-0.2	-0.1	0.8	2.0	2.1	2.5	3.8	2.1	1.9	2.1
Total of above European Union countries	-1.1	-0.9	-0.3	0.2	0.9	0.0	-0.4	-0.8	-1.5	-0.9	-0.4	0.6	1.9	2.4	2.8	3.9	2.4	1.8	2.0
Total of above OECD countries	-0.9	-0.9	-0.1	0.5	1.1	0.3	-0.3	-1.0	-1.5	-0.8	-0.3	0.4	1.6	1.8	1.9	2.7	1.5	0.4	0.7

Note: The primary balance is the difference between the financial balance and net interest payments. For more details see footnotes of Annex Tables 28 and 32, *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods)* .

Source: OECD.

Annex Table 31. **General government structural primary balances**

Surplus (+) or deficit (-) as a percentage of potential GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	-1.5	0.2	1.8	3.2	3.4	2.4	0.3	-1.3	-1.7	-0.2	0.4	1.2	2.3	2.6	3.4	1.7	1.7	1.9	1.8
Austria	0.9	-0.3	-0.7	0.1	-0.2	0.2	-0.3	0.8	-0.5	-1.4	-1.5	0.1	1.7	0.7	0.5	0.7	1.8	1.7	1.7
Belgium	1.9	2.4	3.2	1.9	1.7	2.5	1.8	1.6	4.3	5.2	5.4	6.2	6.4	7.2	6.5	6.0	6.4	6.6	6.0
Canada	-4.5	-3.0	-1.9	-1.5	-1.3	-1.2	-2.0	-2.2	-2.1	-1.0	0.8	3.4	5.7	5.8	5.9	5.9	5.2	4.0	3.7
Denmark	..	..	..	4.9	4.4	3.3	2.3	2.4	3.1	0.9	0.7	1.4	2.2	2.4	4.1	2.7	3.4	3.2	3.2
Finland	3.0	3.4	0.3	2.6	2.6	1.5	0.0	-1.2	0.5	1.8	1.8	1.9	1.9	3.4	3.6	6.7	5.7	5.0	4.8
France	0.7	0.4	1.4	0.1	0.1	-0.2	-0.1	-1.5	-2.1	-1.6	-1.4	0.5	1.4	1.1	1.6	1.3	1.2	1.1	0.9
Germany	2.2	1.7	1.2	0.1	2.1	-1.3	-1.4	-0.6	0.5	1.0	0.3	0.6	1.3	1.7	2.2	1.5	0.7	1.3	1.7
Greece	-5.8	-3.5	-1.0	-3.5	-7.1	-5.8	-2.4	-0.9	0.3	5.1	2.1	4.1	4.8	6.3	6.3	6.4	5.8	5.8	5.8
Iceland	-1.1	-4.2	-3.0	-2.3	-3.7	-1.5	-0.5	1.5	0.3	-1.0	1.5	1.6	2.9	2.6	4.3	3.4	0.8	1.2	1.5
Ireland	-2.5	-1.2	1.1	3.1	4.4	2.4	2.9	3.0	3.7	4.3	2.6	3.7	4.0	4.6	3.0	3.8	-0.1	-0.3	-0.2
Italy	-3.8	-3.4	-3.9	-3.7	-3.5	-2.5	-0.7	1.7	3.4	2.4	3.3	4.0	6.2	5.0	4.9	4.6	5.0	5.3	5.2
Japan [a]	2.2	2.1	3.0	3.0	3.3	2.5	2.5	1.6	-1.2	-2.4	-3.2	-3.9	-2.9	-4.0	-5.5	-6.0	-5.3	-6.0	-5.4
Netherlands	0.8	-1.0	-1.2	0.3	-1.8	-3.4	-0.4	-1.0	1.0	-0.2	0.4	2.6	2.9	2.6	3.2	3.6	2.8	3.0	2.2
New Zealand	..	-3.5	1.1	-1.1	0.8	0.9	2.3	2.7	3.1	3.9	3.6	2.8	1.8	-0.4	1.5	1.8	0.8	0.2	-0.3
Norway [b]	-2.4	-0.9	-1.8	-1.8	-2.3	-3.9	-6.9	-8.4	-8.2	-6.3	-2.9	-2.7	-1.9	-3.1	-2.4	-1.4	-1.5	-2.3	-2.9
Portugal	2.7	3.7	3.0	3.2	2.8	1.8	0.2	3.1	0.7	1.4	2.7	2.2	2.0	1.1	0.7	0.8	0.6	1.1	1.6
Spain	-3.8	-2.3	-0.2	-1.1	-1.3	-2.3	-2.3	-0.5	-1.0	-0.6	-0.2	1.8	2.7	2.4	2.6	2.7	3.0	3.0	3.0
Sweden	-0.8	0.1	4.0	1.6	2.7	1.8	-1.9	-5.0	-6.3	-6.0	-3.5	2.0	3.8	6.2	4.2	5.5	7.5	3.5	3.1
United Kingdom	..	..	0.4	1.0	1.2	-0.5	-0.2	-2.3	-3.5	-3.1	-2.1	-0.9	1.0	3.2	3.8	3.6	2.6	1.2	0.4
United States	-1.6	-1.9	-1.0	-0.6	-0.3	-1.0	-0.7	-1.7	-0.9	0.0	0.8	1.4	2.3	3.2	3.4	4.0	2.9	1.3	1.4
Euro area	-0.1	-0.1	0.0	-0.7	-0.3	-1.3	-1.0	-0.2	0.5	0.7	0.6	1.8	2.8	2.6	2.9	2.6	2.3	2.6	2.6
Total of above European Union countries	-0.3	-0.3	0.1	-0.2	0.1	-1.0	-0.7	-0.5	-0.2	0.0	0.2	1.4	2.6	2.8	3.1	2.9	2.6	2.5	2.4
Total of above OECD countries	-0.7	-0.7	0.1	0.1	0.5	-0.4	-0.2	-0.8	-0.8	-0.4	-0.1	0.6	1.7	2.0	2.0	2.0	1.5	0.7	0.8

Note : The structural primary balance is the difference between the structural balance and net interest payments. It excludes 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)* for details on the methodology used for estimating the structural component of government balances.

a) Includes deferred tax payments on postal savings accounts in 2000, 2001 and 2002. The 2000 outlays include capital transfers to the Deposit Insurance Company.

b) As a percentage of mainland potential GDP. The financial balances shown exclude revenues from oil production.

Source: OECD.

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Annex Table 32. **General government net debt interest payments**

As a percentage of nominal GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	3.8	4.1	3.9	3.7	3.7	3.3	2.9	3.4	2.9	4.0	3.9	3.2	2.6	2.1	2.0	1.8	1.7	1.6	1.5
Austria	2.8	2.9	3.1	3.2	3.1	3.2	3.3	3.4	3.6	3.4	3.6	3.8	3.5	3.3	3.1	3.1	1.9	1.6	1.4
Belgium	10.3	10.7	10.1	9.9	10.8	11.2	10.7	10.6	10.6	9.2	8.9	8.5	7.6	7.2	6.7	6.5	6.3	5.7	5.4
Canada	4.0	4.1	4.1	4.3	4.7	5.2	5.1	5.0	4.9	5.0	5.5	5.2	4.8	4.8	4.4	3.3	2.9	3.1	3.0
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	1.9	1.6	1.6	1.5
Finland	-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	1.0	0.8	0.7	0.6
France	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	2.9	2.9	2.8
Germany [a]	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	3.1	2.8	2.8	2.9	2.9
Greece	5.0	5.4	6.8	7.4	7.5	10.0	9.3	11.5	12.6	13.9	11.2	10.5	8.2	7.8	7.3	7.0	6.2	5.6	5.2
Iceland	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	2.3	1.9	2.0	1.7	1.6
Ireland	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	1.3	0.9	0.3	0.1	0.3
Italy	8.1	8.3	7.6	8.1	9.0	9.9	11.3	12.2	12.6	11.0	10.9	10.9	8.8	7.8	6.2	6.0	5.9	5.8	5.8
Japan [b]	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	1.4	1.4	1.2	1.5
Korea	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	-1.1	-1.1	-1.1	-1.0	-1.0
Luxembourg	..	..	..	..	..	-2.2	-2.1	-1.9	-1.6	-1.3	-1.1	-0.9	-0.8	-0.9	-0.7	-0.9	-0.9	-0.8	-0.7
Netherlands	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	3.9	3.2	2.5	2.2	1.7
New Zealand	..	4.3	4.0	3.3	3.9	4.1	2.9	2.9	2.3	1.3	1.4	0.7	0.6	-1.1	0.4	0.3	0.3	0.2	-0.1
Norway	-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	-1.1	-1.1	-1.1	-1.0
Portugal	8.0	8.3	7.5	6.7	6.0	7.8	7.6	7.0	6.0	6.1	6.3	5.3	4.2	3.4	3.2	3.1	3.1	3.1	3.1
Slovak Republic	..	..	..	..	..	..	..	..	..	3.6	2.5	2.6	2.3	2.5	3.5	2.9	3.2	3.2	3.2
Spain	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	2.9	2.8	2.7
Sweden	2.9	2.2	1.7	0.9	0.5	0.1	0.1	0.2	1.0	1.9	2.6	3.0	3.3	2.8	2.7	2.2	2.1	0.7	0.6
United Kingdom	3.4	3.2	3.1	2.7	2.4	2.3	2.0	2.0	2.2	2.6	2.9	2.8	3.0	2.8	2.4	2.1	1.6	1.9	1.8
United States	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	2.7	2.3	2.0	1.9
Euro area	3.7	4.0	3.9	3.9	4.2	4.4	4.7	5.1	5.2	4.9	5.0	5.1	4.6	4.3	3.8	3.6	3.4	3.4	3.3
Total of above European Union countries	3.8	4.0	3.9	3.8	4.0	4.1	4.3	4.6	4.9	4.7	4.9	4.9	4.4	4.1	3.6	3.4	3.2	3.1	3.1
Total of above OECD countries	3.2	3.3	3.3	3.2	3.3	3.3	3.4	3.5	3.6	3.4	3.6	3.6	3.3	3.1	2.8	2.6	2.4	2.2	2.2

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 *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*

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 33. **General government gross financial liabilities**

As a percentage of nominal GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	..	..	..	25.9	23.8	22.6	23.8	28.2	31.6	41.4	43.2	40.3	38.5	33.2	27.5	23.4	24.4	24.3	23.4
Austria	49.1	53.6	57.5	58.9	58.1	57.2	57.5	57.2	61.8	64.7	69.2	69.1	64.7	63.9	64.9	63.6	61.7	60.4	57.4
Belgium	118.1	123.3	127.6	127.6	123.7	128.2	130.1	131.4	138.1	136.8	133.9	130.1	124.7	119.3	115.0	109.3	108.2	104.4	99.5
Canada	84.2	88.9	89.2	88.8	90.0	93.1	102.1	110.4	116.0	117.4	120.4	120.3	118.4	115.2	113.2	103.0	101.6	99.7	96.2
Denmark	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	59.7	54.9	50.1	46.4	43.4	40.2
Finland	..	..	..	..	..	14.3	22.6	40.6	56.0	58.0	57.2	57.1	54.1	48.8	46.8	44.0	43.6	41.7	40.9
France	38.0	38.8	40.1	40.0	39.9	39.5	40.3	44.7	51.6	55.3	59.3	62.3	64.7	65.0	64.6	64.1	64.8	65.6	65.7
Germany [a]	40.6	40.6	41.6	42.1	40.8	41.4	38.8	41.8	47.4	47.9	57.1	60.3	61.8	63.2	60.9	60.8	60.3	61.3	60.9
Greece	47.1	47.7	53.0	62.7	65.8	89.1	91.1	97.6	110.3	108.0	108.7	111.3	108.2	104.9	103.8	102.7	99.7	98.6	97.5
Iceland	32.7	30.2	27.8	31.2	36.8	36.5	38.6	46.3	53.4	55.8	59.3	56.7	54.1	49.2	44.4	41.8	47.0	42.0	37.3
Ireland	99.5	110.6	111.8	108.2	98.9	101.4	102.8	100.1	96.2	90.4	82.6	74.2	65.1	55.1	49.6	38.8	36.5	33.8	30.9
Italy	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	117.5	115.9	111.4	108.7	106.3	103.1
Japan [b]	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	115.8	123.5	132.8	143.3	152.0
Korea	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	15.2	18.7	19.2	15.9	13.8	12.4
Luxembourg	..	..	..	..	..	4.4	3.9	4.8	5.8	5.4	5.6	6.2	6.0	6.3	6.0	5.6	5.5	4.8	5.0
Netherlands	68.7	70.6	73.1	76.0	76.0	76.7	76.9	77.6	78.8	75.7	77.2	75.2	69.9	66.8	63.1	56.0	53.2	50.8	49.0
New Zealand	..	..	..	..	..	..	..	..	70.6	63.9	57.2	51.8	49.8	50.4	48.3	45.5	44.6	43.7	42.7
Norway	32.5	40.9	33.9	33.0	33.0	29.5	27.8	32.4	40.8	37.2	34.7	31.0	27.9	26.6	27.6	30.9	26.8	25.9	25.9
Portugal	55.8	54.0	60.8	61.0	59.0	55.6	57.1	54.8	61.1	62.1	64.3	62.7	58.9	54.8	54.2	53.5	55.6	55.6	54.2
Slovak Republic	..	..	..	..	..	..	..	..	..	25.0	22.8	27.4	29.7	29.7	29.8	33.5	37.3	39.9	41.4
Spain	49.0	49.8	49.0	45.3	46.9	48.8	49.9	52.4	63.5	65.7	73.6	81.3	80.7	81.3	75.4	72.1	69.1	67.5	65.4
Sweden	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	72.6	68.2	60.6	52.9	48.9	46.6
United Kingdom	59.2	58.4	56.1	49.7	43.0	44.4	44.3	49.2	58.1	55.8	60.6	60.1	60.5	61.4	56.4	54.0	52.5	51.8	51.6
United States	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	65.3	59.4	59.5	58.9	57.6
Euro area	52.9	54.6	56.7	57.3	58.0	60.4	60.7	64.5	69.0	70.8	74.8	77.8	77.9	77.2	75.1	72.9	71.9	71.5	70.0
Total of above European Union countries	56.8	58.0	59.1	58.3	57.2	58.8	59.0	63.6	69.9	71.3	75.4	76.5	76.1	75.6	72.9	70.5	69.1	68.4	67.1
Total of above OECD countries	59.2	61.7	62.7	61.6	60.8	61.7	63.4	66.9	71.0	72.1	74.5	75.6	75.2	75.5	75.2	72.8	73.5	74.5	74.7

Note: Gross debt measures are not always comparable across countries due to different definition or treatment of debt components by countries. Notably, these data include the funded portion of government employee pension liabilities for some OECD countries, including Australia and the United States (where they amounted to 7.5 percentage points of GDP in 2001). For Canada, government employee pension liabilities have been explicitly recognised by the government although they are not fully funded; they amounted to 17.7 per cent of GDP in 2001 and are included in the data. The debt position of these countries is thus overstated relative to countries that have large unfunded liabilities for such pensions which according to ESA95/SNA93 are not counted in the debt figures, but rather as a memorandum item to the debt. 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 58. For more details see *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods)*.

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.

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Annex Table 34. **General government net financial liabilities**

As a percentage of nominal GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	..	..	..	15.3	11.3	10.7	11.6	16.2	22.1	26.6	27.3	21.7	21.9	16.6	15.3	8.7	10.8	10.7	9.9
Austria	30.1	33.3	36.2	38.4	38.1	37.5	37.4	38.7	43.5	45.8	50.5	50.2	47.8	47.7	48.5	48.2	47.0	46.0	43.9
Belgium	108.2	113.5	117.6	117.8	114.3	116.0	117.4	119.5	126.0	125.7	124.9	121.8	117.5	112.2	107.4	102.2	98.9	95.2	90.4
Canada	38.6	43.6	43.4	42.6	45.7	48.3	55.8	66.0	71.4	74.1	76.2	75.7	74.4	71.7	67.0	57.5	53.0	50.6	46.6
Denmark	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	36.0	31.1	26.6	22.9	20.0	16.7
Finland	-27.1	-28.0	-27.9	-29.2	-33.3	-35.5	-34.2	-25.8	-17.3	-17.4	-12.5	-15.1	-15.6	-26.8	-62.0	-44.3	-47.9	-49.8	-50.5
France	10.6	13.6	12.9	13.9	14.6	16.1	16.3	18.4	26.7	29.4	35.9	41.5	41.4	42.4	42.6	42.2	42.1	42.9	42.9
Germany[a]	19.8	20.0	21.0	21.9	20.4	21.0	20.2	24.4	27.9	29.1	39.4	42.2	43.0	45.4	43.6	41.5	43.5	45.4	46.0
Iceland	6.0	8.9	8.1	9.8	17.7	19.1	19.9	26.6	34.7	37.7	39.7	39.6	38.3	31.8	24.1	24.0	25.8	24.1	23.1
Italy	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	105.3	103.7	99.3	96.5	94.2	91.0
Japan[b]	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	45.2	50.5	58.5	67.8	76.5
Korea	-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	-24.5	-25.6	-28.5	-34.1	-38.4	-42.4
Netherlands	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	50.5	44.8	42.1	39.9	38.1
New Zealand	..	..	..	..	..	..	..	..	48.0	42.0	35.5	31.2	28.8	26.8	24.4	22.1	20.0	19.0	17.9
Norway	-36.9	-41.4	-42.8	-43.0	-42.2	-42.0	-38.3	-35.9	-32.7	-31.2	-32.9	-36.9	-43.5	-47.6	-54.3	-62.0	-75.2	-86.3	-95.3
Spain	26.1	29.3	29.9	30.6	30.7	31.8	33.2	35.4	42.3	46.5	49.2	53.3	52.1	51.7	46.0	42.4	39.8	38.2	36.1
Sweden	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	15.2	13.1	6.7	1.0	-1.2	-3.5
United Kingdom	30.8	31.2	29.5	23.8	19.1	15.1	15.3	21.6	30.9	31.1	36.9	38.7	40.1	41.9	36.7	33.4	30.9	30.1	29.9
United States	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	48.6	43.4	41.9	41.3	40.0
Euro area	32.7	35.5	36.1	37.5	39.3	38.4	39.4	43.5	48.1	50.2	55.3	59.1	59.1	59.1	56.7	54.5	54.0	53.9	52.9
Total of above European Union countries	34.6	36.5	36.3	36.3	35.6	33.8	34.5	39.2	45.7	48.1	53.5	55.5	55.3	55.5	52.6	50.0	48.8	48.4	47.4
Total of above OECD countries	36.2	38.2	38.0	37.1	36.3	35.0	36.2	39.9	43.8	45.4	47.9	49.0	48.9	48.8	46.9	44.1	44.0	44.8	44.9

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 33). 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 *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods)* .

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 35. **Short-term interest rates**

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	12.1	16.0	16.5	13.8	12.8	17.6	14.5	10.2	6.5	5.2	5.7	7.7	7.2	5.4	5.0	5.0	6.2	4.9	4.6	5.2
Austria	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	4.2	3.3	3.9
Belgium	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	4.2	3.3	3.9
Canada	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	5.8	4.0	2.7	4.5
Czech Republic	..	..	..	..	..	..	..	..	..	13.1	9.1	10.9	12.0	15.9	14.3	6.9	5.4	5.2	4.3	5.4
Denmark	11.7	10.3	9.1	10.1	8.5	9.6	10.9	9.7	11.0	10.4	6.1	6.1	3.9	3.7	4.1	3.3	4.9	4.6	3.6	4.2
Finland	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	4.2	3.3	3.9
France	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	4.2	3.3	3.9
Germany	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	4.2	3.3	3.9
Greece	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	4.2	3.3	3.9
Hungary	..	..	..	..	..	..	..	..	..	17.2	26.9	32.0	24.0	20.1	18.0	14.7	11.0	10.8	8.5	10.0
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	9.5	9.0
Ireland	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	4.2	3.3	3.9
Italy	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	4.2	3.3	3.9
Japan	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	0.1	0.1	0.0
Korea	..	..	..	..	..	..	..	18.3	16.4	13.0	13.3	14.1	12.7	13.4	15.2	6.8	7.1	5.3	5.2	6.3
Luxembourg	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	4.2	3.3	3.9
Mexico	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	12.2	9.0	8.8
Netherlands	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	4.2	3.3	3.9
New Zealand	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	5.7	5.5	6.0
Norway	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	7.2	6.6	6.6
Poland	..	..	..	..	..	..	..	..	..	34.9	31.8	27.7	21.3	23.1	19.9	14.7	18.9	15.7	9.1	8.4
Portugal	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	4.2	3.3	3.9
Slovak Republic	..	..	..	..	..	..	..	..	..	13.1	9.1	9.5	11.8	21.7	21.1	15.7	8.6	7.8	7.7	8.0
Spain	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	4.2	3.3	3.9
Sweden	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	4.0	4.1	4.9
Switzerland	4.3	4.9	4.2	3.8	3.1	7.3	8.9	8.2	7.9	4.9	4.2	2.9	2.0	1.6	1.5	1.4	3.2	2.9	1.7	2.4
Turkey	..	..	..	..	..	40.7	51.9	109.6	97.8	90.3	150.6	136.3	143.6	119.2	115.7	96.6	46.9	89.0	59.3	37.1
United Kingdom	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	5.0	4.2	5.1
United States	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	3.7	2.3	3.8
Euro area	11.1	9.9	8.5	8.2	7.7	10.0	10.7	10.6	11.1	8.6	6.3	6.5	4.8	4.3	3.9	3.0	4.4	4.2	3.3	3.9

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).*
Source: OECD.

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Annex Table 36. **Long-term interest rates**

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	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	5.6	6.2	6.3
Austria	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	5.2	5.4
Belgium	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	5.1	5.4
Canada	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	5.8	6.0	6.3
Denmark	14.4	11.6	10.1	11.3	9.9	9.7	10.6	9.3	9.0	7.3	7.8	8.3	7.2	6.3	5.0	4.9	5.7	5.1	5.2	5.4
Finland	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	5.1	5.3
France	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	5.0	5.1	5.3
Germany	8.1	7.2	6.3	6.4	6.6	7.1	8.7	8.5	7.8	6.5	6.9	6.9	6.2	5.6	4.6	4.5	5.3	4.8	4.9	5.1
Greece	..	..	..	..	..	..	..	..	..	..	..	..	..	9.8	8.5	6.3	6.1	5.3	5.4	5.5
Iceland	..	..	..	..	..	29.5	16.4	17.7	13.1	13.4	7.0	9.7	9.2	8.7	7.7	8.5	11.2	10.4	9.2	9.0
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	5.1	5.4
Italy	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	5.2	5.3	5.6
Japan	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	1.3	1.6	1.7
Korea	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	6.7	7.2	7.5
Luxembourg	..	..	..	..	..	7.7	9.3	8.8	8.2	6.8	7.2	7.2	6.3	5.6	4.7	4.7	5.5	5.0	5.1	5.4
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	13.8	10.7	10.0
Netherlands	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	4.9	5.1	5.3
New Zealand	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	6.4	6.9	6.6
Norway	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	6.2	6.2	6.4
Portugal	..	..	..	..	..	..	..	..	..	..	10.4	11.5	8.6	6.4	4.9	4.8	5.6	5.2	5.3	5.5
Slovak Republic	..	..	..	..	..	..	..	..	..	13.1	9.1	10.4	9.7	9.4	21.7	15.9	8.5	7.8	7.8	8.0
Spain	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	5.1	5.2	5.5
Sweden	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	5.1	5.4	5.7
Switzerland	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	3.0	3.0	3.9	3.4	3.5	3.7
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	113.6	106.6	38.7	94.6	65.9	38.9
United Kingdom	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	4.9	5.1	5.3
United States	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	5.0	5.2	5.5
Euro area	..	..	..	..	..	9.8	11.2	10.5	10.0	8.3	8.2	8.6	7.1	6.0	4.8	4.7	5.4	5.0	5.1	5.3

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).*
Source: OECD.

Annex Table 37. **Nominal exchange rates (*vis-à-vis* the US dollar)**

Average of daily rates

	Monetary unit	1991	1992	1993	1994	1995	1996	1997	1998	1999	1999	2000	2001	Estimates and assumptions[a] 2002	2003
Australia	*Dollar*	1.284	1.362	1.473	1.369	1.350	1.277	1.348	1.592	1.550	1.550	1.727	1.935	1.892	1.879
Austria	*Schilling*	11.67	10.99	11.63	11.42	10.08	10.58	12.20	12.38	12.91					
Belgium	*Franc*	34.16	32.15	34.55	33.46	29.50	30.98	35.76	36.30	37.86					
Canada	*Dollar*	1.146	1.209	1.290	1.366	1.372	1.364	1.385	1.483	1.486	1.486	1.485	1.548	1.594	1.595
Czech Republic	*Koruny*	..	..	29.15	28.79	26.54	27.15	31.70	32.28	34.59	34.588	38.637	38.016	34.942	34.520
Denmark	*Krone*	6.393	6.038	6.482	6.360	5.604	5.798	6.604	6.699	6.980	6.980	8.088	8.321	8.469	8.467
Finland	*Markka*	4.043	4.486	5.721	5.223	4.367	4.592	5.187	5.345	5.580					
France	*Franc*	5.641	5.294	5.662	5.552	4.991	5.116	5.837	5.899	6.157					
Germany	*Deutschemark*	1.659	1.562	1.653	1.623	1.433	1.505	1.734	1.759	1.836					
Greece	*Drachma*	182.1	190.5	229.1	242.2	231.6	240.7	272.9	295.3	305.7	0.897	1.072			
Hungary	*Forint*	..	..	91.9	105.1	125.7	152.6	186.6	214.3	237.1	237.1	282.3	286.5	275.5	275.2
Iceland	*Krona*	59.10	57.62	67.64	69.99	64.77	66.69	70.97	71.17	72.43	72.4	78.8	97.7	99.8	99.2
Ireland	*Pound*	0.622	0.588	0.683	0.670	0.624	0.625	0.660	0.703	0.739					
Italy	*Lira*	1241	1232	1572	1613	1629	1543	1703	1736	1817					
Japan	*Yen*	134.5	126.7	111.2	102.2	94.1	108.8	121.0	130.9	113.9	113.9	107.8	121.5	132.1	131.9
Korea	*Won*	733.2	780.0	802.4	804.3	771.4	804.4	950.5	1 400.5	1 186.7	1 186.7	1 130.6	1 290.4	1 327.7	1 330.4
Luxembourg	*Franc*	34.16	32.15	34.55	33.46	29.50	30.98	35.76	36.30	37.86					
Mexico	*Peso*	3.022	3.095	3.115	3.389	6.421	7.601	7.924	9.153	9.553	9.553	9.453	9.344	9.062	9.048
Netherlands	*Guilder*	1.870	1.759	1.857	1.820	1.605	1.686	1.951	1.983	2.068					
New Zealand	*Dollar*	1.729	1.860	1.851	1.687	1.524	1.454	1.513	1.869	1.892	1.892	2.205	2.382	2.288	2.266
Norway	*Krone*	6.484	6.214	7.094	7.057	6.337	6.457	7.072	7.545	7.797	7.797	8.797	8.993	8.707	8.639
Poland	*Zloty*	..	..	1.814	2.273	2.425	2.695	3.277	3.492	3.964	3.964	4.346	4.097	4.101	4.090
Portugal	*Escudo*	144.4	134.8	160.7	166.0	149.9	154.2	175.2	180.1	188.2	0.939	1.085	1.117	1.139	1.139
Slovak Republic	*Koruna*	..	..	30.8	32.0	29.7	30.7	33.6	35.2	41.4	41.363	46.230	48.346	47.566	47.360
Spain	*Peseta*	103.9	102.4	127.2	134.0	124.7	126.7	146.4	149.4	156.2					
Sweden	*Krona*	6.045	5.823	7.785	7.716	7.134	6.707	7.635	7.947	8.262	8.262	9.161	10.338	10.343	10.309
Switzerland	*Franc*	1.434	1.406	1.477	1.367	1.182	1.236	1.450	1.450	1.503	1.503	1.688	1.687	1.669	1.666
Turkey	*Lira*	4 169	6 861	10 964	29 778	45 738	81 281	151 595	260 473	418 984	418 984	624 325	1 228 269	1 453 359	1 897 452
United Kingdom	*Pound*	0.567	0.570	0.666	0.653	0.634	0.641	0.611	0.604	0.618	0.618	0.661	0.694	0.695	0.697
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
Euro area	*Euro*	..	..	..	..	..	..	..	..	..	0.939	1.085	1.117	1.139	1.139
	SDR	0.731	0.710	0.716	0.699	0.659	0.689	0.726	0.737	0.731	0.731	0.758	0.785	0.800	0.800

Note: When no rate is shown, the euro rate has been adopted.

a) On the technical assumption that exchange rates remain at their levels of 4 April 2002, except for Hungary and Turkey, where exchange rates vary according to official exchange rate policy.

Source: OECD.

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Annex Table 38. **Effective exchange rates**[a]

Indices 1995 = 100, average of daily rates

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Estimates and assumptions[b] 2002	2003
Australia	99.4	106.7	106.9	107.7	100.9	95.7	103.1	100.0	109.7	111.0	103.5	103.6	96.3	90.3	94.2	95.1
Austria	84.4	84.4	87.9	88.1	90.2	93.2	95.4	100.0	99.1	97.2	99.2	99.9	97.7	98.1	97.7	98.9
Belgium	79.5	79.7	85.2	86.1	88.7	90.7	94.7	100.0	98.4	94.5	96.8	96.3	92.5	93.6	93.5	94.0
Canada	102.5	109.7	113.2	116.5	110.7	105.6	100.8	100.0	101.9	102.2	97.4	97.1	98.0	95.1	92.8	92.8
Czech Republic	..	..	..	..	..	95.9	99.3	100.0	101.6	98.6	100.3	99.9	101.2	106.2	117.5	119.5
Denmark	81.3	80.0	86.5	86.0	88.7	92.9	95.1	100.0	99.1	96.8	99.3	98.7	94.8	96.4	96.1	96.5
Finland	91.9	96.1	99.9	97.0	85.2	76.7	87.0	100.0	97.6	95.4	98.2	101.1	96.6	98.6	98.3	98.8
France	80.6	80.5	86.4	85.9	89.6	93.3	96.1	100.0	100.4	97.7	100.0	99.3	95.7	96.6	96.5	97.2
Germany	72.7	73.2	79.4	80.1	84.0	88.6	93.0	100.0	98.6	95.2	98.7	98.6	94.3	95.5	95.2	96.3
Greece	151.9	142.4	133.8	120.8	113.7	106.0	101.2	100.0	98.4	96.6	93.9	94.6	88.4	89.1	89.3	89.9
Hungary	..	..	..	..	..	140.1	126.0	100.0	85.2	78.9	71.5	69.0	65.5	66.7	70.6	71.0
Iceland	142.9	121.9	110.4	110.9	110.5	104.0	99.6	100.0	99.5	101.7	104.5	106.3	107.4	91.0	90.2	91.0
Ireland	91.4	90.8	98.6	97.5	101.7	96.6	98.2	100.0	102.6	102.4	99.4	96.5	89.5	90.7	90.0	90.3
Italy	114.5	118.7	126.1	127.3	126.2	108.7	108.6	100.0	110.0	111.5	113.9	113.5	109.4	110.7	110.8	112.0
Japan	55.3	54.0	53.2	59.9	65.0	80.4	93.4	100.0	87.2	83.3	86.6	99.3	108.1	99.7	92.4	92.8
Korea	99.2	114.6	111.3	107.4	100.1	98.6	99.7	100.0	101.6	94.1	68.1	77.9	83.4	77.1	77.1	77.0
Luxembourg	87.1	86.8	91.0	91.6	93.5	94.1	96.8	100.0	98.9	96.7	97.7	97.5	94.9	95.4	95.1	95.4
Mexico	220.5	212.5	193.5	186.9	187.1	196.5	190.3	100.0	84.9	83.3	74.0	70.6	72.1	74.1	77.1	77.3
Netherlands	75.4	75.8	81.4	82.0	85.2	89.3	93.6	100.0	98.6	93.9	97.2	97.1	92.2	93.5	93.4	93.9
New Zealand	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	84.7	89.1	89.9
Norway	93.8	94.4	95.8	95.0	96.7	95.7	96.4	100.0	100.1	101.1	98.0	97.9	95.8	99.0	103.8	104.8
Poland	..	..	..	..	..	139.0	113.5	100.0	93.2	86.6	84.8	79.2	81.6	90.0	91.2	91.8
Portugal	92.3	91.8	93.3	95.8	101.3	97.8	96.9	100.0	99.6	98.3	98.2	97.7	95.4	96.3	96.2	96.7
Slovak Republic	..	..	..	..	..	97.9	96.7	100.0	100.9	105.6	106.6	100.6	102.3	99.8	101.5	102.1
Spain	103.7	109.7	117.0	118.4	117.1	104.6	99.7	100.0	101.0	96.9	98.1	97.3	94.3	95.4	95.4	95.9
Sweden	113.3	115.2	115.7	116.7	119.6	98.4	99.6	100.0	110.1	106.6	106.3	106.1	106.3	97.8	99.4	100.1
Switzerland	77.3	74.3	80.5	80.2	79.7	83.5	91.9	100.0	98.7	93.1	97.2	97.8	96.1	100.0	103.0	103.2
Turkey	2 816.1	2008.1	1546.9	1023.7	610.9	427.8	173.5	100.0	58.6	34.9	21.1	14.1	10.3	5.8	4.7	3.6
United Kingdom	110.2	108.0	109.0	111.1	108.4	100.2	103.4	100.0	102.3	119.2	127.0	127.5	130.9	129.6	132.0	132.2
United States	73.7	79.2	83.3	85.4	87.1	92.6	98.0	100.0	105.6	113.1	124.8	124.4	127.5	134.3	137.6	138.0
Euro area	66.2	68.3	81.1	81.6	86.9	86.0	92.0	100.0	102.0	95.5	100.7	99.0	90.1	92.4	92.0	93.9

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).*
b) On the technical assumption that exchange rates remain at their levels of 4 April 2002, except for Hungary and Turkey, where exchange rates vary according to official exchange rate policy.
Source: OECD.

Annex Table 39. **Export volumes**

Total goods, customs basis, percentage changes from previous year

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	17.7	9.0	3.1	8.1	0.1	4.8	7.2	16.2	6.3	6.2	6.3	3.0	12.3	8.0	0.1	4.8	9.7	1.4	3.3	8.2
Austria	9.5	9.5	1.2	2.0	7.6	15.0	10.7	7.1	3.7	-2.8	10.7	9.3	12.0	20.0	12.1	15.0	16.2	6.3	5.6	8.9
Belgium[a]	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	10.2	0.8	0.3	7.7
Canada	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	9.8	8.5	11.0	8.7	-3.9	3.4	9.3
Czech Republic	..	..	..	..	..	..	..	..	..	..	5.7	15.0	2.6	15.0	13.3	7.7	16.0	12.1	7.6	11.7
Denmark	5.5	4.6	1.4	2.4	7.6	7.4	6.5	7.1	5.3	0.1	7.5	6.0	3.4	6.3	1.5	6.7	10.8	2.3	4.4	7.3
Finland	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	9.1	1.0	2.7	9.3
France[b]	7.3	2.6	0.0	4.2	9.6	10.2	5.1	5.2	4.8	0.0	9.9	9.6	2.2	12.1	9.2	4.0	13.9	0.1	-2.8	8.1
Germany	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	12.8	2.9	2.8	7.9
Hungary	..	..	..	..	..	..	..	..	..	..	16.7	9.9	24.2	29.7	21.9	16.3	21.7	7.2	5.7	10.1
Iceland[c]	-3.6	12.7	34.5	25.2	0.8	-2.1	13.5	-1.2	-2.8	-4.7	10.8	11.7	5.3	-1.5	-3.0	5.8	5.7	3.9	-0.4	5.2
Ireland	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	20.5	1.8	3.4	9.8
Italy	6.7	7.4	1.8	2.5	5.6	8.6	3.3	0.2	3.7	8.8	11.9	13.2	1.2	3.8	2.6	1.8	10.2	0.3	1.7	7.6
Japan	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	-10.1	2.7	9.5
Korea	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	19.8	0.5	6.0	13.8
Luxembourg	..	..	..	..	..	12.8	2.2	3.7	-0.5	-0.2	6.6	3.6	1.3	12.5	16.1	5.4	16.9	4.4	-0.5	11.4
Mexico	10.4	-3.2	18.0	11.7	16.8	5.9	8.0	14.3	8.1	16.6	8.6	23.9	18.4	16.3	13.3	11.4	13.6	-2.7	4.5	8.8
Netherlands	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	8.3	6.5	8.4	5.2	2.7	7.3
New Zealand	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	6.1	3.1	4.9	8.0
Norway	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	4.1	5.0	2.9	2.9
Poland	..	..	..	..	..	..	..	..	..	..	19.6	17.1	9.9	13.8	8.8	2.8	25.1	12.7	5.4	11.3
Portugal	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	4.3	9.6	3.8	2.4	8.3
Slovak Republic	..	..	..	..	..	..	..	..	..	..	5.7	15.0	6.6	3.9	16.4	6.2	17.5	6.6	8.5	9.7
Spain	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	3.1	2.5	7.8
Sweden	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	6.1	11.3	-4.6	2.7	9.9
Switzerland	6.2	9.1	0.9	1.5	6.2	6.0	4.2	-1.0	3.8	0.4	4.8	3.8	2.5	7.6	4.5	3.7	7.4	1.8	-0.3	5.3
Turkey	29.5	14.5	-20.8	21.9	8.8	-1.6	1.1	6.4	6.5	7.6	22.0	5.7	12.8	18.5	6.7	5.8	19.8	5.5	0.6	7.0
United Kingdom	8.6	5.7	4.0	5.5	2.5	5.4	6.5	0.5	2.2	0.1	13.0	10.6	8.2	7.6	1.6	4.5	11.3	1.3	-0.9	9.6
United States[b]	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	2.1	3.9	11.3	-5.7	-3.1	7.3
Total OECD	10.3	5.3	2.6	4.9	7.8	7.3	5.0	3.7	3.8	2.0	9.4	9.4	6.5	11.1	5.7	5.7	12.0	-0.8	1.5	8.5

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)*.

a) Including Luxembourg until 1994.

b) Volume data use hedonic price deflators for certain components.

c) OECD estimates.

Source: OECD.

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Annex Table 40. **Import volumes**

Total goods, customs basis, percentage changes from previous year

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	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	7.1	7.2	5.6	-4.7	9.3	8.4
Austria	8.3	5.4	5.2	5.3	7.7	10.6	11.0	3.3	2.8	-1.3	12.9	6.7	12.4	15.8	12.4	13.3	8.8	4.1	4.8	8.2
Belgium[a]	4.9	3.8	10.6	8.3	4.9	6.8	5.2	4.1	1.0	1.2	7.7	5.0	4.3	4.5	8.1	3.3	9.4	0.3	0.9	7.5
Canada	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	6.2	8.7	9.5	-5.9	1.8	9.9
Czech Republic	..	..	..	..	..	..	..	..	..	..	18.8	26.6	10.9	8.8	11.1	2.5	14.5	13.1	7.1	11.0
Denmark	3.4	7.9	7.0	-1.7	0.0	2.4	4.5	4.7	4.7	-3.6	12.3	7.8	0.1	8.5	3.3	1.1	6.4	0.9	2.8	7.1
Finland	-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	4.4	-4.7	3.0	9.0
France[b]	2.2	5.5	6.5	8.9	11.2	9.7	5.3	2.9	1.0	-4.3	10.5	8.6	-0.0	7.5	12.6	5.1	17.0	-0.8	-2.7	8.4
Germany	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	10.9	6.7	9.9	1.1	2.4	7.9
Hungary	..	..	..	..	..	..	..	..	..	..	14.9	-3.1	17.9	26.2	24.6	14.2	20.8	4.1	5.7	9.8
Iceland[c]	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	7.8	24.0	5.2	5.4	-12.5	-3.5	6.5
Ireland	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	17.4	0.1	2.3	9.3
Italy	9.1	8.8	4.6	10.2	7.0	8.3	4.5	4.6	3.2	-10.2	12.5	9.8	-3.1	8.9	8.5	7.9	8.3	-0.7	2.9	7.1
Japan	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	-1.3	-4.2	3.3
Korea	18.6	5.6	1.6	17.8	20.0	15.8	15.2	23.1	3.3	4.6	23.5	24.4	16.1	2.3	-22.2	28.2	16.8	-3.4	8.0	10.4
Luxembourg	..	..	..	..	..	5.8	4.9	10.5	-2.9	2.5	4.9	2.9	-0.5	12.9	10.4	14.2	5.0	5.9	3.2	7.1
Mexico	30.1	14.6	-6.9	8.9	41.1	18.8	17.4	19.7	23.2	3.8	18.5	-13.2	22.7	22.0	15.3	13.8	19.5	-4.1	3.9	10.5
Netherlands	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	8.1	6.4	10.5	4.2	5.3	8.2
New Zealand	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	1.9	4.1	7.7
Norway	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	5.1	0.0	2.5	4.7
Poland	..	..	..	..	..	..	..	..	..	..	15.2	20.8	28.2	22.2	15.1	4.2	10.8	-0.5	4.8	9.2
Portugal	-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	8.9	6.3	2.1	3.7	7.0
Slovak Republic	..	..	..	..	..	..	..	..	..	..	18.8	26.6	5.4	1.9	18.6	-5.5	12.3	12.4	9.5	9.6
Spain	-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	4.8	2.9	7.4
Sweden	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	2.9	12.2	-6.2	1.3	8.6
Switzerland	7.2	5.5	8.1	5.7	4.7	5.8	2.3	-1.2	-4.2	-1.6	9.5	6.1	1.4	6.8	7.5	8.4	7.6	-0.6	-1.3	5.1
Turkey	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	-6.0	34.2	-25.6	7.4	8.5
United Kingdom	11.1	3.8	7.2	6.9	13.8	8.0	0.5	-5.2	6.2	0.4	6.3	6.0	10.1	9.4	9.6	7.6	11.8	2.8	1.9	8.1
United States[b]	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	11.7	12.4	13.5	-2.8	3.3	9.2
Total OECD	10.9	5.9	7.3	7.1	8.6	7.7	5.6	3.7	4.1	0.4	11.1	8.9	7.0	9.7	8.2	8.9	11.9	-0.8	2.3	8.2

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)*.

a) Including Luxembourg until 1994.

b) Volume data use hedonic price deflators for certain components.

c) OECD estimates.

Source: OECD.

Annex Table 41. **Export prices (average unit values)**
Total goods, percentage changes from previous year, national currency terms

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	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	9.8	3.0	4.7
Austria	3.7	2.6	-4.3	-1.9	4.0	-2.6	-1.9	-4.1	-1.8	-1.4	-1.0	3.7	-6.1	-2.6	-3.3	-8.1	-0.7	-1.1	-0.9	2.2
Belgium[a]	7.8	1.7	-9.9	-6.1	4.7	7.9	-3.1	-1.9	-1.4	-1.6	1.2	1.8	2.7	5.3	-0.0	-0.6	8.8	3.9	2.8	2.6
Canada	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	-0.9	0.9	6.4	1.8	-2.9	1.6
Czech Republic	..	..	..	..	..	..	..	..	..	..	4.7	7.2	1.0	5.5	4.0	-0.9	6.3	1.0	-0.0	3.5
Denmark	6.2	3.4	-4.5	-1.0	-0.1	5.6	-1.6	-0.4	-1.7	-3.0	1.9	0.1	1.2	2.0	-0.8	0.4	6.7	2.5	0.4	2.4
Finland	5.9	2.8	-2.4	2.2	5.2	7.6	-1.2	0.5	6.1	5.3	0.8	6.9	-0.1	1.7	1.6	-4.9	13.4	-4.4	-3.6	1.3
France[b]	8.7	3.8	-4.5	-1.3	2.1	3.7	-1.9	-1.5	-2.4	-3.2	-0.7	0.4	1.7	2.1	-1.9	-1.2	1.3	0.9	1.3	1.4
Germany	3.4	3.9	-3.3	-2.7	0.9	4.5	-1.1	-0.6	0.7	0.0	1.0	1.7	0.2	1.6	0.0	-1.7	3.9	3.6	1.7	1.2
Hungary	..	..	..	..	..	..	..	..	..	..	18.0	31.2	18.9	15.1	13.1	3.5	9.9	3.5	-0.4	1.9
Iceland[c]	27.7	30.9	-1.0	-5.9	11.3	32.5	2.2	1.4	-2.5	17.6	3.1	-7.3	3.0	5.3	7.4	0.3	-2.4	26.7	6.1	1.8
Ireland	8.5	2.8	-7.2	-0.1	7.0	6.7	-9.4	-0.9	-2.6	6.8	1.0	1.3	-0.7	1.2	2.6	1.6	3.4	9.9	1.6	2.5
Italy	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	-0.1	5.7	4.0	2.3	1.9
Japan	-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	-0.8	5.6	3.1	0.3
Korea	1.3	-6.0	-8.4	10.5	8.6	-5.3	2.1	3.1	4.3	-1.5	2.8	2.4	-9.4	8.0	17.1	-17.0	-4.6	-0.8	-0.0	0.3
Luxembourg	..	..	..	..	..	15.8	5.1	-1.0	8.3	11.3	-10.9	2.7	-7.0	0.7	-7.1	16.1	-7.7	0.4	-5.4	5.3
Mexico	25.9	60.7	35.6	152.2	53.3	18.4	22.2	-2.6	2.5	-3.0	17.9	100.0	20.3	3.1	8.7	8.2	6.5	-3.3	-1.9	2.5
Netherlands	5.9	1.3	-17.1	-5.7	0.4	5.0	-1.2	-0.6	-2.9	-3.4	2.0	1.5	0.7	3.0	-2.3	-1.4	11.8	1.8	1.4	3.4
New Zealand	13.1	9.3	-2.6	6.0	6.2	13.1	-1.2	-4.2	8.1	2.7	-4.1	-1.7	-3.5	-2.6	4.8	1.4	17.0	9.3	-2.3	3.7
Norway	9.4	4.9	-24.8	-3.4	-0.1	12.3	4.1	-3.7	-8.4	0.6	-3.7	3.7	7.4	2.2	-11.3	12.6	45.8	-6.0	-2.0	3.1
Poland	..	..	..	..	..	..	..	..	..	..	29.0	20.8	8.0	12.7	6.5	7.9	0.8	1.7	-0.4	-0.6
Portugal	30.7	15.7	3.3	8.4	10.4	5.8	2.9	0.2	-2.2	4.3	5.1	3.0	-1.1	0.4	-0.3	-0.3	4.7	2.0	3.3	3.1
Slovak Republic	..	..	..	..	..	..	..	..	..	..	4.7	7.2	3.0	1.2	3.0	5.4	9.8	4.6	4.3	6.2
Spain	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	6.1	1.4	0.4	2.2
Sweden	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	-1.8	2.0	2.6	0.6	0.9
Switzerland	4.7	1.9	0.5	-1.0	2.2	5.7	1.3	2.5	1.2	0.2	-0.7	-1.8	-0.1	3.8	-0.7	1.1	3.0	2.3	1.2	1.8
Turkey	51.6	35.9	25.7	45.6	59.5	50.3	35.8	58.2	66.9	55.4	163.7	72.1	69.6	77.6	64.0	50.2	24.6	109.5	28.8	36.6
United Kingdom	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	-5.7	-3.0	1.3	-0.4	1.3	2.3
United States[b]	0.9	-5.0	-3.3	2.2	6.5	1.4	-0.9	-0.1	-1.5	-0.5	1.1	2.4	-2.6	-2.7	-3.1	-1.4	1.1	-0.7	-1.1	0.9
Total OECD	5.3	2.9	-5.9	1.8	3.8	5.0	0.8	-0.3	0.2	1.0	2.3	4.5	1.2	1.2	-0.1	-2.1	3.8	2.4	1.0	1.7

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.

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Annex Table 42. **Import prices (average unit values)**
Total goods, percentage changes from previous year, national currency terms

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	2.5	18.7	9.3	6.1	-2.4	-1.0	3.9	1.0	4.6	8.1	-2.4	3.6	-5.4	-0.1	8.4	-2.3	9.2	5.8	3.4	4.5
Austria	4.1	3.8	-9.9	-4.1	1.8	3.0	-2.6	3.1	-2.5	-3.5	-1.2	-1.2	-5.2	-3.8	-5.3	-6.7	3.4	-0.4	-1.5	1.8
Belgium[a]	8.3	-0.0	-16.2	-7.0	5.7	7.1	-1.8	-1.3	-3.2	-5.8	2.1	3.1	3.3	6.0	-1.6	1.2	10.7	5.9	2.7	2.5
Canada	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	2.9	-0.9	1.5	2.5	0.4	1.5
Czech Republic	..	..	..	..	..	..	..	..	..	..	-0.9	5.6	1.3	5.2	-2.8	1.9	12.0	-1.5	0.5	2.0
Denmark	8.7	2.4	-9.6	-4.1	1.8	7.1	-2.9	0.0	-2.9	-2.9	2.5	2.4	2.1	3.4	0.9	0.4	7.8	1.3	1.5	1.9
Finland	4.8	3.0	-10.0	-1.9	2.2	3.6	1.7	2.2	10.5	12.8	-2.9	-1.3	2.6	2.4	0.0	-1.4	14.9	0.7	-0.6	0.8
France[b]	11.3	0.9	-14.9	-2.3	0.7	6.0	-2.1	-0.6	-3.7	-4.1	0.1	0.4	2.5	1.6	-3.1	-0.8	4.8	0.4	1.0	1.7
Germany	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	-3.0	-1.5	10.2	1.1	-0.4	2.0
Hungary	..	..	..	..	..	..	..	..	..	..	15.2	30.6	21.3	13.6	11.3	5.5	13.0	3.5	-0.3	1.3
Iceland[c]	27.7	30.9	-1.0	-5.9	11.3	32.4	2.4	1.2	-2.5	17.4	3.3	-7.3	3.0	-2.7	-0.5	-1.7	5.9	24.7	6.3	1.5
Ireland	9.5	2.6	-11.2	-0.1	6.4	6.5	-4.9	2.1	-1.9	5.4	2.4	4.5	-1.0	0.4	2.2	4.8	6.8	3.4	-0.3	2.6
Italy	11.3	7.4	-17.6	-1.5	4.0	7.7	-0.7	-0.8	-0.5	11.7	4.1	12.2	-1.3	1.4	-2.7	-0.9	14.2	2.0	0.3	2.3
Japan	-2.6	-4.4	-36.5	-8.0	-5.4	11.9	10.7	-9.1	-6.9	-12.3	-7.7	-1.4	14.7	6.0	-5.5	-12.2	4.7	5.1	3.0	1.3
Korea	-1.4	-3.6	-0.2	10.1	3.2	-5.9	4.4	-1.7	3.2	0.8	-0.9	1.7	0.2	10.8	22.6	-15.5	9.5	3.8	0.7	-0.7
Luxembourg	..	..	..	..	..	6.0	-2.6	-3.5	4.7	8.5	3.1	-3.9	2.5	-1.5	-4.7	4.2	0.3	-3.3	-2.8	1.4
Mexico	28.4	70.7	92.1	129.8	69.7	14.3	16.2	6.6	3.3	2.0	11.7	99.7	18.9	4.8	14.7	3.3	1.9	-0.5	-2.3	2.4
Netherlands	5.7	0.9	-18.1	-3.0	-0.6	5.1	-1.7	-0.3	-2.7	-3.2	2.0	0.2	0.7	2.6	-2.7	0.6	9.0	-0.7	-1.4	3.0
New Zealand	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	16.5	1.2	-0.2	3.5
Norway	3.1	6.5	0.0	2.8	2.9	6.0	0.9	-1.7	-2.1	1.0	0.7	0.9	-0.9	-1.0	1.4	-1.9	4.7	1.5	-5.0	1.0
Poland	..	..	..	..	..	..	..	..	..	..	28.3	18.6	11.2	13.3	2.1	7.2	5.3	4.3	1.8	1.4
Portugal	35.3	7.3	-8.6	6.1	7.1	7.8	3.2	0.2	-5.1	5.0	3.6	1.8	2.7	0.3	-2.1	-0.6	7.8	2.6	2.4	2.4
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-0.9	5.6	5.5	2.6	-3.4	7.7	14.5	7.7	2.2	4.4
Spain	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	-0.9	1.7	2.2
Sweden	2.3	2.4	-8.3	1.7	3.4	5.2	2.2	-0.6	-2.7	12.0	4.2	0.8	-3.8	0.9	-3.3	1.5	5.0	3.5	1.4	1.2
Switzerland	4.2	4.4	-9.2	-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	5.4	1.7	-0.4	1.6
Turkey	56.2	44.3	8.3	37.5	64.6	55.2	29.6	54.6	61.6	50.0	171.5	82.2	65.2	71.5	62.9	53.2	46.1	93.4	26.6	35.0
United Kingdom	8.0	3.9	-5.8	2.7	-0.5	5.9	3.0	-0.5	-0.3	7.8	3.6	6.7	-0.3	-7.1	-7.4	-3.3	0.4	-0.5	-0.5	2.0
United States[b]	-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	0.1	4.8	-3.0	-2.4	1.8
Total OECD	5.5	2.0	-10.7	1.2	2.9	5.7	1.4	-0.7	-0.9	0.1	2.1	4.3	1.7	1.5	-1.9	-1.6	6.9	1.4	0.1	2.1

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. **Competitive positions: relative unit labour costs**

Indices, 1995 = 100

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Australia	290.1	224.0	180.7	164.4	161.4	163.6	149.7	132.8	115.6	101.5	102.9	100.0	103.3	105.0	93.0	96.9	93.6	87.7
Austria	94.3	94.2	109.2	115.6	109.7	103.9	104.2	102.1	103.6	105.8	98.9	100.0	102.0	92.0	82.0	79.2	74.0	72.6
Belgium	87.4	88.6	92.6	96.0	93.4	91.6	97.5	97.4	97.3	96.5	96.9	100.0	94.6	88.0	89.3	88.5	85.8	87.3
Canada	110.2	105.1	99.1	105.2	115.2	119.6	122.1	127.1	116.4	104.9	97.8	100.0	104.5	105.6	101.6	103.2	107.4	104.0
Czech Republic	..	..	..	..	..	..	..	..	..	90.2	98.2	100.0	107.1	104.9	115.5	117.2	118.7	121.9
Denmark	77.1	78.5	82.5	90.2	95.5	89.7	97.9	94.0	96.3	101.2	96.9	100.0	104.0	98.5	101.9	103.8	104.1	106.1
Finland	131.7	133.6	128.9	127.6	131.7	138.4	145.6	139.4	108.1	82.3	87.2	100.0	93.7	87.9	89.6	88.1	80.3	83.7
France	106.9	106.8	108.1	107.3	103.0	99.4	105.7	101.1	99.0	101.6	100.4	100.0	99.7	90.9	87.2	86.5	82.3	81.6
Germany	71.8	69.9	77.5	83.6	83.2	80.5	83.0	83.7	89.8	91.5	92.6	100.0	97.3	92.9	95.3	96.1	90.2	90.3
Greece	104.9	102.8	88.0	85.0	93.8	99.7	106.3	97.9	94.3	88.2	92.1	100.0	102.6	106.1	101.4	103.2	99.2	98.7
Hungary	..	..	..	..	..	..	..	..	..	122.8	122.2	100.0	92.5	92.4	85.7	86.1	80.1	87.7
Iceland	90.4	97.2	94.4	115.7	125.9	111.5	109.7	113.5	111.0	101.3	99.4	100.0	98.7	104.1	113.3	124.7	135.8	116.7
Ireland	158.5	153.5	164.2	151.7	139.1	128.1	133.7	127.7	123.0	113.0	108.9	100.0	99.1	92.0	85.5	81.6	74.8	72.0
Italy	134.2	135.5	134.0	133.5	130.9	130.7	130.0	133.3	131.2	120.0	114.1	100.0	111.8	113.9	119.7	121.1	114.8	115.5
Japan	48.2	49.4	65.5	69.2	71.5	64.8	60.7	66.0	73.2	89.1	98.5	100.0	84.5	80.7	87.7	98.5	102.4	97.3
Korea	93.2	86.3	68.8	72.9	89.2	104.5	100.2	100.6	92.0	87.4	90.0	100.0	106.4	91.3	63.8	65.1	69.2	63.4
Luxembourg	107.5	109.7	118.5	119.9	108.9	102.9	103.8	101.6	101.4	100.3	98.8	100.0	96.3	91.9	90.5	87.3	87.1	90.1
Mexico	141.6	134.4	103.5	105.0	109.0	120.8	122.9	137.4	152.9	164.7	160.7	100.0	101.7	111.9	108.3	113.5	124.5	128.1
Netherlands	100.6	99.0	106.8	112.6	109.0	101.2	102.7	99.6	102.6	101.6	97.6	100.0	96.8	94.3	97.5	97.5	93.3	96.5
New Zealand	78.8	77.7	79.9	89.8	99.9	92.7	93.0	92.0	82.3	85.4	93.3	100.0	111.0	115.4	105.5	104.0	93.3	90.5
Norway	93.1	93.5	94.2	95.4	100.6	98.9	97.8	95.9	93.6	90.6	94.4	100.0	101.0	107.1	109.0	115.8	119.5	124.8
Poland	..	..	..	..	..	..	..	..	..	87.4	93.3	100.0	102.7	102.4	108.3	101.5	102.5	107.0
Portugal	86.6	89.4	87.3	83.7	87.0	94.7	89.9	91.9	100.7	91.5	95.0	100.0	91.3	93.0	94.6	96.8	98.2	100.1
Slovak Republic	..	..	..	..	..	..	..	..	..	83.4	89.3	100.0	107.7	125.6	134.8	133.8	151.2	158.8
Spain	79.6	79.3	83.0	84.2	89.5	96.6	108.7	109.8	112.6	102.4	99.2	100.0	104.3	103.9	107.4	107.6	108.4	109.3
Sweden	121.5	127.8	128.9	129.9	134.7	141.3	145.9	148.5	145.5	103.9	97.2	100.0	113.1	108.8	106.0	104.4	103.4	94.4
Switzerland	70.1	69.4	76.6	82.0	83.5	79.0	85.0	85.4	83.5	82.7	91.3	100.0	96.5	92.8	96.3	96.4	96.7	101.0
Turkey	118.5	121.9	97.1	88.5	80.8	122.1	173.4	190.8	172.0	171.3	111.5	100.0	100.2	112.6	126.6	148.5	173.1	124.4
United Kingdom	107.9	110.7	104.7	107.8	115.1	111.3	114.8	117.5	111.2	98.1	100.9	100.0	102.9	124.8	136.9	137.6	141.1	138.8
United States	165.0	169.4	149.5	126.4	116.8	117.8	114.8	112.1	108.0	106.7	105.6	100.0	101.1	106.6	114.8	111.7	114.1	123.6
Euro area	86.0	84.0	94.8	102.0	97.6	92.5	101.4	99.1	103.1	99.4	96.8	100.0	100.4	90.8	92.6	91.8	82.6	83.5

Note: Competitiveness-weighted relative unit labour costs in the manufactoring sector in dollar terms. Competitiveness weights take into account the structure of competition in both export and import markets of the manufacturing sector of 42 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. See also *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*

Source: OECD.

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Annex Table 44. **Competitive positions: relative export prices**

Indices, 1995 = 100

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Australia	121.5	108.7	98.1	101.0	118.3	123.6	116.3	105.7	96.9	91.2	96.1	100.0	100.4	102.2	95.6	97.5	103.0	97.0
Austria	104.5	103.7	107.9	109.8	112.6	102.8	104.7	99.3	98.5	99.4	96.0	100.0	92.3	86.1	83.7	77.5	72.7	70.0
Belgium	89.8	90.0	93.7	93.3	93.0	95.4	97.3	95.0	95.9	94.0	95.9	100.0	100.2	100.1	102.5	102.1	103.4	106.0
Canada	100.8	100.1	97.4	99.3	102.8	105.6	103.1	100.4	96.3	95.3	95.6	100.0	101.3	102.3	99.5	100.1	101.8	99.0
Czech Republic	..	..	..	..	..	..	..	..	..	94.3	98.4	100.0	102.7	103.2	108.8	107.3	109.0	111.1
Denmark	86.8	89.5	96.2	98.8	95.6	93.3	98.7	97.2	98.7	98.7	99.9	100.0	99.6	97.9	100.8	102.5	98.7	98.6
Finland	87.1	88.6	88.7	91.3	94.7	99.5	99.4	98.0	90.1	79.5	85.1	100.0	95.3	94.6	98.6	94.5	100.2	95.2
France	104.2	106.0	109.3	109.6	108.0	104.5	107.0	102.6	103.0	100.5	99.9	100.0	101.7	99.6	99.3	98.2	92.2	91.1
Germany	79.5	80.9	90.1	93.2	90.8	89.3	93.0	91.5	94.9	96.5	96.7	100.0	97.8	93.4	95.3	94.1	90.7	92.2
Hungary	..	..	..	..	..	..	..	..	..	103.4	102.4	100.0	101.2	105.7	108.0	107.2	107.9	110.2
Iceland	176.2	175.3	144.0	127.5	120.1	121.3	110.0	111.0	107.6	115.3	111.7	100.0	102.6	125.3	134.9	137.6	125.8	120.4
Ireland	106.0	108.8	111.1	103.8	108.5	108.9	103.9	102.0	104.6	101.0	99.6	100.0	102.4	106.2	106.8	108.1	99.8	111.9
Italy	101.9	102.4	104.5	105.0	101.0	107.8	113.1	114.1	112.6	100.6	98.6	100.0	105.8	105.2	109.1	109.8	108.7	110.8
Japan	70.2	71.8	80.8	79.4	81.6	79.5	74.8	80.4	84.1	94.5	100.8	100.0	92.7	89.7	90.2	98.1	104.4	100.5
Korea	111.0	100.8	87.1	99.6	112.5	123.9	116.6	110.1	103.5	101.3	99.0	100.0	104.1	105.2	84.4	81.3	83.9	79.8
Luxembourg	72.0	72.0	74.0	74.0	74.1	81.1	89.3	88.7	97.7	108.2	96.9	100.0	91.1	87.8	82.2	96.0	83.8	82.2
Mexico	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	114.6	118.1	119.7
Netherlands	94.6	91.4	92.0	98.7	98.9	95.2	96.7	95.2	95.3	95.0	96.2	100.0	98.7	95.0	94.9	93.0	90.4	92.4
New Zealand	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	101.7	92.8	91.6	95.2	99.0
Norway	103.2	99.7	95.7	96.4	112.1	116.4	105.8	100.2	94.8	90.5	89.2	100.0	95.8	95.3	95.3	94.6	97.6	97.4
Poland	..	..	..	..	..	..	..	..	..	100.8	99.4	100.0	100.2	102.5	106.4	108.0	107.4	119.0
Portugal	110.0	111.0	108.6	106.3	106.5	101.7	102.3	103.7	105.6	101.1	99.9	100.0	98.5	95.2	94.4	94.8	94.0	95.1
Slovak Republic	..	..	..	..	..	..	..	..	..	102.7	99.7	100.0	101.9	104.2	106.6	103.5	109.8	111.4
Spain	84.9	87.8	95.9	98.2	102.1	102.2	107.7	112.3	111.9	102.6	98.5	100.0	100.9	99.8	101.5	100.5	99.8	99.0
Sweden	102.7	105.0	107.6	109.1	110.8	112.6	113.3	114.5	113.1	98.2	98.9	100.0	105.6	100.9	97.8	96.3	93.7	86.3
Switzerland	77.0	74.7	84.7	88.6	88.1	84.0	90.7	92.5	91.7	93.7	99.5	100.0	99.4	97.1	100.0	103.0	101.9	106.4
Turkey	157.2	142.9	113.0	120.1	109.0	106.6	105.0	104.7	102.3	101.0	98.7	100.0	97.2	99.2	96.7	95.9	84.9	96.0
United Kingdom	98.4	101.2	97.1	98.0	103.0	101.6	103.4	104.9	102.8	102.5	104.1	100.0	101.5	110.4	111.2	107.8	105.4	101.0
United States	153.8	151.5	134.2	123.6	119.4	119.6	114.9	114.5	111.3	112.6	108.7	100.0	98.9	101.4	105.3	105.6	106.7	109.8

Note: Competitiveness-weighted relative export prices in the manufactoring sector in dollar terms. Competitiveness weights take into account the structure of competition in both export and import markets of the manufacturing sector of 42 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. See also *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*

Source: OECD.

Annex Table 45. **Export performance for total goods**

Total goods, percentage changes from previous year

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	6.9	7.1	2.3	-1.9	-8.9	-1.9	2.0	11.0	0.5	2.7	-4.6	-5.5	8.3	3.0	-1.2	0.3	-1.7	2.1	2.5	-1.0
Austria	3.1	5.0	-4.7	-3.7	0.7	6.8	3.6	0.9	2.5	-0.3	0.3	-0.1	5.5	9.9	1.3	7.7	3.5	4.1	2.6	0.2
Belgium[a]	-0.1	0.5	-0.9	0.3	-1.0	0.5	-2.9	-1.1	-2.5	10.3	0.1	-2.5	-2.7	-1.4	-3.6	-1.1	-1.7	-0.9	-1.8	-0.6
Canada	-0.7	-0.9	-2.8	-1.3	2.5	-4.0	4.0	1.5	-0.9	1.4	0.6	1.1	-2.3	-2.9	-0.9	-0.2	-4.7	-0.2	0.9	0.4
Czech Republic	..	..	..	..	..	..	..	..	..	..	-5.1	2.7	-4.5	5.9	0.9	3.3	5.8	9.0	3.3	2.8
Denmark	-0.4	-0.0	-3.5	-2.7	2.3	1.3	1.8	2.8	2.4	1.3	-2.0	-0.9	-3.9	-1.2	-5.6	2.1	-1.0	3.1	2.0	-0.5
Finland	1.6	-2.7	-4.9	-3.8	-2.6	-6.2	-0.4	-11.9	7.6	19.7	8.3	-10.5	-2.8	1.9	-0.3	0.2	-3.1	-0.6	-0.3	0.4
France	0.6	1.9	-4.5	-0.9	1.1	1.2	-1.0	-1.1	1.0	1.5	-1.6	0.5	-3.4	1.8	-0.0	-2.0	1.5	-1.9	-5.3	-0.2
Germany	1.9	1.5	-4.5	-3.3	-1.9	0.3	-2.6	-1.2	-2.5	-8.0	-1.9	-2.9	0.2	0.3	-2.9	-0.4	-0.1	2.1	0.2	-0.9
Hungary	..	..	..	..	..	..	..	..	..	..	8.2	0.1	16.3	19.8	12.2	13.1	10.1	3.4	1.6	1.6
Iceland	-8.7	10.5	27.4	18.5	0.2	-6.4	9.5	-3.4	-6.0	-4.4	4.1	7.5	0.4	-6.0	-6.9	2.3	-1.3	1.6	-2.4	-1.1
Ireland	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	3.9	14.4	7.7	7.8	0.6	1.4	1.5
Italy	0.2	4.0	-5.0	-1.8	0.8	-1.8	-3.6	-4.2	0.1	11.9	2.2	-1.4	-1.9	-4.9	-6.7	-4.2	-2.6	-0.6	-0.5	-1.0
Japan	2.0	-0.5	-6.0	-6.4	-5.8	-3.7	-0.4	-5.3	-6.3	-9.7	-10.5	-6.6	-6.2	0.7	-3.7	-7.6	-6.7	-8.8	-0.5	-2.1
Korea	2.7	3.9	10.7	11.9	6.8	-12.9	2.8	5.9	1.8	0.5	2.8	7.7	-2.0	1.4	24.5	2.5	-0.7	-4.4	1.3	2.5
Luxembourg	..	..	..	..	..	-3.3	-10.1	-2.4	-13.9	-11.5	11.8	-5.1	3.0	1.8	16.2	-15.4	13.6	5.1	-2.1	2.9
Mexico	-5.8	-7.3	1.3	5.0	9.4	3.2	7.5	10.3	-2.2	3.7	-3.9	16.6	8.3	0.4	-0.4	2.2	1.5	-0.1	0.7	-0.0
Netherlands	3.1	2.4	-2.0	-1.1	2.8	-0.2	-0.5	0.0	-0.2	3.5	-2.3	0.2	-0.1	-0.8	0.1	1.8	-1.9	4.4	0.4	-0.5
New Zealand	-4.8	9.0	-1.6	-5.1	-4.5	-11.6	4.3	8.7	-3.7	-0.4	0.7	-5.4	-0.2	-0.2	-2.1	-3.1	-3.0	3.0	1.6	0.1
Norway	2.4	0.2	-5.1	6.3	-0.8	9.1	2.7	3.4	3.6	5.2	4.5	-0.3	6.8	-1.8	-4.5	-1.0	-5.1	3.5	-0.3	-4.2
Poland	..	..	..	..	..	..	..	..	..	..	8.0	7.1	3.7	5.5	-0.2	-0.9	12.6	9.9	1.9	2.7
Portugal	8.7	6.5	1.5	4.0	-0.3	11.5	6.6	-3.8	4.0	-0.9	4.1	5.7	4.8	0.7	-3.2	-2.9	-1.5	1.9	0.5	0.2
Slovak Republic	..	..	..	..	..	..	..	..	..	..	-7.1	-0.5	-2.7	-5.9	3.9	4.7	3.5	-0.5	3.1	0.1
Spain	13.6	-2.1	-13.0	-0.2	-0.3	-0.1	2.3	1.2	0.7	14.5	10.8	1.2	6.8	4.4	-2.8	1.2	0.3	2.2	0.5	-0.4
Sweden	0.2	-1.9	-3.7	-2.1	-2.7	-4.3	-4.3	-4.9	-2.4	9.7	5.1	1.5	-1.0	1.3	0.1	0.5	-0.2	-5.1	0.1	1.3
Switzerland	-2.6	6.0	-4.3	-4.7	-0.7	-2.2	-2.0	-7.1	0.5	2.3	-6.4	-4.9	-3.3	-3.4	-3.2	-3.0	-5.8	2.1	-2.6	-3.4
Turkey	25.5	15.8	-22.8	18.8	3.9	-4.7	-2.5	3.4	5.9	11.5	11.9	-4.2	7.2	11.7	-0.7	2.7	8.0	1.7	-2.8	-1.5
United Kingdom	1.8	3.2	-0.9	1.3	-3.0	-1.2	0.9	-3.6	-2.0	0.8	2.5	1.1	2.6	-1.6	-6.6	-1.5	-1.0	1.3	-3.0	0.8
United States	-1.3	0.7	0.8	8.5	5.2	4.0	3.2	0.0	-0.6	-2.2	-2.3	3.2	1.6	3.5	-1.3	-2.0	-1.3	-4.8	-5.8	-1.9
Total OECD	1.6	1.5	-3.3	-0.7	-0.4	-0.4	-0.1	-1.2	-1.2	-0.4	-1.5	-0.4	-0.4	0.7	-1.2	-1.2	-1.2	-1.0	-1.3	-0.6
Memorandum items																				
China	2.3	14.5	6.2	2.0	0.7	-2.9	0.5	8.2	10.1	2.6	19.2	-6.7	6.9	16.9	8.4	1.7	12.5	12.5	7.7	7.1
Dynamic Asia[b]	2.1	-4.1	15.1	10.0	4.5	2.2	4.4	5.1	3.5	3.6	2.4	0.3	-1.3	-0.7	1.4	-4.6	-1.0	-3.9	-1.1	3.3
Other Asia	-3.0	-3.1	5.2	3.8	-1.8	5.7	5.4	1.0	7.3	7.8	1.1	6.5	5.5	-4.3	1.6	1.9	2.0	2.5	1.3	-0.5
Non-OECD Asia	1.5	-1.0	12.4	8.0	3.3	1.7	3.8	5.3	5.0	3.8	5.2	-0.5	0.8	2.4	2.8	-2.8	2.3	0.6	1.4	3.9
Latin America	3.0	0.6	-8.6	-2.0	6.5	2.4	-2.9	-1.6	-4.1	3.4	-4.3	-6.8	1.3	-0.0	2.7	1.5	-0.5	2.7	2.3	0.5
Africa and Middle-East	-8.0	-0.7	21.0	-9.0	-1.3	-0.7	-6.0	0.5	-0.8	1.6	-5.3	-7.0	8.3	1.5	0.9	-0.8	-7.0	-0.2	0.2	0.1
Central and Eastern Europe	2.2	-8.4	2.1	-1.1	-3.8	-4.1	-3.5	-13.1	-13.4	-1.0	11.9	0.1	-4.5	-11.9	-7.0	5.9	-4.4	3.0	1.5	-1.6
Total of non-OECD countries	-1.6	-3.2	8.5	-0.4	0.3	-0.2	-1.1	-0.1	-0.0	2.6	2.4	-2.4	1.5	0.4	1.5	-1.0	-0.2	0.8	1.2	2.5
World	0.8	0.3	-0.4	-0.6	-0.2	-0.4	-0.3	-0.9	-0.9	0.4	-0.5	-0.9	0.1	0.6	-0.5	-1.2	-0.9	-0.5	-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.

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Annex Table 46. **Shares in World exports and imports**

Percentage, values for total goods, customs basis

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
A. Exports																				
Canada	4.8	4.8	4.5	4.2	4.3	4.2	3.9	3.8	3.7	4.0	4.0	3.9	3.9	4.0	4.1	4.5	4.6	4.4	4.3	4.3
France	5.3	5.4	6.1	6.1	6.0	5.9	6.3	6.2	6.3	5.7	5.6	5.7	5.5	5.4	5.8	5.5	4.9	4.9	4.7	4.6
Germany	9.7	10.2	12.3	12.7	12.2	11.8	12.2	11.7	11.8	10.4	10.2	10.5	10.2	9.7	10.2	9.9	8.9	9.5	9.7	9.4
Italy	4.0	4.2	4.8	4.8	4.6	4.7	5.0	4.9	4.8	4.5	4.5	4.6	4.7	4.3	4.5	4.2	3.8	3.9	4.0	3.9
Japan	9.4	9.7	10.5	9.8	9.8	9.4	8.7	9.3	9.4	9.9	9.5	8.9	7.9	7.8	7.3	7.6	7.8	6.8	6.5	6.4
United Kingdom	5.1	5.4	5.2	5.4	5.3	5.1	5.4	5.3	5.1	4.8	4.9	4.8	5.0	5.1	5.1	4.8	4.5	4.5	4.5	4.5
United States	11.7	11.4	10.5	10.2	11.3	11.8	11.2	11.7	11.6	11.8	11.5	11.0	11.1	12.0	12.0	11.9	11.9	11.5	10.9	10.6
Other OECD countries	19.5	19.7	20.6	21.6	21.8	21.5	22.3	22.1	22.1	22.4	22.6	23.6	23.8	23.3	24.4	24.4	23.6	24.3	24.9	24.8
Total OECD	69.4	70.6	74.5	74.8	75.3	74.4	75.0	74.9	74.7	73.5	72.8	72.9	72.1	71.7	73.4	72.8	69.9	69.9	69.4	68.5
Non-OECD Asia	10.2	9.9	9.8	10.6	11.3	11.8	11.7	13.1	14.1	15.5	16.2	16.3	16.3	16.8	16.2	16.6	17.7	17.4	17.8	18.6
Latin America	4.7	4.5	3.7	3.3	3.4	3.4	3.2	3.0	2.9	3.0	3.0	2.9	3.0	3.2	3.1	2.9	3.2	3.3	3.5	3.4
Other non-OECD countries	15.7	15.0	12.1	11.4	10.0	10.4	10.1	9.0	8.2	8.0	7.9	7.9	8.6	8.4	7.3	7.7	9.2	9.4	9.4	9.5
Total of non-OECD countries	30.6	29.4	25.5	25.2	24.7	25.6	25.0	25.1	25.3	26.5	27.2	27.1	27.9	28.3	26.6	27.2	30.1	30.1	30.6	31.5
B. Imports																				
Canada	3.5	3.7	3.6	3.4	3.5	3.6	3.2	3.2	3.1	3.4	3.3	3.1	3.0	3.4	3.5	3.6	3.6	3.4	3.3	3.3
France	5.5	5.6	6.0	6.3	6.2	6.3	6.7	6.4	6.2	5.4	5.3	5.4	5.2	4.8	5.3	5.1	4.8	4.7	4.5	4.4
Germany	8.0	8.3	9.1	9.3	8.9	8.9	10.0	10.8	10.7	9.0	8.8	9.0	8.7	8.0	8.6	8.3	7.7	7.8	7.7	7.6
Italy	4.1	4.3	4.4	4.7	4.5	4.6	4.8	4.7	4.6	3.6	3.7	3.7	3.6	3.5	3.7	3.6	3.4	3.4	3.4	3.4
Japan	6.4	6.0	5.4	5.5	5.9	6.2	6.0	6.0	5.5	5.8	5.8	5.9	5.9	5.5	4.6	4.9	5.3	5.0	4.5	4.2
United Kingdom	5.4	5.6	5.9	6.2	6.6	6.5	6.4	5.8	5.8	5.4	5.3	5.2	5.4	5.6	5.8	5.7	5.3	5.3	5.2	5.2
United States	17.8	18.0	17.7	17.0	16.2	16.1	14.8	14.2	14.5	16.0	16.0	15.0	15.4	16.3	17.3	18.8	19.8	19.1	19.0	18.9
Other OECD countries	20.1	20.8	22.0	23.3	23.4	23.7	24.9	24.6	24.4	24.1	24.3	24.8	25.2	24.6	25.1	25.3	24.3	24.4	25.1	24.8
Total OECD	70.8	72.3	74.1	75.7	75.4	75.7	76.8	75.7	74.8	72.6	72.5	72.1	72.3	71.8	73.8	75.3	74.1	73.1	72.7	71.8
Non-OECD Asia	9.8	10.1	9.6	9.9	11.1	11.6	11.4	12.6	13.7	15.8	16.2	16.4	16.0	15.9	13.9	14.3	15.7	15.4	15.5	16.5
Latin America	3.9	3.7	3.7	3.4	3.1	2.9	2.8	2.9	3.2	3.6	3.7	3.8	3.8	4.3	4.5	3.7	3.6	4.0	4.0	3.9
Other non-OECD countries	15.5	13.9	12.6	11.0	10.3	9.8	9.0	8.8	8.2	8.0	7.6	7.7	7.8	7.9	7.7	6.8	6.6	7.5	7.8	7.8
Total of non-OECD countries	29.2	27.7	25.9	24.3	24.6	24.3	23.2	24.3	25.2	27.4	27.5	27.9	27.7	28.2	26.2	24.7	25.9	26.9	27.3	28.2

Note: Regional aggregates are calculated *inclusive* of intra-regional trade.
Source: OECD.

Annex Table 47. **Trade balances**

$ billion

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	-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	-4.7	2.0	-2.3	-2.6
Austria	-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	-2.7	-1.8	-0.9	-0.2
Belgium[a]	0.4	1.2	3.2	2.4	3.9	3.6	3.2	3.6	5.4	7.4	8.7	11.8	10.5	9.4	9.3	8.9	4.5	4.8	4.2	5.0
Canada	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	18.6	15.3	25.9	39.9	39.8	33.9	36.6
Czech Republic	..	..	..	..	..	..	..	..	..	-0.5	-1.4	-3.7	-5.7	-5.0	-2.6	-1.9	-3.1	-3.1	-3.7	-3.3
Denmark	-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	3.8	6.4	6.7	6.8	7.1	8.1
Finland	1.6	1.0	1.8	1.6	1.3	-0.1	0.9	2.4	4.0	6.4	7.7	12.4	11.3	11.6	12.5	12.2	13.7	12.7	11.4	12.9
France	-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	25.4	18.6	-0.4	3.8	4.8	3.7
Germany	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	70.9	58.6	89.5	104.0	109.3
Greece	-5.5	-6.5	-5.8	-7.1	-7.9	-9.5	-13.1	-13.0	-14.9	-13.5	-14.6	-18.6	-19.9	-19.1	-17.1	-18.8	-20.5	-19.1	-20.1	-22.0
Hungary	..	..	..	..	..	..	..	..	..	-3.3	-3.6	-2.4	-2.7	-2.0	-2.4	-2.2	-1.8	-2.0	-2.2	-2.2
Iceland	-0.0	-0.0	0.1	-0.1	-0.0	0.1	0.1	-0.0	0.0	0.2	0.3	0.2	0.0	0.0	-0.4	-0.3	-0.5	-0.1	-0.0	-0.0
Ireland	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	24.3	25.5	31.5	33.9	38.4
Italy	-5.1	-5.4	4.8	0.1	-0.8	-2.7	-1.8	-2.5	-1.0	29.5	31.4	38.8	54.0	40.0	36.5	23.5	10.0	17.5	20.2	22.2
Japan	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	123.2	116.6	70.3	88.7	112.2
Korea	-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	16.9	13.4	10.8	18.8
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	-1.8	-2.0	-2.0	-1.9	-2.5	-2.2	-2.2	-3.1	-2.8
Mexico	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	-9.7	-9.0	-12.9
Netherlands	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	21.0	16.0	21.3	23.5	27.6	29.9
New Zealand	-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	1.5	1.0	1.2
Norway	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	1.8	10.1	25.5	25.0	25.2	27.1
Poland	..	..	..	..	..	..	..	..	..	-2.5	-0.6	-1.6	-7.3	-9.8	-12.8	-15.1	-12.3	-12.2	-13.8	-15.4
Portugal	-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	-13.8	-14.0	-13.0	-12.6	-13.3
Slovak Republic	..	..	..	..	..	..	..	..	..	-0.9	0.1	-0.2	-2.3	-2.1	-2.4	-1.1	-0.9	-2.1	-2.3	-2.3
Spain	-4.6	-4.7	-7.2	-13.7	-18.7	-25.4	-29.1	-30.4	-30.4	-15.1	-14.8	-18.4	-16.3	-13.5	-20.7	-30.4	-32.8	-31.6	-34.4	-37.4
Sweden	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	16.7	15.0	13.8	14.6	16.8
Switzerland	-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	-1.6	-0.2	-2.5	-2.1	1.4	1.8
Turkey	-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	-22.4	-4.8	-6.9	-8.0
United Kingdom	-7.1	-4.2	-14.1	-19.4	-38.3	-40.6	-32.8	-18.2	-22.8	-19.6	-17.0	-19.0	-21.4	-20.2	-36.2	-44.6	-45.4	-47.6	-50.2	-50.0
United States	-112.5	-122.2	-145.1	-159.6	-127.0	-117.7	-111.0	-76.9	-96.9	-132.5	-165.8	-174.2	-191.0	-198.1	-246.7	-345.4	-452.2	-426.6	-462.3	-533.0
Euro area	5.5	11.6	53.0	43.8	50.5	34.3	17.8	-29.9	-3.8	73.8	88.6	122.4	145.6	149.8	146.8	105.4	60.9	115.8	134.8	145.7
European Union	1.7	9.1	42.9	29.7	19.4	0.4	-6.6	-36.6	-13.0	69.2	88.5	127.0	150.7	154.4	131.9	83.8	37.1	88.8	106.2	120.6
Total OECD	-43.7	-42.9	-7.9	-23.9	-1.3	-38.6	-52.9	-27.1	6.9	64.2	58.0	98.5	51.2	53.5	17.7	-121.0	-271.7	-222.1	-235.1	-261.5

a) Including Luxembourg until 1994.
Source: OECD.

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Annex Table 48. **Non-factor services, net**

$ billion

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	-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	-1.1	-0.9	0.3	-0.6	-1.2	-1.5
Austria	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	1.8	0.9	1.5	2.0	2.1
Belgium[a]	0.3	0.2	0.5	1.1	0.7	-0.8	0.0	-0.2	0.5	1.1	1.2	0.1	0.4	1.4	1.0	1.5	2.3	2.9	3.2	4.2
Canada	-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	-6.4	-4.5	-4.3	-4.5	-4.4	-4.0	-4.3
Czech Republic	..	..	..	..	..	..	..	..	..	1.0	0.5	1.8	1.9	1.8	1.8	1.1	1.3	1.4	1.5	1.8
Denmark	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	-0.3	1.7	2.4	3.5	2.9	3.4
Finland	-0.3	-0.5	-0.8	-1.3	-1.8	-2.3	-3.2	-3.6	-2.9	-2.2	-1.8	-2.2	-1.7	-1.6	-1.1	-1.4	-2.4	-2.1	-2.2	-2.3
France	8.9	9.6	10.0	10.4	10.7	13.6	14.9	16.6	19.5	17.3	17.8	14.3	15.1	16.5	17.6	18.0	19.9	19.0	18.9	21.1
Germany	-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	-42.5	-47.0	-53.0	-50.8	-52.3	-47.9	-51.0
Greece	2.5	2.4	2.9	4.0	4.5	4.1	5.7	6.1	7.2	6.7	7.7	7.9	7.6	7.2	7.0	7.6	8.3	7.9	7.8	8.7
Hungary	..	..	..	..	..	..	..	..	..	0.2	0.2	0.6	1.5	2.3	1.8	1.4	1.8	2.2	2.2	2.4
Iceland	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	0.0	0.2	0.2
Ireland	-0.3	-0.3	-0.6	-1.0	-1.4	-1.8	-1.7	-2.0	-3.1	-3.0	-4.1	-6.3	-7.7	-9.0	-10.1	-11.1	-12.0	-15.4	-16.7	-19.0
Italy	3.3	3.4	3.4	3.5	1.6	2.5	3.6	3.3	0.6	3.2	5.2	6.4	7.2	7.9	4.8	1.2	0.9	-0.0	0.1	-0.1
Japan	-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	-47.6	-43.8	-35.7	-34.5
Korea	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	-2.9	-3.5	-5.3	-7.8
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	2.4	2.5	2.8	3.0	3.4	3.4	2.8	3.2	3.4
Mexico	-0.3	-0.6	-0.4	0.3	0.0	-0.5	-1.9	-1.8	-2.3	-2.1	-2.0	0.7	0.4	-0.7	-0.9	-1.8	-2.3	-3.6	-4.1	-4.4
Netherlands	-0.6	-1.2	-1.3	-1.5	-2.3	-1.4	-0.4	-0.8	-0.1	-0.1	0.2	1.1	2.0	3.2	2.5	2.5	-0.4	-1.5	-2.4	-2.4
New Zealand	-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	-0.0	-0.3	-0.3
Norway	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	-0.5	-0.8	0.5	1.5	1.5	1.3
Poland	..	..	..	..	..	..	..	..	..	0.4	2.8	3.5	3.4	3.2	4.2	1.4	1.4	2.3	2.9	3.5
Portugal	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	1.8	1.8	2.5	3.3	3.6
Slovak Republic	..	..	..	..	..	..	..	..	..	0.3	0.7	0.5	0.0	0.1	0.2	0.2	0.4	0.5	0.6	0.6
Spain	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	22.3	24.7	27.0	29.4
Sweden	-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	-2.7	-1.0	-1.1	-1.2
Switzerland	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	13.3	13.9	13.0	12.8	13.5
Turkey	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	11.3	9.1	8.5	7.5
United Kingdom	5.8	8.6	9.5	11.1	7.9	6.0	7.7	7.2	9.6	9.9	9.8	13.4	15.0	20.5	21.0	18.9	20.9	16.9	17.6	16.3
United States	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	90.4	79.9	83.6	76.5	78.8	70.4	78.2
Euro area	20.1	21.1	24.6	24.5	17.5	20.6	22.0	19.7	12.3	9.7	8.3	1.3	6.4	8.3	3.9	-4.9	-5.8	-10.2	-3.6	-2.3
European Union	26.6	29.9	32.6	34.5	24.0	24.2	28.2	27.1	21.9	21.3	18.8	14.8	21.4	27.1	22.0	13.3	14.8	9.1	15.7	16.3
Total OECD	17.6	20.8	29.2	28.0	13.6	14.7	17.0	32.7	36.6	45.8	48.9	53.7	62.1	83.4	80.5	58.8	64.5	61.9	65.8	72.6

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 49. **Investment income, net**

$ billion

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Australia	-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	-10.7	-11.1	-12.1
Austria	-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	-2.9	-2.3	-2.7	-3.1	-3.2
Belgium[a]	0.9	0.9	1.2	1.5	1.7	3.4	4.0	4.9	5.4	6.0	6.4	6.4	6.0	5.7	6.5	6.8	7.3	7.4	7.7	7.9
Canada	-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	-20.9	-19.7	-21.1	-18.3	-17.7	-18.1	-18.9
Czech Republic	..	..	..	..	..	..	..	..	..	-0.1	-0.0	-0.1	-0.7	-0.8	-1.0	-1.3	-1.3	-1.3	-1.1	-1.6
Denmark	-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	-2.4	-3.6	-3.5	-4.2	-4.5
Finland	-1.1	-1.0	-1.3	-1.6	-1.7	-2.7	-3.7	-4.7	-5.4	-4.9	-4.4	-4.4	-3.6	-2.4	-3.1	-2.0	-1.8	-2.1	-1.9	-2.0
France	-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	9.1	12.0	13.8	14.0	15.7	16.3
Germany	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	-9.6	-3.1	-11.3	-5.7	-4.0
Greece	-1.1	-1.3	-1.5	-1.6	-1.7	-1.9	-1.9	-1.9	-2.3	-1.6	-1.4	-1.8	-2.0	-1.7	-1.6	-0.7	-0.9	-1.8	-2.1	-2.4
Hungary	..	..	..	..	..	..	..	..	..	-1.2	-1.4	-1.8	-1.5	-1.4	-1.9	-1.7	-1.6	-1.5	-2.3	-2.4
Iceland	-0.2	-0.1	-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	-0.3
Ireland	-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	-14.0	-15.0	-17.8	-18.9	-20.6
Italy	-2.5	-2.7	-4.2	-4.9	-5.5	-7.2	-14.6	-17.5	-22.0	-17.4	-16.9	-15.9	-15.4	-10.1	-10.9	-11.2	-12.0	-10.5	-13.3	-13.1
Japan	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	56.8	50.0	57.5	72.6	79.7	92.3
Korea	-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	-2.4	-0.9	0.6	2.1
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	2.2	2.0	1.4	1.0	0.6	0.3	0.1	0.2	0.2
Mexico	-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	-12.9	-14.4	-13.5	-13.7	-13.8
Netherlands	1.4	-0.2	-0.2	1.4	1.2	2.9	-0.6	0.4	-1.0	0.9	3.7	7.3	3.5	7.0	-3.1	0.8	-3.6	-3.6	-1.5	-1.1
New Zealand	-1.1	-1.3	-1.5	-2.0	-2.1	-1.9	-1.6	-2.5	-2.5	-2.9	-3.4	-4.0	-4.7	-4.9	-2.6	-3.1	-3.4	-3.1	-3.1	-3.3
Norway	-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	-1.1	-1.7	-1.5	-0.8	1.7	2.4
Poland	..	..	..	..	..	..	..	..	..	-3.4	-2.6	-2.0	-1.1	-1.1	-1.2	-1.0	-1.5	-1.8	-2.2	-2.8
Portugal	-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	-1.8	-2.3	-3.1	-4.2	-4.2
Slovak Republic	..	..	..	..	..	..	..	..	..	-0.0	-0.1	-0.0	-0.0	-0.1	-0.2	-0.3	-0.4	-0.3	-0.3	-0.3
Spain	-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	-8.3	-10.0	-10.7	-11.3
Sweden	-1.9	-2.0	-2.0	-1.6	-1.8	-2.3	-4.5	-6.4	-10.0	-8.8	-5.9	-5.5	-6.3	-4.9	-3.2	-2.0	-1.4	-2.8	-1.8	-1.4
Switzerland	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	17.8	20.2	23.4	17.9	16.8	17.9
Turkey	-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	-5.0	-5.1	-4.5
United Kingdom	3.1	-0.0	4.2	1.4	1.3	-1.2	-5.1	-5.9	0.2	-0.3	5.1	3.3	1.8	6.4	20.8	6.5	13.0	16.1	11.1	9.4
United States	35.1	25.7	15.5	14.3	18.7	19.8	28.5	24.1	23.0	23.9	16.7	20.5	21.0	8.8	-6.2	-13.6	-14.8	-19.1	-26.8	-37.0
Euro area	-5.7	-7.1	-8.5	-9.0	-6.4	0.0	-7.4	-12.0	-21.7	-17.2	-31.1	-28.2	-26.8	-13.6	-31.0	-31.3	-27.9	-41.4	-37.8	-37.6
European Union	-6.8	-11.6	-9.8	-13.2	-10.6	-7.3	-22.1	-29.4	-36.4	-30.1	-35.7	-34.2	-34.9	-15.6	-16.2	-29.2	-19.9	-31.7	-32.8	-34.2
Total OECD	5.1	-6.7	-12.7	-12.9	-4.4	-3.6	-11.2	-18.1	-15.1	-10.3	-28.7	-22.2	-13.3	2.0	-8.8	-36.9	-13.6	-17.2	-18.1	-16.5

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.

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Annex Table 50. **Current account balances**

$ billion

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	-7.5	-7.8	-8.4	-6.7	-10.0	-16.3	-14.0	-9.2	-9.5	-8.1	-15.2	-17.4	-14.0	-10.7	-16.4	-21.3	-13.4	-7.7	-14.6	-16.1
Austria	-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	-6.7	-5.3	-4.3	-3.5	-3.2
Belgium[a]	0.8	1.7	4.0	3.6	4.7	4.4	5.3	6.2	8.8	11.9	13.0	14.2	12.9	12.8	12.6	12.7	10.2	11.5	11.6	13.5
Canada	-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	-8.2	-8.3	1.2	18.1	18.9	13.1	14.6
Czech Republic	..	..	..	..	..	..	..	..	..	0.5	-0.8	-1.4	-4.1	-3.6	-1.4	-1.6	-2.8	-2.7	-3.1	-2.9
Denmark	-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	-1.6	2.9	2.5	4.1	3.1	4.3
Finland	0.0	-0.8	-0.7	-1.7	-2.7	-5.8	-7.0	-6.8	-5.1	-1.1	1.1	5.4	5.1	6.8	7.3	7.7	8.9	7.8	6.3	7.5
France	-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	39.3	35.6	20.1	24.0	25.8	26.2
Germany	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	-19.1	-20.4	2.1	26.8	30.2
Greece	-2.4	-3.7	-2.1	-1.7	-1.5	-3.3	-4.6	-2.6	-3.6	-1.9	-1.4	-4.5	-6.3	-5.3	-3.7	-5.3	-7.5	-7.2	-7.2	-7.4
Hungary	..	..	..	..	..	..	..	..	..	-3.5	-4.0	-2.5	-1.7	-1.0	-2.3	-2.1	-1.3	-1.1	-2.1	-2.0
Iceland	-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	-0.8	-0.4	-0.1	-0.1
Ireland	-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	0.8	0.4	-0.5	-1.3	-1.2	-0.8
Italy	-3.1	-4.2	2.2	-2.5	-7.0	-11.2	-16.8	-24.2	-30.2	8.0	12.6	25.0	39.1	33.7	23.0	8.2	-5.4	3.2	3.3	5.2
Japan	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	107.0	116.8	91.1	124.1	159.9
Korea	-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	12.2	8.6	6.3	13.3
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	2.3	2.0	1.7	1.6	1.0	1.0	0.3	0.1	0.5
Mexico	4.2	0.8	-1.4	4.2	-2.4	-5.8	-7.5	-14.6	-24.4	-23.4	-29.7	-1.6	-2.5	-7.7	-16.1	-14.0	-17.7	-17.5	-17.7	-21.9
Netherlands	6.3	4.4	4.3	4.2	7.1	9.4	8.1	7.5	6.8	13.2	17.3	25.8	21.5	25.0	13.3	13.0	11.0	11.9	18.0	20.7
New Zealand	-1.9	-1.6	-1.8	-1.7	-0.4	-1.6	-1.4	-1.2	-1.7	-1.7	-2.1	-3.1	-4.0	-4.4	-2.2	-3.6	-2.8	-1.6	-2.1	-2.3
Norway	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	-1.3	6.0	23.0	24.1	26.8	29.2
Poland	..	..	..	..	..	..	..	..	..	-4.6	1.0	0.9	-3.3	-5.7	-6.9	-12.5	-10.0	-7.7	-8.8	-10.0
Portugal[b]	-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	-7.8	-9.9	-11.1	-10.1	-9.9	-9.8
Slovak Republic	..	..	..	..	..	..	..	..	..	-0.6	0.7	0.4	-2.1	-2.0	-2.0	-1.0	-0.7	-1.8	-1.8	-1.7
Spain	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	-13.9	-17.4	-15.2	-17.1	-18.0
Sweden	0.7	-1.0	0.0	-0.0	-0.6	-3.1	-6.3	-4.7	-7.5	-2.6	2.5	8.1	8.5	9.0	8.2	8.7	7.6	6.7	8.4	10.9
Switzerland	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	26.0	28.4	31.0	24.6	26.3	28.1
Turkey	-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	3.3	0.4	-0.5
United Kingdom	-0.6	0.5	-3.5	-12.7	-35.4	-43.1	-39.1	-19.0	-22.9	-17.9	-10.3	-14.3	-13.5	-2.9	-8.0	-31.0	-25.6	-25.1	-29.1	-32.4
United States	-94.3	-118.2	-147.2	-160.7	-121.2	-99.5	-79.0	3.7	-48.5	-82.5	-118.2	-109.9	-120.9	-139.8	-217.5	-324.4	-444.7	-417.4	-469.9	-545.5
Euro area	10.9	17.7	54.8	43.0	43.7	34.9	6.3	-64.4	-55.0	25.0	15.2	54.7	80.0	101.2	71.3	23.7	-16.5	22.6	53.1	64.7
European Union	9.3	14.5	46.8	27.3	6.2	-13.0	-38.5	-86.9	-82.3	8.3	9.7	49.8	77.6	108.0	70.0	4.3	-32.1	8.3	35.6	47.6
Total OECD	-51.8	-61.1	-32.2	-54.7	-42.5	-81.6	-108.9	-55.7	-60.3	12.2	-21.1	37.4	0.7	42.5	-15.7	-211.2	-335.2	-278.8	-287.6	-310.2

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 51. **Current account balances as a percentage of GDP**

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Australia	-4.0	-4.7	-4.9	-3.3	-3.8	-5.6	-4.6	-3.0	-3.1	-2.7	-4.5	-4.8	-3.5	-2.7	-4.5	-5.4	-3.5	-2.2	-3.8	-3.9
Austria	-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	-3.2	-2.8	-2.3	-1.8	-1.6
Belgium[a]	1.0	2.0	3.5	2.5	3.0	2.7	2.6	3.0	3.8	5.5	5.6	5.1	4.8	5.2	5.0	5.1	4.4	5.0	5.0	5.5
Canada	-0.4	-1.6	-3.0	-3.2	-3.0	-3.9	-3.4	-3.7	-3.6	-3.9	-2.3	-0.8	0.5	-1.3	-1.3	0.2	2.5	2.7	1.9	2.0
Czech Republic	..	..	..	..	..	..	..	..	..	1.3	-1.9	-2.6	-7.1	-6.7	-2.5	-2.9	-5.6	-4.7	-4.7	-4.0
Denmark	-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	1.6	2.5	1.9	2.5
Finland	0.1	-1.4	-0.9	-1.9	-2.5	-5.0	-5.1	-5.4	-4.7	-1.3	1.1	4.1	4.0	5.6	5.6	6.0	7.4	6.5	5.2	5.9
France	-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	2.7	2.5	1.5	1.8	2.0	1.9
Germany	1.6	2.8	4.4	4.0	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	0.1	1.5	1.6
Greece	-5.9	-9.1	-4.3	-3.0	-2.3	-4.8	-5.5	-2.8	-3.6	-2.1	-1.4	-3.8	-5.1	-4.4	-3.1	-4.2	-6.7	-6.2	-5.9	-5.7
Hungary	..	..	..	..	..	..	..	..	..	-9.0	-9.5	-5.5	-3.8	-2.1	-4.9	-4.4	-2.9	-2.1	-3.5	-3.1
Iceland	-4.6	-3.8	0.5	-3.3	-3.6	-1.9	-2.1	-4.0	-2.3	0.8	1.9	0.8	-1.8	-1.7	-7.0	-7.0	-10.1	-4.6	-1.8	-1.5
Ireland	-5.4	-3.7	-3.1	-0.2	-0.1	-1.5	-0.8	0.7	1.0	3.7	2.7	2.6	2.8	2.4	0.9	0.4	-0.7	-1.3	-1.1	-0.7
Italy	-0.8	-1.0	0.3	-0.3	-0.8	-1.3	-1.5	-2.1	-2.5	0.8	1.2	2.3	3.2	2.9	1.9	0.7	-0.5	0.3	0.3	0.4
Japan	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	2.4	2.2	3.3	4.3
Korea	-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	2.7	2.0	1.4	2.8
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	12.6	11.0	9.5	8.7	4.9	4.9	1.5	0.3	2.4
Mexico	2.5	0.8	-0.8	2.8	-1.3	-2.7	-2.9	-4.7	-6.7	-5.8	-7.1	-0.5	-0.8	-1.9	-3.8	-2.9	-3.1	-2.8	-2.6	-3.0
Netherlands	4.8	3.2	2.4	1.8	2.9	4.0	2.7	2.5	2.1	4.1	4.9	6.2	5.2	6.6	3.4	3.2	2.9	3.1	4.6	5.0
New Zealand	-8.4	-7.2	-6.2	-4.9	-1.0	-3.8	-3.2	-2.8	-4.2	-4.0	-4.0	-5.1	-6.0	-6.6	-4.0	-6.6	-5.4	-3.2	-4.0	-4.0
Norway	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	-0.9	3.9	14.3	14.7	15.3	15.5
Poland	..	..	..	..	..	..	..	..	..	-5.2	1.0	0.7	-2.3	-4.0	-4.4	-8.1	-6.3	-4.3	-4.8	-5.1
Portugal[b]	-2.5	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	-6.9	-8.6	-10.4	-9.2	-8.7	-8.1
Slovak Republic	..	..	..	..	..	..	..	..	..	-4.8	4.5	2.1	-10.6	-9.5	-9.3	-5.0	-3.8	-8.8	-7.9	-6.8
Spain	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	0.4	-0.5	-2.3	-3.1	-2.6	-2.9	-2.8
Sweden	0.7	-1.0	0.0	-0.0	-0.3	-1.6	-2.6	-1.9	-3.0	-1.3	1.2	3.4	3.2	3.8	3.4	3.6	3.3	3.2	3.9	4.7
Switzerland	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	9.9	11.0	12.9	9.9	10.3	10.6
Turkey	-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	2.4	0.2	-0.2
United Kingdom	-0.1	0.1	-0.6	-1.8	-4.3	-5.1	-4.0	-1.8	-2.1	-1.9	-1.0	-1.3	-1.1	-0.2	-0.6	-2.1	-1.8	-1.8	-1.9	-2.1
United States	-2.4	-2.8	-3.3	-3.4	-2.4	-1.8	-1.4	0.1	-0.8	-1.2	-1.7	-1.5	-1.5	-1.7	-2.5	-3.5	-4.5	-4.1	-4.4	-4.9
Euro area	0.5	0.8	1.8	1.1	1.0	0.8	0.1	-1.1	-0.9	0.4	0.2	0.8	1.1	1.6	1.1	0.4	-0.3	0.4	0.9	1.0
European Union	0.3	0.5	1.2	0.6	0.1	-0.2	-0.6	-1.2	-1.1	0.1	0.1	0.6	0.9	1.3	0.8	0.1	-0.4	0.1	0.4	0.6
Total OECD	-0.6	-0.6	-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	-1.1	-1.1	-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.

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Annex Table 52. **Structure of current account balances of major world regions**

$ billion

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	Projections 2003
Trade balance																				
OECD	-44	-43	-8	-24	-1	-39	-53	-27	7	64	58	99	51	54	18	-121	-272	-222	-235	-261
Non-OECD *of which:*	63	53	16	51	33	48	69	54	29	-0	31	11	41	53	47	155	276	205	212	234
Non-OECD Asia *of which:*	0	-9	-1	13	2	3	8	10	4	-13	-4	-15	-11	27	96	105	94	90	104	107
China	0	-13	-9	-2	-5	-6	9	9	5	-11	7	18	20	46	47	36	34	34	34	30
Dynamic Asia[a]	12	18	22	28	21	22	11	11	8	8	3	-13	-6	1	69	85	82	80	95	103
Other Asia	-12	-13	-14	-13	-14	-13	-12	-9	-10	-11	-14	-20	-24	-21	-20	-16	-23	-24	-25	-26
Latin America	26	25	12	12	22	28	31	19	10	2	3	-7	-6	-19	-33	-6	12	-0	9	15
Africa and Middle-East	24	31	-4	15	4	22	53	23	14	11	23	25	54	48	-11	33	118	73	66	76
Central and Eastern Europe	13	5	8	12	6	-6	-23	1	2	-0	10	8	4	-3	-4	23	52	42	33	36
World[b]	20	10	8	27	31	10	16	26	36	64	89	109	92	106	65	34	4	-17	-23	-27
Services and private transfers																				
OECD	17	10	10	3	-5	-4	-11	-1	2	17	-0	8	24	59	47	-13	16	6	9	14
Non-OECD *of which:*	-89	-83	-67	-68	-74	-83	-85	-102	-90	-91	-82	-110	-105	-110	-125	-113	-127	-131	-138	-155
Non-OECD Asia *of which:*	-5	-5	-1	-2	-4	-4	-3	-1	-0	-2	3	-16	-6	1	-20	-18	-10	-20	-23	-27
China	2	2	2	2	2	1	3	4	1	-1	0	-17	-13	-10	-15	-21	-14	-16	-19	-21
Dynamic Asia[a]	-11	-9	-5	-6	-6	-5	-4	-4	-1	-1	-1	-2	1	1	-13	-6	-8	-14	-14	-16
Other Asia	4	3	3	2	0	-0	-1	-1	-0	1	4	3	6	10	8	9	11	10	10	10
Latin America	-33	-30	-30	-28	-31	-33	-27	-24	-21	-27	-27	-30	-33	-43	-45	-38	-43	-42	-44	-46
Africa and Middle-East	-56	-49	-38	-40	-39	-47	-57	-73	-58	-56	-54	-54	-61	-58	-48	-48	-63	-55	-54	-62
Central and Eastern Europe	5	1	1	1	1	1	1	-4	-10	-6	-5	-10	-5	-10	-12	-9	-12	-14	-17	-20
World[b]	-72	-73	-58	-65	-78	-87	-96	-103	-88	-74	-83	-102	-81	-51	-78	-125	-111	-124	-129	-141
Official transfers																				
OECD	-25	-28	-34	-34	-37	-39	-45	-28	-69	-69	-79	-69	-74	-70	-80	-78	-80	-63	-61	-62
Non-OECD *of which:*	6	10	12	10	13	12	4	-9	18	18	14	15	14	13	12	12	11	12	13	13
Non-OECD Asia *of which:*	2	2	3	3	3	2	2	3	3	3	3	4	3	3	3	1	1	2	3	2
China	0	0	0	-0	0	0	0	0	0	0	-1	1	0	0	0	0	0	0	0	0
Dynamic Asia[a]	0	0	0	0	0	0	1	0	1	0	1	1	0	0	1	1	1	1	1	0
Other Asia	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	0	0	1	2	2
Latin America	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
Africa and Middle-East	3	6	7	6	8	8	-1	-20	10	10	8	7	7	6	6	6	6	7	7	7
Central and Eastern Europe	0	0	0	0	0	0	1	6	4	4	2	2	2	2	2	3	2	2	2	2
World[b]	-19	-18	-22	-24	-24	-27	-41	-37	-51	-51	-64	-54	-61	-57	-68	-66	-69	-51	-48	-49
Current account balance																				
OECD	-52	-61	-32	-55	-43	-82	-109	-56	-60	12	-21	37	1	42	-16	-211	-335	-279	-288	-310
Non-OECD *of which:*	-19	-20	-40	-6	-28	-22	-12	-58	-43	-73	-37	-85	-51	-44	-65	54	160	86	87	92
Non-OECD Asia *of which:*	-2	-11	1	14	0	2	8	12	6	-12	2	-27	-14	31	78	89	85	72	83	83
China	2	-11	-7	0	-4	-4	12	13	6	-12	7	2	7	37	31	16	21	18	15	9
Dynamic Asia[a]	2	8	17	22	16	17	7	7	8	7	3	-14	-5	3	57	80	75	67	82	88
Other Asia	-6	-8	-9	-9	-11	-11	-12	-8	-8	-8	-8	-15	-16	-9	-11	-7	-11	-12	-14	-14
Latin America	-6	-4	-16	-14	-8	-3	6	-3	-9	-23	-22	-35	-37	-60	-76	-43	-29	-40	-33	-30
Africa and Middle-East	-29	-12	-35	-19	-27	-17	-4	-70	-35	-35	-23	-22	-0	-4	-53	-9	62	25	18	21
Central and Eastern Europe	18	6	10	13	7	-4	-21	3	-4	-3	6	-0	0	-11	-14	17	43	30	19	19
World[b]	-71	-81	-72	-61	-70	-104	-121	-114	-103	-61	-58	-47	-50	-2	-81	-157	-175	-192	-200	-218

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 53. **Semi-annual demand and output projections**

Percentage changes from previous period, seasonally adjusted at annual rates, volume

	2001	2002	2003	2001		2002		2003	
				I	II	I	II	I	II
Private consumption									
Canada	2.5	2.8	3.1	2.7	1.1	3.5	2.9	3.2	3.2
France	2.9	2.1	2.6	3.4	2.6	1.8	2.2	2.7	2.8
Germany	1.1	0.6	1.8	2.4	-0.3	0.6	1.5	1.9	1.9
Italy	1.1	1.4	2.5	1.4	0.1	1.5	2.5	2.6	2.5
Japan	0.4	-0.4	0.5	3.0	-2.6	0.4	0.4	0.5	0.6
United Kingdom	3.9	3.1	2.5	4.0	4.0	2.9	2.6	2.5	2.4
United States	3.1	3.0	2.6	2.9	2.6	3.6	2.0	2.6	3.2
Euro area	1.8	1.4	2.4	2.6	0.8	1.4	2.1	2.6	2.6
European Union	2.0	1.7	2.5	2.7	1.2	1.7	2.2	2.5	2.6
Total OECD	2.2	2.0	2.4	2.7	1.2	2.4	2.1	2.4	2.6
Public consumption									
Canada	2.2	2.5	2.5	2.1	2.5	2.3	2.8	2.5	2.3
France	2.1	1.9	1.5	2.0	2.2	1.8	1.9	1.4	1.4
Germany	1.7	1.4	0.9	3.3	0.3	1.8	1.5	0.7	0.7
Italy	2.3	1.1	0.6	2.6	1.5	1.1	0.6	0.6	0.6
Japan	3.2	2.5	2.2	4.0	1.7	2.8	2.8	2.1	1.8
United Kingdom	2.7	2.8	4.0	4.5	-0.4	3.8	4.0	4.0	4.0
United States	3.1	4.2	4.2	3.5	3.9	4.7	3.7	4.3	4.7
Euro area	2.2	1.6	1.3	2.7	1.7	1.6	1.5	1.2	1.2
European Union	2.2	1.8	1.6	3.0	1.4	1.9	1.8	1.5	1.6
Total OECD	2.2	2.6	2.6	2.6	2.1	2.9	2.6	2.6	2.7
Investment									
Canada	1.0	2.5	5.0	0.1	1.7	2.2	4.0	5.1	5.6
France	2.8	-0.1	3.2	2.5	0.4	-0.9	1.0	3.7	4.5
Germany	-4.8	-2.3	2.3	-7.2	-5.7	-2.2	0.8	2.6	3.2
Italy	2.4	1.5	4.4	2.2	0.8	1.0	3.2	4.8	4.7
Japan	-1.7	-5.8	-4.3	-1.0	-6.2	-6.2	-4.4	-4.6	-3.6
United Kingdom	0.1	-0.2	3.3	-3.7	-1.3	-1.3	3.1	3.5	3.0
United States	-0.7	-0.7	5.5	0.4	-6.2	-0.1	4.0	5.7	6.4
Euro area	-0.2	-0.1	3.5	-0.9	-1.6	-0.3	2.0	3.9	4.4
European Union	0.1	0.0	3.4	-1.2	-1.4	-0.4	2.2	3.7	4.1
Total OECD	-1.3	-0.3	3.6	-1.7	-3.7	0.0	3.0	3.6	4.0
Total domestic demand									
Canada	0.7	2.7	3.9	0.4	-0.2	3.4	4.0	4.0	3.7
France	1.7	1.6	2.9	1.2	0.9	1.5	2.6	3.0	3.0
Germany	-1.0	0.2	2.2	-2.1	-1.6	0.3	2.0	2.3	2.5
Italy	1.6	1.3	2.6	3.3	-0.2	1.6	2.3	2.7	2.6
Japan	0.3	-1.5	-0.4	2.1	-3.2	-1.1	-0.3	-0.5	-0.3
United Kingdom	2.8	2.5	2.9	2.5	1.8	2.7	3.1	3.0	2.8
United States	1.3	3.0	3.9	1.0	0.0	4.2	3.7	3.8	4.1
Euro area	0.9	1.2	2.7	0.8	0.0	1.2	2.4	2.8	2.9
European Union	1.2	1.4	2.7	1.2	0.2	1.5	2.5	2.8	2.8
Total OECD	0.7	1.9	2.9	0.7	-0.3	2.6	2.9	2.9	2.9
Export of goods and services									
Canada	-3.7	2.8	9.1	-4.5	-6.8	4.9	8.7	9.2	9.3
France	1.1	-2.0	7.8	0.3	-8.1	-1.2	2.9	8.9	10.4
Germany	4.7	3.2	7.5	3.4	0.3	2.8	6.9	7.7	7.8
Italy	0.8	2.3	7.2	-0.4	-4.8	3.8	6.7	7.3	7.4
Japan	-6.6	1.9	9.0	-8.5	-13.0	7.2	7.8	9.4	9.2
United Kingdom	1.0	0.7	8.8	2.1	-8.5	2.3	7.5	9.5	8.7
United States	-4.5	-2.8	7.3	-4.7	-15.2	-0.5	6.6	7.5	7.5
Total OECD [a]	-1.5	0.4	8.0	-2.5	-9.0	2.5	6.8	8.3	8.5

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).*

a) Includes intra-regional trade.

Source: OECD.

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Annex Table 53. (cont'd) **Semi-annual demand and output projections**

Percentage changes from previous period, seasonally adjusted at annual rates, volume

	2001	2002	2003	2001		2002		2003	
				I	II	I	II	I	II
Import of goods and services									
Canada	-5.7	1.6	9.5	-7.1	-7.9	2.7	9.7	9.5	9.5
France	-0.2	-1.7	7.9	-2.7	-9.1	-0.3	3.2	8.9	10.5
Germany	0.1	2.2	7.3	-5.2	-2.5	2.3	6.9	7.3	7.5
Italy	0.2	1.8	6.9	2.2	-6.0	3.5	6.4	7.1	6.9
Japan	-0.5	-5.6	3.1	0.6	-12.5	-4.0	-1.5	4.0	6.0
United Kingdom	2.8	2.6	8.3	2.9	-6.0	4.3	8.3	8.3	8.3
United States	-2.7	2.3	8.8	-4.8	-10.5	6.4	8.2	8.7	9.4
Total OECD[a]	-1.4	1.4	7.6	-3.2	-7.9	3.8	6.5	7.8	8.4
GDP									
Canada	1.5	3.2	4.0	1.2	0.4	4.3	3.9	4.1	4.0
France	2.0	1.4	3.0	2.0	1.0	1.1	2.5	3.1	3.1
Germany	0.6	0.7	2.5	0.8	-0.6	0.6	2.2	2.6	2.8
Italy	1.8	1.5	2.8	2.5	0.0	1.7	2.5	2.9	2.9
Japan	-0.4	-0.7	0.3	1.0	-3.4	0.0	0.6	0.2	0.3
United Kingdom	2.2	1.9	2.8	2.2	1.3	1.9	2.5	3.0	2.5
United States	1.2	2.5	3.5	1.2	-0.2	3.5	3.4	3.5	3.7
Euro area	1.6	1.3	2.9	1.7	0.4	1.3	2.5	3.0	3.1
European Union	1.7	1.5	2.8	1.8	0.6	1.4	2.5	3.0	3.0
Total OECD	1.0	1.8	3.0	1.1	-0.2	2.3	2.8	3.0	3.1
	Per cent of GDP								
Current account balance									
Canada	2.7	1.9	2.0	4.0	1.3	1.7	2.0	2.0	1.9
France	1.8	2.0	1.9	1.1	2.6	2.0	1.9	1.9	1.9
Germany	0.1	1.5	1.6	-0.8	1.0	1.4	1.5	1.5	1.6
Italy	0.3	0.3	0.4	0.0	0.6	0.2	0.4	0.4	0.5
Japan	2.2	3.3	4.3	2.0	2.4	3.1	3.6	4.2	4.4
United Kingdom	-1.8	-1.9	-2.1	-1.5	-2.0	-1.9	-2.0	-2.1	-2.1
United States	-4.1	-4.4	-4.9	-4.3	-3.9	-4.2	-4.6	-4.8	-5.0
Euro area	0.4	0.9	1.0	-0.2	0.9	0.8	0.9	0.9	1.1
European Union	0.1	0.4	0.6	-0.3	0.5	0.4	0.4	0.5	0.6
Total OECD	-1.1	-1.1	-1.2	-1.2	-0.9	-1.0	-1.1	-1.1	-1.1
	$ billions								
Current account balance									
Canada	18.9	13	15	28.6	9.2	12	14	14	15
France	24.0	26	26	14.4	33.6	26	25	26	27
Germany	2.1	27	30	-14.1	18.3	26	27	29	32
Italy	3.2	3	5	-0.4	6.8	2	4	4	6
Japan	91.1	124	160	84.1	98.1	114	134	157	163
United Kingdom	-25.1	-29	-32	-21.4	-28.7	-27	-31	-32	-33
United States	-417.4	-470	-545	-440.1	-394.7	-443	-497	-528	-563
Euro area	22.6	53	65	-11.1	56.3	52	55	60	70
European Union	8.3	36	48	-21.8	38.5	35	36	42	54
Total OECD	-278.8	-288	-310	-323.0	-234.5	-269	-306	-305	-316

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).*

a) Includes intra-regional trade.

Source: OECD.

Annex Table 54. **Semi-annual price, cost and unemployment projections**

Percentage changes from previous period, seasonally adjusted at annual rates

	2001	2002	2003	2001		2002		2003	
				I	II	I	II	I	II
Private consumption deflator									
Canada	1.9	1.8	1.9	1.9	1.5	1.8	2.0	1.8	1.9
France	1.2	1.5	1.4	1.1	1.3	1.6	1.4	1.3	1.3
Germany	1.8	1.4	1.6	2.2	1.0	1.6	1.4	1.5	1.7
Italy	2.9	2.5	2.1	2.7	2.8	2.6	1.9	2.1	2.1
Japan	-1.5	-1.6	-1.7	-1.9	-0.9	-2.0	-1.6	-1.7	-1.8
United Kingdom	1.5	2.3	2.3	1.6	1.9	2.4	2.3	2.3	2.3
United States	1.9	1.4	1.8	2.4	0.4	1.4	2.2	1.7	1.7
Euro area	2.3	2.0	1.9	2.4	2.0	2.1	1.8	1.9	1.9
European Union	2.2	2.1	2.0	2.3	1.9	2.2	1.9	2.0	2.0
Total OECD	2.6	2.2	2.0	3.0	1.9	2.4	2.3	2.0	1.9
Total OECD *less* high inflation countries[a]	1.6	1.3	1.4	1.8	0.9	1.4	1.5	1.4	1.4
GDP deflator									
Canada	1.2	0.5	2.0	2.8	-3.7	1.7	2.6	1.8	1.7
France	1.6	1.6	1.4	1.8	1.7	1.6	1.5	1.3	1.4
Germany	1.3	1.4	0.9	2.2	0.7	2.1	0.9	0.8	1.1
Italy	2.6	2.6	2.2	3.8	1.9	3.1	2.1	2.1	2.3
Japan	-1.4	-1.4	-1.7	-1.6	-0.9	-1.5	-1.6	-1.7	-1.6
United Kingdom	2.4	3.2	2.5	2.5	2.7	3.8	2.6	2.5	2.5
United States	2.2	1.5	1.6	2.6	1.6	1.3	1.6	1.6	1.5
Euro area	2.2	2.1	1.8	2.9	1.8	2.4	1.8	1.7	1.9
European Union	2.3	2.3	1.9	2.8	1.9	2.6	1.9	1.9	2.0
Total OECD	2.7	2.3	1.8	3.2	2.2	2.6	2.1	1.8	1.7
Total OECD *less* high inflation countries[a]	1.7	1.4	1.3	2.2	1.0	1.6	1.4	1.3	1.3
Unit labour cost (total economy)									
Canada	2.7	1.2	1.1	4.1	1.1	1.5	0.9	1.0	1.5
France	1.8	1.7	0.2	1.5	2.1	2.0	0.6	0.1	0.2
Germany	1.3	1.5	0.5	1.8	0.9	2.4	0.5	0.5	0.4
Italy	3.6	2.7	1.5	3.3	5.3	2.0	1.4	1.6	1.6
Japan	0.5	-1.3	-1.3	-0.4	1.1	-2.0	-2.3	-1.2	-0.7
United Kingdom	3.9	2.7	2.1	5.2	2.2	3.0	2.3	1.9	2.4
United States	3.9	0.4	1.7	4.6	2.0	-0.8	1.4	1.8	1.6
European Union	2.9	2.2	1.2	3.4	2.9	2.4	1.3	1.2	1.2
Total OECD	4.1	1.8	1.6	4.6	3.3	1.4	1.4	1.6	1.6
Total OECD less high inflation countries [a]	3.0	1.0	1.1	3.3	2.2	0.5	0.8	1.1	1.2
				Per cent of labour force					
Unemployment									
Canada	7.2	7.6	7.2	7.0	7.4	7.7	7.6	7.4	7.1
France	8.7	9.2	9.0	8.6	8.8	9.1	9.3	9.2	8.9
Germany	7.4	7.8	7.6	7.4	7.5	7.8	7.9	7.8	7.5
Italy	9.6	9.1	9.0	9.7	9.5	9.1	9.1	9.0	8.9
Japan	5.0	5.8	6.0	4.8	5.3	5.7	6.0	6.0	6.0
United Kingdom	5.1	5.3	5.3	5.1	5.2	5.3	5.4	5.3	5.3
United States	4.8	5.6	5.3	4.3	5.2	5.6	5.5	5.4	5.2
Euro area	8.0	8.2	8.1	8.0	8.0	8.2	8.3	8.2	8.0
European Union	7.4	7.6	7.5	7.3	7.4	7.5	7.6	7.5	7.4
Total OECD	6.4	6.9	6.7	6.2	6.6	6.9	6.9	6.8	6.6

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. 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).*

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.

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Annex Table 55. **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

	2000	2001	2002	2003
Australia				
Final domestic demand	2.7	1.4	4.4	4.1
Stockbuilding	-0.5	-0.4	0.4	0.0
Net exports	0.5	1.2	-1.1	-0.1
GDP	3.4	2.4	3.7	4.0
Austria				
Final domestic demand	2.8	0.3	0.9	2.4
Stockbuilding	-0.3	-0.3	-0.2	0.1
Net exports	0.5	1.0	0.5	0.4
GDP	3.0	1.0	1.2	2.8
Belgium				
Final domestic demand	3.1	1.4	0.9	2.1
Stockbuilding	0.5	-1.0	0.5	0.0
Net exports	0.5	0.6	-0.2	0.6
GDP	4.0	1.1	1.1	2.7
Canada				
Final domestic demand	3.8	2.0	2.5	3.2
Stockbuilding	0.5	-1.3	0.0	0.5
Net exports	0.2	0.7	0.6	0.3
GDP	4.4	1.5	3.2	4.0
Czech Republic				
Final domestic demand	2.2	4.2	3.8	4.4
Stockbuilding	1.7	1.8	0.0	0.0
Net exports	-1.0	-2.4	-0.8	-0.7
GDP	2.9	3.6	3.0	3.7
Denmark				
Final domestic demand	2.3	0.7	1.5	1.8
Stockbuilding	0.2	0.4	0.0	0.0
Net exports	0.6	-0.1	0.3	0.4
GDP	3.0	0.9	1.9	2.2
Finland				
Final domestic demand	2.0	1.4	1.1	1.9
Stockbuilding	1.3	-0.8	0.1	0.0
Net exports	2.6	0.0	0.3	1.5
GDP	5.6	0.7	1.5	3.4
France				
Final domestic demand	3.3	2.6	1.5	2.4
Stockbuilding	0.4	-1.0	0.0	0.4
Net exports	-0.2	0.4	-0.1	0.1
GDP	3.6	2.0	1.4	3.0
Germany				
Final domestic demand	1.6	-0.1	0.1	1.7
Stockbuilding	0.4	-0.9	0.2	0.5
Net exports	1.1	1.6	0.4	0.4
GDP	3.0	0.6	0.7	2.5
Greece				
Final domestic demand	4.2	4.2	3.8	4.4
Stockbuilding	0.3	-0.1	0.0	0.0
Net exports	-0.4	-0.1	-0.3	-0.2
GDP	4.1	4.1	3.5	4.2
Hungary				
Final domestic demand	4.7	3.4	3.8	4.2
Stockbuilding	0.5	-1.2	0.0	0.2
Net exports	0.0	1.7	-0.3	-0.1
GDP	5.2	3.8	3.5	4.3
Iceland				
Final domestic demand	6.8	-2.7	-3.0	2.0
Stockbuilding	0.3	-0.7	0.0	0.1
Net exports	-1.6	6.3	2.2	0.2
GDP	5.5	3.0	-0.8	2.3
Ireland				
Final domestic demand	7.4	3.3	1.9	4.3
Stockbuilding	0.5	0.1	0.2	0.0
Net exports	3.7	3.2	1.4	2.0
GDP	11.5	6.6	3.5	6.3
Italy				
Final domestic demand	3.2	1.6	1.3	2.5
Stockbuilding	-1.1	0.0	0.0	0.0
Net exports	0.8	0.2	0.2	0.2
GDP	2.9	1.8	1.5	2.8
Japan				
Final domestic demand	1.9	0.3	-1.3	-0.5
Stockbuilding	0.0	0.0	-0.1	0.1
Net exports	0.5	-0.7	0.7	0.7
GDP	2.4	-0.4	-0.7	0.3
Korea				
Final domestic demand	7.2	1.7	4.8	3.6
Stockbuilding	-0.2	0.0	0.4	0.0
Net exports	3.1	1.5	0.7	3.0
GDP	9.3	3.0	6.0	6.5

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).*
and/or statistical discrepancy.

Source: OECD.

Annex Table 55. (cont'd) **Contributions to changes in real GDP in OECD countries**

As a per cent of real GDP in the previous period

	2000	2001	2002	2003
Luxembourg				
Final domestic demand	1.4	3.4	1.9	2.8
Stockbuilding	0.2	0.3	-0.1	0.0
Net exports	5.4	1.3	0.9	4.0
GDP	7.5	5.1	2.7	6.8
Mexico				
Final domestic demand	8.8	1.0	2.3	5.1
Stockbuilding	0.1	-0.5	0.0	0.3
Net exports	-1.9	-0.7	-0.5	-0.9
GDP	6.9	-0.3	1.8	4.5
Netherlands				
Final domestic demand	3.1	1.1	1.5	2.5
Stockbuilding	-0.2	-0.1	0.1	0.0
Net exports	0.6	0.1	-0.2	0.0
GDP	3.5	1.1	1.4	2.6
New Zealand				
Final domestic demand	2.2	1.5	4.2	3.4
Stockbuilding	-0.6	0.2	-0.3	0.0
Net exports	2.0	0.2	-1.2	0.0
GDP	3.6	1.8	2.9	3.5
Norway				
Final domestic demand	1.2	0.1	1.8	2.9
Stockbuilding	0.8	-0.7	0.0	0.0
Net exports	0.2	2.0	0.4	-0.4
GDP	2.3	1.4	2.1	2.5
Poland				
Final domestic demand	1.4	-1.0	0.8	2.6
Stockbuilding	0.5	-1.5	0.0	0.0
Net exports	1.5	3.8	0.8	0.6
GDP	4.0	1.1	1.3	2.7
Portugal				
Final domestic demand	3.6	1.1	1.9	3.0
Stockbuilding	-0.3	0.0	0.0	0.0
Net exports	0.0	0.8	-0.1	-0.3
GDP	3.4	1.9	1.7	2.7
Slovak Republic				
Final domestic demand	-2.1	6.3	5.4	5.2
Stockbuilding	0.8	1.1	-0.2	-0.6
Net exports	3.6	-4.1	-1.3	-0.5
GDP	2.2	3.3	4.0	4.1
Spain				
Final domestic demand	4.5	2.8	2.0	3.4
Stockbuilding	-0.1	0.1	0.1	0.0
Net exports	-0.2	-0.1	0.0	-0.1
GDP	4.1	2.8	2.1	3.3
Sweden				
Final domestic demand	2.9	0.7	1.5	2.1
Stockbuilding	0.5	-0.5	0.0	0.0
Net exports	0.4	1.0	0.7	1.4
GDP	3.6	1.2	2.1	3.2
Switzerland				
Final domestic demand	2.7	1.0	0.7	2.3
Stockbuilding	-0.2	-0.2	0.0	0.0
Net exports	0.6	0.5	0.4	0.0
GDP	3.0	1.3	1.0	2.3
Turkey				
Final domestic demand	9.2	-15.7	1.8	3.6
Stockbuilding	1.1	-4.0	1.8	0.2
Net exports	-3.0	12.4	-1.8	-0.3
GDP	7.4	-7.4	1.8	3.5
United Kingdom				
Final domestic demand	4.1	3.1	2.6	3.1
Stockbuilding	-0.3	-0.2	0.1	0.0
Net exports	-0.7	-0.8	-0.8	-0.4
GDP	3.0	2.2	1.9	2.8
United States				
Final domestic demand	5.1	2.4	2.6	3.5
Stockbuilding	-0.1	-1.2	0.6	0.5
Net exports	-0.9	-0.1	-0.7	-0.6
GDP	4.1	1.2	2.5	3.5
Euro area				
Final domestic demand	2.9	1.4	1.1	2.4
Stockbuilding	0.1	-0.5	0.1	0.3
Net exports	0.6	0.7	0.2	0.3
GDP	3.5	1.6	1.3	2.9
European Union				
Final domestic demand	3.1	1.6	1.4	2.5
Stockbuilding	-0.1	-0.4	0.1	0.2
Net exports	0.4	0.5	0.0	0.2
GDP	3.4	1.7	1.5	2.8
Total OECD				
Final domestic demand	4.0	1.4	1.7	2.6
Stockbuilding	0.0	-0.7	0.3	0.3
Net exports	-0.1	0.3	-0.2	0.0
GDP	3.9	1.0	1.8	3.0

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)*.
and/or statistical discrepancy.

Source: OECD.

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Annex Table 56. **Household wealth and indebtedness**[a]

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada													
Net wealth	420.0	421.7	415.1	426.2	440.0	453.1	473.6	479.1	492.9	507.6	510.7	513.4	512.2
Net financial wealth	178.5	179.0	176.9	185.6	194.5	200.6	211.2	221.4	232.3	244.1	245.2	246.0	245.3
Non-financial assets	241.5	242.8	238.2	240.5	245.5	252.5	262.4	257.7	260.6	263.5	265.5	267.3	266.9
Financial assets	267.1	269.0	269.5	278.7	290.3	299.0	313.2	323.9	338.0	352.3	355.5	357.6	357.2
of which: Equities	52.7	51.0	49.5	51.2	52.5	59.4	63.7	67.3	75.7	86.0	93.5	95.7	96.7
Liabilities	88.6	90.1	92.6	93.1	95.9	98.4	102.0	102.5	105.7	108.2	110.3	111.6	112.0
of which: Mortgages	55.6	57.3	59.0	61.2	64.4	66.1	68.4	68.6	70.6	71.2	71.6	71.3	70.5
France													
Net wealth	439.1	447.7	417.9	439.7	437.9	466.9	452.5	478.2	502.3	524.4	543.4	614.6	619.3
Net financial wealth	138.0	155.6	130.6	150.6	156.4	189.8	178.2	182.5	205.9	226.0	245.1	298.1	292.5
Non-financial assets	301.2	292.1	287.3	289.1	281.6	277.2	274.3	295.8	296.4	298.4	298.3	316.6	326.8
Financial assets	223.5	243.4	218.9	234.2	238.5	267.1	254.2	246.2	270.4	290.9	314.0	368.3	363.3
of which: Equities	90.1	108.7	87.3	103.0	102.3	121.9	101.8	83.5	97.1	108.8	128.1	171.7	165.8
Liabilities	85.5	87.8	88.3	83.6	82.1	77.4	76.0	63.7	64.5	64.9	68.9	70.2	70.8
of which: Long-term loans	52.1	51.6	51.9	50.7	48.4	51.9	50.6	50.8	51.6	52.0	51.6	54.0	54.7
Germany													
Net wealth	..	..	535.6	472.8	531.1	547.1	553.8	563.7	571.7	580.8	586.8	596.3	585.8
Net financial wealth	182.1	185.4	130.8	123.3	124.2	133.6	130.4	136.0	141.3	150.7	157.2	169.3	165.0
Non-financial assets	..	..	404.8	349.5	406.9	413.5	423.4	427.7	430.4	430.1	429.6	427.0	420.8
Financial assets	199.2	203.1	200.7	208.2	210.1	224.5	227.5	236.7	246.1	258.3	268.1	284.3	280.2
of which: Equities	12.9	15.1	11.6	30.4	30.8	37.7	40.8	42.5	46.8	55.8	62.0	77.4	75.5
Liabilities	17.1	17.8	70.0	84.9	85.8	90.9	97.1	100.6	104.8	107.6	110.9	114.9	115.1
of which: Mortgages	11.6	12.1	53.6	45.7	49.2	52.6	57.3	60.5	63.7	66.5	68.6	70.6	71.3
Italy													
Net wealth	355.7	417.1	442.7	461.0	482.6	517.1	491.4	485.2	491.1	506.3	516.9	535.1	535.3
Net financial wealth	162.5	206.5	196.3	202.4	207.0	229.2	224.1	224.0	231.3	245.0	264.5	286.6	286.5
Non-financial assets	193.2	221.5	246.4	258.7	275.6	288.0	267.3	261.2	259.8	261.4	252.5	248.5	248.8
Financial assets	174.3	223.9	225.4	232.2	237.7	261.0	256.0	254.6	263.3	278.8	301.5	327.3	329.4
of which: Equities	17.0	48.7	46.0	47.9	47.9	54.4	49.3	46.5	50.9	73.7	108.3	147.8	141.8
Liabilities	11.7	28.3	29.1	29.8	30.6	31.8	31.9	30.6	32.0	33.8	37.0	40.7	42.9
of which: Medium and long-term loans	8.5	13.0	13.7	14.3	14.4	14.9	15.2	18.6	19.1	20.0	21.7	24.5	25.6
Japan													
Net wealth	832.3	901.0	943.2	858.0	787.3	759.8	765.1	753.0	758.7	755.7	740.8	762.1	749.5
Net financial wealth	232.4	261.7	261.9	258.4	250.9	256.3	276.0	285.1	297.7	308.1	304.3	337.0	339.1
Non-financial assets	599.9	639.4	681.3	599.7	536.4	503.5	489.1	467.9	460.7	447.8	439.2	427.0	411.8
Financial assets	344.6	377.6	393.3	388.8	379.3	388.2	409.7	423.4	430.3	444.4	439.0	470.5	472.1
of which: Equities	73.2	93.5	51.7	48.1	34.5	35.8	43.8	43.4	39.7	37.8	28.2	47.5	39.6
Liabilities	112.2	116.0	131.5	130.5	128.4	131.9	133.7	138.3	132.6	136.4	134.6	133.5	133.1
of which: Mortgages	44.5	47.6	50.7	50.6	51.6	53.2	56.1	58.6	59.7	54.4	54.8	57.3	58.5
United Kingdom													
Net wealth	673.5	682.8	611.0	579.8	551.7	586.9	548.4	555.6	570.8	628.3	675.9	750.2	726.2
Net financial wealth	217.5	240.3	209.5	220.0	234.4	278.5	254.9	282.3	293.6	338.4	351.7	395.0	338.8
Non-financial assets	458.5	445.1	396.9	359.9	317.2	308.2	291.1	274.3	283.9	286.1	319.8	345.6	347.8
Financial assets	328.1	354.8	325.2	333.3	343.7	384.7	362.2	388.6	398.7	443.4	461.0	507.8	456.1
of which: Equities	48.7	54.7	56.3	58.9	61.1	73.5	70.1	75.6	80.1	95.6	91.9	115.9	105.9
Liabilities	110.6	114.5	115.7	113.3	109.2	106.2	107.3	106.4	105.1	105.0	109.3	112.8	117.3
of which: Mortgages	99.2	103.2	104.7	102.2	98.7	96.2	97.7	96.6	95.7	95.5	99.6	103.1	107.7
United States													
Net wealth	486.7	499.1	475.0	488.1	477.3	483.2	474.0	501.4	523.8	561.7	581.7	632.7	587.4
Net financial wealth	263.2	272.9	258.7	277.7	274.2	282.8	276.4	304.4	326.9	362.0	380.5	425.3	372.2
Non-financial assets	223.5	226.2	216.3	210.4	203.2	200.3	197.7	197.0	197.0	199.7	201.2	207.5	215.2
Financial assets	347.4	359.3	346.0	366.3	361.8	372.8	368.5	398.7	422.8	459.6	479.9	529.8	479.0
of which: Equities	52.9	60.0	52.1	69.7	75.2	85.1	79.0	98.1	112.6	138.1	150.7	186.2	148.5
Liabilities	84.2	86.4	87.3	88.5	87.7	90.0	92.1	94.3	95.9	97.6	99.4	104.6	106.8
of which: Mortgages	56.7	59.0	60.9	62.7	62.8	63.9	64.3	64.1	64.7	65.6	67.2	70.6	71.9

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 on the UN System of National Accounts 1993 (SNA 93) and, more specifically, for European Union countries, on the corresponding European System of Accounts 1995 (ESA 95).

Households include non-profit institutions serving households. 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. See also *OECD Economic Outlook* Sources and Methods *(http://www.oecd.org/eco/sources-and-methods).*

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 57. **Central government financial balances**

Surplus (+) or deficit (-) as a percentage of nominal GDP

	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Canada	-5.4	-4.5	-3.9	-2.0	0.7	1.0	0.9	1.8	1.2	0.4	0.6
France	-4.9	-4.9	-4.2	-3.7	-2.8	-3.0	-2.5	-2.4	-2.2	-2.7	-2.6
Germany	-1.9	-1.2	-1.4	-2.2	-1.6	-1.8	-1.6	1.3	-1.3	-1.5	-1.1
Italy	-9.8	-9.2	-7.7	-6.9	-2.7	-2.9	-1.6	-1.1	-2.0	-1.4	-1.3
Japan[a]	-2.8	-3.5	-3.9	-4.2	-3.7	-5.2	-7.6	-6.7	-6.4	-6.5	-6.4
United Kingdom	-8.2	-6.7	-5.5	-4.7	-2.0	0.6	1.3	1.8	1.0	-0.7	-1.3
United States	-4.4	-3.2	-2.6	-1.9	-0.6	0.5	1.2	2.1	1.0	-0.6	-0.3
excluding social security	-5.1	-4.0	-3.4	-2.8	-1.7	-0.7	-0.3	0.6	-0.6	-2.1	-2.0
Total of above countries	-4.6	-3.9	-3.5	-3.0	-1.6	-1.2	-1.2	-0.2	-1.0	-2.0	-1.8

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.

Source: OECD.

Annex Table 58. **Maastricht definition of general government gross public debt**

As a percentage of nominal GDP

	1993	1994	1995	1996	1997	1998	1999	2000	2001	Projections 2002	2003
Austria	61.8	64.7	69.2	69.1	64.7	63.9	64.9	63.6	61.7	60.4	57.4
Belgium	138.1	136.8	133.9	130.1	124.7	119.3	115.0	109.3	108.2	104.4	99.5
Denmark	78.0	73.5	69.3	65.1	61.2	56.2	52.7	46.8	44.7	41.7	38.6
Finland	56.0	58.0	57.2	57.1	54.1	48.8	46.8	44.0	43.6	41.7	40.9
France	45.3	48.4	54.6	57.1	59.3	59.5	58.7	57.7	57.5	58.5	58.8
Germany	47.1	49.4	57.1	59.8	61.0	60.9	61.3	60.3	59.8	60.9	60.5
Greece	110.3	107.9	108.7	111.3	108.2	104.9	103.8	102.7	99.7	98.6	97.5
Ireland	96.2	90.4	82.6	74.2	65.1	55.1	49.6	38.8	36.5	33.8	30.9
Italy	118.1	123.8	123.2	122.1	120.2	116.4	114.5	110.6	109.4	107.0	103.8
Luxembourg	5.8	5.4	5.6	6.2	6.0	6.3	6.0	5.6	5.5	4.8	5.0
Netherlands	78.8	75.7	77.2	75.2	69.9	66.8	63.1	56.0	53.2	50.8	49.0
Portugal	..	62.1	64.3	62.7	58.9	54.8	54.2	53.5	55.6	55.6	54.2
Spain	58.4	61.1	63.9	68.1	66.6	64.6	63.1	60.4	57.2	56.2	54.7
Sweden	..	76.2	76.2	76.0	73.1	70.5	65.0	55.3	55.9	51.8	49.3
United Kingdom	45.4	48.5	51.8	52.3	50.8	47.6	45.2	42.4	39.0	39.0	39.4

Note: Debt figures are based on ESA95 definitions. For the period 1993-2000, they are provided by Eurostat, the Statistical Office of the European Communities, while GDP figures are provided by National Authorities. The 2002 to 2003 debt ratios are projected forward in line with the OECD projections for general government gross financial liabilities and GDP.

Source: OECD.

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Annex Table 59. **Monetary and credit aggregates: recent trends**

Annualised percentage change, seasonally adjusted

		Annual change (to 4th quarter)					Latest twelve months	
		1997	1998	1999	2000	2001		
Canada	M2	-1.1	0.6	3.8	7.1	5.7	5.3	(Mar. 2002)
	BL[a]	9.3	7.4	5.6	6.8	4.8	5.2	(Mar. 2002)
Japan	M2+CD	3.3	4.5	3.1	2.0	3.2	3.7	(Mar. 2002)
	BL[a]	1.2	-1.0	-0.6	2.5	-1.4	-2.7	(Feb. 2002)
United Kingdom	M0	6.6	5.2	9.3	6.3	7.6	7.0	(Mar. 2002)
	M4	5.5	8.8	3.4	8.8	7.4	6.2	(Mar. 2002)
	BL[a]	12.6	5.4	8.3	13.4	10.2	8.0	(Feb. 2002)
United States	M2	5.6	8.5	6.3	6.1	10.4	8.4	(Mar. 2002)
	M3	9.1	11.0	7.8	9.3	12.8	10.0	(Mar. 2002)
	BL[a]	8.6	9.8	4.5	12.0	2.8	0.1	(Mar. 2002)
Euro area	M2	5.1	3.9	5.7	6.5	4.0	6.2	(Mar. 2002)
	M3	4.5	4.7	5.1	5.0	4.6	7.3	(Mar. 2002)
	BL[a]	..	6.4	6.6	5.9	7.2	5.3	(Mar. 2002)

a) Commercial bank lending.

Annex Table 60. **Export market growth and performance in manufactured goods**
Percentage changes from previous year

	Import volume				Export market growth				Export volume				Export performance[a]			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
Australia	6.7	-6.9	9.9	8.7	16.1	-1.7	1.9	11.2	3.8	5.5	6.6	9.2	-10.6	7.3	4.6	-1.8
Austria	8.1	4.2	5.0	8.5	12.8	2.2	2.9	8.8	15.8	6.1	5.7	9.1	2.7	3.8	2.8	0.3
Belgium	10.0	-0.9	-0.2	8.1	12.8	1.5	1.9	8.7	10.2	0.9	-0.4	8.0	-2.3	-0.6	-2.3	-0.7
Canada	9.9	-6.9	1.9	10.2	15.6	-4.3	2.9	9.7	9.4	-5.4	3.7	10.1	-5.4	-1.2	0.8	0.3
Czech Republic	22.6	15.5	7.4	11.4	11.8	3.6	4.0	8.9	19.5	14.1	7.6	12.0	7.0	10.1	3.6	2.9
Denmark	8.8	0.9	3.1	7.4	11.9	0.1	2.2	8.5	11.2	5.1	5.3	8.1	-0.6	5.0	3.0	-0.4
Finland	5.8	-3.8	2.7	10.0	13.0	0.6	2.9	9.1	9.6	1.0	2.8	9.9	-3.0	0.3	-0.0	0.7
France	18.4	-1.2	-3.3	9.3	11.6	1.3	2.5	8.6	14.5	0.3	-3.4	8.4	2.6	-1.0	-5.8	-0.2
Germany	11.0	2.4	2.1	8.4	13.3	0.6	2.5	9.0	13.0	3.3	2.6	8.0	-0.2	2.7	0.1	-0.9
Hungary	22.7	5.2	6.2	10.2	11.5	2.9	3.5	8.7	24.1	7.4	5.9	10.4	11.3	4.3	2.3	1.6
Iceland	5.1	-15.4	-4.1	7.3	11.7	0.7	1.8	7.9	1.6	8.0	-9.1	8.2	-9.1	7.3	-10.8	0.3
Ireland	18.8	-2.0	1.2	9.7	12.8	0.4	1.7	8.5	20.8	0.7	3.4	10.3	7.1	0.3	1.6	1.6
Italy	10.5	-0.2	2.8	7.2	13.2	0.9	2.2	9.0	10.4	0.3	1.7	7.8	-2.5	-0.6	-0.5	-1.1
Japan	16.9	-1.6	-5.2	3.7	17.1	-2.1	3.1	11.8	9.3	-11.1	2.6	9.5	-6.6	-9.2	-0.5	-2.1
Korea	29.9	-3.0	9.7	11.1	16.4	-0.6	2.3	11.1	15.9	-5.3	3.8	14.0	-0.4	-4.7	1.4	2.6
Luxembourg	8.4	12.4	2.5	8.1	13.0	0.7	1.3	8.8	29.2	5.8	-1.2	12.6	14.4	5.1	-2.4	3.5
Mexico	20.6	-3.8	4.5	10.9	15.0	-4.4	2.8	9.4	16.4	-3.4	3.8	9.3	1.3	1.1	1.0	-0.2
Netherlands	10.6	4.5	5.3	8.9	12.4	0.6	1.6	8.6	8.8	5.6	2.0	7.9	-3.2	5.0	0.4	-0.7
New Zealand	-4.1	1.8	4.4	8.0	12.8	-3.6	4.0	8.7	5.5	0.4	5.3	9.1	-6.4	4.1	1.3	0.4
Norway	5.8	-1.1	1.4	4.7	12.7	-0.4	2.2	9.0	3.6	5.7	0.5	2.8	-8.1	6.1	-1.7	-5.7
Poland	11.9	-1.3	4.5	9.3	12.1	2.7	3.1	8.8	29.1	13.1	5.0	11.7	15.2	10.2	1.9	2.6
Portugal	6.3	2.1	3.7	7.2	11.8	1.4	1.6	8.4	10.3	3.7	2.2	8.6	-1.4	2.3	0.6	0.2
Slovak Republic	11.6	13.6	9.7	9.7	16.0	7.5	5.3	9.9	19.7	6.3	8.6	10.0	3.3	-1.1	3.2	0.1
Spain	8.5	3.9	2.3	7.4	12.9	0.7	1.7	8.6	13.0	2.9	2.1	8.2	0.1	2.2	0.4	-0.4
Sweden	13.5	-7.2	1.2	8.9	12.1	0.3	2.5	8.8	11.9	-5.2	2.5	10.5	-0.2	-5.4	0.0	1.6
Switzerland	6.7	-1.1	-1.2	5.2	13.3	0.3	2.1	9.0	6.6	2.6	-0.7	5.3	-5.9	2.3	-2.8	-3.5
Turkey	36.5	-28.1	7.6	9.2	11.7	3.0	3.0	8.9	22.3	3.9	0.2	7.0	9.5	0.9	-2.8	-1.7
United Kingdom	12.6	2.5	2.1	8.2	13.1	-0.2	2.1	9.0	12.2	1.9	-1.2	9.9	-0.7	2.1	-3.2	0.8
United States	15.7	-5.0	2.9	9.7	14.2	-2.0	2.4	9.8	12.6	-7.3	-4.5	7.4	-1.4	-5.4	-6.7	-2.2
Total OECD	13.8	-1.5	2.2	8.7	13.9	-0.5	2.5	9.6	12.4	-1.5	0.9	8.8	-1.3	-1.1	-1.5	-0.7
Memorandum items																
China	33.4	14.2	11.3	20.7	16.3	-2.6	1.0	10.3	29.8	10.0	9.1	18.1	11.7	12.9	8.0	7.1
Dynamic Asia[b]	20.2	-6.3	-1.0	17.0	17.9	-0.4	3.0	12.2	17.5	-4.1	1.8	15.7	-0.3	-3.7	-1.1	3.1
Other Asia	15.2	5.3	3.3	7.5	13.9	-0.6	2.2	9.5	14.5	1.8	3.6	8.7	0.5	2.5	1.4	-0.7
Non-OECD Asia	22.7	0.1	3.0	17.1	17.3	-0.8	2.6	11.7	20.3	-0.1	4.0	16.0	2.5	0.7	1.4	3.8
Latin America	7.4	2.5	4.5	5.0	12.7	-0.7	3.0	8.2	11.4	3.0	5.0	9.0	-1.2	3.8	2.0	0.8
Africa and Middle-East	5.2	10.0	2.9	8.7	13.2	0.8	2.1	9.3	8.6	0.8	2.5	9.1	-4.1	0.0	0.4	-0.2
Central and Eastern Europe	10.9	15.6	10.5	10.0	14.6	4.2	5.5	10.2	10.0	10.8	9.9	9.4	-4.0	6.3	4.2	-0.8
Total of non-OECD countries	16.8	2.9	3.7	13.6	16.4	-0.2	2.9	11.1	18.3	0.9	4.4	14.7	1.6	1.1	1.5	3.2
World	14.5	-0.4	2.6	9.9	14.5	-0.4	2.6	9.9	13.7	-1.0	1.7	10.2	-0.7	-0.6	-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, *International Trade by commodity Statistics*.

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Annex Table 61. **Geographical structure of OECD trade**
Percentage of nominal GDP

Area or country	Source/destination		Source of imports						Destination of exports					
			1962	1972	1982	1992	2000	2001	1962	1972	1982	1992	2000	2001
OECD[a]	**OECD**		**6.17**	**8.19**	**10.66**	**11.23**	**13.85**	**13.38**	**5.89**	**8.08**	**10.31**	**11.02**	**13.93**	**13.50**
	of which:	European Union	3.53	4.92	6.15	6.62	7.07	7.03	3.48	4.85	6.38	6.74	7.29	7.24
		United States	1.25	1.27	1.65	1.66	2.39	2.20	0.88	1.38	1.67	1.84	3.18	3.01
		Other	1.40	1.99	2.86	2.94	4.39	4.16	1.53	1.85	2.27	2.43	3.46	3.25
	Non-OECD		**2.24**	**2.35**	**4.59**	**3.08**	**4.93**	**4.77**	**2.24**	**2.22**	**4.13**	**2.98**	**3.55**	**3.57**
	of which:	DAEs + China[b]	0.25	0.34	0.76	1.20	2.28	2.18	0.27	0.38	0.75	1.15	1.65	1.52
		OPEC	0.58	0.80	2.13	0.71	0.98	0.89	0.28	0.40	1.40	0.54	0.41	0.45
United States	**OECD**		**1.80**	**3.45**	**4.94**	**5.76**	**8.17**	**7.47**	**2.22**	**2.93**	**4.22**	**5.09**	**5.88**	**5.24**
	of which:	European Union	0.69	1.15	1.45	1.60	2.23	2.15	0.96	1.13	1.69	1.71	1.67	1.57
		Other	1.11	2.30	3.49	4.16	5.94	5.32	1.26	1.80	2.53	3.38	4.21	3.67
	Non-OECD		**0.99**	**1.03**	**2.55**	**2.67**	**4.17**	**3.72**	**1.46**	**1.08**	**2.29**	**2.00**	**2.04**	**1.93**
	of which:	DAEs + China[b]	0.14	0.30	0.72	1.45	2.30	2.04	0.12	0.18	0.54	0.83	1.01	0.91
		OPEC	0.24	0.21	0.90	0.49	0.68	0.59	0.17	0.21	0.67	0.33	0.19	0.20
Japan	**OECD**		**5.36**	**4.16**	**4.66**	**3.30**	**3.64**	**3.78**	**4.13**	**5.60**	**6.59**	**5.42**	**5.92**	**5.70**
	of which:	European Union	0.88	0.73	0.78	0.89	0.98	1.07	0.97	1.40	1.79	1.76	1.65	1.56
		United States	2.94	1.92	2.18	1.37	1.52	1.52	2.27	2.91	3.28	2.52	2.99	2.92
		Other	1.54	1.51	1.69	1.04	1.14	1.19	0.89	1.29	1.52	1.14	1.28	1.23
	Non-OECD		**3.78**	**3.57**	**7.27**	**2.83**	**4.33**	**4.63**	**3.85**	**3.83**	**5.96**	**3.51**	**4.14**	**4.02**
	of which:	DAEs + China[b]	1.08	0.75	1.43	1.22	2.38	2.60	1.24	1.50	2.09	2.34	3.19	3.01
		OPEC	1.09	1.48	4.39	1.02	1.32	1.37	0.51	0.60	1.95	0.49	0.33	0.38
European Union[c]	**OECD**		**12.47**	**13.59**	**18.13**	**17.90**	**22.98**	**22.28**	**11.50**	**13.64**	**17.24**	**17.13**	**24.24**	**23.76**
	of which:	European Union	8.48	10.32	13.33	13.63	16.34	15.94	8.20	10.28	13.46	13.61	17.72	17.37
		United States	1.96	1.44	2.06	1.53	2.45	2.32	1.17	1.37	1.56	1.31	2.71	2.66
		Other	2.02	1.83	2.74	2.73	4.19	4.03	2.13	1.98	2.22	2.21	3.81	3.72
	Non-OECD		**4.35**	**3.73**	**6.25**	**3.42**	**5.62**	**5.57**	**3.43**	**3.08**	**5.52**	**3.20**	**4.34**	**4.71**
	of which:	DAEs + China[b]	0.31	0.28	0.57	0.94	1.97	1.89	0.30	0.25	0.44	0.65	1.10	1.13
		OPEC	1.11	1.37	2.82	0.71	0.98	0.87	0.46	0.58	2.06	0.70	0.62	0.70

a) OECD includes Korea from 1988. Trade data for Greece and Mexico in 2001 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 2001 are partially OECD estimates.
Source: OECD.

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OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(12 2002 71 1 P) ISBN 92-64-19161-5 – No. 52481 2002
ISSN 0474-5574