OECD ECONOMIC OUTLOOK

47

JUNE 1990

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD Economic Outlook

provides a periodic assessment of economic trends, prospects and policies in OECD countries. It appears twice a year, in June and December.

Each number contains an overall analysis of the latest economic trends and short–term projections. This survey is the joint work of members of the Secretariat of the Economics and Statistics Department. The journal also occasionally contains special studies by members of the Department or other parts of the Organisation designed to assist the interpretation of economic trends. Reference statistics are included. The French version of the OECD Economic Outlook *is entitled* **Perspectives économiques de l'OCDE.**

The OECD Economic Outlook *is published on the responsibility of the Secretary–General. The assessments given of countries' prospects do not necessarily correspond to those of the national authorities concerned.*

A separate publication, **Historical Statistics,** *appearing once a year, presents historical data in analytical form starting from 1960.*

The Organisation for Economic Co–operation and Development (OECD)

was set up under a Convention signed in Paris on 14th December 1960, which provides that the OECD shall promote policies designed:

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

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

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

The Members of OECD *are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.*

The Socialist Federal Republic of Yugoslavia takes part in some of the work of the OECD (agreement of 28th October 1961).

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SPECIAL SUPPLEMENT: PROGRESS IN STRUCTURAL REFORM

An assessment of progress made by OECD countries in structural reform accompanies this edition.

CONVENTIONAL SIGNS

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

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Summary of projections[a]

Seasonally adjusted at annual rates

	1988	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II
	Percentage changes from previous period								
Real GNP									
United States	4.4	3.0	2.3	2.5	2.4	2.1	2.5	2.5	2.4
Japan	5.7	4.9	4.7	4.0	5.9	4.4	3.9	4.0	4.0
Germany	3.6	4.0	3.9	3.4	0.9	5.5	3.7	3.4	3.1
OECD Europe	3.8	3.5	2.9	2.8	2.2	3.3	2.9	2.8	2.8
Total OECD	4.4	3.6	2.9	2.9	3.0	2.9	2.9	2.9	2.9
Real total domestic demand									
United States	3.3	2.4	2.0	2.4	2.3	1.6	2.3	2.4	2.4
Japan	7.6	5.9	5.0	3.6	6.7	4.7	4.0	3.6	3.4
Germany	3.7	2.8	4.0	3.4	2.4	5.5	2.7	3.6	3.6
OECD Europe	4.4	3.4	2.9	2.8	2.4	3.2	2.6	2.8	2.9
Total OECD	4.6	3.6	2.9	2.8	3.2	2.8	2.7	2.8	2.8
Inflation (GNP/GDP deflator)									
United States	3.3	4.1	4.2	4.5	3.6	4.5	4.3	4.5	4.5
Japan	0.6	1.5	2.7	2.6	1.8	3.0	2.9	2.5	2.4
Germany	1.5	2.5	3.0	3.4	1.9	3.2	3.7	3.3	3.3
OECD Europe	4.9	5.5	5.4	5.1	4.9	5.7	5.3	5.2	4.9
Total OECD	3.5	4.3	4.4	4.4	3.8	4.7	4.5	4.4	4.2
	$ billion								
Current balances									
United States[b]	–125.6	–103.7	–99.7	–96.9	–101.0	–100.9	–98.4	–98.0	–95.8
Japan	79.6	57.2	48.5	59.4	50.2	48.2	48.8	55.0	63.7
Germany	48.5	52.7	63.3	61.7	48.9	62.2	64.3	62.5	60.9
OECD Europe	15.3	–3.7	10.4	7.9	–13.7	8.6	12.2	10.9	4.8
Total OECD	–49.7	–84.4	–77.0	–66.8	–99.8	–80.0	–74.0	–68.9	–64.6
OPEC	–14.8	4.1	2.9	3.4	9.0	2.9	3.0	3.3	3.6
Non-OPEC developing countries	4.7	–4.4	–6.9	–8.6	–4.3	–5.5	–8.4	–8.7	–8.5
	Per cent of labour force								
Unemployment									
United States	5.5	5.3	5.3	5.4	5.3	5.3	5.4	5.4	5.5
Japan	2.5	2.3	2.2	2.3	2.2	2.2	2.3	2.3	2.3
Germany	6.1	5.5	6.1	5.9	5.5	6.0	6.2	6.1	5.7
OECD Europe	9.2	8.6	8.6	8.5	8.4	8.5	8.6	8.6	8.5
Total OECD	6.9	6.4	6.4	6.5	6.3	6.4	6.5	6.5	6.5
	Percentage changes from previous period								
World trade[c]	9.0	7.3	6.3	6.9	5.7	6.3	6.9	6.9	7.0

a) Assumptions underlying the projections include :
- no change in actual and announced policies;
- unchanged exchange rates from 2nd May 1990; in particular $1 = Y 158.55, DM 1.69.
- Dollar price (OECD fob imports) for internationally traded oil of $17 per barrel for 90 I and constant in real terms thereafter.

b) The historical data for the U.S. current account exclude the effects of changes in exchange rates on the dollar values of direct investment asset and liability stocks. They thus differ somewhat from the official data as currently recorded and published by the U.S. authorities.

c) Arithmetic average of the growth rates of the world import volume and the world export volume.

The cut-off date for other information used in the compilation of the projections was 22nd May 1990.

The policy challenges ahead

The Current Economic Situation

The flow of economic data since late last year has generally confirmed an easing of growth in the OECD area, to a pace of about 3 per cent. Inflation, on average, slowed somewhat in the second half of last year, but was higher in a number of countries early in 1990. Allowing for temporary factors, prices are rising at an annual rate of about 4½ per cent for the OECD as a whole. The current account imbalances of the United States, Japan and Germany shrank more than generally expected in late 1989. OECD projections for the next 18 months are for growth in the area averaging 3 per cent, with virtually no change in the average inflation rate, only limited further adjustment of external imbalances, and unemployment remaining at about 6½ per cent.

Developments in financial markets over the winter months contrasted with the reasonably steady course of both economic activity and inflation. Long-term interest rates have risen sharply. Exchange rates moved widely – some in a direction favourable to external adjustment (as with the appreciation of the DM against the dollar in late 1989) and some not (as with the depreciation of the yen through 1989 and into 1990). Japanese equity prices declined markedly from record levels. And new credit problems have been exposed in North American junk bond and real estate lending markets. On balance, these financial-market developments are not expected to affect economic developments significantly; but they do raise policy issues, which are reviewed below.

The striking political changes in central and eastern Europe raise questions of how previously centrally-planned economies can best manage the transition to a market economy – and how OECD countries can best support this process. And developments in these economies could begin to affect macroeconomic trends in OECD countries. Indeed, some part of the substantial increase of long-term interest rates over the winter may reflect expectations of significant additional claims on world saving arising from changes in central and eastern Europe, and most immediately from German monetary and economic union. This has given a further edge to the question of whether saving rates in OECD countries are adequate.

Policy Responses

Recent developments have re-affirmed rather than altered the requirements of economic policy. Achieving sustained growth of output and employment in the 1990s depends on: durably low inflation; a stable economic environment; and attention to a broad range of economic policies that influence the level of investment, its productivity, and the efficient use of resources more generally. These latter include policies that affect saving; the level and composition of public expenditure; structural reform in markets for tradeable goods; and pressures on environmental resources.

Containing Inflation

Monetary policies have been restrictive for some time in most OECD countries so as to counter actual or anticipated inflationary pressures. Average inflation is projected to crest this year after a few years of slow upward drift. But there has been no clear turnaround yet in those countries where demand pressures have been greatest. And some slippage can be seen over the past year in countries that had achieved low inflation.

The extent of inflationary pressures suggests that OECD economies are operating at levels of aggregate demand very near to, and in some countries above, their current potential output. This applies even to those economies where unemployment remains high. Unemployment today is largely a structural problem calling for structural policy responses. There is virtually no scope for a more rapid, sustained expansion of demand unless the supply potential of economies can be improved, especially as underlying productivity growth has not picked up much from the pace to which it had slowed by the end of the 1970s.

This situation requires a careful balance in the setting of monetary policy. There is little to suggest the need for a sharp further tightening of monetary conditions, which could trigger an unwelcome slowdown in activity. On the other hand, most economies are some way from price stability. Maintaining the credibility of anti-inflationary monetary policies means keeping monetary conditions restrictive until there are clear signs that demand pressures are subsiding and that inflationary expectations are receding. One concern which arose from market-led increases in long-term interest rates during the winter is that they were signalling faltering market confidence in the commitment of monetary authorities to achieving price stability over the medium-term. This is a reminder that policy credibility is fragile; monetary vigilance has to be maintained.

Fiscal policy could be more supportive of monetary policy in keeping demand pressure under control, not by fine-tuning budgets to fluctuations in short-term prospects, but by more assiduous pursuit of medium-term budget objectives in countries where significant deficits persist. This would moderate upward pressures on interest rates generally, across closely-integrated financial markets. It may also be appropriate to set more ambitious medium-term budgetary objectives in countries where budgets are in good shape, given the persistent strength of domestic demand and consequent pressures on interest rates. The desirability of shifting somewhat the burden of restraining inflation from monetary policy to fiscal policy can also be seen in terms of enhancing national saving flows.

Saving More

The adequacy of saving is of growing concern against a background of persistently high interest rates, continuing slow productivity growth and capacity tightness. Total saving in the OECD has risen somewhat as a share of GNP over the last few years, but remains well below its share in the 1960s and 1970s. For some countries, large current account deficits are a further indication of inadequate national saving. The scope for high rates of investment in a reformed central and eastern Europe will intensify competition for saving. New investment opportunities will also arise in developing countries that pursue sound financial policies and market-oriented development strategies. All this suggests that increasing saving should be a policy concern in most countries.

The most direct contribution that governments can make to boosting national saving available for productive investment is to improve public-sector financial balances. Higher public saving may be offset to some extent by lower private saving, but experience suggests that such offsets would be far from complete.

In seeking to improve public-sector financial balances, restraining public expenditure is likely to become increasingly important – but also increasingly difficult. Relaxation of East-West tensions may allow some scaling back of defence expenditure, but sources of increasing pressure on public expenditure can be clearly seen. Ageing populations will raise pension payments and the overall costs of health care, which are in any case on a rising trend. Containing or preventing damage to the environment in the future need not be a burden on the public sector insofar as the costs are borne by the private sector under the "polluter pays" and related principles; however, the task of cleaning up past environmental damage may fall heavily on to the public sector. The fiscal consolidation of recent years has often followed the line of least resistance, involving a shift in public expenditure away from maintenance and investment; neglected infrastructure requires urgent attention in some countries.

A second line of attack on the problem of inadequate global saving is to reduce disincentives to private saving by shifting the weight of taxation away from saving and towards consumption. Relying more on sales or value-added taxes is one way to do this; modifying the structure of income taxation is another. There may also be a case for schemes which strengthen the inducements to particular forms of saving, but they could introduce additional distortions. If they mainly divert savings from one form to another, they could cost more in budgetary terms than they contribute to net private saving.

A need for stronger global saving flows may argue for policies to boost saving in all countries. But policy action is most important in countries that have large budget deficits or large current account deficits, and especially in those that have both.

Dealing with Financial Market Disturbances

Disturbances in several key sectors of stock, bond and exchange markets, noted above, raised questions of whether, how and when monetary policy should react to such disturbances. These questions remain pertinent even though long-term interest rates have recently softened a bit, and the yen and the Tokyo stock market have turned around.

Is it necessary or wise to protect the real economy from financial disturbances? In recent years, economies have proved robust and resilient in the face of the paper-wealth losses and financial turbulence. In any case, attempts to forestall such losses are unlikely to be successful over the medium term. When financial-market adjustments occur on a systemic scale, it may be important to provide temporary liquidity support to the economy – as it was after the 1987 stock-market crisis. But fine tuning of liquidity to volatile financial-market adjustments would add to financial and economic uncertainty. Concern about financial-market effects on the real economy has to reach very high levels before it would seem warranted to divert monetary policy from its medium-term objective of price stability. A steady monetary policy is needed to anchor expectations and confidence, especially given that expectations, always important in financial markets, are now playing an even larger

role as a consequence of the easing of regulatory and liquidity constraints over the past decade or so.

The appropriate course of monetary policy action becomes more difficult to assess when very large exchange-rate movements between major currencies threaten medium-term external adjustment, as was the case when the yen progressively weakened through 1989 and into 1990. In this recent episode, co-ordinated exchange-market intervention was useful at times, but its limitations were once again evident. More fundamentally, monetary-policy adjustments in line with domestic requirements also helped to keep momentum from building up. The yen nevertheless weakened to levels which, if they had been sustained, might well have resulted in competitiveness disparities that would reverse the structural adjustment processes now in train. Should these levels be approached again, some shading of monetary policies in the United States and Japan could be warranted. But such a course would carry risks, and would be durably effective only if pursued in conjunction with policies that underpin sustainable medium-term trends in the two economies, notably more resolute budget-deficit reduction in the United States and continuing structural adjustment in Japan.

Realising the Promise of Central and Eastern Europe

The integration of the economies of central and eastern Europe into the global economy holds out the promise of very substantial benefits over the medium to longer term, both to these countries and world-wide. How far this promise is realised will depend on:

- how fully the legal and other institutional foundations of a market economy are put in place;
- how completely current rigidities and distortions, in particular subsidies and other factors that prevent price signals from working, are dismantled;
- whether public finances are put on a sound footing;
- whether these societies persevere with economic reform when moves to more flexible, more dynamic economies initially involve the displacement of workers and threaten vested interests; and
- whether OECD countries respond by fully opening their markets to exports from central and eastern Europe.

Some lessons from the heavily-indebted developing countries are relevant. The key to successful development is not primarily finance from abroad, although this can help if a climate attractive to investment is established. Rather, it involves: *i)* gaining political acceptance for market-oriented structural changes, which will involve short-term costs for some groups; *ii)* having and exploiting opportunities to expand exports; and *iii)* allowing open import regimes to exert competitive pressures and provide price signals essential for structural change.

Given the scale of economic restructuring and public-sector consolidation required in central and eastern Europe, the near-term macroeconomic impact on the rest of the world from developments in most of these countries is likely to build only slowly. A demand impetus is likely to be felt more rapidly from the economy of what

is now the German Democratic Republic (GDR). German monetary union is taking place on 2nd July, backed up by rapid steps toward broader economic and social integration. There is considerable uncertainty about the current state of the GDR economy and about the way it will respond over the medium term. Nonetheless there is some agreement about the broad magnitude of possible short-term increases of GDR net demand for goods and services from the Federal Republic and other OECD countries; the projections here embody an increase in GDR imports of DM 40 to 50 billion ($25 to 30 billion) at an annual rate by the second half of 1991. (An analysis of issues surrounding German monetary and economic union, going beyond aspects considered in this *Outlook*, is contained in the forthcoming *OECD Economic Survey of Germany*.)

Developments in central and eastern Europe, and policy issues arising from them, must neither be allowed to hold up progress on dealing with problems within the OECD area nor to slow widening interaction between the OECD and other non-OECD economies.

Moving Ahead with Structural Reforms

OECD countries have continued to increase the flexibility of their economies, though progress has been uneven across countries and especially across policy areas. (A special separate supplement to this issue reviews recent progress in structural reform in both of these dimensions.) In some areas – notably financial markets and also foreign direct investment, taxation, competition and regulatory policies – progress has been continuing and substantial, spurred by strong international policy interlinkage. There has also been visible progress in two other areas: improving the efficiency and management of the public sector and making labour markets more responsive, including through increased attention to education and training. In both areas, however, there is substantial scope for further action.

On the other hand, trade, agriculture and industrial-support policies are areas in which progress in structural reform has been disappointing and serious interference continues with the price signals required for smoothly-functioning markets. The open multilateral trading system is under threat from a wide range of opaque, non-tariff restrictions. Agricultural policies – both domestic supports and border measures which interfere with the working of market forces – are very costly. Last year they involved transfers from OECD governments and consumers estimated at $245 billion. The inefficiencies introduced by agriculture policies have reduced OECD output by over $70 billion in recent years. (For detail see the OECD publications *Agricultural Policies, Markets and Trade Monitoring and Outlook 1990* and *OECD Economic Studies,* No. 13, Winter 1989-1990.) The harmful effects of present industrial subsidies – and not least those which distort trade flows – may be more difficult to quantify, but all indications are that they are significant.

The Uruguay Round offers the opportunity to make real progress on all three fronts. Failure to achieve clear success would have adverse consequences for economic performance over the 1990s. Governments must address these admittedly complex, and often politically difficult issues of the Round with sufficient vigour and commitment to achieve results; and they must continue beyond the Uruguay Round to extend these results. These sentiments are widely endorsed in official statements; the challenge now is to translate them into co-operative action.

More generally, an overall economic climate conducive to sustained, efficient and profitable investment and to structural flexibility requires strong competition, operating in response to market-determined price signals. Past reductions in barriers to trade have enhanced competition, and this is one reason to push ahead in reducing them further. There are nonetheless sectors that will remain isolated from the pressures of international competition, and there may be a few where an undue concentration of global market power could emerge, particularly if official encouragement is given to mergers and joint action. Enlarged scope for contesting these markets might alleviate concerns in this respect; competition policy must nonetheless stand ready to check tendencies towards abuse of dominant market positions.

Responding to Environmental Concerns

Environmental issues are receiving increasing attention. Some, such as climate change, have potential economic implications on a much larger scale than the adjustments undertaken to date in response to environmental problems. In dealing with such problems it will be important to ensure that objectives are set in the light of economic criteria, and are pursued in least-cost ways.

The policy response to environmental problems has typically been to impose direct regulation. This approach may be best in some circumstances, for example when the pollution is localised and arises from very few sources. But, in general, the costs associated with the "command and control" approach to environmental protection are hidden, and often very high. Economic instruments, such as charges on pollution, offer more efficient and hence lower-cost solutions by providing the right signals and incentives to firms and households. OECD economies are beginning to experiment more with instruments based on market principles of resource allocation; this approach should be pushed ahead vigorously.

Concerns about possible long-term climate changes that could result from a build-up of greenhouse gases in the atmosphere call for a co-operative international approach to assessing risks and developing a response strategy. Little is yet known about the costs or the benefits of moves to reduce greenhouse gas emissions. In the near term, it is especially important to identify actions that not only reduce such emissions but that are also beneficial in other respects. Beyond this, great uncertainty attaches to the implications of major steps and it is important to avoid costly mistakes. Economic analysis is an essential tool to sharpen estimates of the costs of alternative responses and of the tradeoffs involved, and to provide some guidance as to how best to take account of uncertainty. These issues are being looked at with increasing urgency in national and international agencies, including the OECD. This work should contribute to the identification of sound policy approaches to deal with concerns about climate change in the years to come.

8th June, 1990

DOMESTIC AND INTERNATIONAL DEVELOPMENTS

FORCES SHAPING ECONOMIC ACTIVITY

OECD activity appears to have settled during the course of 1989 on a sustainable medium-term path. Growth slowed from the brisk pace recorded earlier in the recovery, and most markedly in economies where inflation pressures had been strongest. The average inflation rate stabilised and concern about external imbalances abated somewhat. Uncertainties surrounding the economic situation have increased in recent months, however, as a result of several factors: developments in central and eastern Europe; the widespread increases in long-term interest rates; changes in exchange rates; and fragility in certain sectors of financial markets.

Progress in 1989 towards more sustainable economic conditions

Growth close to potential. OECD countries moved, in general, towards more sustainable economic conditions during 1989. Monetary tightening aimed at containing inflation brought OECD growth down to 3 per cent at an annual rate in the second half of 1989 (Table 1), compared with 4¼ per cent on average in the four preceding semesters.

The slowdown tended to be most marked in countries where inflationary pressures were the greatest. On the other hand, fears that some economies

Table 1

Growth and inflation

Percentage changes from previous year

	Average					1988	1989	1990	1991
	1960-73	1974-79	1980-82	1983-87	1988-89				
Real GNP/GDP									
United States	3.8	2.6	−0.3	4.0	3.7	4.4	3.0	2.3	2.5
Japan	9.9	3.6	3.7	4.1	5.3	5.7	4.9	4.7	4.0
Germany	4.7	2.4	0.2	2.2	3.8	3.6	4.0	3.9	3.4
OECD Europe	4.5	2.5	0.9	2.5	3.6	3.8	3.5	2.9	2.8
Total OECD	5.0	2.8	1.0	3.4	4.0	4.4	3.6	2.9	2.9
Private consumption									
United States	4.0	2.9	0.8	4.2	3.1	3.4	2.7	2.2	2.0
Japan	8.9	4.0	2.3	3.2	4.3	5.1	3.5	4.1	3.6
Germany	4.5	3.2	−0.2	2.3	2.2	2.7	1.7	3.9	3.5
OECD Europe	4.6	2.9	0.9	2.7	3.2	3.5	2.9	3.0	2.9
Total OECD	5.0	2.8	1.0	3.4	3.4	3.8	3.0	2.8	2.7
Private non-residential investment									
United States	5.5	3.8	−1.9	4.7	5.9	8.4	3.3	3.2	3.4
Japan	16.1	1.2	5.2	8.2	16.6	15.5	17.8	10.2	5.1
Germany	4.0	2.2	−1.5	3.9	8.4	7.3	9.6	6.6	5.0
OECD Europe	5.1[a]	1.2[a]	−0.8	4.7	9.4	9.9	8.8	5.2	5.1
Total OECD	7.6[b]	2.3[b]	0.3	5.3	9.8	10.8	8.9	5.5	5.0
Private consumption deflators									
United States	3.1	7.9	8.6	3.7	4.2	3.9	4.4	4.8	4.6
Japan	5.9	9.5	4.7	1.3	0.8	−0.1	1.7	2.8	2.5
Germany	3.2	4.6	5.6	1.6	2.2	1.2	3.1	2.6	3.3
OECD Europe	4.4	11.4	12.1	5.7	4.8	4.3	5.4	5.2	5.1
Total OECD	4.1	9.7	9.3	4.2	3.8	3.3	4.3	4.6	4.4

a) Four major European countries.
b) Seven major OECD countries.

could decelerate too far, and perhaps even move into recession, have not been borne out. In the United States, factors which have led to recessions in the past, in particular an acceleration of inflation which would require a sharp tightening of monetary policy, have not been in evidence so far. In most European countries, growth has eased back to sustainable rates. In Japan, where monetary tightening occurred later, output remained buoyant, growing at close to 6 per cent in the second half of 1989: strong domestic demand – for consumption as well as investment – offset a weakening of net exports.

The volume of investment in the business sector continued to expand briskly in 1989, except in the United States – at 8 per cent on average in the OECD countries (Table 2). High rates of gross investment over the last three years (27 per cent for the OECD area) have reversed the steady deceleration of the growth of capital stock witnessed since the mid-1970s. Capital stock in business has nonetheless expanded more slowly than during the 1970s; in 1989 it grew by an estimated 4 per cent on average in OECD countries, even after the sharp increases in gross investment.

With the moderate slowdown in output growth, capacity utilisation has eased somewhat in many countries. On the other hand, OECD employment rose by more than 2 per cent for the second year in succession, rates of unemployment continued to fall in the majority of countries and in many, including some where overall unemployment remains high, there are regional or sectoral labour shortages. High vacancy rates also point to continuing pressures in labour markets, in particular in Japan.

Stabilisation of inflation at high rates. OECD inflation, which had been on a disquieting rising trend up to the first half of 1989, eased somewhat in the

Table 2

Investment in business sector

	Average				1988	1989	1990	1991
	1970s	1980-82	1983-87	1988-89				
	Percentage changes							
Gross fixed investment[a]								
United States	4.4	−2.0	4.4	5.8	8.4	3.3	3.2	3.4
Japan	2.6	4.1	6.3	15.4	14.2	16.7	9.6	4.9
Germany	1.6	−1.6	3.9	8.4	7.3	9.6	6.6	5.0
OECD Europe[b]	2.3	−0.9	4.2	9.3	10.6	8.0	4.4	4.7
Total OECD[b]	3.3	0.1	4.7	9.4	10.7	8.0	4.8	4.3
Growth in the capital stock								
United States	3.8	3.5	3.1	3.2	3.2	3.3	3.2	3.2
Japan	8.6	6.3	5.9	6.9	6.4	7.4	7.7	7.4
Germany	4.1	3.2	2.7	3.3	3.1	3.4	3.7	3.9
OECD Europe[b]	4.3	3.1	2.6	3.3	3.2	3.4	3.5	3.5
Total OECD[b]	5.0	4.0	3.5	4.1	3.9	4.2	4.3	4.2
	Per cent							
Investment/Output ratio (constant prices)								
United States	13.7	14.6	14.4	14.9	14.9	14.9	15.0	15.1
Japan	23.2	21.9	22.8	27.3	25.9	28.7	30.0	30.1
Germany	15.5	15.3	15.4	16.9	16.5	17.3	17.7	17.9
OECD Europe[b]	17.1	16.1	15.8	18.1	17.7	18.4	18.6	18.9
Total OECD[b]	17.0	16.9	16.8	18.9	18.4	19.3	19.6	19.9
Rates of return on capital[c]								
United States	17.2	15.4	17.6	19.6	19.6	19.6	19.4	19.6
Japan	18.4	14.4	14.6	15.2	15.3	15.1	14.9	14.4
Germany	14.0	11.1	12.5	13.7	13.4	13.9	14.4	14.7
OECD Europe[b]	12.4	10.6	11.8	13.1	12.9	13.2	13.2	13.3
Total OECD[b]	15.3	13.2	14.6	16.0	15.9	16.0	15.8	15.9

a) Public enterprise investment included.
b) Iceland, Luxembourg, Portugal, Turkey excluded.
c) Adjusted for the imputed return of the labour of unincorporated enterprise; for the definition of adjustment, see "Sources and methods".

second half of the year, to 4 per cent at an average annual rate (measured by the consumer price deflator). Most of this favourable development reflects specific factors: a stabilisation of oil prices, the further softening of non-oil raw material prices and the absorption of the effects of the indirect tax increases which took place at the beginning of 1989. Underlying consumer-price inflation, excluding food and energy, appears to have accelerated since the beginning of 1990; in March it was running at some 4.7 per cent (measured as price changes over twelve months earlier).

Nominal wage rises have broadly paralleled prices: after accelerating moderately up to the first half of 1989, they have since stabilised at around 6 per cent on average for the OECD countries (Table 3). This outcome is more favourable than might have been expected given the tightness of labour markets. Unit labour cost increases picked up, however, from 3 per cent at an annual rate in the first half of 1988 to 4.5 per cent in the second half of 1989, as productivity growth slowed. Profit margins fell sharply in the United States, the United Kingdom and Canada but continued to widen in the largest continental European countries, coming back to levels not reached since the 1960s.

Progress in external adjustment. Further, if uneven, progress was made in the current-account adjustment of the three largest countries. The United States

Table 3

Labour market, wages and profits

	Average				1988	1989	1990	1991
	1970s	1980-82	1983-87	1988-89				
	Percentage changes							
Nominal compensation per employee (business sector)[a]								
United States	8.1	8.3	4.2	5.0	4.7	5.3	5.6	5.7
Japan	13.5	5.5	3.2	3.8	3.4	4.3	5.2	5.2
Germany	8.3	5.6	3.7	2.8	3.3	2.4	4.5	5.0
OECD Europe	14.7	12.3	7.3	6.8	6.3	7.4	7.2	6.8
Total OECD	11.9	9.6	5.3	5.6	5.2	6.0	6.2	6.0
Real compensation per employee (business sector)[a]								
United States	0.4	−0.2	0.5	0.8	0.7	0.8	0.8	1.1
Japan	3.6	0.8	1.9	3.0	3.5	2.6	2.3	2.6
Germany	3.3	0.1	2.1	0.7	2.0	−0.7	1.9	1.6
OECD Europe	3.4	0.4	1.5	1.8	2.0	1.6	2.0	1.6
Total OECD	2.3	0.3	1.2	1.7	1.8	1.5	1.6	1.5
Labour productivity (total economy)								
United States	0.6	−0.5	1.5	1.5	2.1	0.9	1.2	1.3
Japan	3.9	2.7	3.1	3.4	4.0	2.9	2.8	2.4
Germany	3.0	−0.4	1.9	2.8	2.9	2.7	2.2	2.0
OECD Europe	2.9	1.1	2.0	2.3	2.4	2.2	1.9	2.0
Total OECD	2.2	0.8	2.0	2.2	2.5	1.8	1.7	1.8
Employment (total economy)								
United States	2.6	0.2	2.5	2.2	2.3	2.0	1.0	1.1
Japan	0.8	1.0	0.9	1.8	1.7	1.9	1.8	1.5
Germany	−0.1	0.5	0.4	1.0	0.7	1.3	1.6	1.4
OECD Europe	0.4	−0.2	0.7	1.5	1.6	1.4	1.0	0.8
Total OECD	1.2	0.2	1.4	1.8	1.9	1.8	1.2	1.1
	Per cent							
Capital income share (business sector)[b]								
United States	32.7	32.7	33.5	33.0	33.3	32.7	32.1	32.2
Japan	33.7	30.3	30.7	31.3	31.4	31.2	31.1	30.8
Germany	34.5	30.1	34.0	36.1	35.5	36.7	37.4	38.1
OECD Europe[c]	31.3	30.0	33.2	35.1	34.9	35.3	35.2	35.5
Total OECD[c]	32.4	31.3	33.1	33.7	33.8	33.7	33.3	33.4

a) Average 1972-79.
b) Adjusted for the imputed return of the labour of unincorporated enterprise; for the definition of adjustment, see "Sources and methods".
c) Iceland, Luxembourg, Portugal, Turkey excluded.

trade deficit, which has fluctuated markedly from quarter to quarter, broadly stabilised during the second half of 1989, at an annual rate $5 billion lower than in the second half of 1988. With net investment income deteriorating less sharply than might have been feared and non-factor services improving, the United States current-account deficit continued to narrow – to $100 billion at an annual rate in the second half of 1989 (below 2 per cent of GNP), compared with $125 billion a year earlier. The German surplus in the second half of 1989 was somewhat below its record level in the first half, with a marked fall in the fourth quarter in line with the pick-up of domestic demand. The most striking current-account adjustment has been in the Japanese surplus, which fell to below $50 billion at an annual rate in the second half of 1989 from over $80 billion a year earlier. This partly reflected the evolution of trade volumes, in particular buoyant imports, but was also due in large measure to a terms-of-trade deterioration of close to 10 percentage points. As for the deficits of other OECD countries, these widened in the United Kingdom (for the second half as a whole despite some improvement at the end of the year), Canada, Australia, Finland, Greece, New Zealand, Spain and Sweden.

Main recent developments and their implication

Developments in central and eastern Europe. Despite the dramatic political changes in central and eastern Europe, the impact on OECD countries of economic developments in these countries, apart from those in the German Democratic Republic (GDR), is likely to be limited in the near term. Except for a small number of countries (Austria, Finland and Iceland), OECD trade with central and eastern European countries is relatively small, representing only 2½ per cent of total OECD exports (2.8 per cent for Europe), half of which go to the USSR. Opportunities for a rapid diversion of these countries' exports to OECD countries seem limited.

Imports of central and eastern European countries have been limited by foreign-exchange constraints, which are exacerbated in some of these countries by significant debt-service obligations (interest payments alone amount to half of Poland's export earnings and 20 per cent of Hungary's). A pick-up in capital flows from official and private sources in OECD countries could ease these constraints. In this connection, programmes currently under discussion appear to involve official assistance of the order of $6 billion a year, including debt relief, for the period 1990-91. Projects involving private-sector financing from OECD countries are also being negotiated. Private inflows are unlikely to be significant at the macroeconomic level, however, until the legal and institutional foundations of market economies are put into place.

There is a question as to how effectively capital flows to central and eastern European countries are likely to be used. Inefficient resource allocation in centrally-planned economies is underlined by the observation that, although the share of GDP devoted to investment has been relatively high for several decades, production is low in comparison to OECD countries. If, however, appropriate macroeconomic and structural reforms are adopted, the transformation of these countries' economies and their integration into the multilateral trading system would have visible effects over the medium term on OECD economies, opening up new and potentially-large markets and offering attractive investment opportunities.

Economic and monetary integration of Germany, which is starting to become effective with monetary union between the Federal Republic of Germany (FRG) and the GDR in July, could have effects which will be felt more rapidly. Detail on how account is taken of German integration in the OECD projections is given in the country chapter on Germany. The main features are the continuation of high, if reduced, levels of immigration (including ethnic Germans from eastern European countries) which boost demand but eases labour-market tensions. Transfers to the GDR build up, largely from the FRG. These latter, through the German "Unity Fund", are set to total DM 115 billion through the end of 1994 (of which DM 95 billion are to be bond financed). Net GDR imports are projected to be DM 40 to DM 50 billion (at an annual rate) higher than would otherwise have been the case by the second half of 1991. This demand accrues largely to the FRG but also to other western European countries, partly directly and partly through trade with the FRG. These hypotheses are subject to considerable uncertainty: the actual short- and medium-term development of the GDR (and indeed of other central and eastern European economies) will depend on the implementation of fundamental institutional changes and, in this context, on the behaviour of key factors such as the rate of build-up of the capital stock, saving behaviour and, most importantly, the evolution of productivity relative to wages.

Because the economies of OECD Europe are currently working at virtually full capacity, the extra demand from the GDR risks adding to inflationary pressures. However, higher interest rates are likely to "crowd out" domestic demand and divert output to exports, thereby attenuating these pressures.

Higher long-term interest rates. The marked rise of long-term interest rates, which began last September, is one of the salient features of recent economic developments. In early May, long-term rates were between 1 to 1¾ percentage points higher in Japan, Germany, France, the United Kingdom, Canada, and a number of smaller EMS countries than they were in September, 1989. The rise has been more moderate in the United States: less than a ¾ percentage point. This pressure on long-term interest rates comes after a twelve-month period in which they were broadly stable, despite rising short-term rates. It is striking that this development should have taken place during a period when monetary policy remained largely unchanged in most countries.

There are different possible explanations for this change and their relative importance may differ from country to country – although the growing integration of financial markets facilitates the diffusion of impulses arising from different causes.

One factor behind the rise in long-term rates could be a worsening of inflation expectations. This does not necessarily imply expectations of an *acceleration* of inflation rates; it could merely imply less confidence that monetary authorities will bring about a further *reduction* of inflation. If this were the explanation for the rise in nominal rates, real interest rates would not change and the rise in nominal interest rates, of itself, would have a limited effect on overall activity.

A second factor may be an increase in risk premiums, reflecting in particular uncertainty about developments in central and eastern Europe. The mild softening of rates in several countries of OECD Europe since end-February could be seen as pointing to some reduction of uncertainty in this respect.

A third explanation is that *real* long-term rates have risen as a result of expectations that investment demand is likely to be stronger and returns higher because of investment requirements and opportunities in central and eastern European economies. Real long-term rates (shown in Chart A) have increased appreciably in Japan and many European countries but not in North America. Taking a longer view, with the exception of France and Italy, real interest rates remain below their levels in the first half of the 1980s.

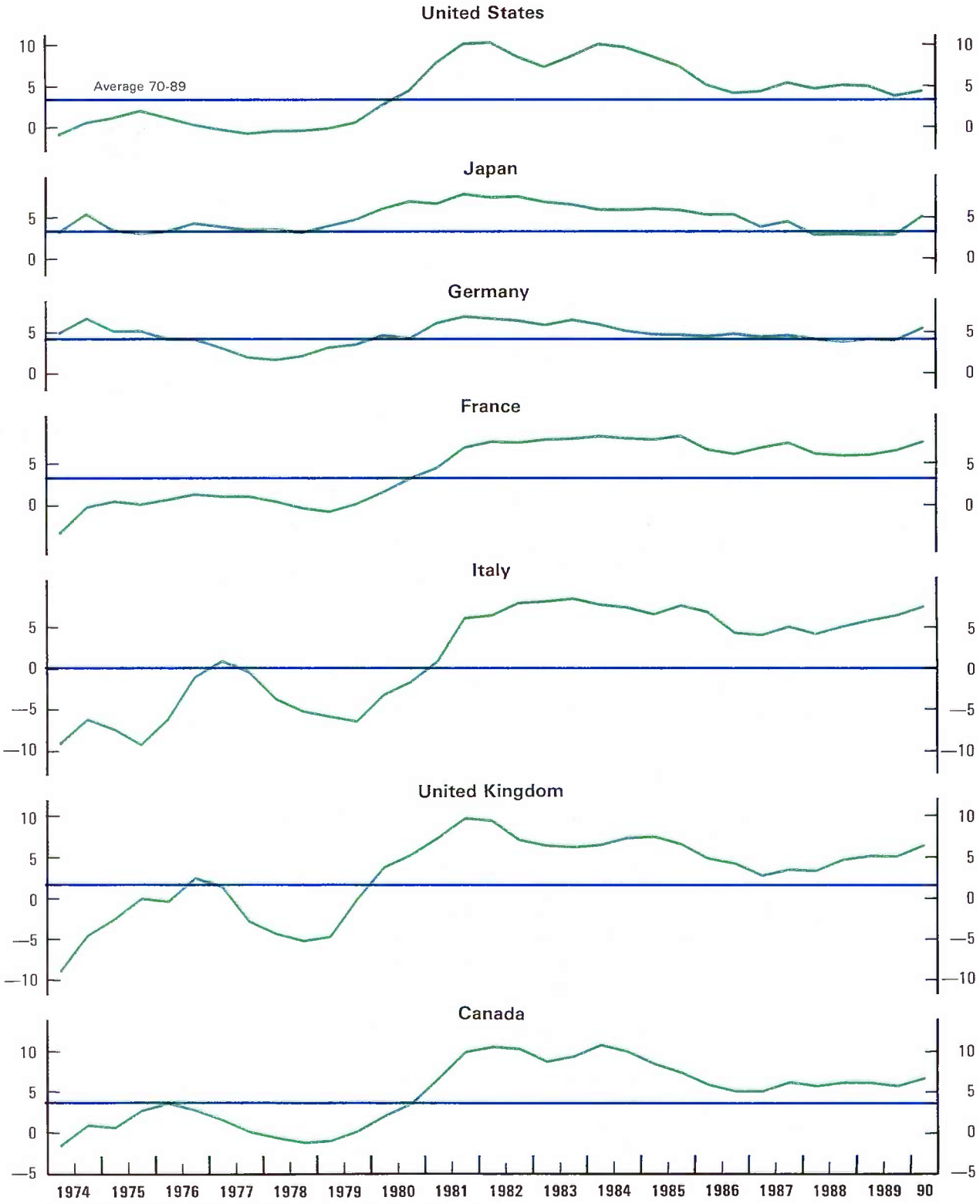
Given potential increases in investment requirements – not just in former centrally-planned economies, but also in OECD countries to expand productive capacity, improve infrastructures and address environmental considerations – high rates of savings will be needed, probably higher than those currently foreseen. National saving rates are projected to continue to rise (Chart B) owing to budget-deficit reduction and the emergence of significant government savings in a number of countries reaching, for example above 8 per cent of GNP in Japan in 1991 on a general government basis. This will help to reduce crowding out of private investment, but, at the same time, private saving may continue to weaken in relation to GNP. Taking a longer view, private saving is visibly lower in the United States and Japan at the start of 1990s than it was at the end of the 1970s. In contrast, private saving ratcheted up in Germany over the second half of the 1980s and may stabilise at around current levels. This could facilitate the financing envisaged for the German "Unity Fund" without putting undue pressure on German interest rates.

Exchange and financial market volatility. Exchange rates have changed substantially since the previous issue of the *Economic Outlook*. Concern shifted from the risk of an overly-strong dollar to the weakness of the yen. The dollar, after depreciating in the last part of 1989, has fluctuated markedly in recent months without any clear trends. The weakening of the yen, in evidence since end-1988, intensified in the first quarter of 1990 despite the rise in Japanese interest rates and the narrowing of interest differentials *vis-à-vis* other major currencies. The yen has since recovered somewhat, but its effective rate at end-May was still 6 per cent below that at the time of the Louvre Accord. In contrast, the DM appreciated markedly in the last months of 1989 after two and a half years of virtual stability. This development took place without giving rise to marked tensions within the EMS; indeed, several EMS currencies have recently strengthened against the DM and the countries involved have been able to narrow interest differentials *vis-à-vis* Germany.

Rising interest rates, exchange-rate fluctuations and problems in specific sectors of U.S. financial markets (junk bonds and real-estate lending in some regions) have increased uncertainty. Nevertheless, equity prices have generally held up well. The striking exception, of course, was the sharp fall of Japanese stock prices (by some 25 per cent between the peak at the end of 1989 and the lowest point of its decline, in the first week of April). This could be no more than a "technical correction" of over-valued stock prices, but it has possibly caused strong investment plans to be trimmed by raising the cost of capital. More generally, the experience of the stock-market crisis, in October 1987, suggests that the effects on real variables of paper-wealth losses may be fairly small – although, if systemic risks emerged that pointed to a possible need for liquidity support, the dilemma for monetary policy would be sharp with inflation now 1½ percentage points higher than it was at the time of the 1987 crisis.

CHART A

REAL LONG-TERM INTEREST RATES (1)

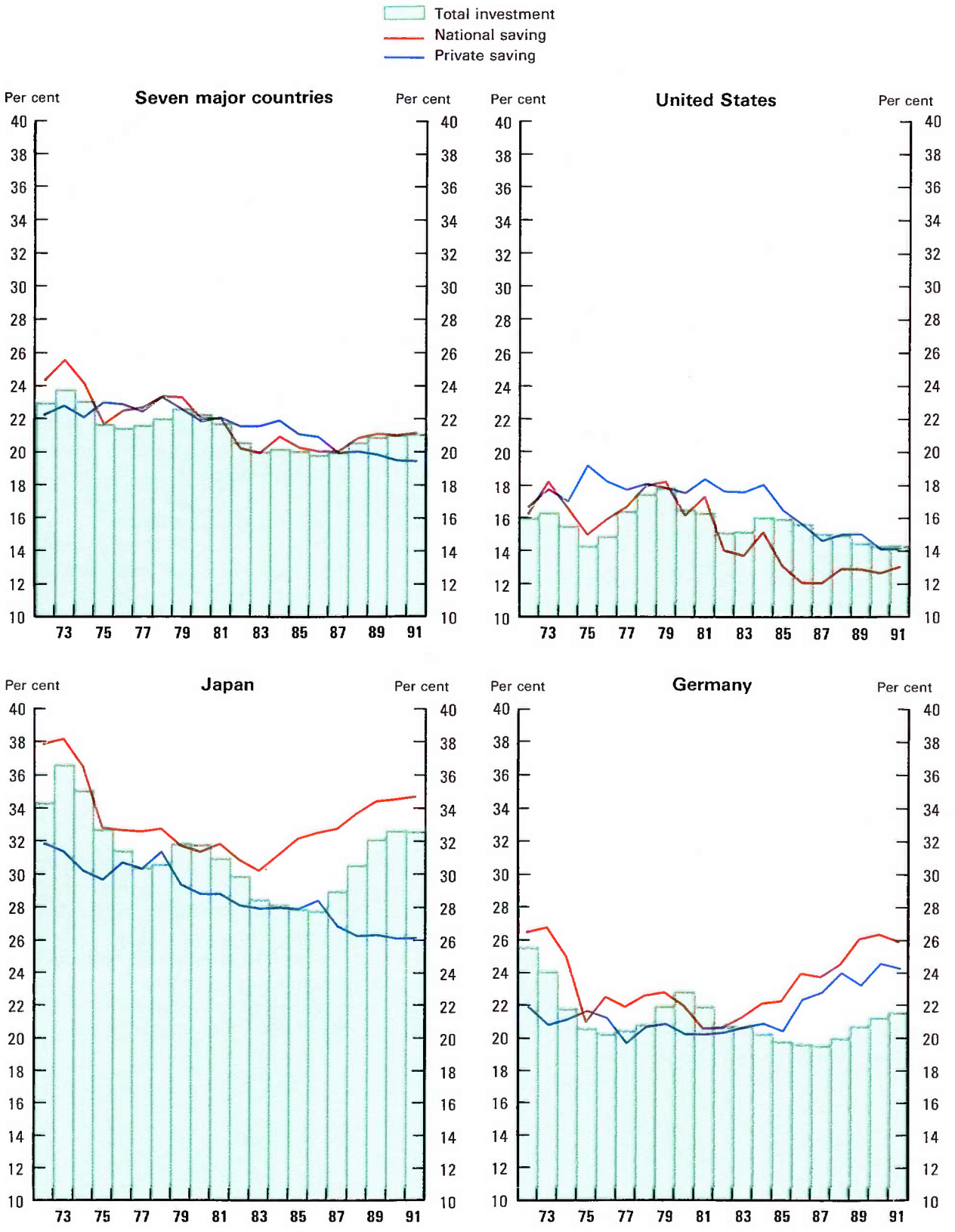


1. Nominal long-term rates deflated by the change in the GNP/GDP deflator over the two years following each observation (actual data to end-1989, projected data subsequently).

CHART B

SAVING AND INVESTMENT

As a percentage of GNP/GDP



An unchanged outlook despite greater uncertainty

Recent developments do not suggest significant changes in the short-term outlook compared with earlier assessments – in part because no major changes have been announced in the stance of policies. With inflationary pressures persisting, monetary policy seems set to pre-empt any acceleration of prices. This stance could imply a further tightening of monetary policy in Germany in the coming months, followed by many European countries, although long-term interest rates may be little affected and short-term interest rates might ease back again in 1991. Fiscal consolidation is projected to continue, and in most countries the general government financial position should improve further with ratios of debt to GNP stabilising or falling. Nonetheless in countries with high public debt relative to GNP (Italy, Belgium, Greece, the Netherlands) the weight of interest payments will limit progress in reducing deficits. In Germany, tax cuts and increases in expenditure associated with unification are likely to result in a marked widening in the budget deficit in 1990; but with growth of activity likely to be buoyant, the deficit should start to narrow again in 1991. Nonetheless, the implementation of German economic and monetary unification has given rise to uncertainty about the prospective evolution of German public finances.

Overall OECD output may expand at an annual rate of some 3 per cent this year and next, close to potential growth. Consumer expenditure is likely to remain strong but, with interest rates high and the initial impact of financial deregulation waning, it will probably no longer be boosted by falling saving ratios – with the notable exception of Japan. In a number of countries, such as the United Kingdom and most Nordic countries, where the fall in saving ratios had been particularly marked, some increase is projected. Private non-residential investment may slow after several years of very rapid expansion (Table 2), in part because the growth of profits may be more moderate. The deceleration of investment could be particularly striking in Japan, going from an annual average growth rate of over 15 per cent over the two years to end-1989 to 5 per cent in 1991. United Kingdom business investment is likely to stagnate over the projection period, because of high interest rates and the significant fall in profits since 1988. In contrast, business investment should remain relatively buoyant in continental Europe notably in the three largest countries, reflecting continued high pressures on existing capacity combined with rising returns to investment.

With productivity gains remaining steady at recent rates, as seems probable, the projected expansion of activity may be just sufficient to absorb into employment the growth of the labour force; overall OECD unemployment should thus remain at around 6½ per cent. Sectoral and local labour-market tightness will nonetheless remain high and real wages may increase broadly in line with productivity after a long period during which they did not do so such that profit margins were rebuilt. High levels of capacity utilisation provide little room for a deceleration of inflation, which on average is projected to continue at around 4½ per cent. Within this overall average – and a worrying feature of the outlook – there appears to be some slippage in countries that had achieved low inflation.

World trade, is likely to grow at 6½ to 7 per cent in volume terms, but little further adjustment of external imbalances is projected. A number of factors will continue to support adjustment: a U.S. competitive position which remains strong, and buoyant domestic demand in Japan and Germany, which should sustain a rapid growth of imports. But a lower value of the yen, if it persists, will work against external adjustment after the initial J-curve effects have been felt. Overall, the United States current deficit may narrow somewhat, to just over 1½ per cent of GNP next year. In Japan the current surplus is likely to rise in absolute terms from the second half of this year, and to stabilise at around 1¾ per cent of GNP. The German surplus could rise further in 1990 but then decline somewhat in 1991, while remaining at around 4 per cent of GNP. The current deficits of the United Kingdom, Australia and New Zealand may narrow, reflecting slow growth of domestic demand, while those of Canada, Finland, Greece, Portugal, Spain and Sweden could widen further.

While this outlook has hardly changed from the one presented in the previous issue of the *OECD Economic Outlook*, the uncertainties surrounding it are substantially larger. In particular, it is difficult to assess how expectations of economic agents in OECD countries will evolve in the light of completely new developments, like those in central and eastern Europe. Moreover, confidence could weaken if financial and exchange market volatility re-emerge.

MONETARY AND FISCAL POLICIES

The stance of monetary policy has remained generally firm in the first half of 1990, as inflation risks have persisted in the OECD area as a whole – perhaps abating in some countries, but coming more to the fore in others. Long-term interest rates rose during the first four months of the year in the three largest countries for reasons which for the most part have been distinct to each. However, market assessments of the financial implications of events in central and eastern Europe have been a common factor contributing to these developments. For the area as a whole, the improvement in government budget balances is expected to continue, even as the growth of economic activity moves to a moderately slower path. For most countries, fiscal policies are becoming more sustainable, as debt-GNP/GDP ratios stabilise or even decline. Many countries have a way to go before public finances are put on a sound footing, however.

MONETARY POLICY

Continuing firm monetary stance

During the past few months the stance of monetary policies has remained restrictive in most major OECD countries. At the same time, uncertainty over the outlook for inflation and monetary policy responses to it, together with the momentous events in central and eastern Europe, led to a marked increase in financial volatility in bond and stock markets.

In the United States, a ¼ percentage point decline of the overnight Federal funds rate in December continued a process of policy easing over the second half of 1989. This had occurred against a background of lower monthly inflation data and concerns about a sharp slowdown in activity. The Federal funds rate was brought down to 8¼ per cent, and it has remained broadly unchanged to May. Since then, inflation figures have been less reassuring and growth has held up. Long rates rose early in the year following the easing of monetary policy. While they slipped back somewhat in May, this has not been sufficient to reverse their previous broad upward movement, and the yield curve remains upward sloping. The collapse of the junk bond market and an increase in bank problem loans have not significantly affected overall liquidity conditions in the U.S. economy.

In Canada, the authorities reduced short-term interest rates by ¼ of a percentage point in mid-January, in response to an apparent slowing of the economy, but subsequently had to reverse this move following a sharp fall of the Canadian dollar on the foreign exchange market. With the official discount rate at around 14 per cent in late May, the interest differential with the United States federal funds rate has increased to well over 500 basis points, compared with just over 100 basis points at the beginning of 1989.

In Japan monetary policy was tightened in late December, when the discount rate was raised by ½ of a percentage point; and again in March, when it was raised a full percentage point to 5¼ per cent. The Bank of Japan gave an additional restrictive policy signal in early 1990, when it requested national banks to place more restrictive limits on their lending; it subsequently extended this recommendation to regional banks. These moves have been motivated by concerns about inflation as economic growth, driven by domestic demand, has been strong and conditions in labour markets have tightened. There has also been considerable official concern about asset inflation – the large increases in land, equity and some other asset prices in recent years. Most key financial indicators also point in the direction of inflation potential. M2 + CD growth has accelerated significantly and exceeded the Bank of Japan projection range of 9-10 per cent for the first quarter of 1990 (Table 4). Moreover, yen depreciation against the dollar continued in the early months of 1990, posing a risk of import price inflation.

After short-term interest rates rose by about 2 percentage points in the second half of 1989, monetary policy has remained firm in Germany, as demand in the economy proved stronger than expected. While the official discount and Lombard rates have been kept unchanged in the first five months of 1990 (at 6 and 8 per cent, respectively), rates on securities repurchase agreements have firmed and three-month market interest rates are up by about ¼ of a percentage point since the end of 1989. Long-term interest rates in Germany have risen much more – by about 1 percentage point between December and mid-May – suggesting market expectations of strong demand growth and perhaps

Table 4

Monetary aggregates[a]: Recent trends and targets

Percentage changes, seasonally adjusted at annual rates

		Last observation	Last 12 months[b]	Last 6 months[b]	Last 3 months[b]	Average of last three monthly changes[c]	From target base period[d]	Current official target[e]
United States	M1	Apr. 1990	2.5	5.3	5.9	6.4		
	M2	Mar. 1990	5.5	6.8	6.4	6.1	6.4	3-7
	M3	Apr. 1990	2.8	2.6	2.6	2.2	2.4	2.5-6.5
Japan	M1	Feb. 1990	–0.2	2.8	5.9	18.8		
	M2+CD	Feb. 1990	11.3	13.5	16.3	18.5	11.8	9-10
Germany	M1	Mar. 1990	3.0	4.8	4.9	–1.6		
	M3	Mar. 1990	4.4	4.6	5.2	4.2	4.8	4-6
	CBM	Mar. 1990	4.6	6.0	7.3	6.8		
France	M2	Mar. 1990	3.5	0.6	–1.2	0.4	–1.0	3.5-5.5
	M3	Mar. 1990	7.0	5.1	6.7	3.8		
	L	Mar. 1990	8.6	6.8	6.6	2.9		
Italy	TDC	Dec. 1989	14.2	14.0	15.9	19.3	15.1	12
	M2	Dec. 1989	9.6	8.4	7.5	11.1	11.1	6-9
United Kingdom	M0	Mar. 1990	5.9	5.3	2.9	0.5	6.0	1-5
	M4	Mar. 1990	18.1	17.7	17.6	15.2		
	M5	Mar. 1990	17.7	17.0	17.0	14.7		
Canada	M2	Apr. 1990	13.1	14.0	9.2	7.4		

a) For details, see "Sources and Methods".
b) Most recent 3-month average over the 3-month average ending 12, 6 and 3 months earlier.
c) Average of monthly increases (at an annual rate) in the most recent 3 months.
d) Most recent monthly observation relative to target base period, at an annual rate; for Japan and the United Kingdom, changes over the previous 12 months.
e) For the United States, Germany and France targets are for the period 1990 Q4/1989 Q4; for Japan, the projection is for 1990 Q1/1989 Q1; for the United Kingdom the current target is expressed in terms of changes over the previous 12 months; for Italy the targets are for calendar year 1990.

higher inflation ahead, although price increases have thus far been moderate. These expectations may have been influenced by M3 growth which, if Euro-Deutschemark deposits are included, has continued to grow strongly[1]. The major factor, however, is the prospect of monetary union with the German Democratic Republic (GDR), which is widely seen as involving at least some intensification of demand and inflation pressures, as well as possible increases in the real return to investment over the medium term. Uncertainty about the extent and timing of these factors and about prospects in central and eastern Europe more widely, is also likely to have added to pressures on interest rates.

The strength of the Deutschemark in late 1989 led the French authorities to increase their money market intervention rates by half a percentage point in mid-December to alleviate pressure on the DM/franc rate. Banks' base lending rates rose in response. However, some easing of money market rates has been possible since the turn of the year, as the Deutschemark weakened within the EMS in response both to uncertainty about German monetary union, and as inflation and external trade performance improved in France. The Bank of France lowered its intervention rate by ½ of a percentage point in two stages in April, and the banks' base lending rate fell from 11 per cent to 10.5 per cent. Short-term interest differentials with Germany have narrowed by about 1½ percentage points between January and mid-May, but the scope for this to continue may be limited if domestic demand strengthens.

The exchange rate of the lira weakened following the decision of the Italian authorities not to participate in the round of EMS interest rate increases in October. In early January, the central rate for the lira within the EMS was devalued by 3.7 per cent against the Deutschemark (although the market rate was unchanged), and the authorities committed themselves fully to the system by narrowing the lira margins of fluctuation to the normal 2¼ per cent. Since then the lira has been strong, as the three-month interest differential *vis-à-vis* Germany remained at around 400 basis points in mid-May and exchange controls were removed. The strength of the lira, some improvement in inflation performance and the adoption of the government's budget reduction package have permitted an easing of interbank interest rates, and the discount rate was cut a full percentage point in late May, to 12.5 per cent. Italian inflation, nevertheless, continues at a rate well in excess of its main EMS partners.

In the United Kingdom, inflation concerns remain paramount despite a protracted period of monetary restraint. Indeed, three-month interbank rates have continued to drift upwards since the end of 1989

and remain well above 15 per cent. Some financial institutions raised their mortgage rates by almost 1 percentage point in early March.

Amongst the small European countries, Belgium and the Netherlands nudged up their official interest rates in concert through early January. Subsequently, however, both of these countries and Denmark have lowered interest rates, as the DM weakened within the EMS and as inflation data have improved. Monetary policy has also been eased slightly in Australia in recent months, amid signs that the economy is slowing after two years of restrictive monetary policy. By contrast, the central bank of Sweden raised its official intervention rate between December and May, reflecting concerns about inflation and the exchange rate.

OECD interest rate projections are shown in Table 5. They reflect current policy intentions and, given the prospective pressures in economies, imply little easing of short rates in the United States, some further firming in Japan and a substantial rise in Germany in the second half of 1990. There appears to be only modest scope for easing of rates in other European countries and Canada in 1991. Yield curve slopes are projected to change very little over the projection period for the United States, Japan, the United Kingdom and Canada. In Germany, long-term interest rates appear already to reflect expectations of higher short rates and may rise only a little further. Thus the present upward-sloping yield curve should flatten or even become slightly inverted. In France, long rates are projected to decline more than short rates, and in Italy some unwinding of the previously inverted yield curve is expected.

Bond price weakness and yield curves

Bond prices were generally weak and yield curves steepened over the first few months of the year in the United States, Japan and Germany, as shown in Chart C. These developments largely reflected domestic factors, particularly, though not only, changes in expectations about inflation. In the case of the United States, this change appears mainly to have reflected a shift away from the perception that monetary policy could continue to ease in response to a slowing economy and receding inflation pressures. Activity was stronger than generally expected in the early part of the year, and financial markets appeared to perceive a higher risk of inflation over the medium term than when easing by the Federal Reserve began in mid-1989: interest rates in late April on all U.S. government securities of maturities longer than one year were actually higher than they were in mid-1989 (see Chart C). While long-term interest rates eased slightly by mid-May, in response to the weakening of some leading indicators of activity, the yield curve is still significantly upward sloping.

The Japanese yield curve has steepened even as short-term interest rates have been pushed up by policy action starting in May 1989. The current shape suggests a market view that short rates are more likely to rise over the coming year than to fall.

The German yield curve has also both steepened and risen over most of its range. Here, as noted earlier, the prospect of monetary and political union with the GDR seems to have been an important factor, operating through three main channels. First, the expected

Table 5
Interest rate developments[a]

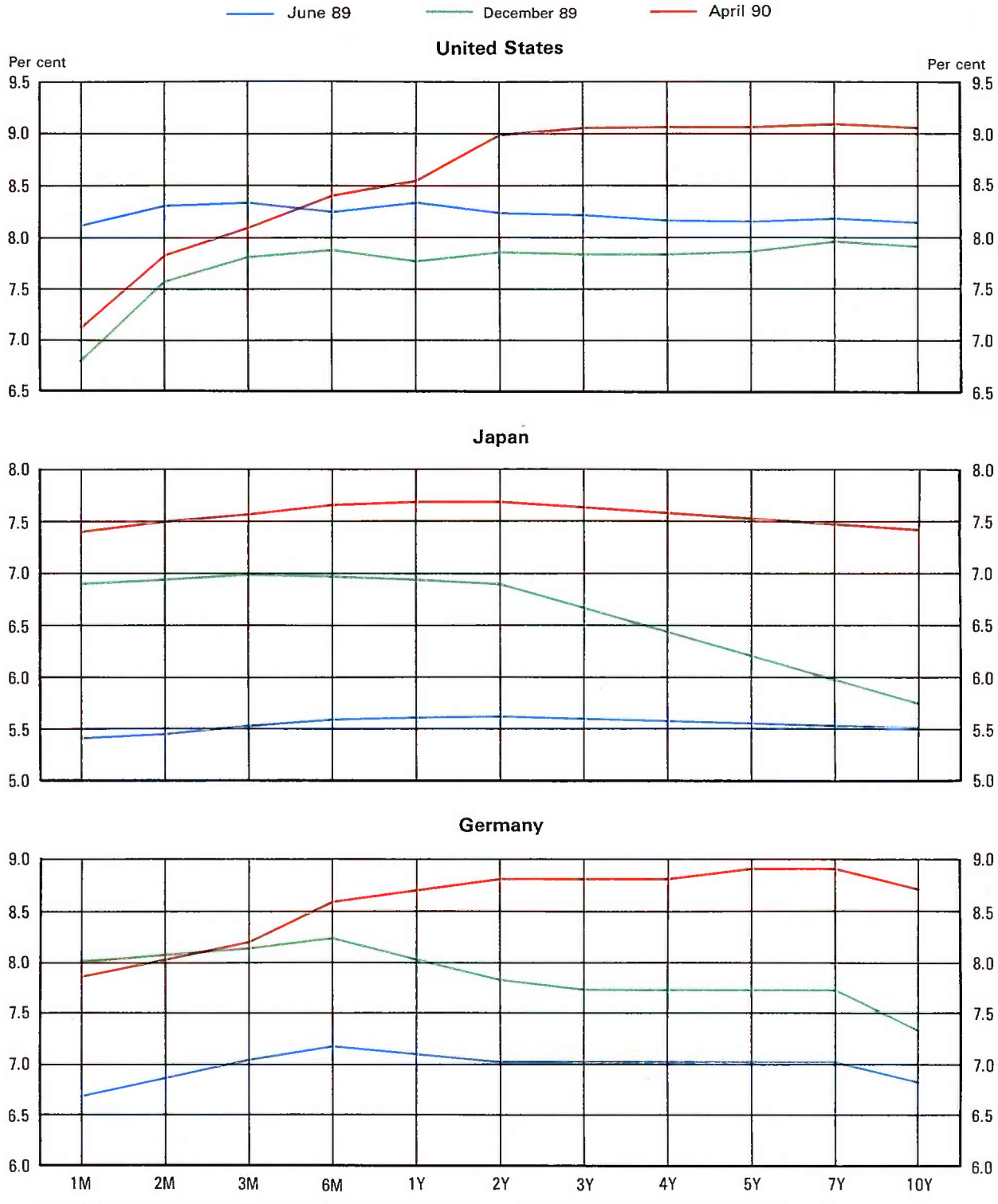
	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Short-term rates											
United States	5.8	6.7	8.1	7.7	7.6	8.5	7.8	7.8	7.7	7.6	7.5
Japan	4.2	4.5	5.4	7.6	7.7	4.8	6.0	7.5	7.7	7.7	7.7
Germany	4.0	4.3	7.1	8.8	9.2	6.5	7.6	8.3	9.3	9.3	9.1
France	8.3	7.9	9.4	10.6	10.3	9.0	9.8	10.5	10.8	10.4	10.1
Italy	11.3	10.8	12.6	13.3	12.9	12.6	12.7	13.3	13.3	13.0	12.8
United Kingdom	9.7	10.3	13.9	15.1	14.3	13.3	14.5	15.2	15.0	14.5	14.0
Canada	8.4	9.7	12.2	13.1	12.6	12.1	12.3	13.2	12.9	12.6	12.5
Long-term rates											
United States	8.4	8.8	8.5	8.5	8.4	9.0	8.0	8.6	8.5	8.4	8.4
Japan	5.0	4.8	5.3	7.6	7.9	5.2	5.3	7.4	7.9	7.9	7.9
Germany	6.2	6.5	7.0	8.8	9.1	6.9	7.1	8.7	9.0	9.1	9.0
France	10.2	9.2	9.2	10.2	9.6	9.1	9.2	10.2	10.3	9.7	9.5
Italy	10.6	10.5	11.6	12.8	12.6	11.3	12.0	12.8	12.8	12.6	12.5
United Kingdom	9.6	9.7	10.2	11.6	11.0	10.1	10.3	11.8	11.5	11.0	11.0
Canada	9.9	10.2	9.9	10.4	9.9	10.2	9.7	10.4	10.4	10.0	9.8

a) For details, see "Sources and Methods".

CHART C

RECENT YIELD CURVE DEVELOPMENTS

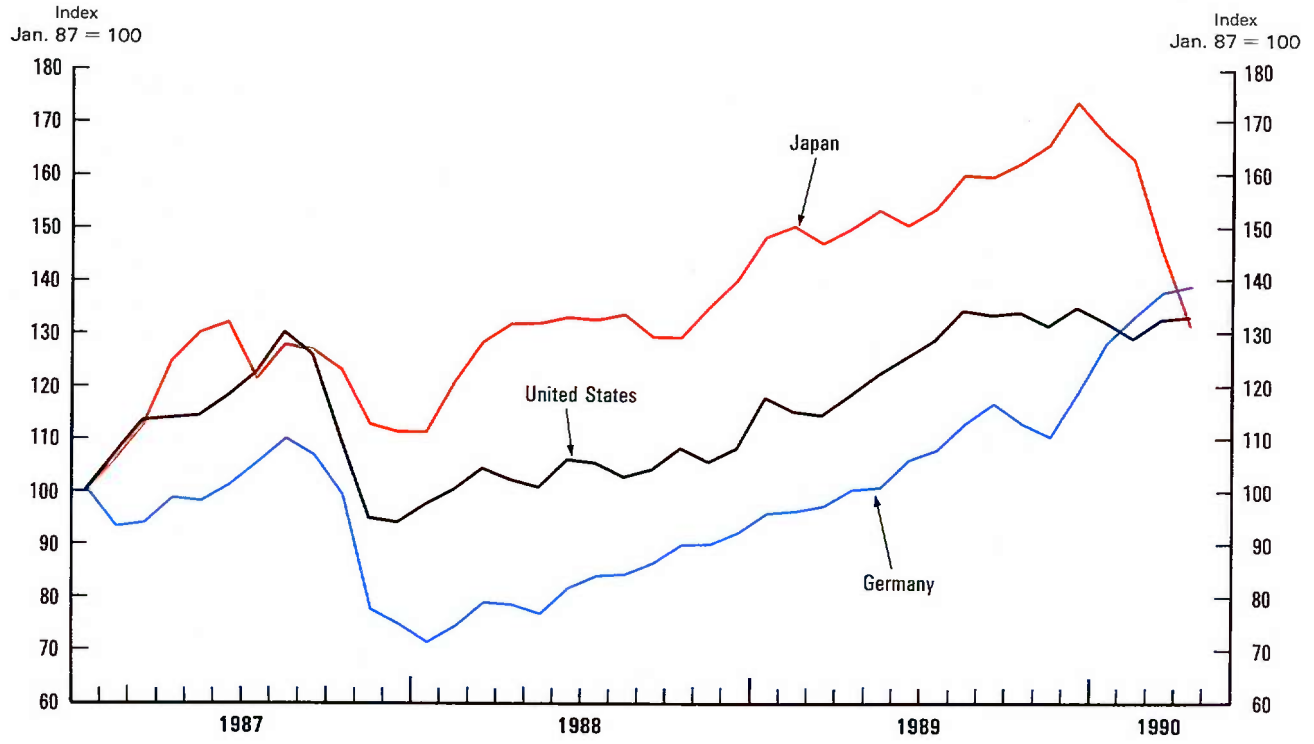
(The term structure of interest rates)

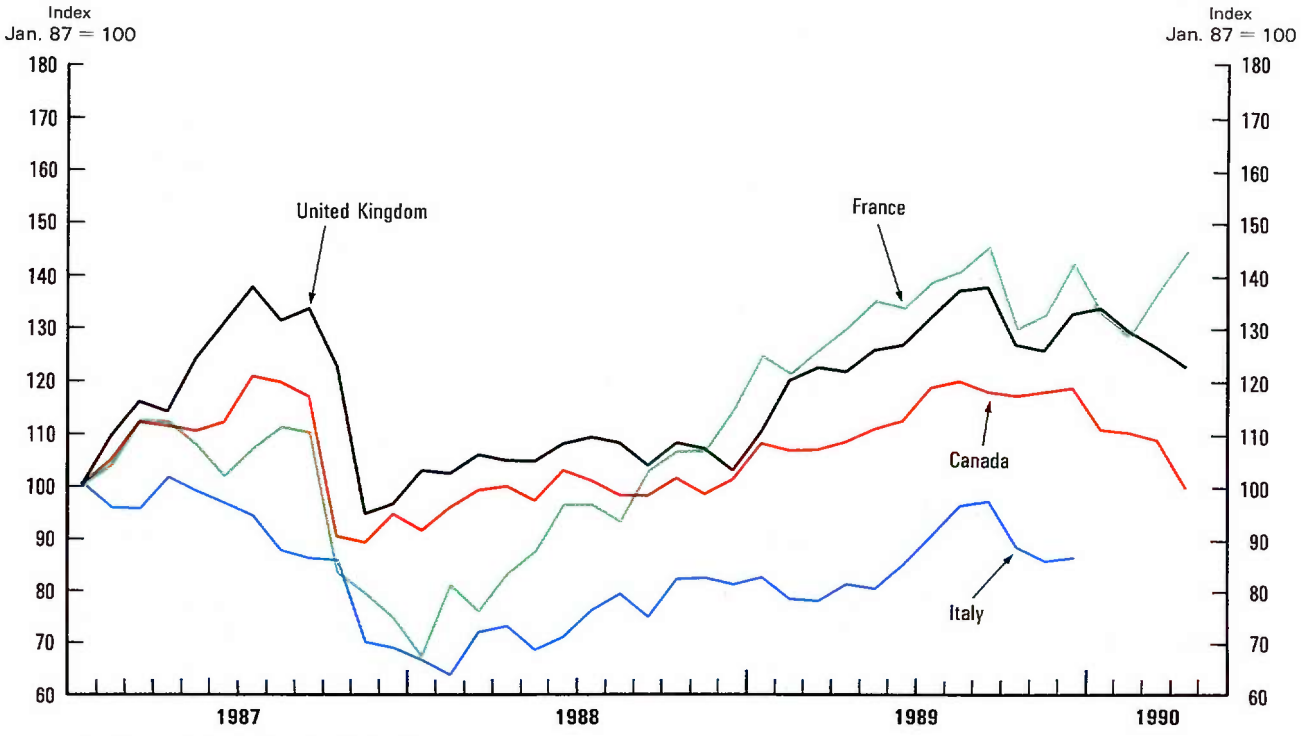


Note: The data for the United States are: the federal funds rate for overnight and Treasury bills and bonds (bond equivalent rates) for other maturities. For Japan the data are: the call rate (uncollateralised) for overnight, CD rates (offer) for maturities from 1 month to 2 years, and the representative government bond rate for the 10 year maturity. For Germany the data are: the interbank rate for maturities up to 6 months and government bond rates for maturities over 1 year.
For Japan, values for maturities of 3, 4, 5 and 7 years are imputed. Two months and 1 year maturities are imputed for Germany.
Maturities notation: 1M - one month, etc; 1Y - one year, etc.

CHART D

SHARE PRICES





United States: Industrial (Standard & Poor's)
Japan: Tokyo Stock exchange
Germany: Industrial (FSO)
Italy: Milan Stock Exchange
France: Industrials (INSEE)
United Kingdom: 500 shares (F.T. Actuaries)
Canada: 300 shares (Toronto Stock Exchange)

future demand for long-term loanable funds to finance investment has presumably pushed up expected real interest rates. Second, inflation expectations may also have risen. Finally, faced with increased uncertainty about future outcomes for both the real economy and interest rates, the risk premium on longer-term bonds very likely increased.

While domestic factors have been most important in explaining bond price behaviour thus far in 1990, a common element across markets has been the developments currently underway all over central and eastern Europe, and not only in the GDR. Rebuilding these economies through substantial capital investment is likely to imply both an additional call on world savings during the 1990s, and greater pressure on the supply potential of OECD economies, thereby pushing up both the real and the inflation components of interest rates across all markets. To the extent that market expectations are forward-looking, this effect should already be influencing longer-term interest rates.

Recent stock market developments

In contrast to the similar behaviour of bond prices in the three largest OECD economies in the early months of 1990, major stock markets have shown diverse tendencies. In the United States, share prices, which had been broadly flat since the beginning of the year, have recently moved up somewhat to record levels; in Japan they fell substantially, and have subsequently recovered only part way; in Germany they have risen significantly (Chart D). French and Italian markets have not yet displayed any major trend in either direction, while in the United Kingdom and Canada they have been relatively weak. These diverse outcomes suggest that different factors have been important in the major equity market developments in the past few months. The following paragraphs review recent trends in the polar cases of Japan and Germany.

The importance of the expected capital gain component of the return to equity relative to dividends in the Japanese market may make prices there especially sensitive to interest rate increases that are expected to be sustained. However, while interest rates in Japan have been rising for well over a year, share prices have fallen only more recently, possibly because most market participants expected that the tightening of monetary policy in 1989 would be relatively short lived, particularly with U.S. interest rates falling. Expectations changed after the turn of the year. It seems reasonable to interpret the early 1990 drop in the Tokyo stock market as an adjustment, arguably overdue, to the end of a period of easy money and a consequent jolt to bull-market psychology.

The effects of the progressive deregulation of Japanese money markets may also be contributing to this stock market adjustment. More and more short-term deposit rates are moving to higher market-determined levels. As the higher rates attract saving, the demand for equities could be reduced. The speed of the markets' decline has been thought by some to have been exacerbated by programme trading, a recent import into the Tokyo market from the United States.

In the case of Germany, share prices have been moving upwards – by approximately 30 per cent between the dismantling of the Berlin Wall and mid-May of this year. The main domestic factor here again appears to be the prospect of monetary union with and the economic reconstruction of the GDR. This is expected to have a favourable impact on corporate profits in the Federal Republic, prompting investors to buy German equities which, in terms of cash flow or earnings, were underpriced relative to other markets even before the prospect of German unification emerged.

FISCAL POLICY

The near-term budgetary outlook

Budget deficits are expected to continue declining in most OECD countries over the projection period. For the OECD area as a whole[2], the general government financial deficit is projected to fall, albeit at a slower pace than in recent years, to 0.7 per cent of GDP in 1991 (Table 6). In the major countries this improvement is likely largely to reflect reductions in central government budget deficits (Table 7). To some extent lower deficits are also expected for other levels of government (local and social security), except in Canada where some of the recent measures to achieve budgetary savings for central government have partly shifted expenditure to provinces. A deterioration in the budgetary positions of the Länder is also expected in Germany, although in this case the effect on general government finance is compounded by the expected increase in central government's budget deficit[3]. In the United Kingdom, the central government is expected to experience some erosion of its surplus over the projection period.

The extent to which the projected progress in budget deficit reduction reflects factors other than the business cycle is indicated by changes in cyclically-

Table 6

General government financial balances[a]

Surplus (+) or deficit (-) as a percentage of nominal GNP/GDP

	1984	1985	1986	1987	1988	1989	1990	1991
United States	–2.8	–3.3	–3.4	–2.4	–2.0	–2.0	–1.3	–0.9
Japan	–2.1	–0.8	–0.9	+0.7	+2.1	+2.7	+3.1	+3.3
Germany[b]	–1.9	–1.1	–1.3	–1.8	–2.1	+0.2	–0.8	–0.8
France	–2.8	–2.9	–2.7	–1.9	–1.8	–1.4	–1.2	–1.0
Italy	–11.6	–12.5	–11.7	–11.1	–10.9	–10.2	–10.2	–9.9
United Kingdom	–3.9	–2.7	–2.4	–1.2	+1.1	+1.3	+0.7	+0.3
Canada	–6.5	–6.8	–5.5	–4.4	–2.6	–3.4	–3.0	–2.7
Total of above countries[c]	–3.4	–3.2	–3.2	–2.2	–1.5	–1.1	–0.8	–0.6
Australia	–4.0	–3.3	–3.0	–1.1	+0.7	+1.2	+2.3	+2.2
Austria	–2.6	–2.5	–3.7	–4.3	–3.1	–2.7	–1.1	–0.3
Belgium	–9.3	–8.7	–8.8	–7.2	–6.8	–6.5	–6.1	–6.0
Denmark	–4.1	–2.0	+3.4	+2.5	+0.3	–0.4	–0.5	0.0
Finland	+0.4	+0.1	+0.8	–1.2	+1.4	+2.7	+2.5	+1.4
Greece	–10.2	–14.0	–12.7	–12.0	–14.5	–17.8	–17.2	–16.5
Ireland	–10.1	–11.8	–11.6	–9.2	–2.6	–2.8	–1.1	–0.1
Netherlands	–6.3	–4.8	–6.0	–6.5	–5.0	–5.1	–5.1	–5.0
Norway	+7.5	+10.4	+5.9	+4.8	+3.1	+1.0	+1.2	+0.5
Spain	–5.5	–7.0	–6.1	–3.2	–3.1	–2.1	–2.0	–1.4
Sweden	–2.9	–3.9	–1.3	+4.2	+3.4	+5.3	+4.6	+3.2
Total of smaller countries[c,d]	–4.3	–4.1	–3.7	–2.5	–2.0	–1.7	–1.4	–1.4
Total of European countries[c,d]	–4.5	–4.4	–4.1	–3.5	–3.1	–2.2	–2.5	–2.5
Total of above countries[c]	–3.5	–3.3	–3.2	–2.3	–1.6	–1.2	–0.9	–0.7

a) On a SNA basis except for the United States, the United Kingdom, Australia, Greece and Sweden, where the data are based on national methods.
b) Excludes the German Unity Fund.
c) 1987 GNP/GDP weights and exchange rates.
d) For the countries shown in the table.

adjusted budget balances[4], which are projected to improve by the same amount as actual balances over 1990-91[5]. Thus, in contrast with recent years, it is non-cyclical factors rather than average growth (for the present economic cycle) which are mainly expected to reduce budget deficits.

Recent increases in interest rates are not expected to affect significantly OECD budgetary consolidation: the change in the combined cyclically-adjusted balance for the group of countries included in the total OECD area calculation is almost the same over 1990-91 whether or not interest payments are included. The absence of more visible effects of recent interest rate increases at the aggregate level reflects long lags between changes in market interest rates and governments' average borrowing costs, as well as the fact that debt-GNP/GDP ratios are falling in many countries including, in particular, Japan. Nevertheless,

Table 7

Central government financial balances[a]

Surplus (+) or deficit (-) as a percentage of nominal GNP/GDP

	1984	1985	1986	1987	1988	1989	1990	1991
United States	–4.5	–4.9	–4.9	–3.6	–3.0	–2.8	–2.1	–1.9
(excluding social security)[b]	–4.6	–5.2	–5.3	–4.1	–3.9	–3.9	–3.4	–3.2
Japan[c]	–4.1	–3.7	–3.1	–1.9	–1.1	–0.8	–0.6	–0.5
Germany[d]	–1.6	–1.2	–1.2	–1.4	–1.7	–0.4	–1.0	–0.7
France	–3.0	–2.9	–2.3	–2.3	–2.0	–1.7	–1.4	–1.2
Italy	–11.6	–13.6	–12.8	–11.5	–11.8	–11.0	–10.9	–10.7
United Kingdom	–3.1	–2.3	–2.1	–1.1	+1.1	+1.3	+0.7	+0.2
Canada	–6.8	–6.6	–4.8	–4.3	–3.4	–3.6	–2.9	–2.4
Total of above countries[e]	–4.5	–4.6	–4.3	–3.3	–2.7	–2.4	–2.1	–1.9

a) On a SNA basis except for the United States, Germany, the United Kingdom and Italy where the data are based on national methods.
b) OECD estimates, derived from fiscal year off-budget items (primarily retirement pension balance) converted to a calendar year basis.
c) For the fiscal year beginning 1*st* April of the year shown.
d) Excludes the German Unity Fund.
e) 1987 GNP/GDP weights and exchange rates.

in countries with high debt-GNP/GDP ratios such as Italy, Canada, Belgium, Greece and Ireland, interest rate effects are more notable.

Although cyclical developments are not expected to influence budget balances, on average in the OECD, they do affect projections for most countries. In the United States, Canada, Australia and Denmark, the cyclical component of the budget balance is projected to deteriorate. However, this is expected to be more than offset by discretionary measures (Chart E). Of the other countries in which the cyclical component of the budget balance is projected to deteriorate, Finland is expected to follow a broadly neutral fiscal policy, while the United Kingdom and Sweden plan to make discretionary reductions in their surpluses respectively through increases in expenditure and tax reform.

Amongst countries where growth is projected to be above trend, five – Italy, Austria, Belgium, Ireland and Spain – are expected to reinforce the automatic improvement in their budget positions with firmer discretionary policies (mainly inducing planned revenue increases in Italy and Spain and non-interest expenditure reductions in the other countries). The cyclically-adjusted budget deficits in Italy and Belgium may nevertheless increase as debt service costs escalate. Of the other countries in which growth is likely to be comparatively strong, only France is projected to pursue a neutral policy stance over 1990-91. Discretionary budgetary relaxation is not expected to be large enough to offset the favourable budgetary effects of strong growth in the Netherlands. In Germany and Norway, on the other hand, discretionary actions are expected to offset completely the positive cyclical contribution to the budget. The German budgetary situation reflects this year's direct tax cuts as well as some allowance for the extra expenditures associated with the process of unification with the GDR (for an elaboration, see the Country Note on Germany). In Norway, income tax cuts are the main factor accounting for the projected discretionary easing in fiscal policy[6].

Cyclical factors are not expected to have any effect on the budgetary positions of two countries – Japan and Greece – where discretionary policies are respectively anticipated to be neutral and firming. The expected tightening of budgetary discipline in Greece will begin to reduce a deficit that is by far the largest in relation to GNP of any OECD government.

Public debt and the sustainability of fiscal policy

The improvement in the budgetary situation of most OECD countries during the second half of the 1980s has been reflected in a stabilisation of public debt-GNP/GDP ratios. With growth projected to slow and long-term interest rates to rise, current fiscal policy settings are expected to be broadly sustainable from the viewpoint of keeping public debt on a stable or declining path.

Assessing the sustainability of fiscal policy in this sense is equivalent to asking whether the present levels of taxation and government spending can be maintained, or whether adjustment of these will be needed in order to avoid a build-up of debt as a share of GNP/GDP. Such an appraisal requires that account be taken of *i)* revenue and expenditure programmes, which are under the direct control of fiscal authorities; and *ii)* long-run real output growth and the real rate of interest, factors that are less under their control. Indicators which reflect the sensitivity of public debt to both these elements are presented below. They focus on the future path of the ratio of debt to GNP/GDP that would be observed if the current stance of fiscal policy – characterised by the size of the primary budget balance (i.e. the balance net of debt interest payments) – were to remain unchanged relative to output[7]. Fiscal policy could be said to be unsustainable if public debt is projected to increase indefinitely relative to output, a situation which can be shown to prevail whenever the nominal rate of interest exceeds the growth rate of nominal output and the primary budget is in deficit or insufficiently in surplus.

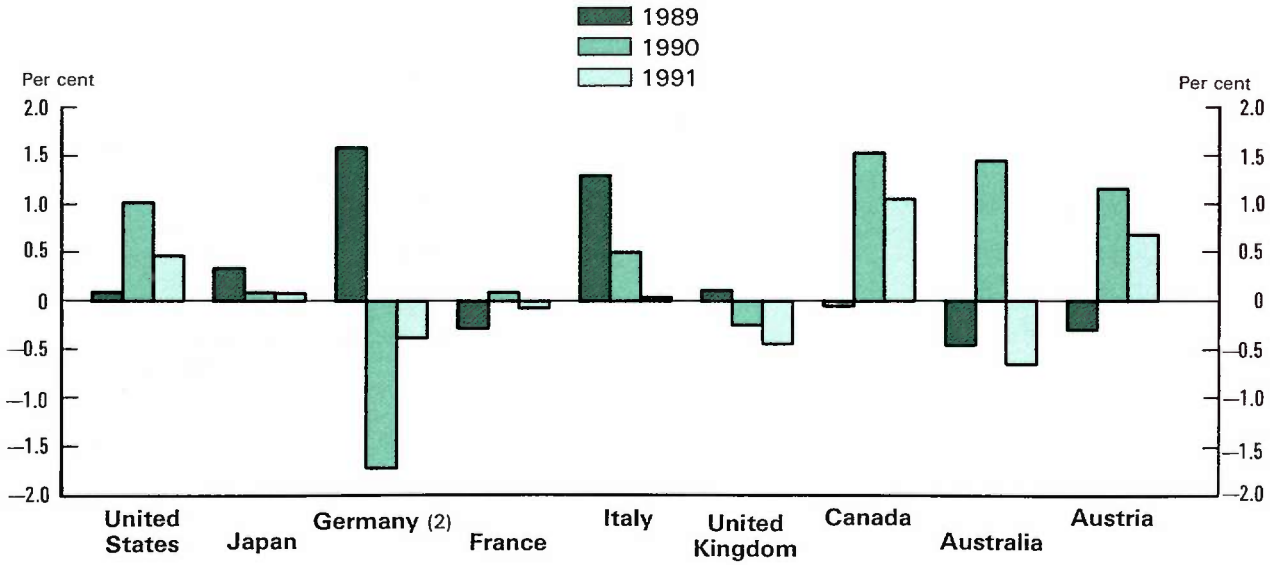
The average value of primary budget balances (both actual and cyclically-adjusted) for selected OECD countries is shown in Table 8, as well as the difference between interest rates and the output growth rates projected for the 1990-91 period. Two alternative measures of this differential are reported, one based on the implicit average interest rate actually paid on net debt, and the other on the market rate for long-term bonds. For most countries the differential is smaller (or even negative) when the average interest rate is used, partly because this reflects the lower cost associated with issuing non-interest bearing debt to the central bank, but also because long-term debt may have been incurred in the past at interest rates different, on average, from those currently prevailing. This implicit rate may not necessarily be representative of the market conditions at which new debt can be issued, especially as the pursuit of an anti-inflationary monetary policy would not allow monetary authorities to absorb large amounts of new public debt issues. In this respect, the measure based on the long-term market rate may be preferable when assessing the outlook for public debt. The last column of the table uses this measure and the outstanding stock of debt to estimate what primary balance would just stabilise the debt-GNP/GDP ratio[8]. Either the actual or the cyclically-adjusted

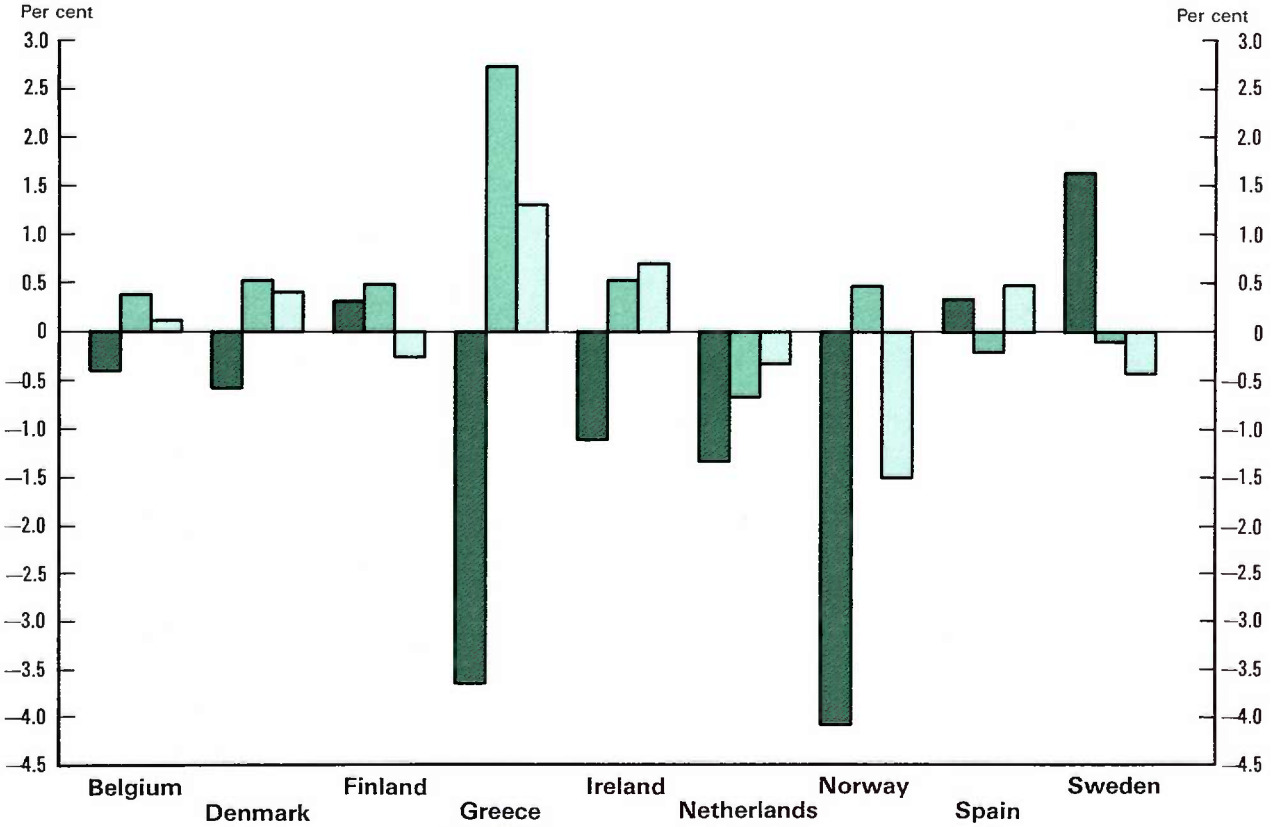
CHART E

FISCAL STANCE IN OECD COUNTRIES

Change in primary balance (1)

Percentage of trend GDP/GNP





1. Cyclically-adjusted general government budget balances excluding debt interest payments.
2. Excludes German Unity Fund.

A FORWARD-LOOKING INDICATOR OF THE SUSTAINABILITY OF FISCAL POLICY

The traditional indicators of the sustainability of fiscal policy presented in Table 8 show the evolution of the debt-GNP/GDP ratio that would be implied by maintaining the current budgetary stance. Judging the sustainability of policies on this basis has at least two limitations. First, to the extent that the government's budgetary decisions span several years, an apparently "unsustainable" fiscal policy may be in reality sustainable by virtue of the fact that a correction is built into the policy agenda and is therefore expected during the later part of the planning horizon. Conversely, a policy stance may appear sustainable on the basis of the traditional measure despite the fact that latent spending pressures, including those arising from unfunded liabilities, or incipient revenue declines threaten the long-run health of public finances. Thus, a *forward-looking* indicator, which takes account of foreseeable future changes in spending or revenues, would provide, in principle, a better assessment of the sustainability of the government's budgetary stance.

A second and related limitation of the traditional indicators of sustainability is that, insofar as fiscal policy may appear to be unsustainable over a given planning horizon, these indicators do not provide any direct indication of the magnitude of the change in government spending and/or taxation needed now to avoid an increase in the debt-GNP/GDP ratio over the longer term. It would be useful to have a meaningful measure of the degree to which a budget stance departs from a sustainable path.

To overcome these limitations, an alternative indicator of sustainability has been developed recently[1], which views budgetary decisions as being made over a planning period of a specified duration. In this approach, the sustainability of fiscal policy is gauged by comparing the current implicit tax rate (the ratio of general government receipts to GNP/GDP) to the one which, if maintained throughout the planning period, would prevent public debt from growing more rapidly than income[2]. A positive difference between this estimated tax rate and the current one – the "tax gap" – is suggestive of a need to tighten policy to stabilise the debt-GNP/GDP ratio, either by raising taxes or by reducing spending, or a mix of both.

The degree to which fiscal policies in Member countries are sustainable according to this alternative approach can be seen from the adjoining table[3]. The estimated tax gaps shown there are for the period 1989-91, based on current projections for growth rates and interest rates. The rather short horizon is one for which projections of future fiscal policy and economic variables are readily available. These projections incorporate the effects of legislated or likely-to-be approved policy measures on public budgets, which are discussed in the country notes of this *Outlook*. Also shown in the table, for purposes of comparison, are the more traditional primary gaps described earlier in this chapter.

Not surprisingly, given the short time horizon over which future structural budget changes have been taken into account, the alternative approach tends to provide a similar qualitative assessment of the sustainability of fiscal policy as the one suggested by the traditional indicators. Indeed, on the basis of current and expected budgetary measures, fiscal policy appears sustainable in all countries except Greece, Italy, and the Netherlands. Although the assessments using the different approaches for a short time horizon are similar, appraisals of the sustainability of fiscal policy over longer horizons can yield very different outlooks than suggested here. Indeed, estimated tax gaps may be significantly affected by the pressures on future government expenditure noted in the text (demographically-induced pension and health spending, infrastructure investment, etc.). Thus, it seems worthwhile to extend the time horizon of the calculations, provided adequate information is available concerning the longer-run spending and revenue implications of current policies.

Forward-looking indicator of the sustainability of fiscal policy

As a percentage of nominal GNP/GDP

	Three-year tax gap[a]	Memorandum item: Debt-stabilizing primary gaps[b]	
		actual	Cyclically adjusted
United States	+0.2	–0.5	–0.1
Japan	–3.5	–3.7	–3.4
Germany[c]	–2.9	–1.0	–0.4
France	–0.1	–0.1	+0.2
Italy	+4.6	+4.5	+4.8
United Kingdom	–1.8	–0.9	–0.6
Canada	–0.4	–1.2	–1.1
Australia	–2.1	–2.1	–1.9
Austria	–0.4	–0.7	–0.1
Belgium	–1.2	–0.3	+0.5
Denmark	–2.7	–2.3	–3.0
Finland	–2.4	–2.4	–1.9
Greece	+9.1	+7.7	+7.8
Ireland	–1.7	–0.8	–0.7
Netherlands	+1.9	+1.9	+2.7
Norway	+0.3	+0.4	+1.3
Spain	–0.1	–0.6	+0.2
Sweden	–5.0	–3.9	–3.5

a) See discussion above.
b) Debt-stabilising primary balance minus the average projected primary balance over the 1990-1991 period.
c) Excludes the German Unity Fund.

NOTES

1. See O.J. Blanchard, "Suggestions for a New Set of Fiscal Indicators", *OECD Department of Economics and Statistics Working Papers* No. 79, April 1990.
2. Income includes the interest payments on the debt itself.
3. See J.C. Chouraqui, R.P. Hagemann and N. Sartor, "Indicators of Fiscal Policy: a Re-examination", *OECD Department of Economics and Statistics Working Papers* No. 78, April 1990, for an application of this approach to selected OECD countries.

Table 8

Traditional indicators of the sustainability of fiscal policy

	Net public debt in 1989[a]	Differential between the interest rate and output growth based on:[b]		General government primary balances[b,d]		Debt-stabilising Primary Balance[e]
		Implicit interest rate[c]	Long-term interest rate	Actual	Cyclically-adjusted	
United States	+29.8	+1.4	+2.3	+1.2	+0.8	+0.7
Japan	+14.1	–1.4	+0.7	+3.8	+3.6	+0.1
Germany[f]	+21.9	+3.8	+2.0	+1.4	+0.8	+0.4
France	+25.4	+2.7	+3.7	+1.0	+0.7	+1.0
Italy	+94.3	+0.7	+3.7	–1.1	–1.4	+3.5
United Kingdom	+32.9	–0.4	+4.5	+2.4	+2.1	+1.5
Canada	+38.0	+8.0	+3.6	+2.6	+2.5	+1.4
Australia	+16.5	–2.3	+5.4	+3.0	+2.8	+0.9
Austria	+57.8	–0.1	+3.4	+2.6	+2.1	+2.0
Belgium	+122.4	+1.7	+3.2	+4.2	+3.5	+3.9
Denmark	+23.1	+13.4	+6.4	+3.8	+4.5	+1.5
Finland	–2.1	+2.4	+6.0	+2.3	+1.8	–0.1
Greece	+79.0	–7.2	+2.4	–5.8	–5.9	+1.9
Ireland	+122.6	–1.3	+4.1	+5.8	+5.8	+5.1
Netherlands	+57.2	+2.2	+2.9	–0.2	–1.0	+1.7
Norway	–25.6	+4.4	+5.4	–1.8	–2.6	–1.4
Spain	+29.3	+1.4	+3.4	+1.6	+0.8	+1.0
Sweden	+0.6	+1.3	+4.0	+3.9	+3.5	0.0

a) As a percentage of GNP/GDP.
b) Average over the 1990-1991 period.
c) Average rate paid on outstanding public sector net debt (gross debt for Finland and Sweden).
d) Budget balances net of interest payments on the public debt, as a percentage of GNP/GDP.
e) Derived by the multiplication of column 1 by column 3. See text.
f) Excludes the German Unity Fund.

primary balances shown in the two previous columns can be compared to the debt-stabilising value to assess the sustainability of fiscal policy. By this criterion, policies appear to be broadly sustainable, with the notable exception of Greece (by a very wide margin) and, to a lesser extent, Italy and the Netherlands. This overall assessment is corroborated by an alternative indicator, described in the adjoining box, which is based on the fact that the government's budgetary decisions span more than one period.

While stabilising the debt-GNP/GDP ratio has been an important objective in efforts to put economic policies on a sound medium-term basis, several considerations would justify the pursuit of more challenging goals in the 1990s. In many countries, and for the OECD as a whole, one such objective would be to boost national saving. This would also be a reason for governments to reduce disincentives to save arising from tax systems and other policies. Another more ambitious target in several countries would be to reduce the share of budgetary resources devoted to interest payments. Authorities in countries with very high interest burdens have less budgetary flexibility to respond to emerging expenditure needs, and their budget stability will remain vulnerable to higher interest rates.

An important reason for setting fiscal policy goals more stringent than suggested by the debt sustainability criterion is that the usual accounting principles on which they are based ignore unfunded liabilities implicit in loan guarantees and pay-as-you-go pension schemes. Stringency is also warranted in countries where substantial spending increases are envisaged, for example on environmental clean-up programmes.

NOTES

1. If Euro-Deutschemark deposits were included as a legitimate component of M3, current monetary growth would appear to be around 8 per cent in early 1990, i.e. more rapid than that shown by the variable targeted by the authorities.
2. Statistics referring to the "total OECD area" in this section are based on data from all OECD countries except: Iceland, Luxembourg, New Zealand, Portugal, Switzerland and Turkey.
3. The budgetary figures for Germany exclude amounts borrowed through the German Unity Fund. Loans raised through this fund are expected to amount to approximately 1 per cent and 1½ per cent of the Federal Republic of Germany's GDP respectively in 1990 and 1991.

4. The interpretation of cyclically-adjusted budget balances was discussed in *OECD Economic Outlook 31*, July 1982. Such a measure gives a rather wide definition of "discretionary" fiscal action because it includes components (such as debt service, fiscal drag and resources revenues) that are not directly under government control. Fiscal drag is treated here as discretionary on the basis that authorities could, if they desired, offset the increases in taxation associated with nominal income growth and an unindexed, progressive tax schedule.

5. See Table 36 in the Detailed Projections and Other Background Information section for detail.

6. The assessment of discretionary fiscal policy in Norway is based on changes in the cyclically-adjusted non-oil primary balance as a percentage of mainland GDP rather than the figures which appear in Table 36 and which are reproduced in Chart E.

7. As originally developed by E.D. Domar ("The 'Burden of Debt' and the National Income", *American Economic Review*, December, 1944), this approach aims at assessing the economic burden of the debt, under the assumption that government net lending is a constant fraction of total output and that interest payments are entirely financed through taxes.

8. The level of the primary budget balance needed to stabilise the debt at its current level is given by the product of the current debt-GNP/GDP ratio times the interest and output growth rate differential. See *OECD Economic Outlook 45*, June 1989, pp. 24-26, for further discussion of this aspect.

LABOUR MARKETS AND INFLATION

Vacancies and skilled labour shortages remain high in many countries, although labour-market conditions appear to have stopped tightening recently. With labour demand buoyant and population growing slowly in the OECD area, immigration has recently made an increasing contribution to labour force growth in many OECD countries. Employment growth is projected to slow over the next two years and OECD unemployment could start to drift up again. Price and wage inflation were higher last year than in 1988. Prices were adversely affected by strong rises in energy and food prices as well as by increases in indirect tax rates, while the underlying OECD inflation rate rose less perceptibly. The growth of real earnings remained broadly unchanged. Both price and wage increases are projected to remain at current rates, though the balance of risks seems to lie on the side of higher inflation.

Recent trends in labour markets

Employment and labour force developments

OECD *employment* grew at roughly the same rate in 1989 as in 1988 (Table 9) although, in line with the slowing of output growth, the expansion of employment decelerated in the second half of the year in all of the larger economies except Italy. This pattern was particularly marked in North America. Four countries – Australia, Luxembourg, Spain and the United Kingdom – recorded employment growth of 3 per cent or more for the year. Only four countries – Denmark, Italy, New Zealand and Norway – experienced falling employment.

The service sectors continued to generate most of the growth in jobs, accounting for 85 per cent of the increase in civilian employment last year in the seven major countries. Industrial employment also expanded, however, in all the major countries except Italy. Australia and Spain recorded very rapid growth in this sector – 6 per cent in both cases, with particularly strong gains in construction.

Some indicators suggest that tight labour markets eased somewhat in the second half of last year. In addition to the slowing in employment growth, vacancy rates or other widely-used measures of job offers have declined in some countries (Australia, Belgium, Canada, Portugal, the United Kingdom and the United States), and this was accompanied by some fall in overtime hours. Nonetheless, vacancies continued to increase in Germany and remain at high levels in most countries.

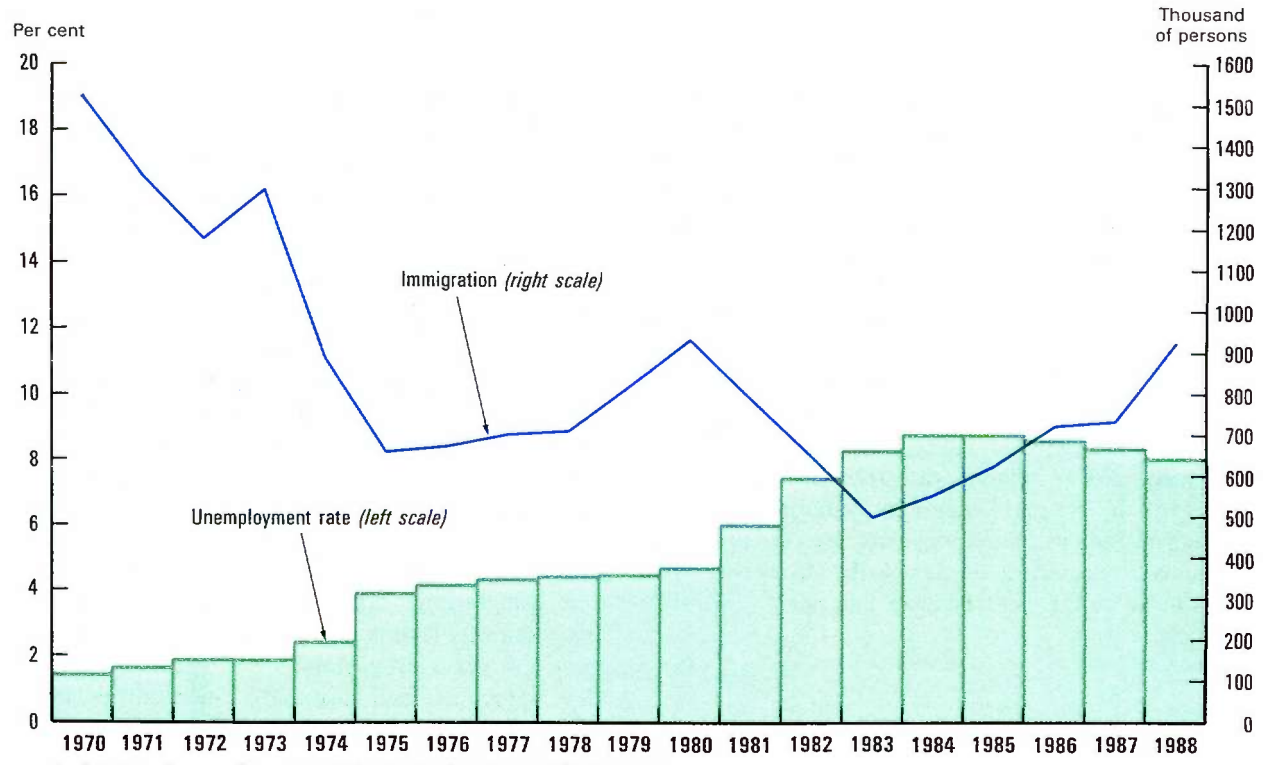
The OECD area *labour force* grew less rapidly than employment in 1989, decelerating through the year as employment growth slowed. The rate of increase in the population of working age in the OECD area has progressively declined since the mid-1980s, a trend which continued last year. However, the negative impact of the slowdown in population growth on labour force growth has been moderated by immigration flows.

Indeed, *international migration* has become an increasingly important phenomenon for many OECD economies as labour markets have tightened over the past few years. Migratory flows reflect a response to developments in both host and home countries. Population pressures in countries on the southern peripheries of Europe and the United States, accompanied by large differences in *per capita* incomes between host and home countries, have intensified supply pressures. At the same time, the emergence of labour shortages in many OECD countries has encouraged the recruitment of foreign workers. While the most dramatic recent increase in inflows has occurred in the Federal Republic of Germany – the influx of east Germans and ethnic Germans from other central and eastern European countries totalled 721 000 in 1989 – gross immigration has also been of growing importance in Australia, Canada, Japan, Norway, Sweden, Switzerland and, to a lesser degree, the United States. Even countries where emigration has a long tradition, especially Italy and Spain, are now experiencing gross inflows in excess of outflows so that net migration has been making a greater positive contribution to their populations and labour forces in recent years.

The relationship between the magnitude of such flows and labour-market conditions is illustrated by the negative relationship between the unemployment rate and gross immigration in six European host countries (Chart F). Gross inflows declined significantly in the early 1980s as unemployment rose, but then began to revive as the cyclical upswing gathered pace. While these inflows boosted both the working-age population

CHART F

UNEMPLOYMENT RATE AND GROSS IMMIGRATION IN SIX EUROPEAN COUNTRIES (1)



1. Belgium, France, Germany, Netherlands, Sweden and Switzerland.

Sources: OECD, *SOPEMI* 1988.

and the labour force, the magnitude of this effect is difficult to judge in the absence of data on the age structure of immigrants[1]. While persons of working age are estimated to have accounted for roughly 90 per cent of the inflow into Germany last year, this may not be indicative of the age structure elsewhere.

The OECD *unemployment rate* fell by half a percentage point to 6½ per cent in 1989, down a cumulative 2¼ percentage points from its 1983 peak. Most of the decline occurred in the first half of the year and the rate remained stable into the first quarter of 1990. The largest falls last year were recorded in Australia, Belgium, Finland, France, Germany, Ireland, the Netherlands, Spain, and the United Kingdom. Current unemployment rates are in line with, or beneath, their previous cyclical lows in Australia, Canada, Finland, Japan, Portugal, Sweden, Switzerland, the United Kingdom and the United States. Elsewhere, the sharp increase in unemployment which occurred during the first half of the 1980s has yet to be significantly reversed.

Broadly speaking, the trend increase in European unemployment rates in the 1980s has reflected a lengthening in the average duration of unemployment spells rather than increased inflows into unemployment[2]. In many cases persons idle for a year or more account for 40 to 50 per cent or more of total unemployment, and only the United Kingdom has experienced significant falls in long-term unemployment recently. In contrast to the European experience, rising unemployment in North America and Australia in the early 1980s had mainly reflected increased numbers of newly unemployed rather than a lengthening in unemployment spells. While U.S. workers are without work more frequently than their European counterparts, the length of these spells is typically much shorter; the average duration of uncompleted spells of unemployment there is currently at two and a

Table 9

Employment, labour force and unemployment[a]

	1988	1980-85	1987	1988	1989	1990	1991
	Thousands	Annual average percentage change					
Employment							
United States	114 971	1.5	2.6	2.3	2.0	1.0	1.1
Japan	60 114	1.0	1.0	1.7	1.9	1.8	1.5
Four major European countries	96 142	−0.3	1.0	1.6	1.3	0.9	0.7
OECD Europe	160 653	−0.0	1.4	1.6	1.4	1.0	0.8
Total OECD	356 952	0.7	1.8	1.9	1.8	1.2	1.1
		Annual average percentage change					
Labour force							
United States	121 666	1.5	1.7	1.5	1.8	1.1	1.3
Japan	61 664	1.1	1.1	1.4	1.7	1.8	1.6
Four major European countries	105 556	0.6	0.7	0.9	0.4	1.0	0.7
OECD Europe	177 014	0.8	1.0	1.0	0.7	1.0	0.8
Total OECD	383 260	1.1	1.3	1.3	1.3	1.2	1.1
		Per cent of labour force					
Unemployment							
United States	6 695	8.1	6.2	5.5	5.3	5.3	5.4
Japan	1 550	2.4	2.8	2.5	2.3	2.2	2.3
Four major European countries	9 414	8.2	9.6	8.9	8.1	8.2	8.2
OECD Europe	16 362	8.8	9.8	9.2	8.6	8.6	8.5
Total OECD	26 308	7.5	7.4	6.9	6.4	6.4	6.5
		Millions					
Unemployment							
United States		9.0	7.4	6.7	6.5	6.7	6.9
Japan		1.4	1.7	1.6	1.4	1.4	1.5
Four major European countries		8.3	10.1	9.4	8.6	8.8	9.0
OECD Europe		14.8	17.1	16.4	15.3	15.4	15.5
Total OECD		27.1	28.1	26.3	24.9	25.3	25.8

a) For sources and definitions, see "Sources and Methods".

half months compared with twelve months in, for example, France.

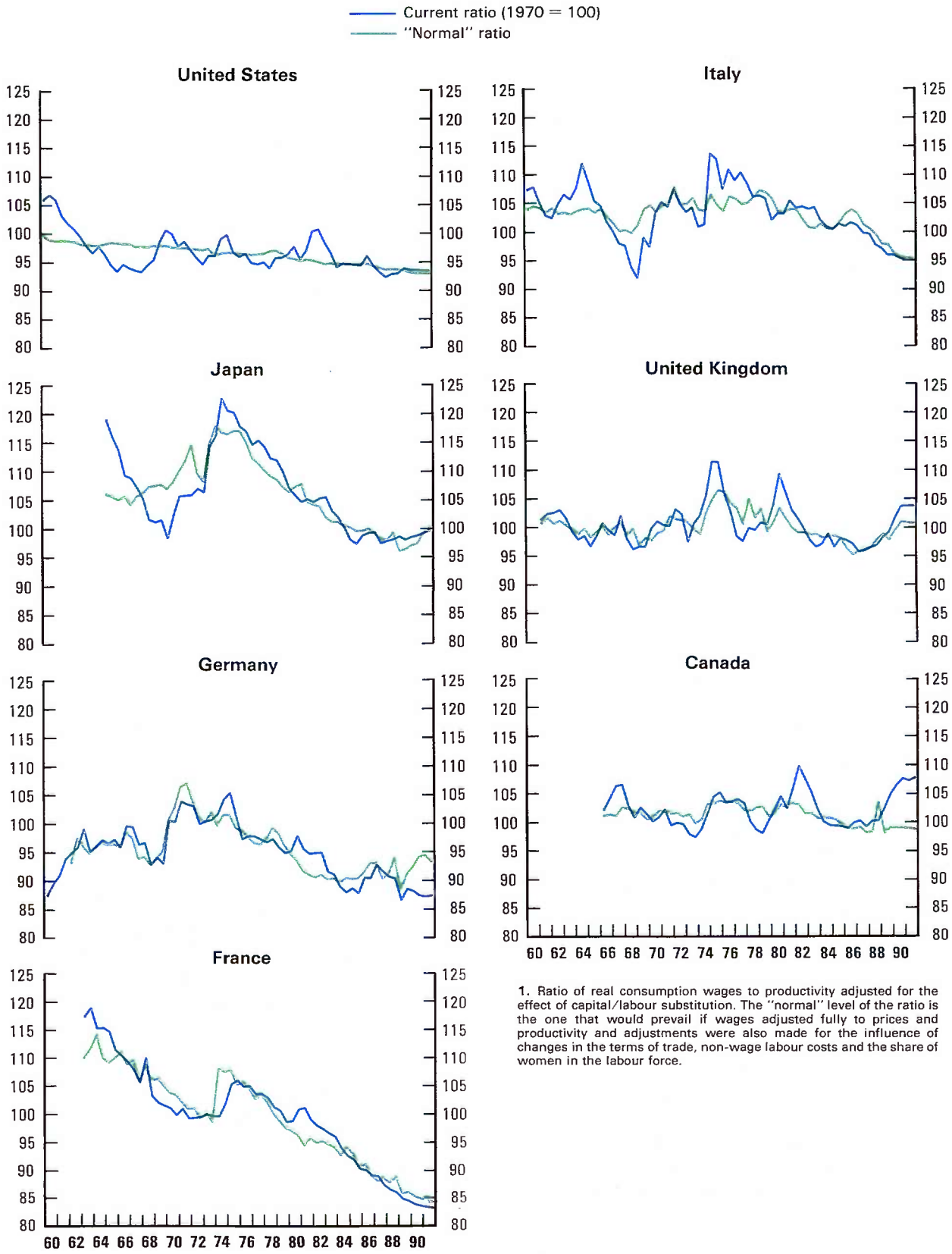
Wage and cost developments

Last year saw a further upward drift in the growth rates of business-sector *labour remuneration* of around ½ to ¾ percentage point depending on the measure used. This acceleration, which was widespread and initially accompanied by a narrowing of the gap between the higher rates of increase in European countries and lower rates elsewhere, barely kept pace with the rise in price inflation, leaving real earnings growth broadly unchanged. The growth rate of average wages in the OECD area rose from 4.8 per cent in 1988 to 5.5 per cent last year (Table 10). Most countries experienced this movement, but it was relatively pronounced in Austria, Belgium, Japan and the United States, where rates of increase have been below average, and in Portugal, Spain and Sweden. With the acceleration carrying over into 1990 in Japan and Europe, OECD-wide nominal wages are currently estimated to be rising at a 6 per cent annual rate, with the gap between the average increase in Europe (7 per cent) on the one hand and in the United States and Japan (both 5½ per cent) on the other, tending to widen again. Non-wage labour costs in the OECD increased more slowly than wages last year, but are currently estimated to be rising at around the same rate.

Within manufacturing industry, OECD hourly earnings rose by 5 per cent last year, compared with 4.5 per cent in 1988. The acceleration was marked in Japan owing to the impact of bonus payments, but was relatively slight in Europe taken as a whole; the impact of a clear acceleration in Austria, Belgium, Italy and Sweden was largely offset by slowdowns in Denmark, Ireland and Spain. Earnings growth slowed sharply to

CHART G

REAL WAGES RELATIVE TO PRODUCTIVITY (1)



1. Ratio of real consumption wages to productivity adjusted for the effect of capital/labour substitution. The "normal" level of the ratio is the one that would prevail if wages adjusted fully to prices and productivity and adjustments were also made for the influence of changes in the terms of trade, non-wage labour costs and the share of women in the labour force.

Table 10

Price and cost developments[a]

Percentage changes from previous period, seasonally adjusted at annual rates

	Average 1980-87	1989 I	1989 II	1990 I	1988	1989	1990	1991
GNP/GDP deflator								
United States	4.6	4.3	3.6	4.5	3.3	4.1	4.2	4.5
Japan	1.4	1.8	1.8	3.0	0.6	1.5	2.7	2.6
Four major European countries	6.8	4.6	3.7	4.3	3.9	4.4	4.1	4.1
Total OECD	5.2	4.4	3.8	4.7	3.5	4.3	4.4	4.4
Total OECD adjusted[b]	4.9	4.0	3.4	4.3	3.1	3.9	4.0	4.1
Smaller European adjusted[b]	6.7	4.6	4.7	5.8	4.0	4.6	5.3	4.8
Wage rates[c]								
United States	5.2	5.4	5.5	5.4	4.6	5.5	5.5	5.7
Japan	3.2	4.9	4.8	5.6	3.7	4.7	5.4	5.2
Four major European countries	7.7	5.2	6.0	6.9	5.2	5.3	6.5	6.2
Smaller European countries[d]	7.6	6.3	6.8	7.0	5.3	6.2	6.9	6.9
Total OECD[e]	5.9	5.5	5.6	6.1	4.8	5.5	5.9	5.9
Average compensation[c]								
United States	5.2	5.2	5.2	5.7	4.7	5.3	5.6	5.7
Japan	3.8	3.8	4.5	5.4	3.4	4.3	5.2	5.2
Four major European countries	8.0	5.9	5.0	7.0	5.7	5.6	6.3	6.0
Smaller European countries[f]	8.1	5.9	7.2	7.6	5.3	6.0	7.5	6.8
Total OECD[f]	6.2	5.3	5.4	6.3	4.9	5.4	6.0	5.8
Unit labour costs[c]								
United States	4.1	4.9	4.8	5.1	3.4	5.0	4.8	4.2
Japan	0.8	2.1	0.3	2.6	−0.8	1.2	2.1	2.5
Four major European countries	5.7	3.7	3.1	4.8	2.6	3.5	4.1	3.5
Smaller European countries[f]	6.0	3.1	6.1	5.3	2.9	3.7	5.5	4.7
Total OECD[f]	4.2	3.9	3.7	4.7	2.4	3.8	4.3	3.7

a) Aggregates are calculated using 1987 GDP weights and exchange rates.
b) Excluding three high-inflation countries: Greece, Iceland and Turkey.
c) Business sector.
d) Excluding Greece, Iceland and Luxembourg, for which data are not available, as well as Turkey.
e) Excluding countries listed in footnote *d)* and New Zealand.
f) Excluding Iceland and Luxembourg, for which data are not available, as well as Turkey.

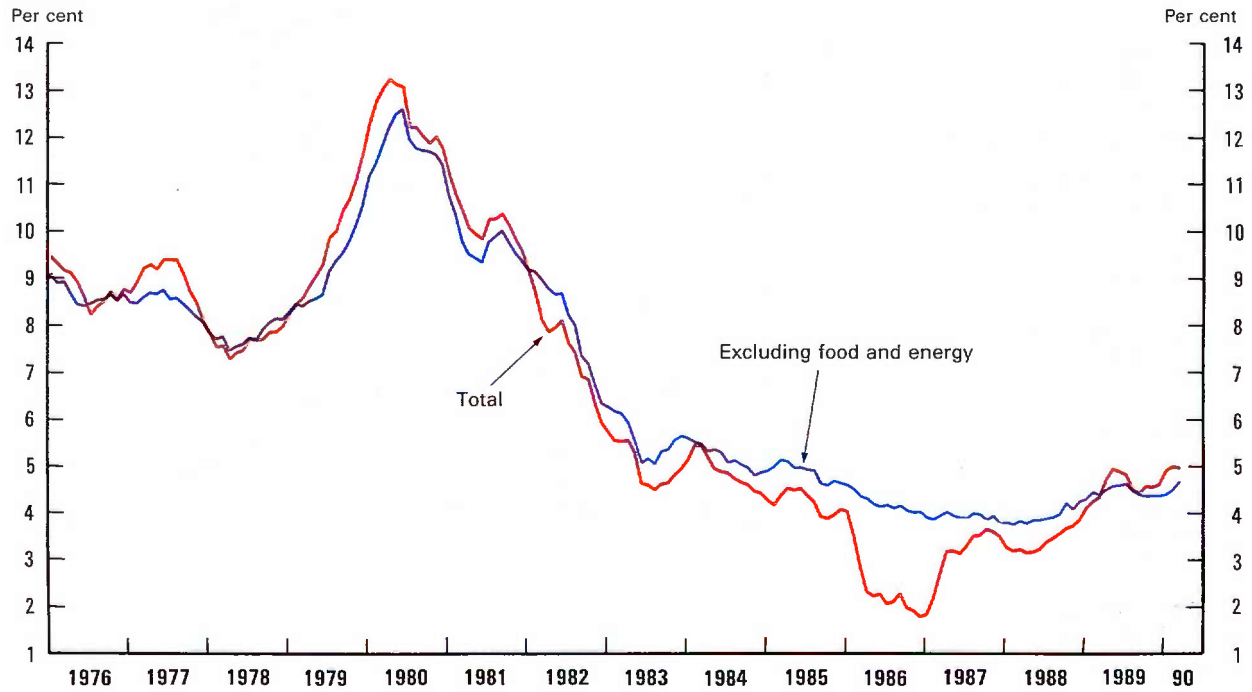
below average in New Zealand and remained under 3 per cent in both the Netherlands and the United States.

Although, as noted above, signs have emerged recently of some easing in labour-market tensions – which seem to have generally been less acute than at the previous cyclical peak around a decade ago – conditions remain tight in a number of countries. Against this background, recent wage developments appear relatively moderate. Last year the average OECD growth rate of real wages barely matched its 1¾ per cent rise in 1988. Real wages actually fell in Denmark, and their growth rate slowed markedly in Finland, Germany and Ireland, owing to the dual effect of a deceleration in nominal earnings and an acceleration of price inflation. Taking the four major European countries together, the growth of real wages halved (from 2 to 1 per cent). The ratio of real wages to labour productivity in the major countries is compared in Chart G with its expected "normal" value (see the note to Chart G for details on the construction of the latter measure). This suggests that the *level* of real wages is currently below "normal" in the continental European countries, but above "normal" in Canada and the United Kingdom.

A slowdown in the growth rate of productivity last year and the coincident pick-up in wages growth contributed in approximately equal measure to an acceleration in business-sector *unit labour costs* which rose by 3.8 per cent, compared with 2.4 per cent in 1988. The rise in the United States (5 per cent) clearly outstripped that in Japan (1.2 per cent) and the major European countries (3.5 per cent). Labour-cost pressures appear to have intensified during the first half of 1990, with unit costs rising further to an average 4¾ per cent in the OECD area as a whole. Within

CHART H

ACTUAL AND UNDERLYING CONSUMER PRICE INFLATION (1)



1. Total OECD excluding Greece, Iceland, Portugal, Sweden and Turkey for which data on energy are not available.

manufacturing industry, the more pronounced slowdown in output and productivity growth last year was reflected in cost developments; taking the major seven countries together, manufacturing unit labour costs, which had fallen by 0.5 per cent in 1988, rose by 1.5 per cent.

Recent trends in prices and profits

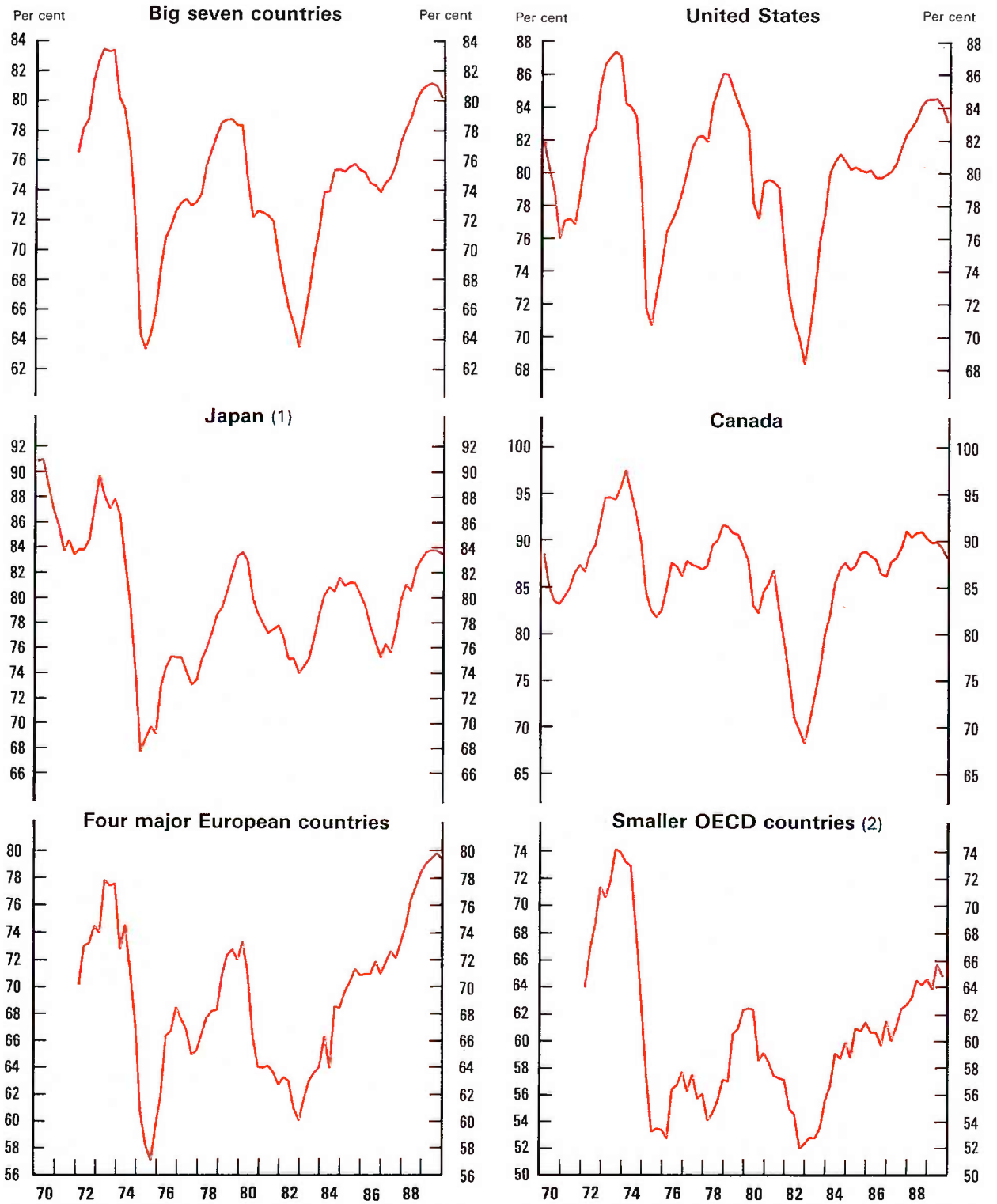
Last year the rate of *price inflation* in the OECD area – whether measured by the comprehensive GDP deflator or at the consumer level – increased by around 1 percentage point. Food and energy prices, which advanced more strongly than at any time since the early 1980s, accounted for around a half of the acceleration in consumer prices. This occurred despite the fact that world prices of food, tropical beverages and agricultural raw materials fell last year, even in nominal terms. OECD domestic food prices, which are linked to world commodity prices rather tenuously, experienced upward pressure last year owing *inter alia* to drought in certain European countries. Abnormally cold weather in the United States and disruptions to North Sea supplies accentuated the normal seasonal upward pressure on oil prices during the second half of 1989 (by end-December Dubai crude was trading 12 per cent above its mid-year price).

Excluding food and energy, the "underlying" rate of consumer price inflation eased during the second half of 1989, albeit modestly, following the steady acceleration observed since the end of 1987 (Chart H). Increases in indirect tax rates also imparted upward pressure on prices last year. Among the major countries, such policy action added around ¼ percentage point on average to the CPI, affecting mainly the low-inflation economies (Germany and Japan) as well as Italy. Mortgage-interest rate rises had a noticeable impact on the index, directly in the case of the United Kingdom and Australia and indirectly (via rents) in the case of Switzerland. On the other hand, the sustained weakening in world metals and minerals prices throughout last year moderated inflationary pressures in the OECD area.

World commodity prices have generally been weak so far in 1990. Although non-oil commodity

CHART I

CAPACITY UTILISATION IN MANUFACTURING



1. The series for Japan, which was previously an index with 1985 = 100, has been revised in accordance with official Economic Planning Agency (EPA) estimates.
2. Australia, Austria, Belgium, Finland, Greece, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland.

Note: Cross-country comparisons of capacity utilisation levels may be misleading owing to conceptual and methodoligical differences in the construction of the indices. For further details see Methodological Notes of *Main Economic Indicators* and *Sources and Methods,* No. 37 (Business Surveys) April 1983.

prices increased marginally during the first quarter of the year, helped *inter alia* by a recovery in metals and minerals prices, they have continued to decline in real terms. At the same time, spot oil prices have softened in the face of an easing back in demand and an accumulation of stocks. Nevertheless, "exogenous" factors continued to boost consumer prices at the beginning of the year, influenced by the lagged effects of North American climatic conditions in late 1989. Abstracting from this influence, the rise was more muted; the "underlying" rate of consumer price inflation (excluding food and energy prices) rose from 4½ to 4¾ per cent during the first quarter.

The increase in business-sector output prices last year (at 3¾ per cent) was rather less than that in consumer prices, and matched the rise in sectoral unit labour costs. Consequently, the *share of capital income* remained stable in the OECD area as a whole. There was downward pressure on capital shares in North America and the United Kingdom, where costs rose relatively rapidly, but gains in France and Germany as well as in the large majority of other countries. A broadly similar picture holds for the rates of return on capital in the business sector.

Prospects

OECD employment growth is expected to slow to around 1¼ per cent in 1990 and 1 per cent in 1991 in line with the projected easing in the pace of output expansion. Virtually all countries are expected to experience slowdowns, which could be especially sharp in Australia, Finland, Spain and the United Kingdom. Labour productivity growth is projected to continue at its 1989 rate of almost 2 per cent over the next two years.

Labour force growth in the OECD area is expected to decelerate broadly in line with employment as more sluggish demand for labour impacts on participation rates. Nevertheless, the numbers of unemployed may start to drift up slowly this year; by the end of 1991 there may be around 1 million more unemployed in the OECD area than at the end of last year. However, the overall OECD unemployment rate is projected to remain stable at around its present level of 6½ per cent; it may rise somewhat in Australia, Canada, Finland, Germany (reflecting further immigration in 1990), Greece, Sweden, Turkey and the United Kingdom, but is projected to fall in Belgium, Ireland, the Netherlands and Spain.

With output expected to grow at 3 per cent – which is around OECD estimates of its "potential" rate – and the unemployment rate stable, underlying inflation momentum is projected to neither pick up nor subside. Oil import prices are assumed to average $17 per barrel during the present half-year, and to remain unchanged in real terms thereafter. Other commodity prices are projected to decline slightly in real terms.

Hence, the rates of OECD-area wage and price inflation may vary little from their present (first half of 1990) levels. Wages are projected to rise by 6 per cent and both the GDP and consumption deflators by some 4½ per cent on average, implying little divergence of real wages from their present 1½ to 1¾ per cent growth path. The projections entail a clear tendency toward a progressive convergence of rates of nominal wage growth across countries. With productivity growth expected to remain steady, business-sector unit labour cost growth should average some 4 per cent over the projection period, which implies only a slight acceleration from its 1989 rate. Among the major seven countries, unit labour costs could rise significantly faster than average in Canada, Italy and the United Kingdom this year, but decelerate in the course of 1991.

The projection of price inflation stabilising at around current rates is supported by direct surveys of price expectations conducted in the United States and the European Community, which suggest no change in market sentiments in either an upward or downward direction. Fiscal reforms are, however, considerably distorting inflation profiles in the United Kingdom (downward for the deflators but upward for the RPI this year due to the method by which the Community Charge – a poll tax replacing a property tax – is treated), Canada (upward next year with the introduction of the Goods and Services Tax – essentially a value-added tax) and Sweden (upward both this year and next with the broadening of the VAT base and a rise in the rate). As in the case of wages, a progressive convergence of inflation rates is expected among the larger countries. Rates of return on capital could be squeezed slightly for the OECD area as a whole, as business-sector output prices may rise by barely 4 per cent. Such a development seems most likely in North America and the United Kingdom; on the other hand, the share of capital income is expected to continue widening in France and Germany and to remain broadly stable in Japan.

Risks

The projected stabilisation of both price and wage inflation at present levels is subject to considerable uncertainty. Although, as indicated above, consumer surveys lend credence to this picture, assess-

ments are inevitably divided. For example, one view attributes the recent rise in long-term interest rates to doubts of market participants about the medium-term prospects of halting the upward drift in inflation. Indeed, certain considerations could lend support to such doubts. With continued growth in oil consumption and with non-OPEC supplies remaining broadly unchanged, upward pressure could emerge on crude oil prices, although this would also depend on the degree of OPEC cohesion. At the same time, a continuation of the recent revival in metal prices cannot be excluded, as both consumer and producer stocks are currently reported at abnormally low levels and are likely to remain so in the face of high interest rates. Furthermore, some major producers continue to face production problems.

Capacity utilisation rates in manufacturing industry continued to rise last year to levels which in many instances – and contrary to the situation in labour markets – exceeded their previous peaks of the late 1970s (Chart I). This was the case particularly in the major European economies. Although these rates have generally levelled off in recent months and even receded slightly in a few countries, the capacity situation is tight, and is expected to remain so. While business-sector investment has been buoyant, its ability to relieve capacity constraints in the short term remains limited. Should demand pressures prove stronger than currently projected, production bottlenecks could well emerge and inflationary tensions be exacerbated.

As noted earlier, real wage increases have been relatively moderate, and the easing in labour-market conditions, as reflected in a slowdown in employment growth, is expected to be sufficient to maintain this moderation over the projection period. Nonetheless, the fact that real wages remain below their "normal" *levels* over the projection period in the major continental European countries (see Chart G) could increase the risk of "catch-up" pressures emerging. However, such risks would seem lower in Canada, Japan, the United Kingdom and the United States, where real wages are near, or above, their "normal" levels.

In sum, there is a possibility that external inflationary pressures coming from commodity prices could prove stronger than projected, while at the same time manufacturing industry is expected to continue operating at relatively high rates of capacity utilisation. Labour market conditions are not expected to tighten further and, while there may be a risk of wage "catch-up" in certain countries, wage pressures could prove weaker than projected in others. Under these conditions, the balance of risks concerning the outlook for inflation in the OECD area appears to lie on the upside, but the risk is rather uneven across countries.

NOTES

1. While it is generally presumed that immigrants tend to be younger and more active than the native population, this is not always the case. In the traditional non-European host countries, immigrants are normally accompanied by their families. While immigrant labour in Europe was initially considered as temporary (guest workers), immigrants have increasingly taken up permanent residence and then sent for family members. Under these circumstances, the age structure of the migrant work force, even if known for single years, is unlikely to remain stable. For example, the share of people of working age among new arrivals in Germany would fall dramatically if immigrants were to be joined by family members in large numbers.
2. For a more detailed discussion of inflows into unemployment see OECD (1990), *Employment Outlook* (forthcoming).

INTERNATIONAL DEVELOPMENTS

OECD FOREIGN TRADE AND CURRENT BALANCES

This chapter reviews overall trends in trade and payments, as well as developments in selected non-OECD regions, and international monetary developments. World trade is expected to grow at a relatively robust 7 per cent rate reflecting continued economic expansion both within the OECD area, though with significant interregional differences, and in the world economy more generally. The major external imbalances, which continued to narrow last year, are likely to diminish somewhat further in 1990. As regards non-OECD regions, east Asia continues to be the most dynamic region, though some signs of strain have been developing, with growth slowing from the exceptionally strong rates of recent years, and inflation pressures increasing. In Latin America there is a growing contrast between countries that are beginning to reap the benefits of adjustment efforts and non-adjusters. Finally, as regards international monetary developments, the most striking developments has been the relative weakness of the yen, which appears to reflect a variety of interrelated factors.

Recent trends and prospects in the OECD area

The growth of trade between OECD countries slowed markedly in the second half of 1989, but picked up again in early 1990 (Table 11). Imports of oil grew briskly during this period and the area's trade balance in real terms worsened. Over the next 18 months, export volumes are projected to accelerate moderately to a 7½ per cent rate, with OECD import volumes expanding half a point more slowly than export volumes.

The increase in trade prices also slowed considerably during 1989. Earlier fears that international trade was transmitting inflationary pressures rather than alleviating excess demand in individual countries were unfounded. Trade prices continued to rise only slowly in the first half of 1990. They are projected to grow at 3 to 4 per cent rates over the next 18 months, on the usual technical assumptions that exchange rates remain stable in nominal terms, and that oil prices remain stable in real terms. Demand for non-oil commodities is projected to expand at rates that would also leave their prices broadly stable in real terms. The terms of trade of the area may therefore change little. Terms-of-trade developments expected for individual countries mainly reflect recent exchange-rate movements (and the assumption of unchanged rates from now on). Thus most European countries are projected to register some improvement and Japan a deterioration.

Trade between OECD and non-OECD countries

Most non-OECD countries in the past decade were either encumbered by debt or, in the case of OPEC, saw their export revenues decline steeply. They were obliged to constrain the growth of their imports, or even reduce them. Only the newly-industrialising countries were able to maintain a brisk rise in import demand. By the end of the decade, however, the debtor and oil-exporting countries had adjusted to their external financing constraints, commodity prices had recovered and OECD demand had picked up. The positive impact of these developments on OECD exports was partly offset in 1989 by a slowdown in import demand from China and from the dynamic Asian economies (DAEs). The DAEs have grown greatly in importance as markets for OECD goods and the six largest (Thailand, Malaysia, Singapore, South Korea, Taiwan, Hong Kong) now account for nearly a third of OECD exports to the rest of the world (Chart J). The growth of OECD imports from non-OECD economies also slowed during 1989, despite an acceleration in oil imports. Latin American exports were constrained by supply factors, and exports by some DAEs were affected by strong increases in real effective exchange rates (see the next section for a more complete discussion of these economies).

Over the next 18 months, OECD imports from the rest of the world are expected to expand at an annual average rate of 5 to 6 per cent. Those from the DAEs, mainly manufactured goods, are likely to grow considerably faster than that. The growth of imports from other non-OECD countries is expected to be

constrained by the relatively low income elasticities of demand for primary commodities. Reflecting their less difficult financial conditions, non-OECD countries' imports from the OECD area may expand at much the same 6 to 7 per cent rates projected for trade between OECD countries.

Table 11

World trade and payments summary

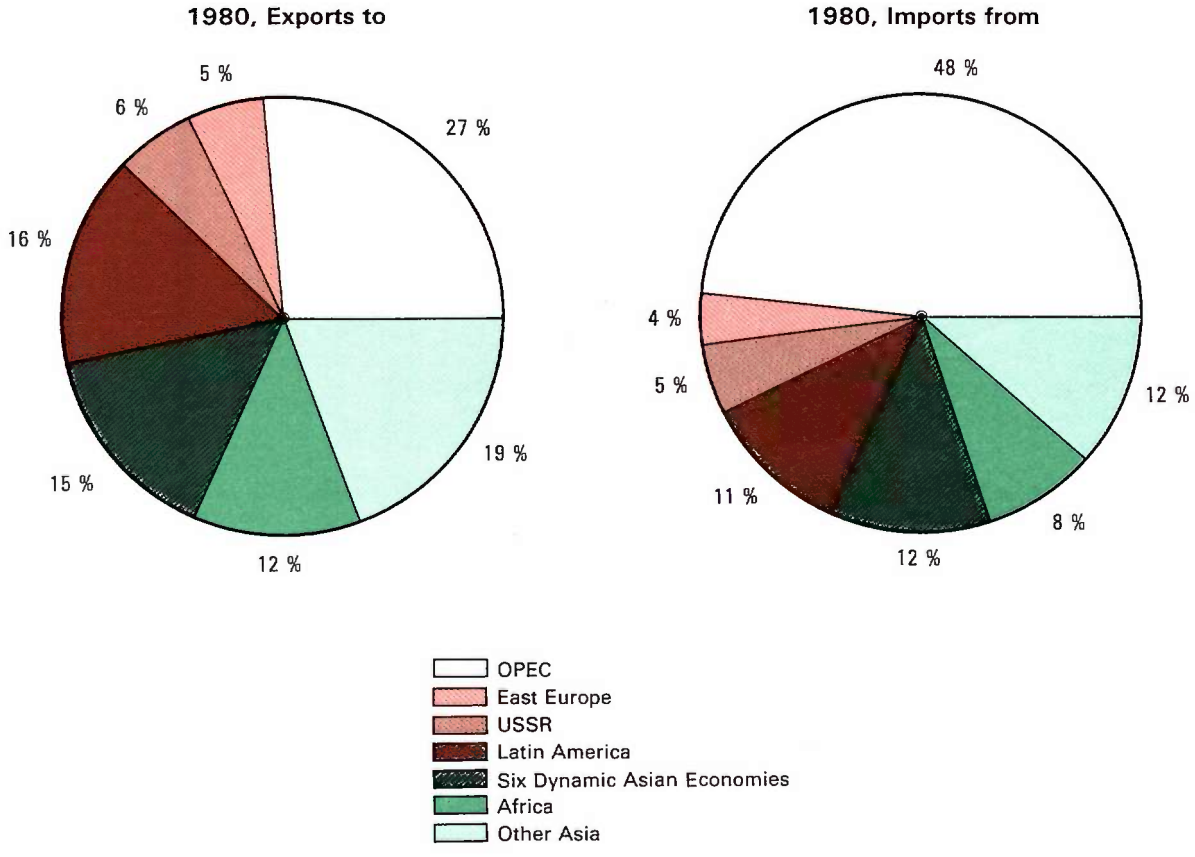
Seasonally adjusted data at annual rates, percentage changes from the previous period for volumes and prices
$ billion for current balances

	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
A. Merchandise trade volumes										
OECD exports	8.3	7.6	6.6	6.9	9.6	4.6	7.5	6.6	7.0	7.2
OECD imports	8.5	7.9	5.8	6.5	8.0	6.3	5.3	6.2	6.6	6.7
of which: Energy	4.1	4.7	5.6	4.7	1.0	6.6	5.7	4.5	4.7	4.7
Non-OECD exports[a]	11.5	6.0	5.5	6.4	3.0	6.6	4.7	6.0	6.5	6.5
Non-OECD imports[a]	10.3	6.2	7.7	8.7	5.5	5.6	7.2	10.7	8.0	8.1
Memorandum items										
Real GDP (import weighted)	4.1	3.5	2.8	2.8	4.0	2.6	2.9	2.8	2.8	2.8
OECD exports to non-OECD[b]	9.6	6.1	6.8	6.5	5.5	5.9	7.3	6.8	6.8	5.5
OECD imports from non-OECD[b]	12.1	6.4	5.2	5.7	2.4	8.2	3.6	5.7	6.1	5.0
Intra-OECD trade[c]	7.4	8.3	6.3	7.0	10.9	4.8	6.9	6.5	7.0	7.6
World trade[d]	9.0	7.3	6.3	6.9	7.6	5.7	6.3	6.9	6.9	7.0
of which: Manufactures	10.5	8.3	6.6	7.3	9.1	5.8	6.9	7.0	7.4	7.4
B. Trade prices *(average values)*										
Trade prices, in local currency										
OECD exports	2.0	5.6	2.1	3.4	7.0	1.8	1.6	3.5	3.4	3.5
of which: Manufactures	1.8	5.0	2.6	3.5	6.1	2.0	2.4	3.7	3.4	3.5
OECD imports	1.7	5.6	1.7	3.2	8.0	2.2	0.8	2.9	3.3	3.4
of which: Energy	−16.1	18.3	3.7	4.1	40.8	13.3	−1.3	5.1	3.8	3.8
Non-energy raw materials	7.0	5.8	−1.7	3.2	6.8	−1.8	−3.7	2.8	3.3	3.4
Trade prices in dollars										
OECD exports	5.8	0.0	6.4	3.0	1.5	0.1	11.7	2.6	3.1	3.3
of which: Manufactures	5.7	−0.8	6.8	3.1	0.5	0.1	12.4	2.8	3.2	3.3
OECD imports	4.6	0.4	6.0	2.8	2.9	0.8	10.7	2.2	2.9	3.1
of which: Energy	−13.4	11.8	6.0	3.2	33.9	10.4	5.4	3.0	3.2	3.4
Non-energy raw materials	10.8	−0.2	2.0	2.6	1.1	−4.0	5.5	1.5	2.9	3.1
Memorandum items										
GDP deflator (Export weighted)	3.5	4.2	4.4	4.3	4.4	3.7	4.7	4.5	4.3	4.1
OECD terms-of-trade with rest of world[e]	8.4	−4.2	0.8	0.1	−10.2	−3.4	3.4	0.2	0.1	0.1
C. World current balances										
United States[f]	−126	−104	−100	−97	−107	−101	−101	−98	−98	−96
Japan	80	57	49	59	64	50	48	49	55	64
OECD Europe	15	−4	10	8	6	−14	9	12	11	5
of which: Germany	49	53	63	62	57	49	62	64	63	61
Total OECD	−50	−84	−77	−67	−69	−100	−80	−74	−69	−65
OPEC	−15	4	3	3	−1	9	3	3	3	4
Latin America	−5	−9	−9	−9	−9	−10	−9	−9	−9	−8
Four Asian NIEs	29	23	20	18	25	21	20	19	19	18
Other non-OECD countries	−5	−6	−7	−20	−8	−3	−4	−9	−16	−24
World total	−46	−72	−70	−73	−62	−83	−70	−70	−71	−75

a) These represent total exports and imports of the country groups listed, rather than OECD exports to and imports from these regions.
b) OECD exports to a non-OECD region are estimated as a weighted average of the region's imports of four broad categories of goods (food, energy, raw materials and manufactures), weights being the commodity shares of OECD exports directed to the region. An average transportation lag of one month is assumed. OECD imports from a non-OECD region are estimated as a weighted average of OECD imports of four groups of merchandise using the commodity shares of OECD imports from this region as weights. In both cases, the calculations are first made for each of the three non-OECD regions. The results are then aggregated for the total non-OECD area. Historical figures are recorded as inter-regional flows deflated by corresponding price indices shown below.
c) This is a simple arithmetic average of the intra-OECD export and import volumes implied by the total OECD trade volumes and the estimated trade flows between OECD and the non-OECD areas. Historical figures are actual intra-OECD trade flows deflated by total OECD export prices.
d) Arithmetic average of the growth rates of the world import volume and the world export volume.
e) Ratio of OECD export prices to the non-OECD and OECD import prices from the non-OECD.
f) The historical data for the U.S. current account exclude the effects of changes in exchange rates on the dollar values of direct investment asset and liability stocks. They thus differ somewhat from the official data as currently recorded and published by the U.S. authorities.

CHART J

OECD TRADE WITH NON-OECD REGIONS



* January-November.

Source: OECD, *Series A,* Monthly Statistics of Foreign Trade.

Note: In 1980, OECD goods exports to non-OECD regions totalled $378 billion, imports $481 billion. In the first three quarters of 1989, OECD goods exports to non-OECD regions totalled $483 billion, imports $556 billion at an annual rate.

Current balances and global adjustment

The long-standing imbalances on current account of the three biggest OECD countries narrowed considerably in 1989. There was a significant fall in the U.S. deficit between the two halves of the year, mainly on services account. The Japanese trade surplus fell very considerably in the second half of the year and there was a marked widening of the German invisibles deficit. However, there was less, or no, progress in reducing the large deficits on current account in the United Kingdom and some of the smaller European countries.

The reduction in imbalances for the three major OECD countries is noteworthy for a number of reasons. The fall in the dollar exchange rate that started early in 1985 was not immediately followed by a narrowing of imbalances. Only in 1988 did the U.S. and Japanese imbalances on current-account fall in dollar terms, while the German surplus was larger in 1989 than in 1986 even as a percentage of GNP. The imbalances recorded in the mid-1980s underestimated the extent of adjustment required because of the then high level of the dollar. This undervalued U.S. imports and overvalued U.S. exports. Moreover, the long period of misaligned exchange rates allowed momentum to build

Table 12

Changes in current account positions

$ billion, rounded to nearest billion

	1986, level	1986/1987	1987/1988	1988/1989	1989/1990	1990/1991	1986-89 change
United States							
Current balance, nominal	−153	−7	34	22	4	3	47
Trade balance, nominal	−145	−14	32	14	7	2	30
Change due to volumes		20	26	14	8	−1	60
Export volumes		38	51	40	30	38	129
Import volumes		−18	−25	−26	−22	−39	−69
Change due to prices		−32	1	2	−1	3	−29
Export prices		−6	12	6	0	11	12
Import prices		−26	−11	−4	−1	−8	−41
Investment income	10	−4	−3	0	−3	−4	−7
Japan							
Current balance, nominal	86	1	−7	−23	−9	11	−29
Trade balance, nominal	93	4	−1	−18	−8	12	−15
Change due to volumes		−9	−11	−2	5	12	−22
Export volumes		1	10	11	18	24	22
Import volumes		−10	−21	−13	−13	−12	−44
Change due to prices		10	14	−8	−10	−1	16
Export prices		19	22	−2	−9	6	39
Import prices		−9	−8	−6	−1	−7	−23
Investment income	9	7	4	2	5	6	13
Germany							
Current balance, nominal	39	6	3	4	11	−2	13
Trade balance, nominal	56	14	9	0	17	0	23
Change due to volumes		−3	6	9	0	−4	12
Export volumes		6	20	27	21	25	53
Import volumes		−9	−14	−18	−21	−29	−41
Change due to prices		17	3	−9	16	5	11
Export prices		40	9	−8	45	14	41
Import prices		−23	−6	−1	−29	−9	−30
Investment income	4	0	1	6	2	3	7

Note: Data are changes from the previous year except for the first and last column. Figures in the columns 1989-90 and 1990-91 are OECD projections. Changes in trade volumes (or prices) are calculated by multiplying the earlier-year dollar values (balance-of-payments basis) by the growth rate of trade volumes (or dollar prices) in the later year. The "base year" is thus the earlier year in each case. The figures for volumes (or prices) thus indicate how dollar exports or imports would have moved had prices (or volumes) not changed. The volume and price effects do not sum exactly to the change in the nominal trade balance because growth rate data are on a customs basis, and because of second-order terms that are ignored.

THE WORLD CURRENT-ACCOUNT DISCREPANCY AND U.S. AND GERMAN ACCOUNTING PRACTICES

Individual country current account positions should in principle sum to zero. In practice, the sum is negative, large and erratic. It amounted to about $70 billion in 1989 and close to $100 billion at the beginning of the 1980s. Although the world current-account discrepancy is large, the reasons for its existence are well understood (see *Report on the World Current-Account Discrepancy*, IMF, 1987) and it is possible to project its future evolution, together with projections for individual countries, with some confidence.

There are two special factors affecting the world current-account discrepancy, one during the past, the other the projections. Until mid-1990 the United States recorded as part of its direct investment income the changes in values of foreign direct investment assets (and liabilities) that arise through changes in exchange rates. Since U.S. foreign assets are very large, changes in the dollar rate can have a large impact on the measured direct investment income flows. No other major country followed this convention and there was thus no offset elsewhere in the world to this erratic item. The world discrepancy on investment income – and the world current-account discrepancy itself – was therefore affected. The table below shows that the world investment income discrepancy looks far smoother once allowance is made for this effect. The erratic nature of this item obscures the underlying trend of U.S. investment income and the OECD's current U.S. projections are based on data that exclude it. The U.S. authorities have indicated that official U.S. balance-of-payments statistics will also exclude this item as from mid-1990, as well as being revised in other ways. These revised data were not available at the time the OECD was preparing its projections.

Another recording gap concerns Federal Republic of Germany's (FRG) trade with the German Democratic Republic (GDR). In the FRG accounts, such trade is classified as internal and does not figure in either the customs or balance-of-payments statistics (it is recorded as foreign trade in the national accounts, however). This accounting practice has caused no problems in the past because the trade involved was small and approximately in balance. However, the projections for Germany (FRG) include a very large increase in goods exports to the GDR, starting in the second half of 1990. Following standard practice, the OECD excludes these exports from the projected FRG trade and current account. They are, however, recorded as imports into the central and eastern Europe/USSR grouping since they are included in GDR trade data. The projected world trade surplus therefore declines by several billion dollars in 1990 II. The projections also include an allowance for a large increase in official transfers from the FRG to the GDR, which are recorded as a credit in the central and eastern Europe/USSR group, but not as a debit for the FRG. These broadly offset the trade flows. There is thus also a sharp fall in the world discrepancy on official transfers (a deficit of some $27 billion in 1989), and the overall world current account discrepancy is hardly affected. The Bundesbank has announced that, following monetary union in mid-1990, balance-of-payments statistics will henceforth be collected and published for the combined FRG and GDR entity, because of the impossibility of indentifying certain kinds of transactions as emanating from the separate parts. However, the current projections for Germany are based on the previous concept.

Data are in $ billion, actual rate

	1981		1982		1983		1984		1985		1986		1987		1988		1989	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
Revaluation item, U.S. direct investment	–0.7	0.2	1.5	1.9	3.3	3.5	2.6	6.0	2.4	–9.1	–4.0	–6.5	–2.6	–10.5	3.6	–1.1	8.8	–6.7
Recorded world discrepancy on investment income	–14.6	–21.8	–25.9	–26.3	–23.6	–22.3	–27.0	–32.4	–31.3	–18.6	–23.7	–22.4	–26.9	–18.7	–34.2	–34.5	–47.2	–29.0
World discrepancy on investment income, corrected for revaluation effects	–15.3	–21.6	–24.4	–24.4	–20.4	–18.8	–24.4	–26.4	–29.0	–27.7	–27.8	–29.0	–29.5	–29.2	–29.7	–35.8	–38.4	–35.7

up behind the imbalances. For several years thereafter, the adjusting countries remained on the negative segment of the J-curve.

Movements on current account for the three countries are detailed in Table 12. The decomposition in the table is purely an accounting one and is intended to show what has happened in recent years, not why. While such a decomposition is suggestive of the forces at work, these are not directly visible and movements in individual components are inter-dependent. As can be seen, the adjustment in real terms has been quite large for both the United States and Japan, although there are signs of a slowdown in the past two years. However, movements in Japan's real trade balance in the "right" direction were offset for some time by terms-of-trade movements that, to some extent, reflected exchange-rate changes. Last year, Japanese terms of trade turned around and reinforced volume changes rather than offsetting them. By contrast to these countries, changes in Germany's real trade balance have been in the "wrong" direction for adjustment recently. This has occurred despite accelerating import volumes, at least partly reflecting the even stronger growth of activity in Germany's main trading partners in Europe than in Germany itself.

At the beginning of the adjustment process, it was feared that the large current-account imbalances would become self-sustaining because of the associated build-up of foreign assets and liabilities and the induced flows of investment income that go with them. In practice, net investment flows have played a far smaller "perverse" role than was expected. Such flows are not easy to analyse or project, but the "rule of thumb" that predicted a $10 billion cumulative annual deterioration in U.S. net investment income for each $100 billion annual current-account deficit has proved wide of the mark. Abstracting from asset and liability valuation effects (see box), the net U.S. position on investment income deteriorated by only $7 billion between 1986 and 1989 (although by over $20 billion from the beginning of the decade), the improvement in Japanese net investment income flows over the same period was less than $15 billion and that for Germany only $7 billion. It seems that U.S. investors have consistently been able to obtain a higher rate of return on their foreign investments than have Japanese and German investors. It is not clear why this should be so, nor if it will continue. It may also be relevant here that the recorded discrepancy (a deficit) between global investment payments and receipts widened by $18 billion between 1986 and 1989.

The unexpectedly large reduction in imbalances late last year raises the question of whether or not there may be more adjustment in the pipeline. The very sharp declines in the Japanese and German surpluses in late 1989 reflected a combination of accelerating domestic demand and rising oil prices, neither of which are projected to persist. Nevertheless, there seem to be grounds for cautious optimism about further adjustment, even relative to earlier projections by the OECD, which were themselves more optimistic than those of many other analysts. The current projections, as did their immediate predecessors, incorporate the view that trade structures have changed such that U.S. import volumes will expand less quickly than standard trade equations predict and that Japanese import volumes will expand more quickly. However, the recent weaker level of the yen, were it to persist, might lead to the restoration of earlier relationships between Japanese growth and import volumes. Another reason for optimism is that projections for domestic demand growth have moved in a way favourable to continued adjustment: slower growth in the

Table 13
Current balances in the OECD area[a]
Percentage of GNP/GDP

	1987	1988	1989	1990	1991
United States[b]	–3.5	–2.6	–2.0	–1.8	–1.6
Japan[b]	3.6	2.8	2.0	1.8	2.1
Germany[b]	4.0	4.0	4.4	4.4	4.0
France	–0.5	–0.4	–0.4	–0.2	–0.3
Italy	–0.2	–0.7	–1.3	–0.8	–0.8
United Kingdom	–0.9	–3.2	–4.1	–3.2	–2.4
Canada	–1.7	–1.7	–3.0	–3.4	–3.6
Total of the above countries	–0.4	–0.3	–0.5	–0.4	–0.2
Austria	–0.2	–0.2	0	0.1	–0.2
Belgium-Luxembourg	1.9	2.3	2.4	2.5	1.8
Denmark	–2.9	–1.6	–1.3	–1.3	–1.3
Finland	–2.0	–2.9	–4.3	–4.7	–4.5
Greece	–2.6	–1.8	–4.8	–5.5	–4.9
Iceland	–3.2	–3.8	–1.6	–1.6	..
Ireland[b]	1.3	2.3	1.8	1.0	0.6
Netherlands	1.4	2.4	3.1	2.9	3.1
Norway	–4.9	–4.1	0.2	1.6	2.9
Portugal	1.8	–2.6	–1.2	–2.0	–2.2
Spain	0	–1.1	–2.9	–3.2	–3.4
Sweden	–0.7	–1.2	–2.6	–3.5	–4.6
Switzerland	4.4	4.6	3.4	3.3	3.5
Turkey[b]	–1.2	2.3	1.2	0.3	0.4
Total of smaller European countries	0.1	0.2	–0.4	–0.6	–0.8
Australia	–4.1	–4.0	–5.6	–5.0	–4.2
New Zealand	–4.9	–1.7	–4.4	–4.3	–3.2
Total of smaller countries	–0.4	–0.4	–1.2	–1.2	–1.2
Total OECD	–0.4	–0.4	–0.6	–0.5	–0.4
Four major European countries	1.0	0.3	0.1	0.5	0.5
OECD Europe	0.7	0.3	–0.1	0.2	0.1
EEC	0.8	0.3	0	0.3	0.2
Total OECD *less* the United States	1.3	0.8	0.2	0.2	0.3

a) Figures for 1990 and 1991 are projections.
b) Percentage of GNP

United States and faster growth in Germany and, to some extent, Japan. Finally, the fact that the starting-off point for the projections is one of smaller imbalances than previously makes it easier to achieve further adjustment in future.

As regards other OECD countries (Table 13), the picture is more mixed and less satisfactory. The projections for the United Kingdom, Portugal and Spain are for large current-account deficits relative to GDP, albeit lower than projected in late 1989. Projections for other countries that were registering large deficits relative to GDP have for the most part been revised upwards, especially those for Canada, Sweden, Finland and Greece. At the same time, the projected surpluses in some other smaller countries have also been revised upwards. There is thus a disturbing tendency for imbalances as between smaller OECD countries to be widening even as those between the larger countries narrow. For the most part, these widening deficits and surpluses do not reflect expected differential demand pressures. Indeed, countries that are projected to register large and growing deficits are also projected to register very marked decelerations in domestic demand and *vice versa*. The causes rather lie in developments in unit labour costs that have not been offset by exchange-rate movements; the countries registering large deficits have experienced above-average increases in unit labour costs measured in local currency and have also registered large increases in relative unit labour costs measured in a common currency. In the past, trade patterns have tended to react more slowly to changes in relative competitiveness than to changes in relative demand pressure, but the effects continue to build up even after competitiveness stabilises.

NON-OECD REGIONS

This section provides a brief assessment of trends in selected parts of the non-OECD world, with a particular focus on the dynamic Asian economies and on Latin America. The dramatic developments in central and eastern Europe are reviewed in the next chapter.

The dynamic Asian economies

The six dynamic Asian economies (Hong Kong, Korea, Malaysia, Taiwan, Thailand and Singapore) had strong GDP growth during the 1980s and indeed growth accelerated from the middle of the decade. This performance rests on high rates of domestic saving and investment, flexible and efficient production structures and a strong outward orientation reflected in very rapid growth of both exports and imports (Table 14). These economies' share of world exports of manufactured goods has risen from less than 4 per cent in 1975 to over 10 per cent currently.

While strong economic performance is likely to continue to be underpinned by these basic factors in most DAEs in coming years, recent indicators suggest that a slowdown is under way. Export growth in Korea, Taiwan and Hong Kong, in particular, has slowed markedly relative to longer-term trends. Inflation pressures are also visible; prices accelerated in all these economies in 1988-89 and are rising at rates over 5 per cent in Hong Kong, Korea and Thailand. Inflationary pressures are expected to persist in all DAEs in 1990. Recent economic experience of the DAEs suggests that rapidly growing economic potential and increasing non-price competitiveness give rise to powerful pressures for real exchange-rate appreciation. Where nominal exchange rates are pegged or managed, this real appreciation is likely to be realised through domestic cost and price inflation.

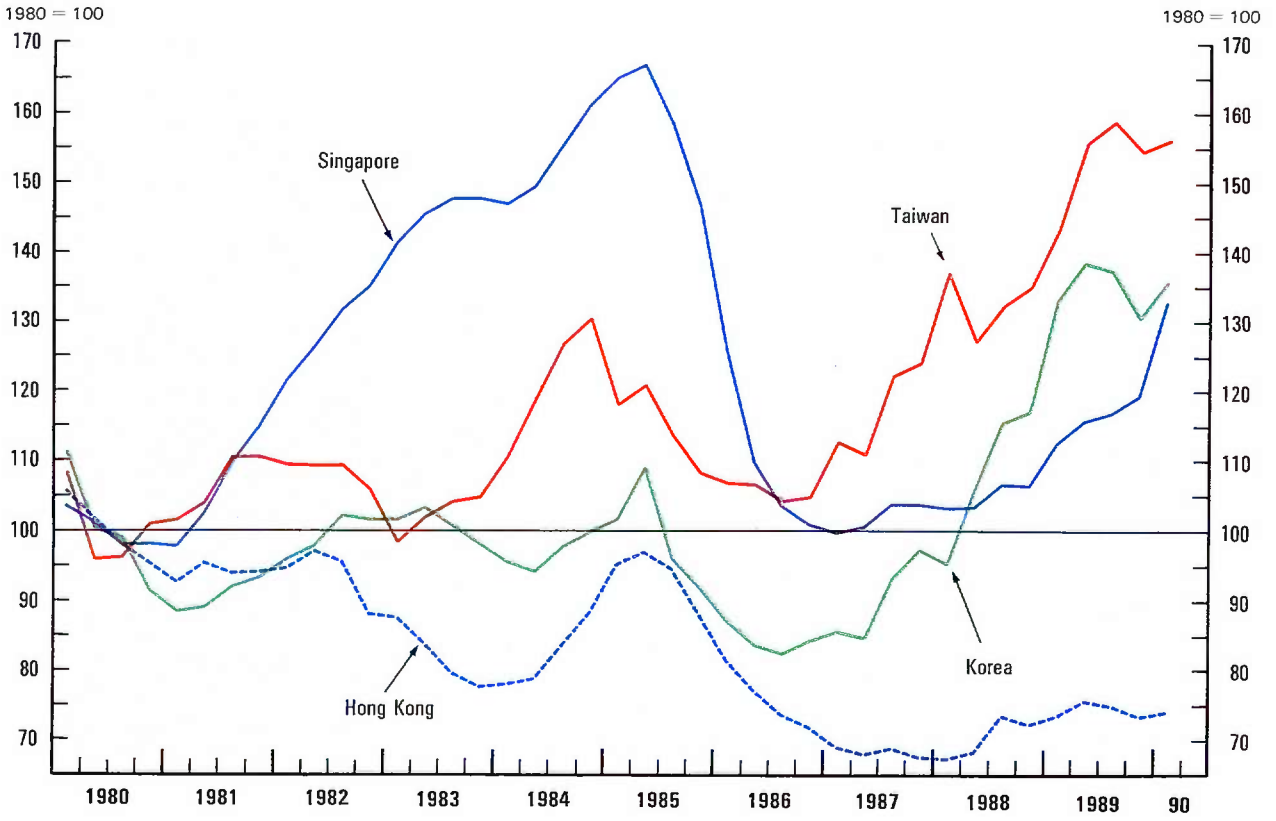
In *Korea*, signs of strain became evident following especially strong growth in 1986-88. Inflation had begun to accelerate in 1988. Currency appreciation and large wage increases combined to reduce Korea's external competitiveness substantially; Korean relative unit labour costs are now over 50 per cent higher than they were two years ago (Chart K). Coupled with production disruptions associated with increased labour strife, this resulted in declining export volumes last year, a sharp narrowing of the current-account surplus and a marked deceleration of overall economic growth despite continued strong domestic demand.

Korea's export performance may show a slight recovery this year. Wage demands are expected to moderate and labour strife should also be significantly lower than last year, leading to much smaller production and export losses. Export markets may expand at broadly the same pace as in 1989. Export growth should offset a possible weakening in domestic demand and help maintain overall growth at a rate similar to that of last year, around 6 per cent. At the same time, import volumes are projected to grow more strongly than exports and bring about a further reduction in Korea's current-account surplus to around $2 billion (Table 15).

Even a partial recovery in export performance will depend to some extent on containing price rises. Inflation did slow in 1989 to 5.7 per cent, reflecting moderation of price increases in the first half of the year; but it accelerated late in the year and in the first

CHART K

RELATIVE UNIT LABOUR COSTS OF ASIAN NIES



quarter of 1990. Measures to stimulate activity, including a substantial easing of monetary policy in November 1989, further action this April to boost exports and investment, and the recent tendency for the Korean won to depreciate are putting pressure on prices. Inflation may accelerate to over 7 per cent in 1990.

Taiwan's real GDP growth slowed to 7.3 per cent in 1988, after two years of 12 per cent growth, and remained at about the same lower rate in 1989. The slowdown was largely due to a sharp deterioration in export performance with a loss of competitiveness resulting from both the appreciation of the new Taiwan dollar which began in 1987 and relatively high wage growth. Domestic demand remained strong, partly due to a substantial increase in public spending. Combined with the effects of some import liberalisation, low export growth led to a decline in the current-account surplus in 1988, but this trend was not sustained in 1989. The continuing strength of the current account, despite a large real exchange-rate appreciation (Chart K), may be partly due to temporary factors, in particular a boost to exports as orders were shifted away from the People's Republic of China to Taiwan following the political events in the former last year. However, it also reflects the capacity of this economy to upgrade rapidly the goods it produces.

Inflation accelerated significantly in 1989. In response, monetary policy was tightened and has remained restrictive since March last year. This has contributed to a slowdown in investment growth. While the authorities' stated intention is to keep the overall monetary stance relatively tight, some credit loosening took place in March this year to ease the financial burden on small business and a further easing occurred in April.

Continued cost pressures may result in a loss of competitiveness in the near term. However, export growth would nevertheless remain steady over the next two years as the export-market diversification programme bears fruit. Import growth is likely to be stronger than the increase in exports and a moderate

Table 14

Performance indicators for the dynamic Asian economies

	Korea	Taiwan	Hong Kong	Singapore	Thailand	Malaysia
	Growth of real GDP (per cent)					
1980-85	7.6	6.5	5.7	6.3	5.6	5.2
1986	12.4	11.6	11.9	1.8	4.5	1.2
1987	11.8	12.3	13.9	8.3	8.4	5.3
1988	11.3	7.3	7.2	11.0	12.0	8.7
1989	6.1	7.4	2.5	9.2	10.8	7.6
	Investment as per cent of GDP					
1980-85	30	23	30	47	25	35
1986	29	18	24	38	22	26
1987	29	20	27	39	26	23
1988	30	23	28	37	28	26
1989	33	23	27	38	29	28
	CPI inflation rate (per cent)					
1980-85	7.1	3.9	9.1	3.3	5.0	4.7
1986	2.8	0.7	2.8	−1.4	1.8	0.7
1987	3.0	0.5	5.5	0.5	2.6	0.9
1988	7.1	1.3	7.5	1.5	3.8	2.0
1989	5.7	4.4	10.1	2.4	5.5	4.0
	Growth of real exports of goods and services (per cent)					
1980-85	9.8	9.4	10.3	5.1	8.5	7.3
1986	26.5	27.6	15.3	14.5	14.6	17.6
1987	21.6	18.9	30.5	13.1	20.6	10.0
1988	13.1	5.7	24.3	27.9	19.6	15.5
1989	−3.9	4.9	9.3	9.1	n.a.	n.a.
	Growth of real imports of goods and services (per cent)					
1980-85	5.2	3.4	8.5	4.8	2.4	5.0
1986	18.5	22.3	13.7	11.0	3.4	−2.7
1987	19.4	28.0	29.5	12.4	26.8	8.8
1988	12.2	18.6	25.4	25.5	39.7	22.6
1989	13.0	9.1	8.6	8.2	n.a.	n.a.
	Trade balance in $US billion					
1980-85	−2.2	5.4	−1.6	−5.0	−1.8	1.4
1986	4.2	17.0	−0.1	−2.1	0.4	3.2
1987	7.7	20.0	−0.3	−2.6	−0.4	5.8
1988	11.4	13.8	−0.7	−2.3	−2.1	5.6
1989	4.5	16.4	0.8	−2.8	−4.9	4.3
	Current-account balance in $US billion[a]					
1980-85	−2.8	3.7	−0.2	−0.8	−2.0	−2.0
1986	4.6	16.3	2.0	0.5	0.3	−0.1
1987	9.9	18.0	2.8	0.6	−0.4	2.6
1988	14.2	10.2	3.0	1.7	−1.7	1.8
1989	5.1	11.1	5.0	1.6	−2.2	0.1

a) Current-account balance figures for Hong Kong correspond to net exports of goods and services on a National Accounts basis.

Table 15

External balances and trade volumes of Asian NIEs

EXTERNAL BALANCES

US$ billion

	1988	1989	1990	1991
	A. CURRENT ACCOUNT BALANCE			
Korea	14.2	5.1	2.6	1.7
Taiwan	10.2	11.2	9.8	9.2
Hong Kong[a]	3.0	5.0	5.9	6.4
Singapore	1.7	1.6	1.4	1.1
Total	**29.0**	**22.9**	**19.8**	**18.4**
	B. TRADE BALANCE			
Korea	11.4	4.5	2.0	0.9
Taiwan	13.8	16.4	15.0	14.6
Hong Kong[a]	−0.7	0.8	1.3	1.4
Singapore	−2.3	−2.8	−3.3	−3.8
Total	**22.2**	**18.8**	**14.9**	**13.0**

TRADE VOLUMES

Percentage changes

	Exports				Imports			
	1988	1989	1990	1991	1988	1989	1990	1991
Korea	13	−5	3	6	14	14	10	9
Taiwan	1	4	4	6	23	10	9	10
Hong Kong	26	10	6	7	27	9	7	8
Singapore	33	11	9	10	28	10	10	11
Total	**16**	**5**	**5**	**7**	**23**	**10**	**9**	**9**

a) Current account estimates for Hong Kong correspond to net exports of goods and services on a National Accounts basis and, therefore, exclude, investment income and transfers. The trade balance corresponds to net exports of goods on a National Accounts basis.

Sources: IMF, *International Financial Statistics;* The Central Bank of China (Taiwan), *Financial Statistics: Taiwan District, The Republic of China;* Hong Kong Census and Statistics Department, *Monthly Digest of Statistics;* OECD estimates and projections.

reduction in Taiwan's current-account surplus is therefore projected (Table 15).

Growth in *Hong Kong* has slowed substantially in the past two years and inflation accelerated to 10 per cent last year. Poor growth performance – around 2.5 per cent last year – has been largely a result of a sharp deceleration in export growth linked to China's austerity programme and to a continued slowdown in demand for Hong Kong's exports by the United States. A recently announced easing in China's austerity programme should provide some stimulus to Hong Kong's trade prospects. Overall growth, however, may be only a little higher than last year. Inflation could decelerate somewhat, to around 7 per cent, in 1990. Nonetheless, inflation in Hong Kong remains a major concern.

Singapore's economic growth remained strong last year – at over 9 per cent – and continued to be mainly driven by foreign demand. Nonetheless, export growth slowed considerably from the very high rate in 1988. An effective currency appreciation of close to 7 per cent on average last year and an increase in manufacturing labour costs of about 6 per cent resulted in a loss of international competitiveness. Continued labour cost pressures this year and in 1991 seem likely to lead to further slowing of export growth, a dampening in investment and a slowdown in GDP growth.

Economic growth in *Thailand* has been very rapid in recent years: in 1988 and 1989 it outpaced that of all other countries in South-East Asia. Much of this growth has been driven by strong export performance and by increased manufacturing production. Combined with high money supply growth, the rapid pace of activity has, however, started to put pressure on domestic costs and has led to accelerating inflation. With likely continuing rapid growth in activity, and consequent very high import growth, the trade and current-account deficits are expected to widen in the short term.

Growth in *Malaysia* was 7.6 per cent in 1989, somewhat lower than in the previous year, while inflation rose to around 4 per cent for the year. The trade surplus declined with very strong import growth. Economic growth may remain at around the current rate in the short term, with some further reduction expected in the trade surplus. Inflation may accelerate further to around 4.5 per cent in 1990.

Latin America

Among major Latin American debtor countries, a pattern of increasing differentiation in economic policies and performance is emerging. One group of countries (Mexico, Chile, Colombia) has made considerable progress in establishing the conditions for basic macroeconomic stability and has embarked on wide-ranging programmes of structural reforms. Another group of countries (Brazil, Argentina, Peru) is faced with a rapidly deteriorating macroeconomic situation, bordering on hyperinflation in some cases, and has made little progress in eliminating structural rigidities. These countries continue to experience debt service problems, whereas countries with strong macroeconomic control and structural reform programmes in place have been able to reduce their debt burden and are beginning to attract higher foreign investment and, in the case of Mexico, a significant repatriation of flight capital.

Almost all Latin American countries have made at least some attempt at economic reform. Reform efforts have been uneven, however. Mexico, Chile and Colombia have made considerable progress towards macroeconomic stability, with primary budget balances in surplus and inflation being brought down to about 20 per cent per annum. Within this group of strong adjusters, Chile and Mexico are relatively advanced with structural reforms. Chile has an open trade regime and has almost completed an ambitious privatisation programme initiated in 1985: the state airline and public utilities in telecommunications and electric power, which had been controlled by a state development corporation, have been privatised.

Mexico has pursued a policy of opening the domestic market to foreign competition, with a reduction of import tariffs (the average tariff rate now is 6 per cent, compared with 35 per cent in Brazil), elimination of most import licences, and liberal foreign investment rules. The share of manufactures in total exports has risen from 9 per cent in 1982 to 57 per cent in 1988. Many state enterprises have been divested and the number of products reserved for production by the state petroleum company (PEMEX) has been dramatically reduced. Mexico's largest, state-owned insurance company is soon to be privatised and the opening up of the computer and pharmaceuticals sector is planned. Colombia's liberalisation programme is firmly in place, but moving at a much slower pace; the outlook is somewhat clouded by the continued drug war. In all three countries growth has resumed.

Macroeconomic stability has proven elusive for Brazil, Argentina and Peru. Both Peru and Argentina have primary budgetary deficits and have lost monetary control. Inflation in 1989 ranged from just under 1 800 per cent per annum in Brazil to 4 900 per cent per annum in Argentina. Attempts to bring inflation under control in these countries (Argentina: Austral, Primavera and Menem plan; Brazil: Cuzado, Bresser and Summer plan; Peru: Inti plan) have relied on so-called heterodox policies. They all failed, because the breathing space provided by price and wage controls was not used to bring budget deficits and monetary growth under control; in some cases, fixed prices were used to engineer consumption recoveries which proved temporary and ended with high inflation. Without macroeconomic stability, efforts at structural reform have lacked credibility. Privatisation plans by the Menem administration in Argentina have failed so far and bail-outs of the banking system through the central bank continue. Only Brazil has achieved some import liberalisation. Except for temporary demand booms in the case of Brazil, growth has been poor. (It is too early to assess the most recent Brazilian plan of President Collor to bring inflation under control on a durable basis, or the recently announced austerity policies in Argentina.) Argentina's GDP fell by 8 per cent in 1989, Peru's by 10 per cent.

Venezuela and Ecuador are somewhere in the middle between these two groups. They have embarked on IMF-backed macroeconomic programmes and are opening their economies to foreign investment. The adjustment programmes are now in their first phase with inflation stabilised and output falling or flat. These countries will soon enter the stage where perseverance with financial discipline and a continuing process of structural reform could lead to a resumption of growth on a sound and sustainable basis.

The emerging contrast in Latin America between strong adjusters and weak adjusters is documented in Table 16. Average figures for 1986-89 and their change against the period average for 1983-85 are used to show emerging trends. The different level and the changes of inflation rates make the point most strongly. From moderate inflation rates, by Latin American standards, during 1983-85, inflation jumped in weakly adjusting countries, while the increase was small in strongly adjusting countries. Primary fiscal balances show a similar picture. These are positive in strong adjusters and have strengthened against the 1983-85 period; except for Brazil, they are negative in weak adjusters and have been falling except for Argentina. The export to GDP ratio as an indicator of trade-orientation tells the same story. Average export/GDP ratios in strong adjusters are higher than in weak adjusters by a significant margin and have been increasing; in weak adjusters, they have been falling.

It is sometimes argued that differences in the external debt burden explain the differences in policy performance. On this argument, a high external transfer makes a high internal resource transfer from private to public sector necessary, since most debt service obligations are public. With inflexible tax systems and narrow tax bases, this domestic transfer is achieved through the inflation tax and jeopardises attempts at fiscal consolidation. The indicators in the table cast doubt on the importance of this process in determining the policy course of countries. It is the strong adjusters that made the largest resource transfer abroad, as measured by the non-interest current account, and their transfer (with the exception of Mexico) increased between 1983-85 and 1986-88. Inflation rates rose only moderately in these countries. Weak adjusters have had a much lower resource transfer, which actually fell in 1986-88 compared to 1983-85. Inflation, however, exploded. While the burden of debt service has an influence on domestic economic performance, it appears that the emerging split between strong and

Table 16

Economic indicators for two groups of Latin American countries

	Strong adjusters			Weak adjusters		
	Mexico	Chile	Colombia	Brazil	Argentina	Peru
Inflation						
Average 1986-1989	84.2	18.3	24.3	803	1392	633
Percentage point change against 1983-1985	+16.3	−5.9	+5.2	+605	+890	+502
Primary fiscal surplus						
Average 1986-1989	2.6	0.8	5.1	0.8	−2.9	−4.1
Percentage point change against 1983-1985	+5.8	+2.2	+0.2	−2.6	+5.0	−3.5
GDP growth						
Average 1986-1989	0.4	7.1	4.6	3.4	−0.9	−0.5
Percentage point change against 1983-1985	−0.3	+4.4	+1.8	−0.3	−1.2	+1.2
Non-interest current account/GDP						
Average 1986-1989	5.0	5.5	2.7	3.4	2.3	−2.2
Percentage point change against 1983-1985	−2.6	+3.5	+5.1	−0.6	−2.9	−5.3
Exports/GDP						
Average 1986-1989	19.6	34.7	18.2	9.3	11.5	13.5
Percentage point change against 1983-1985	+2.8	+9.8	+6.2	−3.1	−2.9	−5.7

Source: World Bank Tables for data up to 1987. United Nations Economic Commission for Latin America for 1988 data. Primary fiscal balances are taken from Marcelo Selowsky, Preconditions Necessary for the Recovery of Latin America's Growth, paper presented at the Latin America Meeting of the World Economic Forum, Geneva, June 1989. 1989 data are OECD estimates.

weak adjusters in Latin America is largely due to domestic policy differences and not due to differences in external debt service burdens.

Other Non-OECD economies

The short term outlook for India is favourable. Rapid export growth is expected to continue, leading to a stabilisation of the debt service ratio which has more than doubled since 1980 to about 38 per cent in 1989. The current-account deficit is expected to decrease in 1990. The main risk comes from a possible increase in the budget deficit. The current budget deficit for 1990 is estimated at more than 3 per cent of GDP, or more than double the target. As well, after the change of government last year, there is uncertainty as to whether the process of liberalisation will continue.

China's austerity programme brought the inflation rate down from over 30 per cent to 6 per cent in 1989. At the same time, however, GDP growth declined from 11.2 per cent in 1988 to 3.8 per cent in 1989; production indicators point to a further slowdown in the first half of 1990. The trade balance continued to widen in 1989 as a result of rapidly rising imports. However, for 1990 imports are expected to decline sharply and, with exports continuing to grow quite strongly, the trade balance is likely to improve. Debt indicators remain favourable, with a debt service ratio of just over 10 per cent.

During the 1980s, many countries in Sub-Saharan Africa have started to implement structural adjustment programmes. The outlook is not very good, however. Even progress in countries with relatively strong programmes, such as Ghana and Nigeria, has been slow. Investment has remained low and infrastructure continued to deteriorate. Sub-Saharan Africa's (excluding South Africa) share of world markets has almost halved since 1970 and this loss is expected to continue. Per capita incomes have declined since 1986 and drastic structural changes will be necessary to raise per capita incomes in the 1990s.

INTERNATIONAL MONETARY DEVELOPMENTS

Overview

Since the autumn of 1989, inflation and current-account developments have tended to reassert their influence over exchange-rate movements to some

extent. During the previous 12 months or so, the currencies of many large and medium-sized OECD economies had tended to move in directions opposite to those suggested by inflation differentials and current-account positions, appreciating in countries with high rates of inflation and external deficits (United States, United Kingdom, Canada, Australia, Spain and Sweden); and *vice versa* (Japan, Germany, Belgium, the Netherlands and Switzerland).

The notable exception to this re-emergence of fundamentals in determining exchange-rate movements in the most recent period has been the yen, which continued to weaken until April, despite a shrinking but still sizeable current-account surplus, and a low inflation rate (Chart L). Following a strong recovery, at end-May the trade-weighted value of the yen was down 6 per cent from the level prevailing at the time of the Louvre Accords of February 1987 and 20 per cent from the peak of late 1988. While the yen has lost ground against practically all OECD currencies and the currencies of most DAEs, its weakness has been especially pronounced against the Deutschemark and other EMS currencies, with some of these bilateral rates moving back to the levels of early 1973. The Bank of Japan, along with other major central banks, stepped up intervention significantly in support of the yen in March. As a result, Japan's gross official reserves, which had declined by $13 billion in 1989, declined by a further $10 billion – or over 10 per cent – in the first quarter of 1990; and due to the purchase of yen by other central banks, notably the Federal Reserve, the decline in Japan's net reserves was some $13 billion (in 1989 it approached $25 billion). With the firming of the yen in April, intervention in support of it abated sharply.

The other major currencies also recorded significant changes in the last months of 1989: the Deutschemark strengthened in response both to events in central and eastern Europe and to changes in interest differentials *vis-à-vis* the United States; and the dollar weakened. But this year, although the pound sterling and the Canadian dollar have fluctuated widely, net changes have been rather modest. The major exception, in addition to the yen, has been the Swiss franc which has appreciated by over 7 per cent. The Italian authorities adopted the narrow band limits for the lira within the EMS in early January after a nominal devaluation (of the central rate) of 3 per cent against the ECU. Since then, the lira has consistently been at the top of the EMS band. On the whole, exchange markets have remained relatively calm despite a high degree of volatility in global securities markets.

Factors influencing the yen and the dollar

In trying to understand the weakness of the yen over the past two years and the relative strength of the dollar interest rate differentials are no help. Indeed interest differentials and exchange rates have generally moved inversely (Chart M). The evolution of the sum of the current account, foreign direct investment and long-term official capital may provide a clue. These three items are largely unresponsive, in the short-run, to interest rate and exchange rate considerations and can thus be seen as representing a "core balance". The decline of this balance in Japan has paralleled the decline of the yen over the last two years, although the relationship between this measure and exchange rate developments is weaker for the dollar and the Deutschemark (Chart L). The direct impact of the "core balance" on the demand for yen and the supply of dollars has been compounded by the evolution of short-term financial flows – though for technical reasons this is not apparent in the case of the United States from the figures in Table 17[1].

Another factor underpinning the relative strength of the dollar and weakness of the yen may have been the demand for dollar assets on the part of global investors resulting from rapid growth in overall portfolios. Even if the share of dollar assets in total portfolios that investors seek to maintain is unchanged, the current structure of global portfolios is such that increases in portfolio size, other things being equal, imply a net demand for dollar assets[2]. In 1989, on the basis of very tentative estimates, this "constant portfolio composition effect" may have accounted for a net demand for dollar assets of the order of $60 billion. A significant proportion of this demand probably originated from Japan where the private sector is already a large net holder of dollar assets and the paper value of financial portfolios had grown quite rapidly, partly because of appreciation of domestic assets in Japan such as real estate and equities.

Indeed, massive purchases of foreign securities by Japanese investors have been a prominent feature of the Japanese balance of payments for several years, and they increased further in 1989. But to a significant extent these capital outflows have been linked to offsetting inflows – as in the case of acquisitions by Japanese investors of equity-related bonds issued abroad by Japanese corporations, and the growing international financial intermediary role of Japanese banks, which has involved investment in foreign securities. Hence, while specific financial flows have shown major changes over the last couple of years, the overall financial account has recorded a modest increase in net outflows

CHART L

EXTERNAL BALANCES AND EXCHANGE RATES

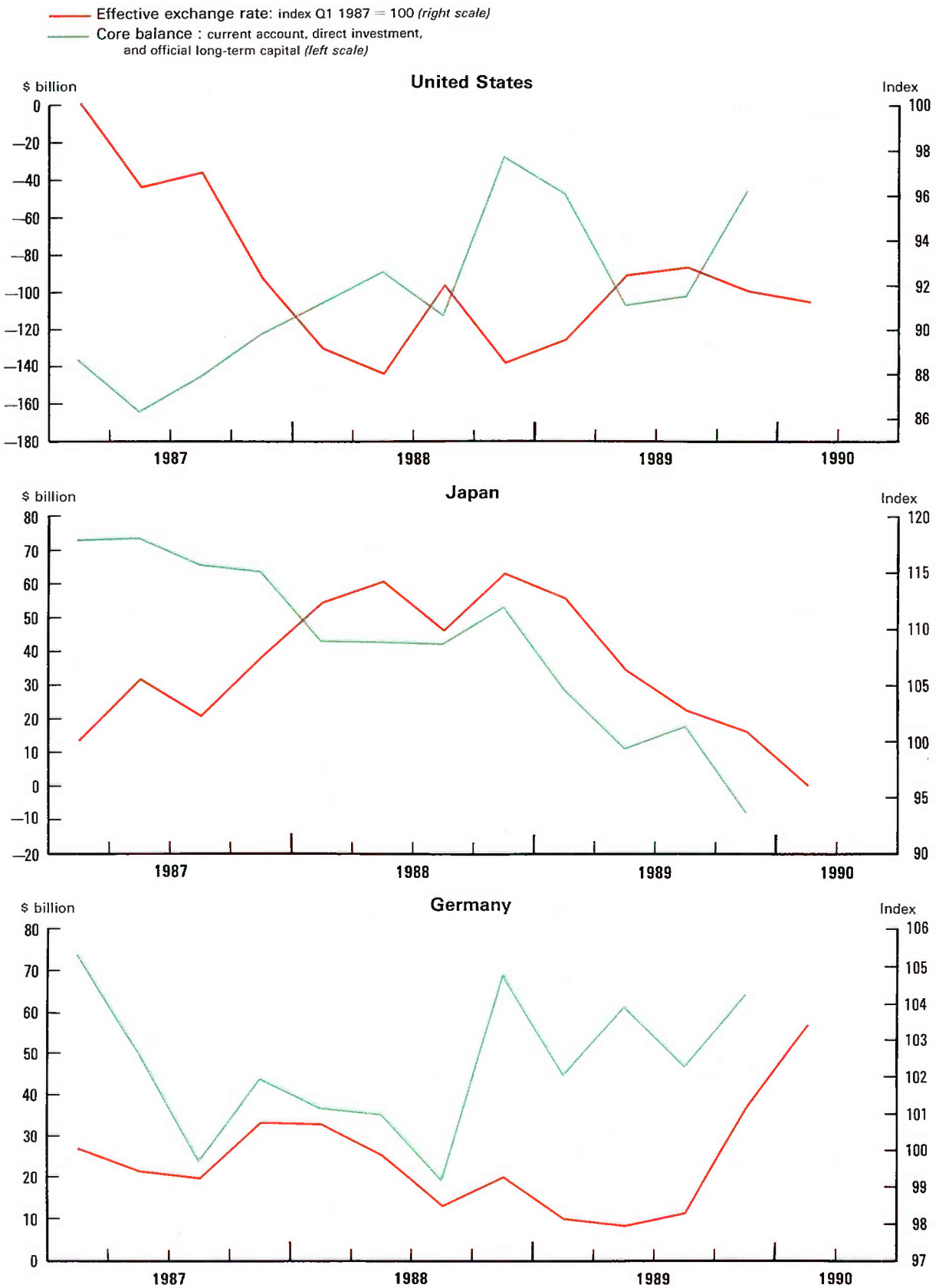


Table 17

Balance of payments of selected countries

$ billion

	1987	1988	1989	Changes 1987-89
United States				
Current account[a]	−159.5	−125.6	−103.7	55.8
Foreign direct investment (net)[a]	18.5	39.9	26.9	8.4
Official long-term capital	−1.5	1.7	1.1	2.6
Core balance	−142.7	−84.0	−75.7	67.0
Long-term financial capital	31.1	40.4	45.0	13.9
Short-term capital	54.7	7.0	48.7	−6.0
Non-monetary	7.8	−7.4	38.0	30.2
Monetary	46.9	14.4	10.7	−36.2
Total financial flows	85.8	47.4	93.7	7.9
Net transactions of monetary authorities	−56.9	−36.6	18.0	74.9
Japan				
Current account	87.0	79.6	57.0	−30.0
Foreign direct investment (net)	−18.3	−34.7	−44.9	−26.6
Official long-term capital	..	..	..	..
Core balance	68.7	44.9	12.1	−56.6
Long-term financial capital[b]	−118.1	−96.3	−43.0	75.1
Assets	−113.1	−115.7	−147.0	−33.7
Liabilities	−4.8	19.5	103.9	108.7
Short-term capital	91.8	66.8	6.3	−85.5
Non-monetary	20.0	22.3	−2.3	−22.3
Monetary	71.8	44.5	8.6	−63.2
Total financial flows	−26.3	−29.5	−36.7	−10.4
Net transactions of monetary authorities	42.3	15.5	−24.7	−66.9
Germany				
Current account	45.2	48.5	52.7	7.5
Foreign direct investment (net)	−7.1	−8.8	−8.9	−1.8
Official long-term capital	8.9	−0.7	7.1	−1.8
Core balance	47.0	39.0	50.9	3.9
Long-term financial capital	−14.8	−38.8	−11.4	3.4
Short-term capital	−9.3	−20.0	−49.6	−40.3
Non-monetary	−5.9	−8.5	−19.5	−13.6
Monetary	−3.4	−11.5	−30.1	−26.7
Total financial flows	−24.1	−58.8	−61.0	−36.9
Net transactions of monetary authorities	22.9	−19.7	−10.1	−33.0

a) Excluding capital gains and losses on outstanding stocks of direct investment.
b) Including official long-term capital.

as the large decline in the net outflow of long-term financial capital has been more than offset by the virtual cessation of net short-term inflows (Table 17).

The drying-up of short-term inflows – particularly monetary inflows – seems to have reflected, among other factors, adjustments in foreign currency hedging by yen-based investors. In 1987, a large proportion of the massive inflows of short-term funds may have resulted from the desire of Japanese institutional investors to cover the exchange-rate exposure on their holdings of foreign securities. In 1989, the shift in market sentiment against the yen apparently led these institutions to reduce their hedging activity and accept a higher degree of exchange-rate exposure. Since hedging typically implies higher foreign borrowing by Japanese banks, this decision contributed to the sharp drop in the inflows of monetary funds.

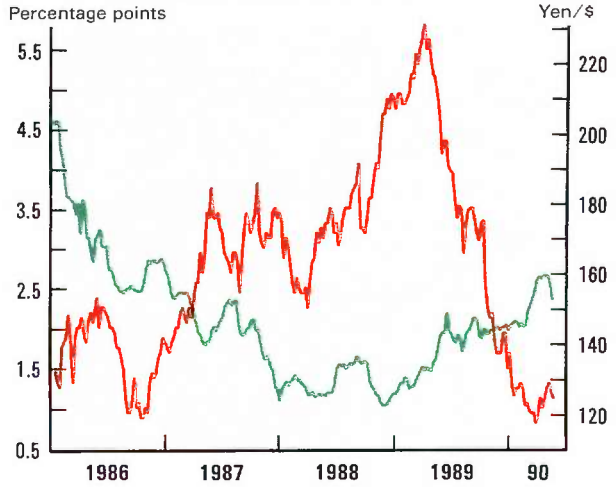
Looking at the factors likely to affect the yen in the coming months, the period of sharp deterioration of the "core balance" should largely be over: little change

CHART M

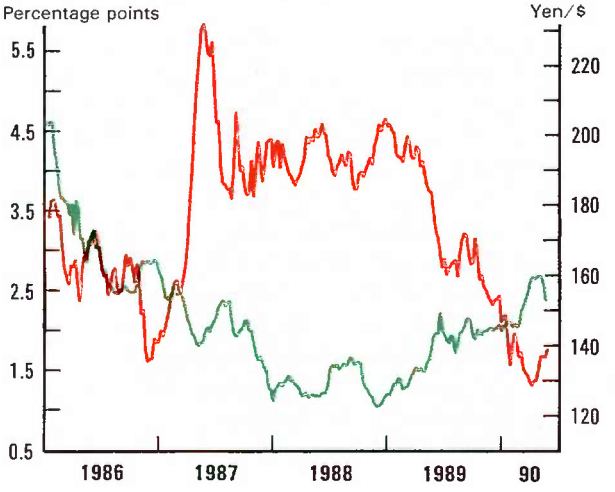
INTEREST DIFFERENTIALS AND EXCHANGE RATES

Interest differentials *(left scale)*
Exchange rates *(right scale)*

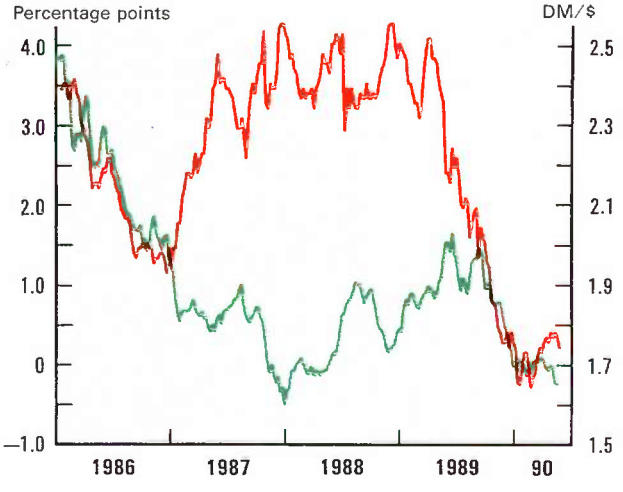
US-Japan: Short-term differentials



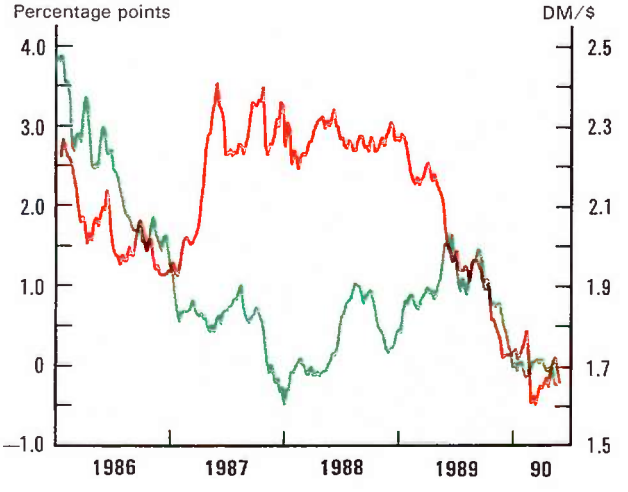
US-Japan: Long-term differentials



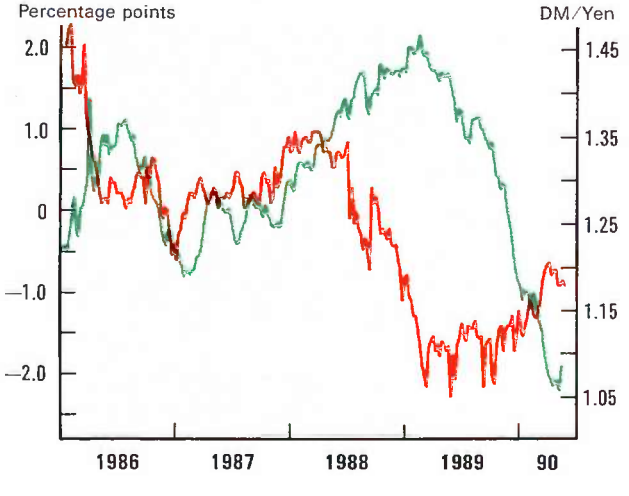
US-Germany : Short-term differentials



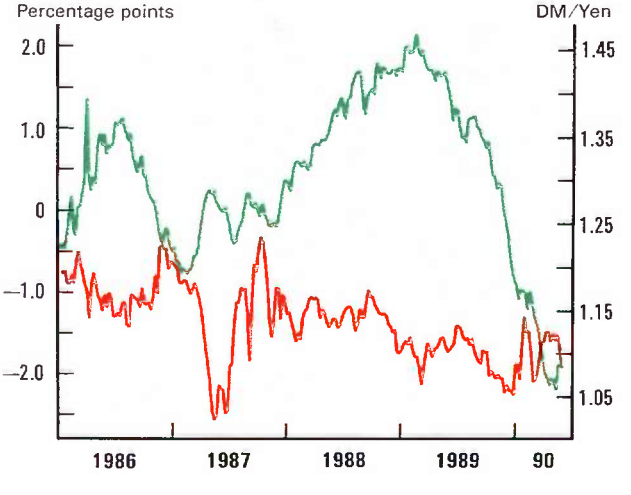
US-Germany : Long-term differentials



Japan-Germany: Short-term differentials



Japan-Germany: Long-term differentials



is projected in the current account and while outflows related to foreign direct investment may remain strong, they could recede somewhat from their recent peaks. If the "core balance" stabilises, pressure on the yen will depend on the factors influencing financial flows. Net outflows of long-term financial capital slowed further in the first months of 1990. Heavy net sales of Japanese equities by foreign investors and the virtual cessation of the issuance in international capital markets of equity-related bonds by Japanese corporations were more than offset by large net purchases of Japanese bonds by foreign investors and a sharp decrease in net purchases of foreign bonds by Japanese investors – with actual net liquidations in March. These developments may reflect a perception by market participants that Japanese bonds have become attractive relative to U.S. bonds and foreign bonds more generally. Combined with strong fundamental economic conditions in Japan, they could effectively underpin the yen and, barring unforeseen shocks, could lead to a cessation or reversal of unfavourable short-term flows.

NOTES

1. The analysis of U.S. financial flows is greatly complicated by the substantial under recording of official financing in 1987 and the corresponding over-recording of short-term inflows. Allowing for this factor, short-term inflows and total financial inflows – contrary to what shown in Table 17 – increased sharply from 1987 to 1989. More generally, as intended flows are typically affected by changes in exchange rates, ex-post balance-of-payments data – like those in Table 17 – provide only a partial indication of the role of financial flows in determining exchange-rate pressures.
2. The proportion of financial assets denominated in dollars ("dollar assets") in non-U.S. private portfolios is much higher than the proportion of financial assets denominated in foreign currencies ("foreign-currency assets") in U.S. private portfolios. These results and the estimate of the "constant portfolio composition effect" are derived from work done at the OECD. See B. Barenco (1990), "The Net Dollar Position of the Non-U.S. Private Sector, Portfolio Effects and the Exchange Rate of the Dollar", *OECD Department of Economics and Statistics Working Papers* No. 76.

THE ECONOMIES OF CENTRAL AND EASTERN EUROPE

The dramatic political changes in the past year in central and eastern Europe are setting the stage for radical programmes of economic restructuring, superseding the piecemeal initiatives toward market-oriented reforms that have been attempted in a number of these countries over the past few years. The outcome of this process is impossible to assess with any precision, both because of substantial uncertainty about the pace and content of economic restructuring programmes in the different countries, and because of a chronic shortage of hard information about the actual state of these economies that would provide a basis for assessing the adaptive capacity of the "supply-side" to the market environments that are coming into existence. This chapter provides a brief overview of available indicators for the economies of the region, with a view to gaining some insight into the magnitude of the challenges to be faced over the next several years.

General economic situations

A basic set of indicators is provided in Table 18. While there is inevitably much uncertainty about some of these measures, where in some cases substantial amounts of OECD judgement has been brought to bear in interpreting available data, the broad features as summarised below are probably robust.

Following two decades of relatively rapid growth in the 1950s and 1960s, growth performance deteriorated in the 1970s as the strategy based on maximising output growth through maximising increases in the quantity of labour and capital inputs ran into increasingly serious problems. As shown in the top panel of Table 18, measured growth rates of output over the past 20 years have been persistently below the OECD average for all the economies considered. Per capita GDP ranges from a low (in Romania) of about 30 per cent of the OECD average to a high in the German Democratic Republic of just under 65 per cent, though the measurement difficulties associated with such comparisons need to be borne in mind.

It is likely that the gaps in living standards between these countries and OECD are substantially larger than suggested by these per capita GDP comparisons, for several reasons:

a) Larger shares of output in these economies go to investment than in the OECD, on average, (Table 18, panel 2), with correspondingly less product available for consumption.

b) Direct indicators of living standards, such as the diffusion of telephones and automobiles, are suggestive of larger gaps.

c) Widespread anecdotal evidence of inferior product quality and mismatches between goods supplied and goods demanded suggest that the utility derived from a given aggregate amount of measured consumption is substantially lower in these countries than in OECD.

d) Finally, the evidence of severe environmental degradation and unhealthy working conditions in some of the central and eastern European countries suggests a further source of reduced living standards.

By most available measures, Czechoslovakia, the GDR and Hungary stand out as having the highest levels of economic development within the group. This is reflected not only in measures of per capita GDP, but also in the percentage share of the labour force in agriculture, where a lower share normally points to a more advanced stage of development. Again, if the energy intensity of production is taken as a rough measure of the efficiency of the capital stock, these three appear somewhat more efficient – though the numbers need to be interpreted with caution because the countries have quite different industrial structures and specialisations.

In general, the potential quality of labour inputs in these economies is judged to be reasonably high, though massive over-manning, lack of proper incentives, and general management failure have resulted in low work-effort and poor productivity. The share of the workforce with at least secondary education varies across countries and is generally much lower than in the OECD area. Nonetheless, the workforces of central and eastern European countries are relatively well-educated for their levels of economic development. The more fundamental problem on the input side appears

Table 18

Basic indicators for central and eastern European countries

	Soviet Union	Bulgaria	Czecho-slovakia	German Democratic Republic	Hungary	Poland	Romania	OECD
General indicators								
Population (m, 1988)[a]	286.4	9.0	15.6	16.6	10.6	38.0	23.0	824.8
GDP ($bn, 1988)[b]	1590.0	50.7	118.6	155.4	68.8	207.2	94.7	12073.0
GDP per capita, $	5552.0	5633.0	7603.0	9361.0	6491.0	5453.0	4117.0	14637.0
Growth of GDP[a]								
1971-80	3.1	2.8	2.8	2.8	2.6	3.6	5.3	3.3
1981-85	1.7	0.8	1.2	1.9	0.7	0.6	−0.1	2.5
1986-88	2.3	1.9	1.5	1.7	1.5	1.0	0.1	3.5
Living standards (1987)[c]								
Cars per 1000 inhabitants	50.0	127.0	182.0	206.0	153.0	74.0	11.0	385.0
Telephones per 1000 inhabitants	124.0	248.0	246.0	233.0	152.0	122.0	111.0	542.0
Structural indicators								
Share of labour force in agriculture[a]	21.7	19.5	12.1	10.2	18.4	28.2	28.5	8.0
Gross domestic investment/GDP[d]	33.2	32.7	24.7	29.2	28.5	36.5	37.1	20.6
Share of private enterprise in NMP/GDP[e]	2.5	8.9	3.1	3.5	14.6	14.7	2.5	70-80
Relative energy intensity (OECD = 1)[f]	2.6	2.2	1.9	1.6	1.5	1.9	2.7	1.0
Percent of workforce with secondary or higher education[g]	27.3	n.a.	29.4	n.a.	33.8	28.9	n.a.	61.0
Trade indicators								
Total exports of goods as percent of GDP (1988)[h]	6.8	23.0	19.7	13.7	14.7	6.4	11.2	14.4
Manufactured goods exports as share of exports to non-socialist countries[i]	63.1	59.3	72.4	77.3	79.6	63.4	50.6	81.8
Percentage change of share of OECD markets[j]								
1978-89	−26.7	−18.5	−44.0	−25.2	−7.8	−32.3	−46.3	—
1986-89	−13.0	−19.9	0.9	−9.1	1.5	−23.5	−27.8	—

a) CIA, Handbook of Economic Statistics, 1989.
b) PlanEcon data.
c) CIA, Handbook of Economic Statistics, 1989; OECD data are approximate.
d) Economic Commission for Europe, Economic Survey of Europe 1988-89, and OECD estimates. Data for Bulgaria and East Germany are for 1987.
e) PlanEcon; OECD data refer to four countries and are intended to give an approximate range only.
f) Calculated on the basis of total energy consumption in TOE in 1987 from the OECD, World Energy Statistics and Balances, 1989, and PlanEcon estimates for GDP; all data are for 1987.
g) National source data reported in PlanEcon; OECD data average for 16 countries, percent of total population.
h) OECD Series A data and ECE; East German data include intra-German trade.
i) OECD Series C and PlanEcon; manufactures is defined as SITC 5-9. OECD ratio is for 1987.
j) OECD Series A; data for German Democratic Republic exclude intra German trade.
Sources: OECD data are from OECD databases.

to be the efficiency of capital. The association of low rates of output growth with high rates of investment is striking, suggesting that much investment has been largely or totally wasted, so that the effective, potentially productive capital stock is small in relation to the cumulative investment effort undertaken. The inefficiency of investment, furthermore, is one element accounting for the overhangs of forced savings that persist in a number of these economies: payments to labour for investment activities increase incomes, but if the resulting investment is unproductive there is no corresponding rise in output to absorb the spending power thus generated.

The future growth in central and eastern Europe will have to come largely in the private sector and to that extent countries which already have significant private sectors may have an advantage. The figures in Table 18 on the recorded share of private sector activity in total production are based on national sources and suggest that, except for Hungary, Poland and Bulgaria, this share is insignificant. However, estimates of the shadow economy suggest that these figures probably overstate the differences: they may have more to do with the official stance towards private sector activity than with the actual size of these activities.

Table 19

Trade of the Soviet Union and other central and eastern European countries with OECD

In millions of $

	1986			1987			1988			1989 January to November at annual rates		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
Bulgaria	747	2202	−1456	760	2353	−1593	745	2429	−1683	795	2310	−1515
Czechoslovakia	3102	2744	358	3493	3331	162	3818	3575	242	4094	3381	713
German Democratic Republic[a]	2482	1917	564	2596	2486	110	2743	2951	−208	2900	3110	−211
Hungary	2993	3468	−476	3697	3902	−205	4090	4000	89	4427	4567	−140
Poland	4214	3376	838	4913	3962	950	5714	4965	749	6230	6058	172
Romania	3577	1643	1933	4066	1315	2751	4029	1257	2772	3921	1156	2764
Total of above countries	17114	15351	1763	19524	17349	2176	21138	19177	1961	22367	20582	1784
Soviet Union	20348	20574	−226	22856	20556	2300	23636	24909	−1273	25604	27646	−2042
Total 7	37462	35925	1537	42380	37905	4475	44774	44086	688	47970	48228	−258

a) Trade of the GDR does not include transactions with the FRG.
Source: OECD Foreign Trade Statistics, Series A. Balance equals Exports (f.o.b.) minus Imports (c.i.f.).

Finally, as regards trade structures, the economies of central and eastern Europe are relatively dependent on foreign trade, taking into account CMEA trade (and intra-German trade for the German Democratic Republic). Even the Soviet Union, which is generally considered to be a relatively closed economy, has goods exports as a share of GDP roughly comparable to the United States. However, a striking indication of the structural problems facing these economies is the marked loss of export shares on OECD markets that these countries have experienced over the past decade: only Hungary, which has throughout this period focused attention on shifting its trade from CMEA to OECD markets, has succeeded in limiting this erosion of market share to some extent.

Recent trade developments in value terms for the economies of central and eastern Europe *vis-à-vis* OECD countries are shown in Table 19. The numbers in general do not suggest any marked change in trends: while the value of exports to OECD countries has tended to rise slowly, they have not kept pace with overall world trade growth. In some cases, deteriorating terms of trade (particularly as regards the USSR) may be masking increases in export volumes. It is possible, furthermore, that significant recent currency devaluations, most notably in Poland, will provide the incentive basis for a stronger export growth to the West in coming years. The key uncertainty here is the capacity of the production structure to respond to relative price signals which, at the moment, would appear to provide strong relative price incentives for exports in at least some of these countries. On the import side, the most striking feature is the sharp contraction of Romanian imports in recent years, reflecting the obsession of the Ceausescu regime with abolishing external debt.

Trade relations

A more detailed accounting of the evolution of trade patterns for the economies of central and eastern Europe is provided in Table 20. There are significant differences among countries, particularly as regards degrees of dependence on intra-CMEA trade. Nevertheless, the overall dependence, for all of these countries, on intra-CMEA trade is a critical factor in assessing the future economic evolution of these economies. Members of the CMEA are currently discussing an internal reform of the CMEA system. It seems likely that, starting in 1991, a new CMEA regime based largely on world pricing and convertible-currency settlement will go into effect. This raises two central issues. The first is the likely coming to an end of the implicit subsidies to central and eastern European economies that result at present from their capacity to purchase raw materials, and especially energy, from the USSR at below world-market prices. The extent of this subsidy is difficult to measure, but a conservative estimate would put it at some $5 billion annually for the six non-Soviet members of the group.

The second issue is the extent to which intra-CMEA trade in manufactured goods will contract in favour of trade with countries outside the region. The balance of considerations in this regard is difficult to draw. Structural considerations, in particular the rela-

tive immobility and inflexibility of productive factors tied up in intra-CMEA trade-related production, argue for maintaining intra-CMEA trade in the process of economic reform; but the more advanced technology and higher quality goods available on world markets argue for greater reliance on imports from non-CMEA regions and a corresponding re-orientation of exports to these markets.

It is likely that in the near future most central and eastern European countries will sign trade and economic co-operation pacts with the European Community, allowing these countries lower EC tariffs and in return increasing EC access to central and eastern European markets. This and other steps towards fuller integration of the central and eastern European countries into the world economy means that their produc-

Table 20

Regional trade structure of Central and Eastern European countries

Percentage shares of total trade

	Exports to:				Imports from:			
	Soviet Union	Other Eastern Europe	Developed countries[a]	Rest of World[b]	Soviet Union	Other Eastern Europe	Developed countries[a]	Rest of World[b]
Soviet Union								
1980	..	42.1	32.0	25.9	..	42.9	35.4	21.7
1985	..	46.8	25.6	27.6	..	47.6	27.8	24.6
1988	..	49.0	21.9	29.1	..	54.0	25.1	20.9
Other Eastern Europe								
1980	33.0	22.4	28.5	16.0	33.1	20.9	31.0	15.0
1985	38.0	20.8	25.4	15.8	40.1	22.2	24.3	13.4
1988	37.9	22.7	26.8	12.6	36.5	24.1	27.4	12.1
of which:								
Bulgaria								
1980	49.9	16.5	15.8	17.8	57.3	18.1	17.2	7.4
1985	56.6	17.2	8.5	17.7	56.1	17.5	15.2	11.1
1988	62.8	18.1	6.4	12.8	53.7	20.1	15.5	10.6
Czechoslovakia								
1980	35.6	27.8	21.8	14.8	36.0	28.7	24.3	10.9
1985	43.7	26.6	15.8	14.0	46.0	28.6	15.3	10.1
1988	43.1	29.9	16.3	10.8	40.3	32.3	18.6	8.8
German Democratic Republic								
1980	33.3	26.2	29.3	11.2	33.2	22.4	34.6	9.8
1985	37.2	22.4	31.5	8.9	38.8	22.9	30.2	8.0
1988	35.5	26.5	29.9	8.1	34.6	24.8	33.2	7.4
Hungary								
1980	29.3	21.0	34.0	15.7	27.7	19.2	39.5	13.6
1985	33.6	18.7	30.2	17.5	30.0	19.3	38.4	12.2
1988	27.6	17.0	40.5	14.9	25.0	18.7	43.6	12.7
Poland								
1980	31.2	21.1	34.4	13.3	33.2	19.6	35.0	12.2
1985	28.4	19.7	34.7	17.2	34.4	19.8	32.2	13.5
1988	24.5	16.2	43.3	16.0	23.4	17.2	45.7	13.7
Romania								
1980	19.6	17.7	34.8	28.0	15.6	15.1	31.2	38.1
1985	21.4	14.5	33.9	30.3	22.4	20.4	17.3	39.9
1988	23.4	16.4	37.9	22.3	30.9	21.3	11.6	36.2

a) Developed countries, according to United Nations includes the OECD area plus Yugoslavia, less New Zealand and Australia.
b) Rest of World includes Developing Countries and Socialist Countries other than Eastern Europe and the USSR.
Source: Economic Commission for Europe secretariat Common Data Base, United Nations, based on national statistics; OECD secretariat estimates and calculations.

Table 21

Current account balances and net debt/export ratios in convertible currencies of Central and Eastern Europe

Millions of dollars

	1986	1987	1988	1989[a]
	A. CURRENT ACCOUNT			
Bulgaria	−921	21	−650	−800
Czechoslovakia	240	−300	−350	−300
German Democratic Republic[b]	780	730	585	−200
Hungary	−1400	−850	−592	−1370
Poland[c]	−550	−471	−580	−1840
Romania	1300	1850	2200	2000
Total of above countries	−551	1034	613	−2510
Soviet Union	1000	4000	3100	−1000
Total 7	449	5034	3713	−3510
	B. NET DEBT/EXPORTS			
Bulgaria	143	175	196	263
Czechoslovakia	66	78	78	95
German Democratic Republic[d]	89	107	106	118
Hungary	312	324	290	326
Poland	570	556	504	532
Romania	98	76	32	−1
Total of the above countries	205	218	202	211
Soviet Union	79	82	90	113
Total 7	152	158	153	169

a) Estimate.
b) Including transactions with the Federal Republic of Germany.
c) Including interest payment obligation.
d) Including intra-German debt.
Source: OECD.

ers will face new challenges in the form of competitive pressures from both OECD countries and the dynamic Asian economies.

External financial relations

The hard currency external debt position of all countries – except Romania – has deteriorated since 1984 (Table 21). As measured by debt/export ratios Poland, Hungary and Bulgaria are severely debt constrained; and all the countries of the region (except Romania) have significant hard-currency debts which may limit their capacity to borrow extensively in coming years. This state of affairs reflects a steady deterioration of these countries' current account balance in convertible currencies (Table 21). Noteworthy is that the hard currency surplus of both the GDR and the USSR turned into a deficit in 1989. The rise in hard-currency net indebtedness of the region might appear at first glance as incompatible with continued recorded total current-account surpluses. The total current-account balance of the central and eastern European countries is the sum of the convertible currency current-account *vis-à-vis* OECD countries, the balance *vis-à-vis* non-CMEA developing countries and the balance *vis-à-vis* non-European CMEA economies. The overall surpluses are primarily due to the rouble surplus of the USSR *vis-à-vis* socialist countries outside central and eastern Europe and by continuing surpluses of central and eastern European economies *vis-à-vis* developing countries. Although the latter claims might be in terms of convertible currencies, they are for the larger part not recoverable at their face value.

Scale of resource transfer

From a global perspective, a key issue is that of the likely scale of resource transfers to these countries. Under this heading, four interrelated considerations are of particular relevance.

First, the demand from the economies of central and eastern Europe for goods, technology and capital

from OECD countries in coming years is potentially large, though the speed with which foreign resources can be productively absorbed will depend crucially on the pace of structural and institutional transformation. The eventual needs of these countries for foreign resources to facilitate domestic reconstruction is, on the most conservative estimates that have been floated, well in excess of anything that could be absorbed efficiently or is likely to be forthcoming over the next several years.

Second, in assessing the likely scale of resource flows from outside, a sharp distinction needs to be made between the German Democratic Republic and the other economies of the region. In the former case, the imminent monetary union and economic integration with the FRG fundamentally alter the basic parameters. As regards the other countries of the group, foreign resources are likely to play a less central role in the restructuring process for three reasons:

a) The capacity of these economies to earn substantial increments in foreign exchange through increased exports will be strongly limited for a number of years by the difficulty of re-orienting supply so as to provide attractively priced goods of reasonable quality for export markets. Exchange rate policies can clearly influence this at the margin, but the "elasticity" of export supply with respect to relative prices is likely to remain low for some considerable time.

b) Borrowing capacity to finance increased imports beyond export revenues is constrained by debt problems for most of these countries, and will continue to be so for some years.

c) Overall access to foreign resources to aid economic restructuring will thus be primarily determined by the scale of official capital flows to these economies and by foreign direct investment.

Third, as regards official flows, a substantial increase can be expected. Putting together IMF credits for those countries that are IMF members, World Bank lending programmes and bilateral initiatives coordinated through the G-24, official gross disbursements of some $6 billion might be expected both this year and next – principally to Poland and Hungary. The newly-created European Bank for Reconstruction and Development will also in due course become a substantial supplier of funds. Even so, these sums are small in relation to potential requirements.

Fourth, private foreign direct investment (FDI), via joint ventures, outright purchases of existing enterprises, or the establishment of new firms, is an attractive vehicle for resource transfer because it provides technology and managerial know-how along with the funds to purchase foreign inputs. There is some tendency to view this as the panacea for the adjustment problem of the central and eastern European countries, particularly those such as Hungary and Poland that have indicated a willingness to put the bulk of state-owned enterprises up for sale. Three cautionary notes are, however, in order:

a) In the best of cases, there is a substantial lag between entering into commitments on FDI and actual disbursement of funds. The extent, therefore, to which FDI can ease external financing constraints may be relatively limited for most central and eastern European countries over the next 2-3 years.

b) The development of large-scale FDI flows to central and eastern Europe is likely to depend on the pace of domestic reform processes in these economies, particularly as regards the definition of property rights, which remains a murky area since it has been revealed that "social ownership" of the means of production may, in practice, mean a very uncertain pattern of actual ownership rights.

c) Finally, given the extremely imperfect asset markets in the region, there is a risk that private FDI into these economies will in part be characterised by predatory manoeuvres rather than longer-term developmental considerations. Some of these economies have a pressing need for foreign exchange and grossly inadequate information about the underlying market value of state assets, rendering them vulnerable to asset-stripping and transfer-pricing practices.

The broad conclusion might be that, while some acceleration of resource flows to central and eastern European countries can be expected in coming years, the macroeconomic significance of such flows (again, with the exception of the GDR) is likely to be modest. Indeed it is uncertain whether, in terms of providing *net* resources to aid in the economic restructuring process, these flows will even compensate the non-USSR members of this group for the loss of income resulting from the termination of implicit energy subsidies from the USSR. Financing of economic restructuring in central and eastern Europe is thus likely to be dependent on strong domestic saving flows. Saving has generally been strong in these countries, but in conditions of limited availability of many consumer goods and services. In the absence of such constraints, positive incentives to save will need to be stronger.

DEVELOPMENT IN INDIVIDUAL COUNTRIES

UNITED STATES

Key features

GNP growth declined to a 1¼ per cent annual rate in the last quarter of 1989, and continued at this pace in the first quarter of 1990. Although manufacturing employment and capacity utilisation have continued to fall, weaknesses have been concentrated in certain sectors and regions: auto production, residential construction and the North-East region have been worst hit. Overall, the continued growth of the service-producing sector has kept the civilian unemployment rate unchanged since the second quarter of 1989, and continuing healthy export and investment demand is allowing the economy to expand moderately. Growth a little below the economy's potential is projected to continue through 1990 and 1991, with personal consumption growth likely to remain subdued. Labour-market conditions should ease somewhat and inflation, having increased in the first quarter because of food and energy price rises, should stabilise at about 4½ per cent.

Monetary stance has changed little in recent months, following substantial easing in 1989. Long-term interest rates have risen, however, and this may reflect, in part, an upward revision in market expectations about the short-term strength of the economy and potential inflationary pressures. At the same time, domestic financial conditions are rather unsettled, due

UNITED STATES

Demand, output and prices

Percentage changes from previous period, seasonally adjusted at annual rates, volume (1982 prices)

	1987 current prices billion $	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Private consumption	3 010.8	2.8	3.4	2.7	2.2	2.0	2.3	3.4	1.7	1.8	2.1	2.1
Government consumption	926.1	2.6	0.4	2.7	2.1	1.9	3.5	0.7	3.1	1.7	1.9	2.0
Private fixed investment	670.7	2.6	5.8	1.6	2.4	3.4	1.5	0.1	3.3	3.0	3.5	3.5
Residential	226.4	–0.4	–0.3	–2.9	0.4	3.4	–4.2	–8.0	3.7	2.9	3.5	3.5
Non-residential	444.3	3.9	8.4	3.3	3.2	3.4	3.8	3.2	3.2	3.1	3.5	3.5
Final domestic demand	4 607.6	2.7	3.2	2.5	2.2	2.2	2.4	2.3	2.2	2.0	2.3	2.3
* change in stockbuilding	29.3[a]	0.5	0.1	–0.2	–0.2	0.2	–0.3	0	–0.6	0.3	0.1	0
Total domestic demand	4 636.9	3.2	3.3	2.4	2.0	2.4	2.1	2.3	1.6	2.3	2.4	2.4
Exports of goods and services	448.6	13.5	17.6	11.2	6.3	8.1	14.1	7.5	4.9	7.9	8.1	8.1
Imports of goods and services	561.2	7.5	6.8	6.1	3.8	7.1	5.1	6.5	1.3	6.3	7.4	7.4
* change in foreign balance	–112.6[a]	0.4	1.1	0.6	0.3	0.1	1.1	0	0.5	0.2	0	0
GNP at market prices	4 524.3	3.7	4.4	3.0	2.3	2.5	3.2	2.4	2.1	2.5	2.5	2.4
GNP implicit price deflator	–	3.1	3.3	4.1	4.2	4.5	4.3	3.6	4.5	4.3	4.5	4.5
Memorandum items												
Consumer prices[b]	–	4.7	3.9	4.4	4.8	4.6	5.0	3.4	5.6	4.5	4.6	4.6
Industrial production	–	3.8	5.7	3.3	1.3	2.4	3.0	1.4	0.8	2.3	2.4	2.4
Unemployment rate	–	6.2	5.5	5.3	5.3	5.4	5.2	5.3	5.3	5.4	5.4	5.5

* As a percentage of GNP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts private consumption deflator.

Budget deficit projections

	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Fiscal year, $ billion (Deficit = +)								
Administration estimates under administration policies[a]	221	150	155	152	124	61	24	(20)[b]	(64)[b]
Congressional Budget Office (CBO)									
February baseline[a]	221	150	155	152	127	134	141	148	133
Balanced Budget Act Targets									
Original	172	144	108	72	36	0			
Revised[a, c]			144	136	100	64	28	0	
OECD[a]	221	150	155	152	136	132	130	140	132
(Calendar years, national accounts)	207	161	146	149	119	114	109	111	105
Memorandum item:									
Social security fund surplus[d]	17	20	39	52	66	74	85	98	112
Resolution Trust Corporation (non-interest spending)[e]					32	28	−17	−16	−12

a) Excluding non-interest spending by the Resolution Trust Corporation.
b) Figures in parentheses represent estimated surpluses.
c) Under the Balanced Budget and Emergency Deficit Control Act, a projection of $10 billion or more above the target is required to trigger sequestration.
d) CBO estimates from the *Economic and Budget Outlook: Fiscal Years 1991-1995* (January 1990). The social security surplus is included in all the deficit projections in this table. In contrast to the other lines on this table, a positive number denotes a surplus.
e) Non-interest spending of the Resolution Trust Corporation (largely asset acquisitions or sales) as estimated by the CBO.

largely to insolvencies in the thrift industry, a stricter regulatory stance, defaults on "junk" bonds, and problem real estate loans in some regions. As a result, borrowing costs have risen for some categories of borrowers. Higher borrowing costs may also be related to the rise in interest rates world-wide.

In seeking to create the conditions for non-inflationary growth and lower interest rates, it remains a problem that monetary policy has had only modest assistance from fiscal restraint. Progress in reducing the federal budget deficit continues to be slow, even abstracting from the mounting costs of the rescue of thrift institutions. In the absence of a budget agreement, and excluding spending on thrifts, the Federal deficit could reach and remain in the region of $135 billion in fiscal years 1990 and 1991 (some 2½ per cent of GNP). Partly as a result of this, dependence on foreign saving will remain high and further reduction of the current-account deficit is likely to be slow.

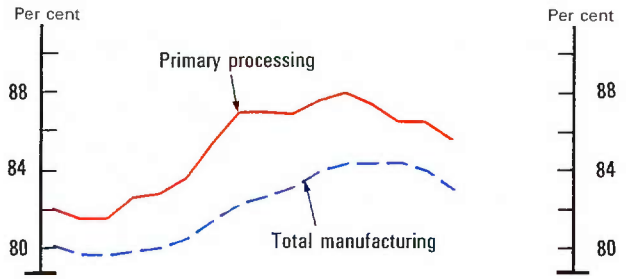
Recent Trends

The economic slowdown in the fourth quarter was partly attributable to temporary factors: the disruption caused by Hurricane Hugo, the Californian earthquake, the month-long strike at Boeing, and severe December weather. Recovery from these setbacks boosted activity in the first part of 1990. Final domestic demand recovered quite strongly. However, growth remained concentrated in the service sector. Manufacturing production is little changed since early 1989. Output of durable consumer goods has also been flat over the past year and remains relatively depressed. Automobile sales were especially weak in the fourth quarter, leading to a substantial build-up of unsold cars by the end of the year. A sharp cut in assemblies in January partially restored inventory balance, but production so far in 1990, at about a 6 million unit annual rate, is well down on past levels.

Aggregate inflation measures do not show any upward trend over the last year, at least on average. The GNP fixed-weighted price index rose 4½ per cent during the four quarters ending in 1990 Q1, which was slightly down on the 4¾ per cent rate registered in the same 1988-89 period. However, the quarterly pattern has been irregular, reflecting the transitory influences of food and energy prices, as well as fluctuations in the exchange rate. Inflation was low in the second half of 1989 as energy prices were weak and prices of imported goods were depressed by the earlier strength in the dollar. Both of these effects were reversed in the the first quarter of 1990, when the GNP fixed weight index showed a 6.7 per cent rise at annual rates. Excluding food and energy, the CPI rose 4.8 per cent over the twelve months to April, compared with an

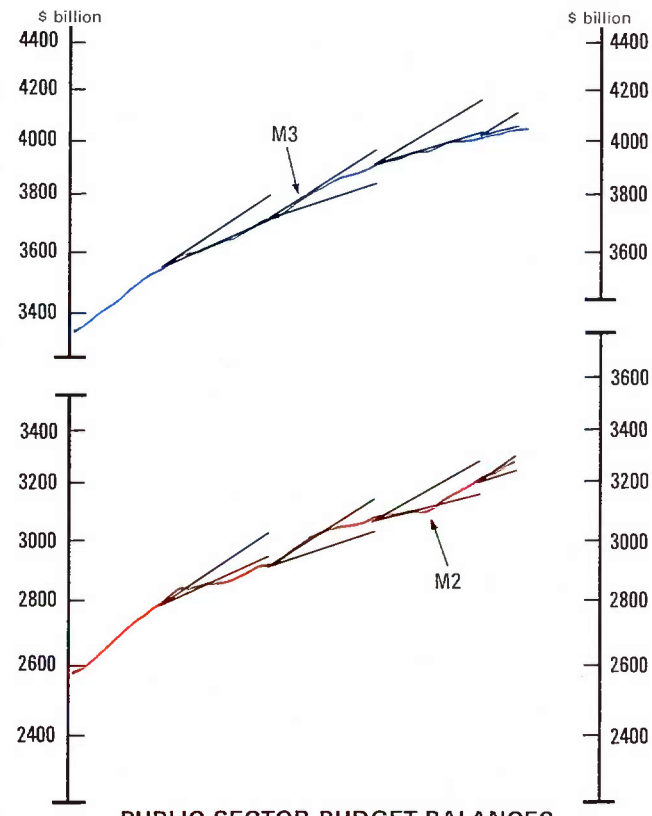
UNITED STATES

CAPACITY UTILISATION RATES

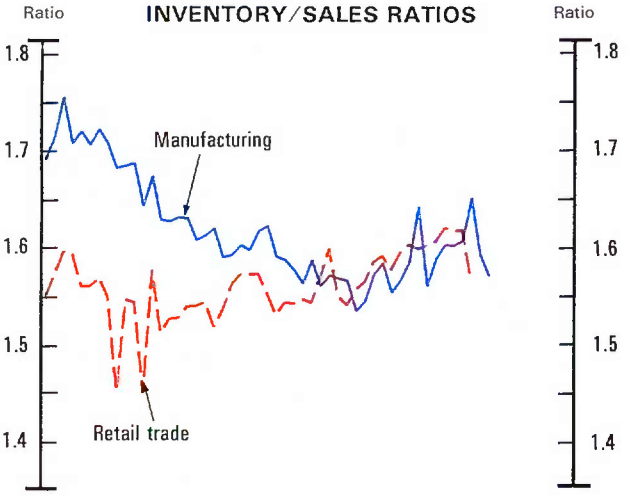


MONETARY AGGREGATES: TARGET RANGES AND ACTUAL DEVELOPMENT

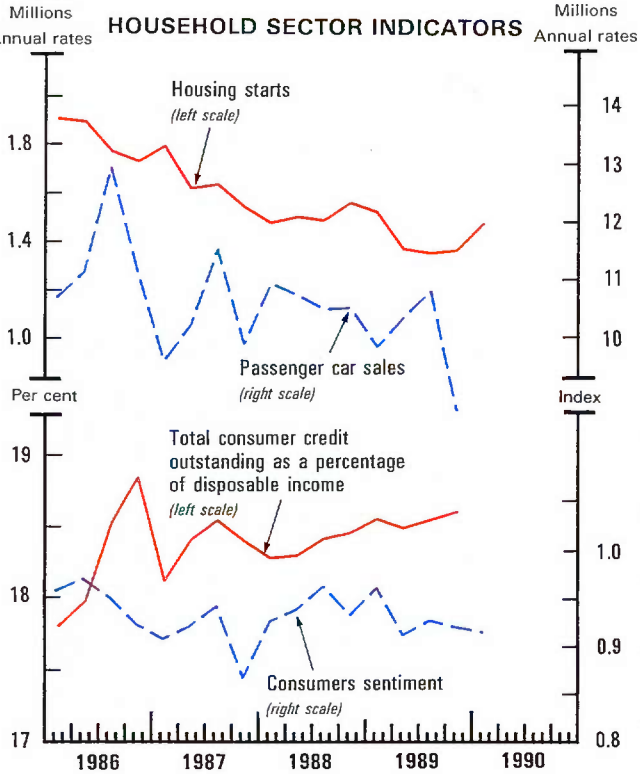
Semi-logarithmic scale



INVENTORY/SALES RATIOS

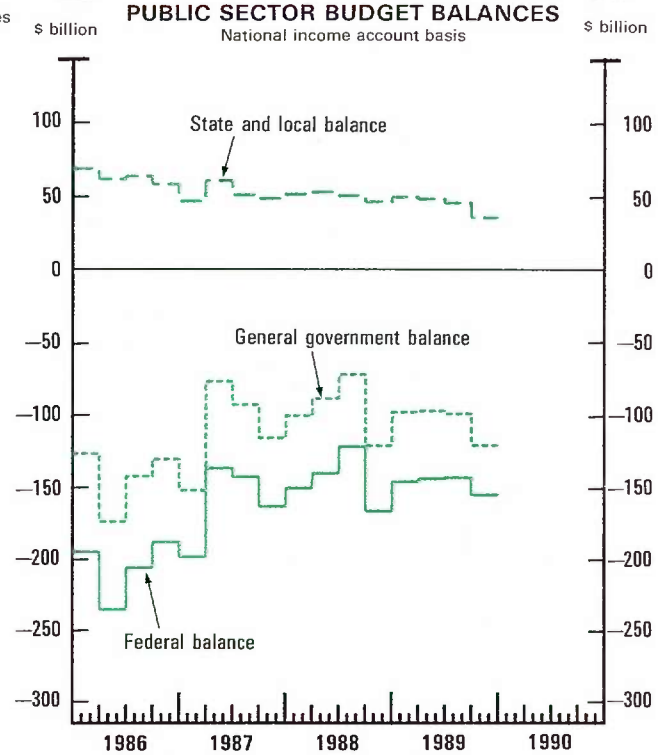


HOUSEHOLD SECTOR INDICATORS



PUBLIC SECTOR BUDGET BALANCES

National income account basis



Sources: Department of Commerce, Federal Reserve Board, University of Michigan consumer survey, OECD.

increase of 4.6 per cent over the previous twelve months. Similarly, although higher on average than in 1988, the rate of increase in wages and salaries has shown little sign of increasing on a quarter-by-quarter basis since early 1989. Slower productivity growth, however, pushed the rise in unit labour costs up from an average of 3 per cent in 1988 to 4½ per cent. Partly for this reason, the share of after-tax corporate profits in corporate output fell to just over 5 per cent – compared with a high of over 7 per cent during 1984. (The rise in corporations' net interest costs, to a record 64 per cent of profits in the fourth quarter, has also put pressure on net profits.)

Policies

Short-term interest rates, which declined by 160 basis points through the latter part of 1989, have changed little since January. Long-term rates have risen, however, as investors appear to have reacted to increasingly attractive investment opportunities abroad, a run-up in energy prices and stronger-than-expected economic data, which may have undermined expectations that inflation would fall. At the same time, the Federal Reserve's concern about recession has abated. The February meeting of the Federal Open Market Committee saw a switch away from concern about recession to a fairly balanced concern about slower growth and inflation, and this rather balanced perception of risks seems to have persisted into May. Reflecting this, the Federal Funds rate has been unchanged since January. The February Monetary Report to Congress underlined the fact that the Federal Reserve expects little progress on the inflation front in the short term, but is optimistic that inflation will fall over the medium term, as moderate growth leads to an easing of labour-market pressures. In maintaining the same targets for 1990 as 1989, at 3 to 7 per cent for M2, the Federal Reserve expectation is that money growth will be eased back as the year progresses, and data for the first five months indicate that this has been the case.

Assessing the degree of present monetary restraint is complicated, not just by variations in money velocity, but also by signs that banks have restricted credit to certain classes of borrowers. The Federal Reserve has expressed concern about the deterioration in indicators of financial stress among some borrowers, with implications for lenders, including commercial banks. Among households, debt-servicing burdens have risen to historic highs relative to income and delinquency rates have recently moved up to high levels. Corporate debt burdens and interest costs have risen markedly, contributing to record corporate bond defaults in the first quarter and to a collapse of the "junk bond" market. Commercial bank profits in some regions (notably New England) have been adversely affected by problem real estate loans. As a result, banks have restricted credit to below-investment grade companies and reduced construction loans to builders. There does not appear to be a generalised credit squeeze, however. Helping to allay concern is the consideration that household net worth has risen relative to income, that formerly distressed banks in the agricultural sector have continued to recover their financial health, and that corporate profits are still substantially above their 1982 low.

Progress in reducing the Federal deficit has remained rather slow. According to the

UNITED STATES

Appropriation account for households

Percentage changes from previous year

	1987 billion $	1987	1988	1989	1990	1991
Compensation of employees	2 690.0	7.1	8.1	8.1	7.1	6.8
Income from property and other	940.1	7.7	8.1	11.1	7.9	7.2
Current transfers received	548.2	5.1	6.7	8.1	8.4	7.0
Less: interest on consumer debt	91.4	2.6	5.2	5.7	5.2	5.7
Total income	4 087.0	7.1	8.0	8.9	7.5	6.9
Less: direct taxes	571.6	11.5	2.6	10.5	10.0	8.2
current transfers paid	402.7	5.7	10.9	7.7	8.1	7.7
Disposable income	3 112.7	6.5	8.6	8.8	7.0	6.6
Consumers' expenditure	3 010.8	7.6	7.4	7.3	7.0	6.7
Saving ratio (as a percentage of disposable income)	–	3.3	4.3	5.6	5.5	5.4

Administration's Budget, the Balanced Budget Act's target of a $100 billion deficit for FY 1990 is likely to be exceeded by $24 billion, but this has since been revised up. The Congressional Budget Office (CBO) baseline shows a $27 billion overshoot in FY 1990, and the OECD projection, which uses the same non-defence spending assumptions as the CBO, is slightly higher still (see Budget Deficit Projections Table). In November, Congress passed legislation cutting the deficit by $12 billion in FY 1990, but these cuts have been offset by technical revisions.

For FY 1991 the cuts are, in any case, rather small, because the Budget agreement contained $7 billion in non-recurring savings and other accounting devices. As a result, both the OECD and the CBO baseline deficit for FY 1991 is only just below $140 billion, compared with the Gramm-Rudman target of $64 billion. However, the outturn will hinge on public spending and taxation agreements which still have to be reached. Each 2 per cent cut in defence spending authorisation tends to reduce spending by nearly $10 billion after two years, and by almost $30 billion by the fifth year. Although defence cuts will not be translated dollar-for-dollar into deficit cuts, they could be enough to ensure that the general trend in the deficit is downward. Meeting the Balanced Budget Act targets for FY 1991 and beyond probably requires higher tax revenues, the more so since the costs of rescuing insolvent savings and loans associations – which are not included in the above baseline estimates – are likely to be greater than expected[1]. The prospects of such increases, perhaps based on removing the remaining distortions in the income tax base or widening the scope of consumption taxes (such as higher gasoline taxes as a user charge on pollution) are currently unclear.

Trade policy has focused on both multilateral liberalisation in the Uruguay Round (due for completion at the end of 1990), and bilateral initiatives to open foreign markets to U.S. exports. The 1988 Trade Act required the identification of barriers to trade of priority interest to the United States and negotiation to eliminate them. Specific announcements were made in May 1989, the most important concerning trade with Japan, where exclusionary government procurement concerning satellites and supercomputers, and restrictive standards on wood products were named as priority concerns. Negotiations between the United States and Japan have resulted in partial interim agreements on each of the issues in dispute. At the same time, the bilateral debate has been widened under the Strategic Impediments Initiative (SII) to the identification and correction of general impediments to more balanced trade between the two countries.

Prospects

Abstracting from the influence of temporary factors, the economy appears to have been growing at around a 2 per cent rate in the first half of 1990, and is expected to continue to expand at a 2 to 2½ per cent pace. Overall, total domestic demand seems likely to grow at around 2 per cent, and there may be a small contribution to GNP growth from net exports. The main factors influencing domestic demand appear to be:

i) The stock-to-sales ratio for the economy as a whole is low compared with its historical average;

ii) Business investment intentions surveys indicate that capital spending in manufacturing will continue to grow, but somewhat more slowly than in 1989;

iii) Residential construction is likely to be affected positively as hurricane and earthquake damage is repaired, but is being held back by problems in the thrift industry, which have restricted the number of multi-family building starts;

iv) Real disposable income is growing rather slowly, which may be expected to restrain consumer spending; however, the saving ratio, having risen in the past year, appears unlikely to increase further.

Federal purchases are expected to decline in real terms, but state and local government spending will continue to grow because of continued demands for infrastructure investment. The poor condition of some state finances, especially in the North-East, is leading to the introduction of new taxes, but in general, the state and local operating deficit is unlikely to decrease much. Overall, the fiscal stance is unlikely to be restrictive.

The external account should continue to provide an additional stimulus to GNP growth, though smaller than in 1989. U.S. exports are projected to expand more rapidly than markets. U.S. export competitiveness is continuing to improve, with manufacturing unit labour costs projected to rise more slowly than the average for the major economies. Import volumes will probably continue to be particularly affected by the evolution of domestic investment; imports of producer durable equipment have been the fastest growing items in the past year, and the rate of increase could slow as the pace of domestic investment slows. In all, the trade deficit may fall to between $100 and $110 billion in both 1990 and 1991. No further improvement in the balance on services is expected, so that the current

UNITED STATES[a]

Balance of payments

Value, $ billion

	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Seasonally adjusted										
Exports	319.3	361.9	392	442	179.1	182.8	191	201	214	228
Imports	446.5	475.1	499	547	235.0	240.2	244	255	267	280
Trade balance	−127.2	−113.3	−107	−105	−55.9	−57.4	−53	−53	−53	−52
Non-factor services, net	13.1	20.6	21	27	8.4	12.2	10	11	13	14
Investment income, net	3.2	3.2	0	−2	0.5	2.6	0	0	−1	−2
Private transfers, net	−1.8	−1.6	−2	−2	−0.9	−0.7	−1	−1	−1	−1
Services and private transfers, net	14.5	22.2	20	22	8.0	14.2	9	11	11	11
Official transfers, net	−12.9	−12.7	−13	−15	−5.4	−7.3	−6	−7	−7	−8
Current balance	−125.6	−103.7	−100	−97	−53.3	−50.5	−50	−49	−49	−48
Memorandum items (s.a.a.r.)										
Per cent changes in volume[b]										
Exports	20.5	12.5	8.4	9.8	16.8	8.3	8.2	8.8	9.9	10.6
Imports	6.0	5.8	4.6	7.9	2.8	9.9	0.7	7.5	8.1	7.9

Note: Detail may not add, due to rounding.

a) The historical data for the U.S. current account exclude the effects of changes in exchange rates on the dollar values of direct investment asset and liability stocks. They thus differ somewhat from the official data as currently recorded and published by the U.S. authorities.

b) Derived from values and unit values on a *National Account* basis. Certain adjustments to balance of payments basis are therefore excluded, the most important being the omission of foreign trade of the Virgin Islands.

account deficit is projected to fall only slightly to just under $100 billion (1¾ per cent of GNP by 1991).

With monetary policy committed to containing inflation, GNP growth is likely to fall short of its potential rate (estimated at 2¾ per cent), and the unemployment rate could edge upward. As the unemployment rate is now in the neighbourhood of the natural rate, inflation is expected to stabilise over the projection period, despite a near-term increase in labour costs due to the recent increase in social security costs and the rise in the minimum wage. The recent increases in farm and energy prices are expected to unwind, and overall consumer price inflation may settle at about 4½ per cent.

The risks attaching to the projection seem relatively evenly balanced between greater short-term weakness and higher inflation. The effects of recent financial disturbances should remain limited and localised, and financial tensions are more likely to amplify a downturn than precipitate one. But there are substantial uncertainties attaching to monetary policy effects which could yet have marked effects on credit availability. Alternatively, since the economy already seems to be operating at or near to its "natural" rate of unemployment, any inadvertent easing of policy would be liable to create inflationary pressures which would require much slower growth to correct. The current account deficit also remains a source of risk. Although fears about the unsustainability of the external deficit have been assuaged, pressures on the dollar could re-emerge at some stage, forcing the Federal Reserve to tighten. The persistence of the trade deficit could also lead either to greater pressure for protectionism or to restrictions on foreign direct investment, which could have destabilising consequences.

NOTE

1. The government has to cover the gap between failed thrifts' liabilities and the market value of their assets. Under the 1989 rescue plan it was estimated that a cash infusion of $50 billion was needed to meet the costs of closing and restructuring insolvent thrifts. However, the ultimate cost will be higher, depending on *i)* the number of failed thrifts; *ii)* the market value of thrift assets; and *iii)* the time taken to wind up loss-making thrifts. Moreover, in the process of resolving the problem thrifts, cash far in excess of $50 billion will be needed to finance the purchase of assets which will subsequently be sold. The Administration has indicated a range of $40 billion to $100 billion in working capital in the next two years to allow the build-up and sale of assets.

JAPAN

Key features

The Japanese economy continued to expand rapidly in the second half of 1989, with further progress in external adjustment. Total domestic demand increased at an annual rate of close to 7 per cent, mainly supported by buoyant business investment and a reacceleration of private consumption. While the labour market has tightened further, wage increases have remained modest, and, following the introduction of the general consumption tax, the rate of inflation has stabilised at about 2½ per cent. The net foreign balance continued to decline in volume terms, and the current external surplus fell to below $60 billion in 1989, a reduction of more than $22 billion compared with the previous year, though there were signs in the first quarter of 1990 that the contraction of the current-account surplus had come to an end.

The policy stance has shifted in emphasis towards containing inflation pressures and expectations. In response to some upward pressure on domestic wages and the steady depreciation of the yen (amounting to slightly less than 30 per cent between the peak reached in late 1988 and the trough in April 1990), the monetary authorities raised the discount rate four times within the last twelve months, bringing it from a historic low of 2½ per cent to 5¼ per cent in March 1990. Fiscal policy has been broadly neutral on a cyclically-adjusted basis, with the government financial balance improving further.

Domestic demand may expand by 5 per cent in 1990, led by household consumption and buoyed by

JAPAN

Demand, output and prices

Percentage changes from previous period, seasonally adjusted at annual rates, volume (1980 prices)

	1987 current prices trillion Y	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Private consumption	199.3	4.3	5.1	3.5	4.1	3.6	2.5	4.6	4.0	3.7	3.6	3.6
Government consumption	33.0	–0.6	2.2	2.1	1.6	1.6	2.1	1.5	1.6	1.6	1.6	1.6
Gross fixed investment	99.3	10.4	12.6	10.9	7.2	4.1	11.2	11.8	6.2	4.7	4.0	3.8
Public[a]	23.7	7.6	5.6	–1.4	0.4	1.6	0.9	–2.1	1.1	1.4	1.7	1.7
Private residential	19.5	22.4	11.9	2.9	3.4	2.8	1.7	4.3	3.2	2.9	2.9	2.7
Private non-residential	56.1	8.2	15.5	17.8	10.2	5.1	17.6	18.5	8.5	6.0	4.9	4.6
Final domestic demand	331.6	5.7	7.4	6.0	5.0	3.6	5.5	6.9	4.6	3.9	3.5	3.5
* change in stockbuilding	0.8[b]	–0.3	0.3	–0.1	0	0.1	0.1	–0.2	0.1	0.2	0.1	–0.1
Total domestic demand	332.4	5.4	7.6	5.9	5.0	3.6	5.6	6.7	4.7	4.0	3.6	3.4
Exports of goods and services	43.8	3.9	8.6	15.4	13.4	9.6	14.2	13.8	15.3	9.4	9.5	9.9
Imports of goods and services	30.7	8.7	20.7	21.4	14.9	7.8	23.6	18.0	16.2	9.6	7.4	6.9
* change in foreign balance	13.1[b]	–0.6	–1.7	–1.0	–0.4	0.3	–1.5	–0.8	–0.3	–0.1	0.4	0.6
GNP at market prices	345.5	4.6	5.7	4.9	4.7	4.0	4.0	5.9	4.4	3.9	4.0	4.0
GNP implicit price deflator	–	–0.3	0.6	1.5	2.7	2.6	1.8	1.8	3.0	2.9	2.5	2.4
Memorandum items												
Consumer prices[c]	–	–0.2	–0.1	1.7	2.8	2.5	1.9	2.2	3.0	2.9	2.5	2.4
Industrial production[d]	–	3.4	9.5	5.9	3.6	4.4	8.2	1.0	4.5	4.3	4.4	4.7
Unemployment rate	–	2.8	2.5	2.3	2.2	2.3	2.3	2.2	2.2	2.3	2.3	2.3

* As a percentage of GNP in the previous period.
a) Including public corporations.
b) Actual amount of stockbuilding and foreign balance.
c) National accounts private consumption deflator.
d) Mining and manufacturing.

business fixed investment. Recent surveys suggest that investment is likely to grow strongly in 1990, reflecting a high level of capacity utilisation and the need for labour-saving investment under conditions of acute labour shortage, in particular in certain skill categories. Some slowing of the growth of investment and of consumption is envisaged in 1991; domestic demand may then expand at 3½ per cent. The continued growth of domestic demand should generate sustained output growth and employment expansion, and the unemployment rate is projected to remain around 2¼ per cent. Reflecting labour market tightness, inflation is likely to be more rapid during the projection period than in 1989. External adjustment in volume terms may slow in 1990, and – on the technical assumption of an unchanged exchange rate of Y 159 to the dollar embodied in OECD projections – reverse in 1991. The current external surplus is projected to decline further to below $50 billion in 1990 (1.8 per cent of GNP), but to rise again in 1991.

Against the background of the induced upward pressure on domestic prices and a possible resurgence of the external imbalance, the weakening yen has become a major concern of the authorities. Downward pressure on the yen in late 1989 and the first four months of 1990, despite narrowing interest-rate differentials *vis-à-vis* the dollar, seems related to increasing outflows of net foreign direct investment. Such outflows may continue, given the high domestic saving ratio, real asset appreciation, and further relocation of production overseas by Japanese multinational corporations; the latter takes place not only to avoid trade barriers, but also to exploit comparative cost advantages. The prospects for other capital flows, in particular those associated with exchange-rate expectations, are more difficult to assess. With the internationalisation of the Japanese economy proceeding rapidly, both further liberalisation of the domestic market – still subject to various regulations and administrative guidance – and policies to stimulate competition, are needed both for the benefit of Japanese consumers and to avoid trade frictions.

Recent trends

Recent indicators confirm that household consumption recovered in the fourth quarter in 1989 after being temporarily depressed following the introduction of the general consumption tax in April 1989, and the strength continued in the first quarter of 1990. The persistent high level of capacity utilisation, high profitability of firms and labour shortages have resulted in continued strength of business investment demand. Export volumes, which had stagnated during 1989 (–0.1 per cent in the fourth quarter, year-on-year) started to increase again in the first quarter of 1990, while merchandise imports, which grew strongly during 1989 (9 per cent) decelerated somewhat recently in the face of the weakening of the yen.

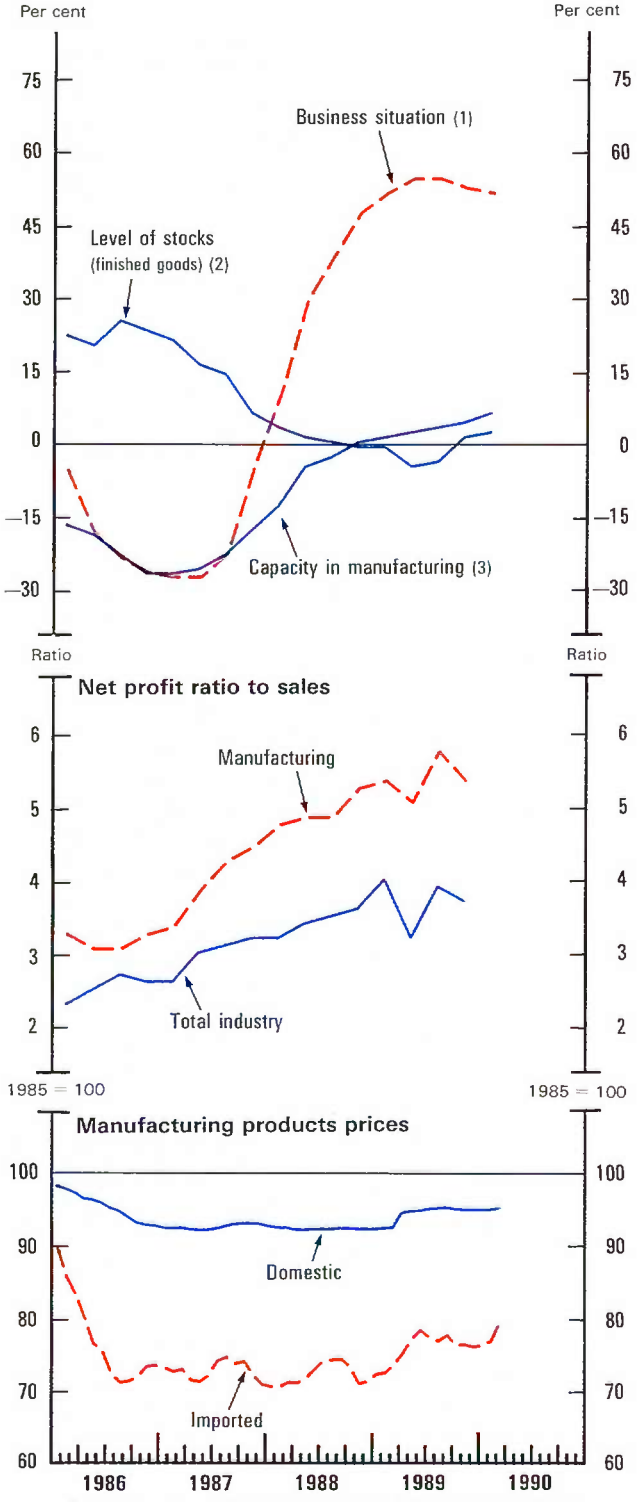
There has been a notable divergence between demand and output indicators: the growth of industrial production in the second half of 1989 was only 1.0 per cent at annual rate. This is a consequence of stock adjustments, following a sharp rise in output in the first quarter of 1989 in anticipation of the introduction of the general consumption tax, and a rapid upgrading of the quality of domestic output (coinciding with the replacing of lower quality products by imports) which is not properly reflected in the industrial production index. Labour-market conditions have generally remained tight, and the rate of unemployment fell to 2.0 per cent in March 1990, though overtime hours worked declined from the peak reached in mid-1989. Inflation (measured by the consumer price index), which was running at 3½ per cent (year-on-year) in the first quarter of 1990, fell to 2½ per cent in April with the once-for-all effect from the introduction of the general consumption tax having come to an end.

Policies

Monetary policy has progressively tightened since mid-1989, and the discount rate was raised four times by a cumulative total of 2¾ percentage points since the end of May 1989, most recently by a full percentage point in March 1990. Monetary restraint has been intended to reduce inflation pressures, arising from tight labour markets, and to brake the tendency toward higher land prices nationwide. The aim of stabilising the yen exchange rate, which fell by slightly less than 30 per cent from the peak reached in late 1988 (around one-third of the previous appreciation since autumn of 1985) has also been an aspect of this policy. The effects of monetary policy tightening have been mixed. On the one hand, the rise in short-term interest rates has been accompanied by a sharp fall in bond and stock prices in early 1990, largely reversing the latter's 20 per cent rise recorded in the course of 1989; some recovery has been observed toward the end of May 1990. On the other hand, the yen sharply declined despite a significant narrowing of interest rate differentials *vis-à-vis* the dollar. The growth of broad money supply (M2+CD), which stabilised during 1989 at around 10 per cent, increased to slightly below 12 per cent (year-on-year) in the first quarter of 1990. This acceleration partly reflected an increasing shift of

JAPAN

BUSINESS SITUATION

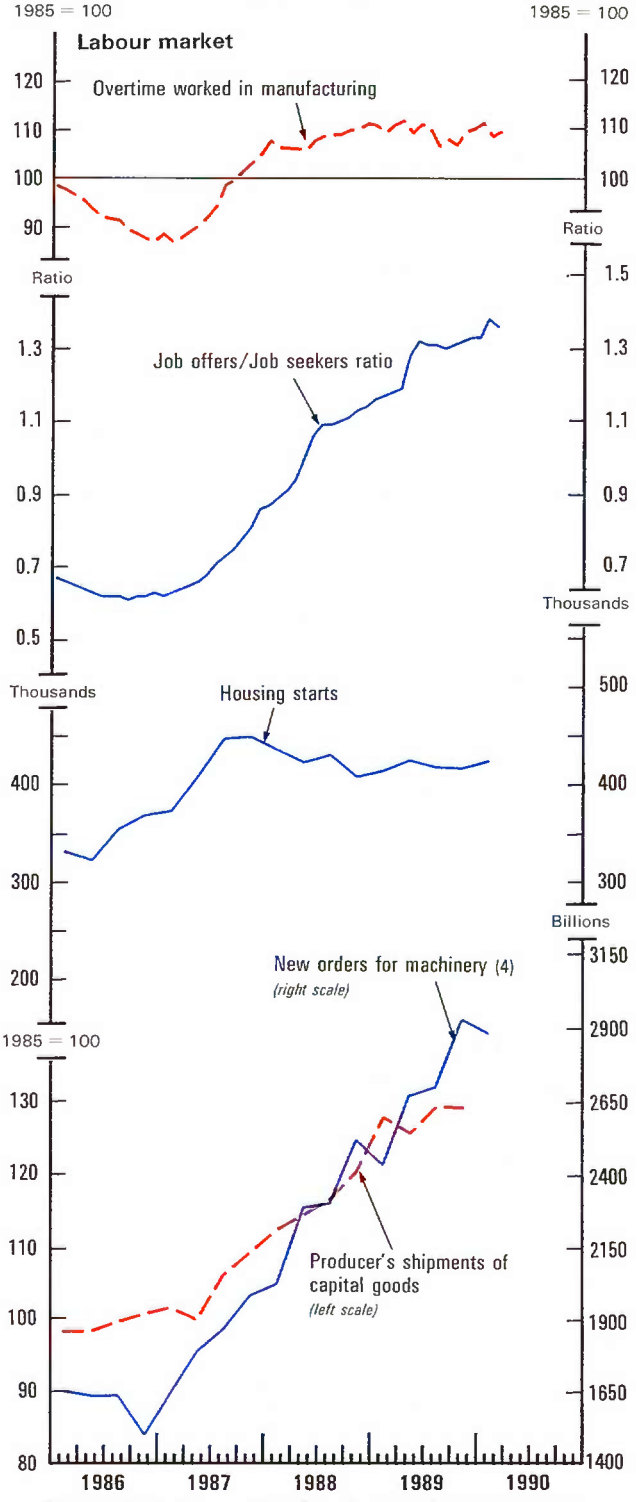


— Forecasts: values referring to the expected situation are attributed to the end of the 4-month period.

1. Per cent of replies "good" *minus* per cent of replies "bad".
2. Per cent of replies "too high" *minus* per cent of replies "too low".
3. Per cent of firms with insufficient capacity *minus* per cent of firms with excessive capacity.
4. Excluding vessels and electric power.

RECENT INDICATORS

Seasonally adjusted



Sources: Bank of Japan, *Short-Term Economic Survey of Principal Enterprises in Japan*, EPA, *Japanese Economic Indicators*.

JAPAN

Appropriation account for households

Percentage changes from previous year

	1987 trillion yen	1987	1988	1989	1990	1991
Compensation of employees	188.7	4.1	6.1	7.4	7.3	6.9
Income from property and other	57.9	–1.3	1.5	3.2	5.2	4.1
Current transfers received	60.4	6.5	6.3	6.4	7.9	6.8
Total income	307.0	3.5	5.3	6.4	7.0	6.4
Less: direct taxes	25.0	8.5	4.4	11.8	9.1	7.9
current transfers paid	50.5	5.6	8.7	6.7	8.2	7.3
Disposable income	231.6	2.5	4.6	5.8	6.5	6.0
Consumers' expenditure	196.7	4.2	4.9	5.2	7.0	6.3
Saving ratio (as a percentage of disposable income)	–	15.1	14.8	15.3	14.9	14.7

financial assets away from shares and postal savings towards large-denomination bank deposits and Money Market Certificates with market-determined interest rates. The minimum face value of these instruments have been lowered recently to ten million and one million yen respectively.

Fiscal policy has pursued the medium-term objective of continued budget consolidation, resulting in a broadly neutral policy stance on a cyclically-adjusted basis. Tax revenues continued to grow more rapidly than output, mainly due to strong corporate profit performance, capital gains from asset appreciation, and a rising volume of security transactions. This, combined with public expenditure growing less rapidly than GNP, led to a further rise in the general government surplus, to about 2¾ per cent of GNP in 1989. The medium-term fiscal strategy aims at continued reductions of the ratio of bond-issues to total expenditures (General Accounts of central government) from 8.4 per cent projected in FY 1990, to below 5 per cent by FY 1995, against the background of a high ratio (by international standards) of gross debt to GNP (73 per cent in 1988).

Structural reform has proceeded in various areas. Regulation of the opening of gasoline stations has been abolished effective April 1990; retail prices, which have been high by international standards (particularly excluding taxes), are likely to be lowered through the intensification of competition due to deregulation measures. Also, regulation of entry and price setting in the trucking industry is to be relaxed to some extent by the end of 1990, which will contribute to improve the efficiency of the distribution network.

Prospects

The major forces shaping the short-term outlook in Japan are: the past tightening of monetary policy; a further slight increase in the general government surplus; continued strength in world trade (projected to grow at the same rate as that recorded in 1989); and basically maintained business confidence in 1990 as reflected in recent investment intention surveys. With employment and wages rising, household consumption should lead domestic demand during 1990. Recent surveys show continued strength in investment plans for FY 1990 (which runs from April 1990 to March 1991)[1]. The growth of final domestic demand may slow to 3½ per cent in 1991, mainly due to a deceleration in business fixed investment from an exceptionally high rate in 1989. External adjustment may reverse in 1991 with growth of imports of goods and services decelerating more sharply than that of exports. Overall, GNP is projected to grow by 4¾ per cent in 1990, and to slow to 4 per cent in 1991, roughly in line with potential.

The rate of unemployment is likely to remain at the low level of 2¼ per cent throughout the projection period, and wage rises may pick up – by ½ to 1 percentage point – from the 4.7 per cent increase recorded in 1989. Import prices may also put upward pressure on domestic prices. As a result, inflation (measured by the consumption deflator) may accelerate to 2¾ per cent in 1990, about 1 percentage point more than in 1989. A slight deceleration is likely in 1991, as the effects of tight labour markets will be countered by the gradual erosion of the effect of yen depreciation, the phasing out of price effects from the introduction of the

JAPAN

Balance of payments

Value, $ billion

	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Seasonally adjusted										
Exports	259.8	269.6	277	307	136.3	133.3	136	141	149	158
Imports	164.8	192.7	208	226	92.8	99.8	102	106	111	116
Trade balance	95.0	76.9	69	81	43.4	33.5	34	35	39	42
Non-factor services, net	–32.3	–39.0	–45	–52	–19.1	–19.8	–22	–23	–25	–27
Investment income, net	21.0	23.4	29	36	9.9	13.5	14	15	16	19
Private transfers, net	–1.1	–1.0	–1	–1	–0.5	–0.5	–1	–1	–1	–1
Services and private transfers, net	–12.4	–16.5	–17	–17	–9.7	–6.8	–8	–9	–9	–8
Official transfers, net	–3.0	–3.3	–4	–4	–1.6	–1.6	–2	–2	–2	–2
Current balance	79.6	57.2	49	59	32.1	25.1	24	24	27	32
Memorandum items (s.a.a.r.)										
Per cent changes in volume[a]										
Exports	4.3	4.4	6.6	8.5	3.3	1.7	8.7	7.3	8.9	9.0
Imports	16.7	7.9	6.9	5.6	7.8	8.9	6.7	5.5	5.6	5.6

Note: Detail may not add, due to rounding.
a) Customs basis.

general consumption tax in April 1989, and a slowdown of domestic demand growth. And the continuing penetration of domestic markets by imported manufactured goods puts competitive pressure on domestic producers.

Given the projection of a relatively modest increase in wages and the technical assumption of a stable yen, Japan's relative unit labour costs in manufacturing (measured in common currency) are projected to fall further, by a cumulative 10 per cent over the 1990-91 period, generating gains in cost competitiveness. As a result, export volume growth may catch up with export market growth in 1990 onwards. Growth in merchandise import volumes is projected to slow in 1991 in line with final domestic demand, to 5½ per cent, though the growth rate of import volumes of manufactures is likely to be higher. The terms of trade are projected to fall by a cumulative 2½ per cent over the 1990-91 period, reflecting higher inflation abroad. Overall, the trade surplus is projected to decline further in 1990, but to rise again in 1991, exceeding the level recorded in 1989.

Net investment income, which increased by $4 billion in the second half of 1989, reflecting higher overseas interest rates and the continuing accumulation of net external assets, is likely to grow rapidly. This will offset a growing increase in the non-factor service deficit, and the overall invisible deficit is expected to stabilise over the projection period. As a result, the current-account surplus is projected to fall to below $50 billion in 1990, but to rise again to some $60 billion, just over 2 per cent of GNP, in 1991.

NOTE

1. The February 1990 investment intention surveys of growth of nominal investment expenditure in the manufacturing sector produced the following results:

Survey	Period covered	
	FY 1989 (estimate)	FY 1990 (plan)
	(Percentage growth rate)	
Bank of Japan	24.9	7.5
Nikkei	26.6	10.5
Japan Development Bank	26.7	10.1

The growth in investment planned in February is in many cases revised upwards during the year.

GERMANY

Key features

As the economic and monetary union with the German Democratic Republic (GDR) approaches its realisation, the German economy is facing its most important challenge since the post-war reconstruction period. On 18th May 1990, the Federal Republic and the GDR Governments signed a treaty setting out the key provisions as to the responsibilities and modalities for the conduct of fiscal, monetary and social policies. The present projection incorporates economic interactions between the two regions, in terms of both real and financial flows that can be expected to affect the initial period after unification. However, given the unprecedented nature of such an integration process, orders of magnitude are difficult to establish and the projections must be interpreted with extreme caution[1].

Even before the creation of an economic union had become a real possibility, the German economy seemed set for a period of expansion, more or less in line with its potential output growth which seems likely to be boosted by migration from central and eastern Europe. With economic and monetary integration of the two parts of Germany, the projected path of output of the Federal Republic will become somewhat steeper, and it may take longer to bring down inflation from rates now expected this year. Consumer expenditure will be boosted by a release of GDR savings, while investment can be expected to be stimulated by the prospect of the larger "domestic" market and by GDR investment requirements. A considerable part of the capital stock in the GDR is either economically obsolete or has to be changed for environmental reasons. This is true not only for the business capital stock, but also for infrastructure.

While the stepped-up net transfer of goods and services to the GDR will be facilitated by the projected slowdown of demand in some of Germany's major

GERMANY

Demand, output and prices

Percentage changes from previous period, seasonally adjusted at annual rates, volume (1980 prices)

	1987 current prices billion DM	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Private consumption	1 112.7	3.5	2.7	1.7	3.9	3.5	1.2	1.7	4.2	5.4	3.0	2.8
Government consumption	397.0	1.5	2.2	–0.8	1.4	1.7	–2.5	–0.8	2.1	2.1	1.6	1.5
Gross fixed investment	390.0	2.2	5.9	7.2	6.8	5.3	18.4	–3.5	12.6	6.2	5.3	4.5
Public	47.8	0.2	2.0	4.4	5.3	6.0	29.1	–20.2	21.6	5.0	5.8	7.5
Private residential	103.7	–1.4	4.8	5.2	5.1	3.9	20.0	–2.4	9.2	5.0	3.7	3.2
Private non-residential	238.4	4.2	7.3	9.6	6.6	5.0	16.5	4.2	8.1	6.1	4.8	4.3
Final domestic demand	1 899.6	2.8	3.3	2.4	4.0	3.6	4.0	0	5.6	4.9	3.3	2.9
* change in stockbuilding	5.5[a]	0.1	0.4	0.4	0	–0.2	–0.8	2.3	0	–2.1	0.4	0.7
Total domestic demand	1 905.1	2.9	3.7	2.8	4.0	3.4	3.1	2.4	5.5	2.7	3.6	3.6
Exports of goods and services	638.7	0.8	5.8	10.4	7.2	8.4	19.0	–0.8	8.9	12.0	7.6	6.7
Imports of goods and services	526.1	4.8	6.3	7.3	8.0	9.0	10.0	3.3	9.3	10.0	8.9	8.4
* change in foreign balance	112.6[a]	–1.1	0	1.3	0	0.1	3.2	–1.4	0.2	1.1	–0.1	–0.3
GNP at market prices	2 017.7	1.7	3.6	4.0	3.9	3.4	6.2	0.9	5.5	3.7	3.4	3.1
GNP implicit price deflator	–	2.0	1.5	2.5	3.0	3.4	3.1	1.9	3.2	3.7	3.3	3.3
Memorandum items												
Consumer prices[b]	–	0.6	1.2	3.1	2.6	3.3	4.9	1.5	2.6	3.6	3.2	3.2
Industrial production	–	0.3	3.7	4.8	4.9	4.1	3.7	6.1	4.5	4.5	4.0	3.8
Unemployment rate	–	6.2	6.1	5.5	6.1	5.9	5.6	5.5	6.0	6.2	6.1	5.7

* As a percentage of GNP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts private consumption deflator.

trading partner countries as well as more rapid imports, there will also be greater pressure on domestic resources. However, while the potential real and financial flows are huge, the absorptive capacity of the GDR economy must realistically be seen as rather limited, at least in the initial phase of the unification process. If capacity constraints of the FRG economy are also taken into consideration, the growth of output in the FRG in 1990 may be maintained at its high 1989 rate of some 4 per cent. On the assumption that monetary policy continues to bear down on inflation, real GNP growth can be expected to slow down thereafter to a rate more closely in line with its potential rate of growth.

Concerns about possible inflationary consequences have been spurred by uncertainties about the size of the "monetary overhang" in the GDR and the budgetary implications for the Federal Government and the social-security system. Some of these worries may seem exaggerated, given the credibility and the resolve of the Bundesbank as to its anti-inflationary policy stance. For this reason, this projection incorporates the assumption that the recent sharp rise of interest rates will not give way to a decline before mid-1991. Moreover, much of the initial demand effects from the release of GDR savings may be directed towards consumer goods, where the supply is relatively elastic, both from domestic and foreign sources. The unified labour market means greater elasticity of potential labour supply in the Federal Republic, tending to damp increases in the supply price of labour. Monetary union between a high- and a low-income region usually leads to large calls on government funds for infrastructure investments and flanking social measures. However, allowing for several likely offsets and more buoyant official projections of revenues due to higher economic growth, the combined public sector borrowing requirement for the two regions may not exceed some 3 to 3½ per cent of GNP in 1991. Over the projection period, by changing priorities in public spending plans, increased scope for higher GDR-related transfer payments could be created; the reduction of migration embodied in the present projection should release resources compared with the non-unification case; and higher economic growth will entail stronger revenue growth. Moreover, over the medium term, subsidies to the border areas and to Berlin can be phased out and defence spending may also be reduced. To cover two-thirds of prospective debt-financed GDR government spending, a German "Unity Fund" has been set up, worth DM 115 billion over the next 4½ years.

The recent rise in long-term interest rates, apart from mirroring somewhat higher inflation expectations and increased uncertainties associated with the likelihood of a rapid move to full currency union, may also reflect the market's anticipation of high returns on capital investments in the GDR. In conjunction with a policy-mix of tighter monetary conditions and a temporarily more expansionary fiscal stance, there could be upward pressures on the real exchange rate, as capital inflows are induced and capital outflows to the countries other than the GDR become relatively less attractive, although recently such pressures *vis-à-vis* EMS-partners have not been in evidence.

Recent trends

The last few months of 1989 were marked by a significant shift away from foreign towards domestic sources of demand growth. Indeed, spurred notably by business investment, total domestic demand increased by more than 11 per cent (at an annual rate) in the last quarter of 1989, while real net exports fell by a third. Another welcome feature was the pick-up of real consumer expenditure which had been virtually flat in the two preceding quarters. This surge of consumer spending reflected massive purchases by GDR residents and tourists from central and eastern Europe but also spending in anticipation of income-tax cuts in 1990. Consumer spending remained strong in the early months of this year, while, judged by order inflows, investment spending tailed-off. Activity in the residential construction sector regained strength after a mid-1989 lull, and was, for the third consecutive year, boosted by mild weather conditions in early 1990. Export volumes fell slightly in the last quarter of 1989, as demand in some major partner countries showed signs of flagging and supply constraints in internationally-competing sectors intensified. More recently, however, export growth has resumed again, which, combined with strong domestic demand, permitted output to grow as much as 2 to 2½ per cent (actual rate) in the first quarter of 1990.

At the turn of 1989 capacity utilisation in manufacturing reached its highest level for 20 years and growing shortages of skilled labour have been only partly mitigated by the large influx of relatively well-trained migrants from the GDR. With continued high employment growth, unemployment after a rise in the last months of 1989, has resumed its downward slide. Notwithstanding evidence of increasing supply constraints, the price climate has been calm in the past few months, benefiting from an exchange-rate-induced decline in import prices, and continued low unit labour cost increases. Major wage settlements have recently been concluded with wage increases around 6 per cent,

GERMANY

Appropriation account for households

Percentage changes from previous year

	1987 billion DM	1987	1988	1989	1990	1991
Compensation of employees	1 084.2	4.1	3.9	4.4	6.4	6.3
Income from property and other[a]	456.5	4.5	4.4	8.6	6.0	7.3
Current transfers received[b]	412.5	5.4	4.7	3.7	4.8	5.5
Less: interest on consumer debt	17.8	–2.5	1.6	14.6	15.0	12.3
Total income	1 935.4	4.5	4.2	5.2	5.9	6.3
Less: direct taxes	209.5	6.7	2.5	10.3	–4.6	9.7
current transfers paid	457.0	4.5	4.7	4.7	5.9	4.7
Disposable income	1 269.0	4.2	4.3	4.5	7.7	6.3
Consumers' expenditure	1 112.7	4.1	4.0	4.9	6.6	6.9
Saving ratio (as a percentage of disposable income)	–	12.3	12.6	12.2	13.2	12.7

a) Excluding retained earnings of unincorporated business.
b) Public and private.

but without further reductions in working time. Producer prices have been virtually stable since the autumn of 1989, and underlying inflation, measured by the increase in consumer prices excluding food and energy, has been running at an annual rate of around 2½ per cent.

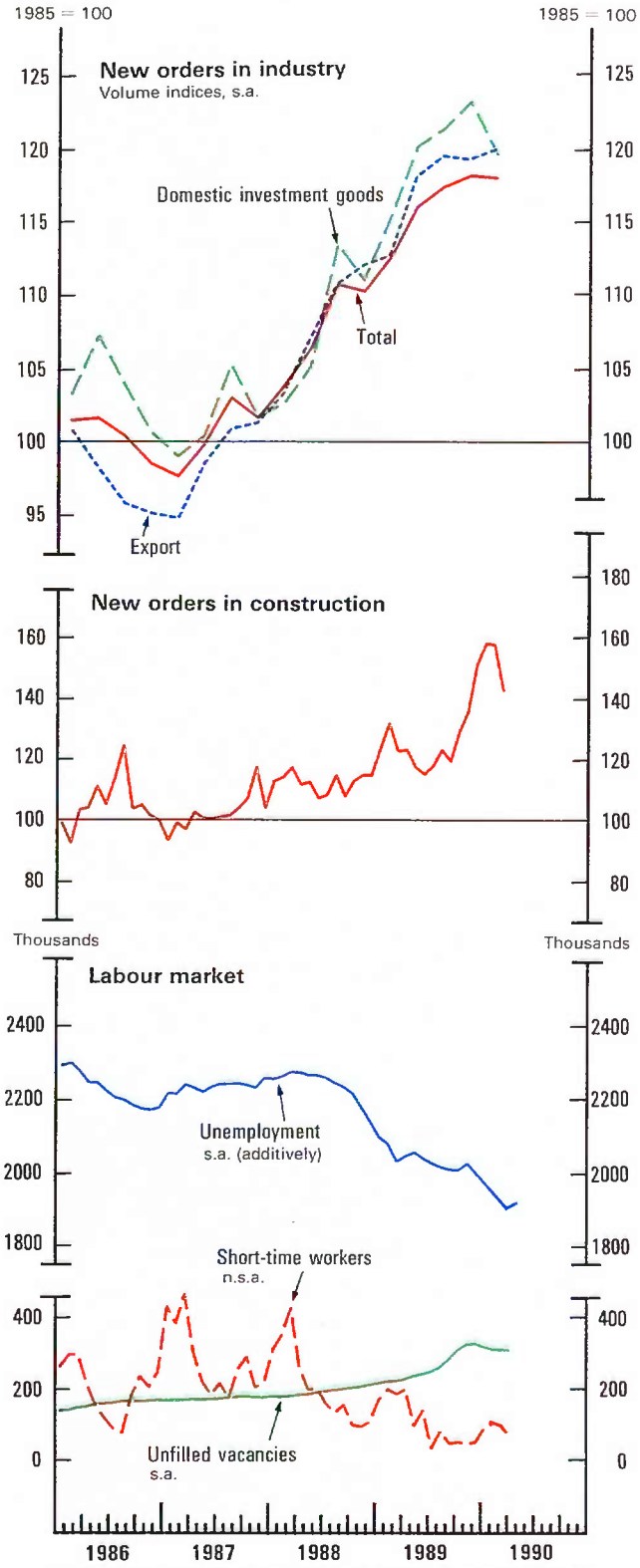
Policies

Monetary conditions were progressively tightened between mid-1988 and autumn 1989, in order to counteract potential inflation risks arising from the temporary weakness of the Deutschemark and to prevent exchange-rate movements which might entail larger external surpluses. In addition, following three years of monetary overshooting, the Bundesbank wished to re-assert its credibility in terms of its money supply policy. The discount rate and the Lombard rate were raised in a number of steps to 6 per cent and 8 per cent respectively, involving in particular a full percentage point increase in October 1989. Since then, the stance of policy has not changed much, with day-to-day money-market rates oscillating at around 7.8 per cent. The progressive tightening of money-market conditions has been mainly fostered by repeated increases in the cost of bank liquidity, with interest rates on repurchase agreements rising from 5.2 to 5.5 per cent in January 1989 to 7.8 to 8.25 per cent in March 1990. This allowed the Bundesbank to keep monetary expansion within its target in 1989, as the growth of the broadly-defined money stock M3 increased by 5 per cent between the fourth quarters of 1988 and 1989. When setting the quantitative target for the growth of the broad money supply in 1990, the Bundesbank decided to return to a range approach (4 to 6 per cent in the year to the fourth quarter 1990). At the same time, it re-affirmed its anti-inflation stance by allowing for only 2 percentage points of "unavoidable" inflation in 1990 when calculating the target range.

Fiscal policy was tightened in 1989. With the rise in indirect taxes, notably on energy products, and the benefit from rapid growth of economic activity, the general government financial balance (on a national accounts basis) recorded a small surplus for the first time since the early 1970s. Tax revenues were boosted by renewed fiscal drag after the 1988 tax cut, by the short-lived imposition of a withholding tax on interest income (during the first six months of 1989) and by the strong rise in indirect tax receipts. Moreover, growth of total outlays remained under 3 per cent, mainly reflecting the effects of the Health Reform and a restrictive recruitment policy. Within current transfer payments, lower-than-budgeted unemployment-related outlays were more than offset by higher pension payments and the unforeseen outlays to the large inflows of ethnic Germans and GDR citizens ("welcome money" on entry to the Federal Republic, income-support payments, and various integration programmes). The 1990 Federal Budget was voted in December 1989, entailing a rise in the borrowing requirement on an administrative basis from DM 20 to DM 25 billion (1.1 per cent of GNP). This deterioration mainly reflected the DM 25 billion tax cut implemented on 1st January 1990. However, federal expenditure growth was also envisaged to move up to the 3 per cent

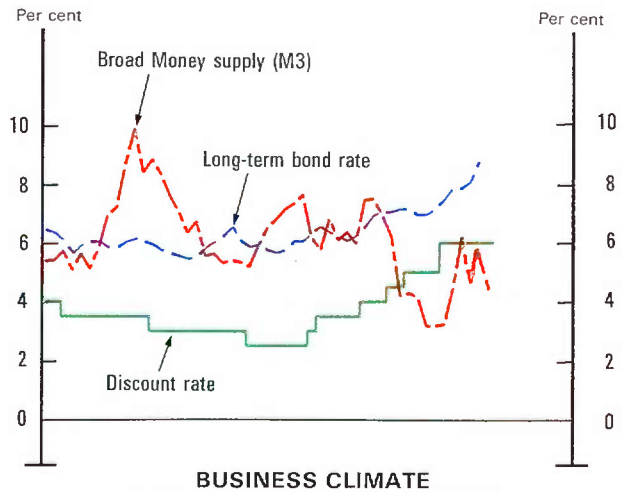
GERMANY

RECENT INDICATORS

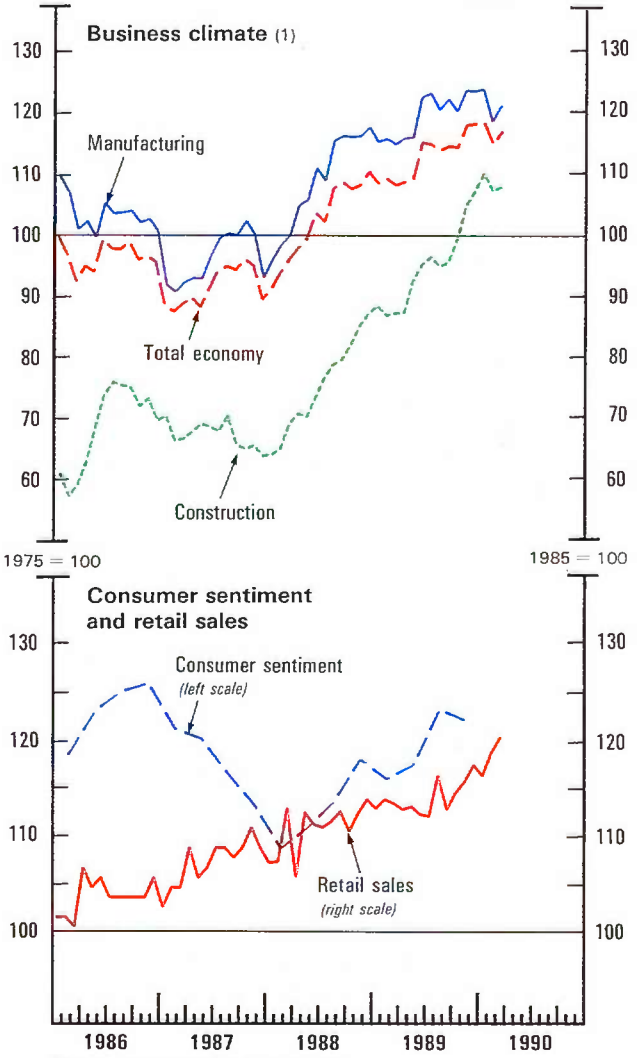


1. Weighted average of present and future (6 months ahead) business situation. A level of 100 corresponds to "normality".

MONETARY POLICY AND CREDIT CONDITIONS



BUSINESS CLIMATE AND CONSUMER CONFIDENCE



Sources: Deutsche Bundesbank, IFO.

GERMANY[a]

Balance of payments

Value, $ billion

	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Seasonally adjusted										
Exports	309.0	326.3	391	430	160.3	166.0	191	200	210	220
Imports	230.0	247.8	296	335	120.7	127.1	143	152	162	173
Trade balance	79.0	78.5	95	95	39.7	38.9	47	48	48	47
Non-factor services, net	–16.8	–17.9	–22	–25	–8.4	–9.5	–11	–11	–12	–13
Investment income, net	4.6	10.6	12	15	5.5	5.0	6	6	7	8
Private transfers, net	–7.0	–6.9	–8	–8	–3.3	–3.6	–4	–4	–4	–4
Services and private transfers, net	–19.2	–14.3	–18	–19	–6.2	–8.0	–9	–9	–9	–9
Official transfers, net	–11.2	–11.6	–14	–14	–5.2	–6.4	–7	–7	–7	–7
Current balance	48.5	52.7	63	62	28.2	24.5	31	32	31	30
Memorandum items (s.a.a.r.)										
Per cent changes in volume[b]										
Exports	7.1	8.8	6.4	6.3	9.1	1.8	8.8	6.4	6.3	6.3
Imports	6.6	7.9	8.6	9.9	4.5	8.7	8.1	9.4	10.1	10.0

Note: Detail may not add, due to rounding.

a) Balance of payments statistics do not include tansactions between the Federal Republic of Germany plus Berlin (West) and the German Democratic Republic plus Berlin (East).

b) Customs basis.

guideline as reduced unemployment payments would be outpaced by increased family benefits and stronger immigration-related transfer payments. The budget also included the special multi-year subsidy programme for housing construction, worth DM 2 billion in 1990. In response to the rapidly-deteriorating economic and political situation in the GDR, a first DM 7 billion supplementary budget was voted in March 1990, and a second one – DM 4.8 billion – was proposed in May 1990. However, with a substantial increase in projected tax revenues, reflecting stronger growth expectations, the federal borrowing requirement should increase only moderately to some DM 32.5 billion, or 1¼ per cent of GNP.

A wide range of structural policy measures have been implemented or announced. With the 1986-90 Tax Reform, statutory marginal personal tax rates have been reduced over the whole range of the income scale, and the uniform tax rate on retained profits was lowered. The tax system is now more equitable, simpler, and more transparent. Privatisation proceeds amounted to DM 3 billion in 1989. The 1989 Health Reform limited the coverage of medical expenses and increased cost-sharing, with the objective of reducing contribution rates in 1990 and stabilising them afterwards. The 1989 Pension Reform aims at curbing the rapidly-growing burden on the federal budget deriving from transfers to the pension system, mainly by adjusting pensions to net wages and by raising the retirement age. The monopoly of the Federal Post Office was broken into three public enterprises responsible for mail services, postal banking services and telecommunications, leaving, however, about 80 per cent of telecommunications turnover under public monopoly. Shop-opening hours were made more flexible and the Cartel Law was further strengthened. The latest Subsidy Report confirmed the steady rise in subsidies until 1989. However, the 1990 tax reform embodies substantial reductions in the level of indirect subsidisation through tax-credits and exemptions. The report from the Deregulation Committee has been delayed a year, but partial evidence has been published in the spring.

Prospects

The present set of projections must be seen against the unusual degree of political and economic uncertainties concerning developments over the next year or two. While the modalities of the economic and monetary union with the GDR, which will be in place by 1st July 1990, are known by now, hard facts about the state of the GDR economy are still sparse. Hence, a number of working assumptions had to be made concerning the size of the net external impulse and of the fiscal transfers to the GDR. The budgetary consequences of reunification are assumed to be 1 per cent of GNP in 1990 (including the supplementary budgets already noted), building up to 1½ per cent in 1991. Migration should slow significantly in the second half

of 1990 and thereafter. The extra net impulse to net exports of the FRG is projected to be relatively moderate, attaining DM 18, 24 and 30 billion (annual rates) in the three half-years to end-1991, given institutional, legislative and behavioural adjustment lags. Moreover, monetary conditions are likely to become somewhat tighter in response to higher demand pressure, containing inflationary impulses from the integration process.

While the net demand impulse from the GDR will offset some of the slowing of market growth in western industrialised countries, domestic demand is seen to be the main dynamic force behind the continued strong rise in economic activity in the Federal Republic. With wage settlements resulting in effective wage increases of the order of 6 per cent and the large cuts in income taxes embodied in the last stage of the 1986-90 Tax Reform, households' real disposable income will rise sharply in 1990. Likely delays in adjusting spending to the high 1990 income gains should also help to support private consumption in 1991 when real income growth is expected to slow and fiscal drag will resume. With the high degree of business confidence currently prevailing, the prospects for larger markets in central and eastern Europe and the approaching of the unified EC market, business investment may grow over most of the projection period as strongly as in 1989. Higher real interest rates are not expected to have a major moderating effect on business capital spending given the very high degree to which it is self-financed. Some investment spending may be shifted, however, from the FRG to the GDR. Considerable pressures may also persist in the residential construction sector for demographic and migration reasons, and capacity limits may become increasingly tight. Contrary to developments up to the end of 1989 and despite the real transfer of resources to the GDR, net real exports may not add to output growth, as demand for German products weakens in western markets and the strong domestic demand growth is increasingly met by rising import volumes. In all, and in parallel with domestic demand, real GNP may continue to grow in 1990 at the same high rate as in 1989, slowing only little in 1991.

As the rise in economic activity extends into the 1990s, employment growth may continue to be substantial by German standards as cyclical productivity reserves are progressively used up. The heavy inflow of ethnic Germans from central and eastern European countries and immigrants from the GDR has favourable effects on the age structure of the population, the mobility of the labour force and the economic potential of the FRG economy. Lower entry barriers to entrepreneurship and employment for immigrants integrating in the German labour market would reinforce these effects. However, given the rapid growth of the available stock of immigrant labour, unemployment may temporarily rise again. With unemployment remaining relatively high, and given the increased supply elasticity in a more unified labour market, wage growth should remain within acceptable bounds. However, following two years of near-stability, unit labour costs are projected to show a moderate rise of 2½ per cent in both 1990 and 1991 as productivity rises more slowly. With stronger domestic cost-push pressure, increases in already comfortable profit margins are likely to become more limited. This, along with lower rises in import prices, should help contain inflation. Consumer

GERMANY

Balance of payments of the Federal Republic of Germany (FRG) and the Democratic Republic of Germany (GDR)[a]

$ billion

	1989	1990	1991
1. Transactions of FRG with the rest of world (except GDR)			
Exports	326.3	390.5	429.9
Imports	247.8	295.6	335.2
Trade balance	78.5	95.0	94.7
Total services	−7.3	−10.0	−10.3
Transfers	−18.5	−21.7	−22.7
Current balance	52.7	63.3	61.7
2. Transactions of FRG with GDR			
Exports	3.9	9.0	18.8
Imports	3.6	4.0	4.5
Trade balance	0.3	5.0	14.3
Total services	0.7	0.0	1.6
Transfers	−1.7	−10.4	−18.1
Current balance	−0.7	−5.4	−2.2
3. Transactions of GDR with rest of world (except FRG)			
Exports	13.7	15.1	17.0
Imports	13.9	18.0	25.1
Trade balance	−0.2	−2.9	−8.1
Total services	−0.1	−0.5	−1.3
Transfers	0.2	0.2	0.3
Current balance	−0.1	−3.2	−9.1
4. Total external transactions of an extended Deutschemark zone (1. + 3.)			
Exports	340.0	405.6	446.9
Imports	261.7	313.6	360.3
Trade balance	78.3	92.1	86.6
Total services	−7.4	−10.5	−11.6
Transfers	−18.3	−21.5	−22.4
Current balance	52.6	60.1	52.6

a) GDR services and transfers comprise only hard currency transactions. Trade transactions include exports and imports with all trading partners, including COMECON members.

price inflation may fall back in 1990, but this reflects mainly the unwinding of the effect of indirect tax increases at the beginning of 1989.

Following two years of deterioration, the terms of trade are expected to improve over the projection period, accentuating the move towards larger trade surpluses implied by trade flows in volume. At unchanged exchange rates, investment income may increase much more slowly than in 1989, and hence not offset the trend widening of the deficit in non-factor services and other invisibles. The Federal Republic's current account in dollar terms, after attaining $63 billion in 1990, may decline somewhat in 1991, both in absolute terms and relative to GNP. The external transactions on a balance-of-payments basis for the two Germanies are shown in the accompanying table.

NOTE

1. For a more detailed discusion of the German economic unification, see *OECD Economic Survey of Germany*, June 1990, Paris, (forthcoming).

FRANCE

Key features

Despite some slowing in the second half, economic activity in France remained firm in 1989, with an increase in real GDP of nearly 3¾ per cent. The conditions for strong and sustained growth of output, in particular moderate wage behaviour, have been maintained. Business investment has continued to expand in response to persisting significant pressures on capacity and facilitated by healthy profit margins. This increase in investment, which has been directed more than in the past to expanding net capital stock, was accompanied by substantial job creation. Household disposable income rose as a result, boosting both saving and consumption. The improved competitiveness of French industry, resulting from both lower relative labour costs and the positive effects of its investment in recent years, enabled it to take full advantage of continued brisk foreign demand in 1989. Despite a notable deceleration in the second half, the volume of exports grew at its fastest pace since 1973, and for the first time since 1984 the contribution of the real trade balance to growth was positive. Although inflation accelerated owing to external factors in the early months of 1989, it did so less steeply than in the country's main trading partners; excluding food and energy, inflation continued to slow. The current external deficit remained small in relation to GDP in 1989 (0.4 per cent), despite some temporary cyclical widening in the second half. High unemployment is still the main disquieting element in the current situation, even though it remains on a slight downward trend.

With real interest rates still high internationally and overall foreign demand slackening, despite the further pick-up in German markets, continued good economic performance depends on the preservation of a climate conducive to the expansion of business investment, the improvement of supply conditions and the

FRANCE

Demand, output and prices

Percentage changes from previous period, seasonally adjusted at annual rates, volume (1980 prices)

	1987 current prices billion FF	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Private consumption	3 230.9	3.0	3.2	3.3	3.1	2.9	2.4	3.9	2.8	2.9	2.8	2.8
Government consumption	1 015.9	2.8	2.9	1.6	1.9	2.3	1.7	0.9	2.2	2.3	2.2	2.2
Gross fixed investment	1 049.1	5.2	8.6	5.6	4.2	3.8	5.2	3.9	4.7	3.6	3.9	4.0
General government	161.1	2.9	7.7	6.6	3.0	3.6	11.2	1.3	3.5	3.7	3.6	3.6
Household	285.8	3.3	4.6	1.8	–0.3	–1.3	–1.3	2.7	–1.0	–2.0	–1.0	–1.0
Other	602.2	6.9	10.7	7.0	6.5	6.0	6.6	5.1	7.5	6.0	6.0	6.0
Final domestic demand	5 295.9	3.4	4.2	3.4	3.1	3.0	2.8	3.3	3.1	3.0	3.0	3.0
* change in stockbuilding	17.0[a]	0.2	–0.2	–0.2	0.2	0	–0.5	0.1	0.2	0.1	0	0
Total domestic demand	5 312.9	3.6	4.0	3.2	3.3	3.0	2.3	3.4	3.3	3.1	2.9	2.9
Exports of goods and services	1 103.2	2.7	8.3	11.0	5.9	6.2	19.0	1.9	7.7	6.4	6.1	6.1
Imports of goods and services	1 095.1	7.9	8.6	8.3	6.2	6.4	8.6	5.2	6.8	6.0	6.6	6.4
* change in foreign balance	8.1[a]	–1.2	–0.3	0.4	–0.2	–0.2	2.1	–0.9	0.1	0	–0.2	–0.2
GDP at market prices	5 321.0	2.4	3.8	3.7	3.1	2.9	4.5	2.5	3.4	3.1	2.8	2.8
GDP implicit price deflator	–	2.8	3.0	3.4	3.3	2.8	3.0	4.1	3.2	2.9	2.8	2.7
Memorandum items												
Consumer prices[b]	–	3.1	2.7	3.3	3.0	2.8	3.5	3.4	2.9	2.8	2.8	2.8
Industrial production[c]	–	2.0	4.7	4.8	2.9	3.4	4.7	4.7	1.5	3.9	3.2	3.2
Unemployment rate	–	10.5	10.0	9.5	9.3	9.2	9.6	9.5	9.4	9.3	9.2	9.2

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts private consumption deflator.
c) Quarterly index.

FRANCE

Appropriation account for households

Percentage changes from previous year

	1987 billion francs	1987	1988	1989	1990	1991
Compensation of employees	2 802.0	4.0	5.2	6.5	6.0	5.3
Income from property and other	1 279.3	6.6	9.9	10.3	8.5	7.2
Current transfers received	1 271.9	3.4	7.0	6.1	6.4	5.7
Total income	5 187.6	4.5	6.5	7.1	6.6	5.7
Less: direct taxes	345.6	4.5	1.1	5.9	6.4	6.0
current transfers paid	1 201.5	6.5	6.5	8.2	6.7	5.8
Disposable income	3 640.5	3.9	7.0	6.8	6.5	5.7
Consumers' expenditure	3 230.9	6.2	5.9	6.7	6.2	5.7
Saving ratio (as a percentage of disposable income)	–	11.3	12.1	12.2	12.5	12.5

growth of job creation. Further reductions in the already favourable inflation expectations depend on enhancing the public's confidence in the monetary authorities' ability to maintain a stable exchange rate within the EMS and to contain the rise in domestic prices. The good results achieved thus far have increased flexibility on the monetary-policy front: the last exchange controls were lifted on 1st January 1990, six months in advance of France's undertaking to the EC, and, because of the franc's firmness *vis-à-vis* the Deutschemark, the central bank was recently able to lower its leading rates for the first time since July 1988, when they were nearly 3 points below their current level. Reflecting an increase in credibility, long-term interest differentials *vis-à-vis* Germany have declined to less than a percentage point. Further tax adjustments and reductions in the budget deficit to increase the availability of domestic saving for the financing of investment are also likely. Given economic-policy settings and international developments, real output growth could be around 3 per cent over the projection period. Prices may rise more slowly than that, and at a slower pace than in Germany by 1991.

Recent trends

Real GDP growth slackened in the second half of 1989 to 2½ per cent at an annual rate, reflecting the deceleration in foreign demand for French goods. During the course of 1989, domestic demand accelerated while export market growth slowed; the real trade balance therefore worsened after starting the year particularly well. All the components of domestic demand showed strength. Growth of private consumption picked up in the second half, entirely on account of the increase in real disposable income since the spring; the household saving ratio actually rose to nearly 13 per cent at the end of the year. Fixed investment, on the other hand, expanded more slowly than in 1988, despite quite brisk growth in the industrial sector. With buoyant activity, job creation was again substantial for 1989 as a whole; the unemployment rate (9.3 per cent in April 1990), however, has edged down only slightly over the past year. More recently, both domestic and foreign demand growth would seem to have fallen back; industrial orders have dwindled since the autumn, and increased stockbuilding by industry and distributive trades indicates that demand is slacker than previously expected. As a result industrial production has stagnated since the summer of 1989, and pressures on capacity have eased somewhat.

Consumer-price increases stabilised over the period July-December 1989 after accelerating in the first half of 1989 because of the rise in energy and food prices. The growth in the CPI has subsequently slowed slightly, to 3.2 per cent over the year to April 1990. The deceleration of prices other than for energy and food primarily reflects the corporate sector's efforts to curb costs, particularly wage costs. However, in the final quarter of 1989, unit-labour-cost rises, resulting from continued hiring coupled with some acceleration of real wages, as well as increased business profits taxation, put pressure on profit margins, which fell back, although perhaps only temporarily, to their levels of late 1987.

Foreign trade performance has shown signs of improvement. Despite a reversal in April, the trade deficit, in monthly terms, has been running at about half its average 1989 level since last November. More-

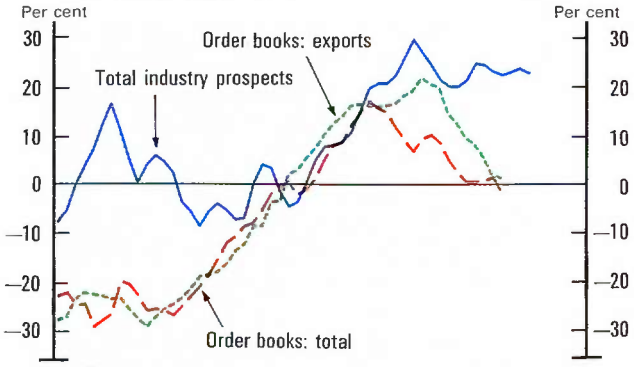
FRANCE

BUSINESS SURVEYS IN INDUSTRY

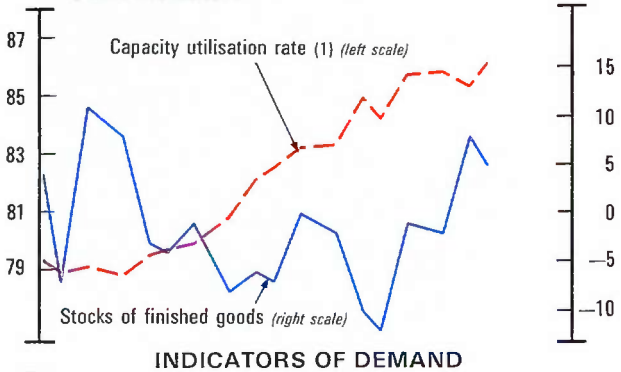
Balance between businessmen's optimistic (+) and pessimistic (—) answers

Production prospects and order-books

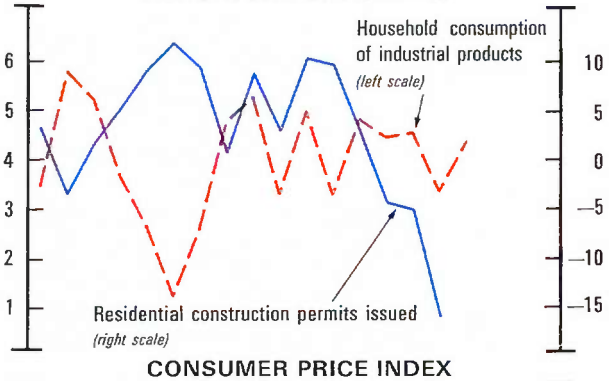
3-month moving averages



Other indicators

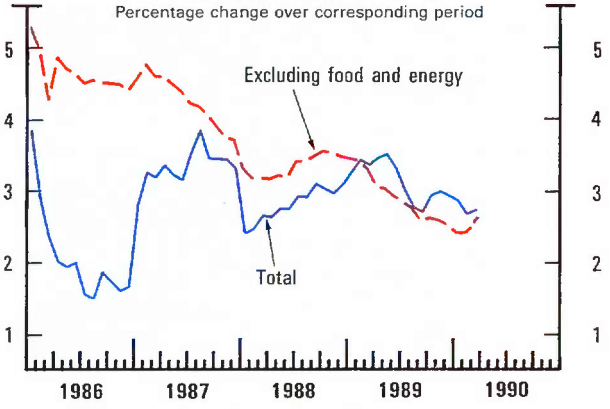


INDICATORS OF DEMAND



CONSUMER PRICE INDEX

Percentage change over corresponding period



1. 100 *less* percentage of unused capacity including that needing additional personnel to exploit it.

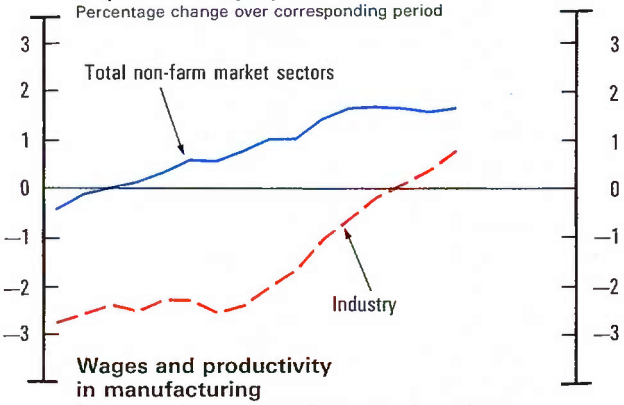
THE LABOUR MARKET

Seasonally adjusted

Unemployment rate

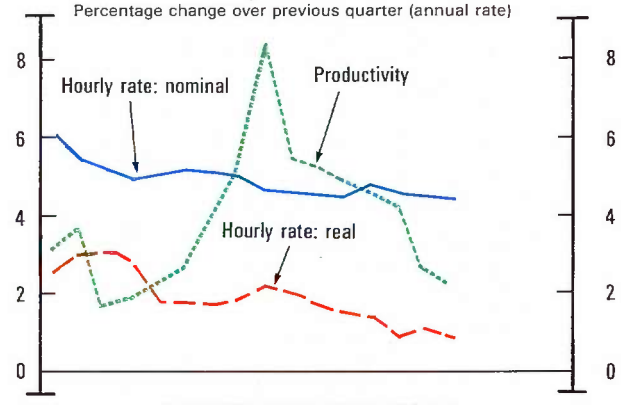
Dependent employment

Percentage change over corresponding period

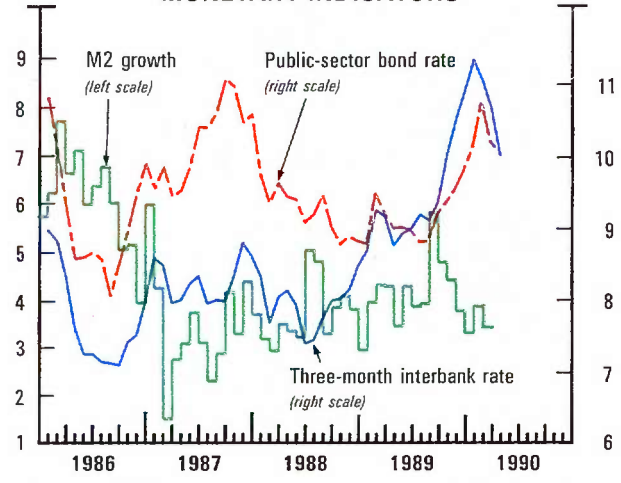


Wages and productivity in manufacturing

Percentage change over previous quarter (annual rate)



MONETARY INDICATORS



Sources: INSEE, *Tendances de la conjoncture;* OECD, *Financial Statistics.*

over, though not in evidence in sluggish volume export growth in the latter half of the year, France's international competitiveness appears to have improved in 1989 judging from both relative prices and labour costs and the trend of its market share in manufactures.

Policies

Since end-1989 the monetary authorities have responded to cyclical and exchange-market developments in order to maintain the stability of the franc within the EMS and to control the monetary aggregates. The central bank thus tightened monetary policy in the late months of 1989 and at the very beginning of 1990 to counter growing pressure on the franc: while in October the leading rates were raised by 0.75 point in a joint move with the other European countries, in December the French authorities decided to raise rates unilaterally by 0.5 point. These increases also reflected a determination to curb excessive credit growth and thereby help to slow domestic demand. Since the turn of the year, France's improved inflation and foreign-trade outcomes and uncertainty regarding German monetary union have been reflected in a firming of the franc against the Deutschemark. This development, along with the fairly moderate growth of the monetary aggregates, led the Banque de France to lower its leading rates in two steps by ½ of a percentage point in April. As in other countries, long-term interest rates moved up sharply at the beginning of 1990, although this rise has to a large extent been reversed since early March. The differential movements in short and long rates have largely eliminated the previous inversion of the yield curve. Over the period ahead, the growing credibility of the hard-currency policy and the projections for good inflation and foreign-trade performance may allow some further narrowing of the interest-rate differential between France and Germany. Monetary policy is likely to be fairly cautious, so as to contain inflation expectations. The Banque de France has set its M2 growth target for 1990 at 3.5 to 5.5 per cent, slightly lower than last year. As in 1989, the growth of this aggregate has remained well below the target range during the early months of this year.

The 1990 Finance Act, adopted last autumn, aims to reduce the State deficit from FF 100 billion in 1989 to FF 90 billion this year (1.4 per cent of GDP) and provides for almost FF 17 billion in tax cuts. Despite an expected increase in the interest burden, the targeted reduction in the budget deficit seems likely to be achieved given good growth prospects. However, increasing social expenditure remains a recurrent public-finance problem; a recent agreement between the social-security system and the non-contract medical sector does not include any specific provisions which would serve to keep a tighter rein on health-care expenditure. The government plans to raise taxes on tobacco products from 1st January 1991 in order to reduce their consumption. A proposal to change the system of funding the social-security system is to be discussed this year with a view to determining the form of a new broad-based contribution needed to balance the social-security accounts. With regard to public-sector pay policy, an agreement has been signed improving civil-service career prospects and providing for greater flexibility of pay increases. A lump-sum appropriation of FF 40 billion has been earmarked over a period of seven years for this reform of job classification and wage scales, to be supplemented by a variable appropriation when real output growth exceeds 3 per cent.

The information available regarding the 1991 Finance Act indicates that the next budget will probably be in line with the medium-term objectives of the Tenth Plan which include a further reduction in the budget deficit (of about FF 10 billion) as well as tax reforms. In this context, a further cut in the top VAT rate and in corporation tax will probably be considered; changes in the wealth tax and in local taxes and also the possible introduction of deductions at source of income tax are also under discussion.

Prospects

GDP growth is likely to be around 3 per cent during the projection period, somewhat slower than in 1988-1989. Growth of total investment, while likely to continue to outpace that of real output, will probably be damped by weak residential construction resulting from the persistence of high long-term interest rates. With continued pressures on capacity, business-sector gross fixed capital formation could remain robust in 1990-1991 despite an increase in financial costs and the recent fall in the self-financing ratio. According to industrial surveys, capital expenditure could rise by 11 per cent in real terms in 1990 (compared with 7 per cent in 1989). Still rapid job creation should give a substantial boost to households' real disposable income and consumption, although the household saving ratio is likely to remain at the level seen in the second half of 1989. Exports will be affected by the slowdown in foreign demand in 1990. The lagged effect of the rise in relative costs and prices in the wake of the franc's appreciation this year could prevent the business sector from taking full advantage of the slightly greater buoy-

FRANCE

Balance of payments

Value, $ billion

	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Seasonally adjusted										
Exports	160.1	171.8	204	224	84.8	87.0	99	105	109	114
Imports	168.4	182.5	214	236	89.2	93.3	105	110	115	121
Trade balance	–8.3	–10.7	–10	–12	–4.4	–6.3	–5	–5	–6	–7
Non-factor services, net	11.6	15.5	18	20	7.8	7.7	9	9	10	10
Investment income, net	0.1	–0.5	–1	–1	0.1	–0.5	0	0	0	0
Private transfers, net	–2.4	–2.4	–3	–4	–0.9	–1.4	–2	–2	–2	–2
Services and private transfers, net	9.3	12.7	14	16	6.9	5.8	7	7	8	8
Official transfers, net	–4.4	–5.6	–7	–7	–2.8	–2.8	–3	–3	–3	–3
Current balance	–3.4	–3.6	–2	–3	–0.3	–3.4	–1	–1	–1	–2
Memorandum items (s.a.a.r.)										
Per cent changes in volume[a]										
Exports	7.9	8.7	6.7	6.1	15.5	2.6	8.9	6.6	5.9	5.9
Imports	9.2	8.7	7.2	6.5	8.1	7.2	7.7	6.1	6.7	6.6

Note: Detail may not add, due to rounding.
a) Customs basis.

ancy of foreign markets, particularly the German market, in 1991.

The unemployment rate could decline somewhat over the projection period, while real wages will probably still not rise as fast as productivity, so that corporate profits should resume their trend to improvement, although at slower pace. Price inflation is likely to decelerate as a result both of slowing nominal wage increases and of a deceleration of import-price rises in 1990 due to the effective appreciation of the franc and the moderation of commodity prices. The improvement in the terms of trade this year should allow the trade balance to improve in 1990 relative to 1989, although some renewed deterioration is projected in 1991. The surplus on services will probably widen steadily over the projection period, though not as markedly as last year. All told, the current deficit could narrow in 1990 and increase slightly in 1991.

ITALY

Key features

The economic policy tightening implemented in spring 1989 helped to put a sharp brake on the expansion of total domestic demand in Italy during the year. Even though the foreign balance made a strongly positive contribution to growth over the same period as imports fell, the pace of GDP growth slowed between the first and second semesters. For the year as a whole, the economy expanded by 3.2 per cent, one point slower than in 1988. GDP growth has nonetheless remained close to potential, and capacity utilisation in industry has remained at the record level it reached at the end of 1988. However, the rate of unemployment is still high (over 12 per cent), and the disparity between the North, with full employment, and the South is widening. Inflation, which peaked at the end of the first half of 1989, has only edged down slowly since and was still running at close to 6½ per cent in the first part of 1990. The decline in import volumes in the second semester of 1989 halted the rapid worsening of the trade balance in the first. Nonetheless, for 1989 as a whole, the current account deficit doubled compared with 1988 to 1¼ per cent of GDP.

The decision to incorporate the lira in the narrow EMS band in January 1990 indicated the authorities' determination to create conditions conducive to gradually reducing Italian inflation to the rates in its principal European partners, notably Germany and France. On current performance, this would mean reducing the inflation rate in Italy by 2½ to 3 percentage points. Following the January exchange rate adjustments there was a massive inflow of capital putting upward pressure on the lira within the EMS. As a result the

ITALY

Demand, output and prices

Percentage changes from previous period, seasonally adjusted at annual rates, volume (1980 prices)

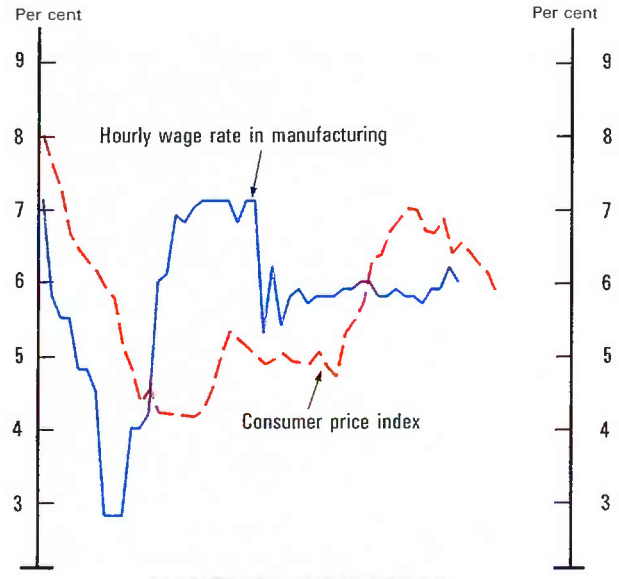
	1987 current prices trillion L	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Private consumption[a]	612.2	4.2	4.1	3.8	3.4	3.3	3.8	2.8	3.6	3.5	3.3	3.3
Government consumption	166.6	3.7	2.8	0.5	1.7	1.9	0.3	–0.1	2.5	2.0	2.0	1.8
Gross fixed investment	193.6	5.8	6.7	5.1	4.6	4.7	6.0	3.6	5.0	4.7	4.7	4.5
Investment in machinery and equipment	97.2	12.6	11.6	6.3	5.5	6.2	6.9	2.6	6.5	6.5	6.2	6.0
Construction	96.4	–1.1	1.2	3.6	3.4	2.6	4.8	5.1	3.0	2.5	2.7	2.6
Residential	50.2	–2.5	–1.3	1.0	1.8	1.4	1.7	3.7	1.2	1.2	1.5	1.5
Non-residential	46.2	0.5	4.1	6.3	4.9	3.8	8.0	6.4	4.8	3.8	3.8	3.6
Final domestic demand	972.5	4.5	4.4	3.6	3.4	3.4	3.7	2.6	3.7	3.6	3.4	3.4
* change in stockbuilding	9.5[b]	0.3	0.4	–0.2	–0.2	0	0.3	–2.3	0.7	0	0	0
Total domestic demand	982.0	4.7	4.7	3.3	3.1	3.4	4.0	0.3	4.4	3.5	3.4	3.3
Exports of goods and services	176.0	3.3	4.8	10.1	6.3	5.9	11.8	7.9	6.0	5.5	6.0	6.2
Imports of goods and services	179.1	10.1	6.9	9.6	6.0	6.3	12.9	–1.1	9.5	6.5	6.2	6.5
* change in foreign balance	–3.2[b]	–1.8	–0.7	–0.3	–0.2	–0.4	–0.8	2.2	–1.2	–0.5	–0.3	–0.4
GDP at market prices	978.9	3.0	4.2	3.2	3.1	3.2	3.3	2.5	3.3	3.1	3.2	3.1
GDP implicit price deflator	–	6.1	6.1	6.3	5.9	5.5	6.2	5.1	6.5	5.6	5.5	5.4
Memorandum items												
Consumer prices[c]	–	4.9	5.3	6.0	6.1	5.6	6.4	5.7	6.4	5.9	5.6	5.2
Industrial production	–	4.0	5.9	2.8	3.6	3.0	0.6	5.1	3.0	3.2	3.0	3.0
Unemployment rate	–	12.1	12.1	12.1	12.2	12.3	12.2	12.0	12.2	12.3	12.3	12.3

* As a percentage of GDP in the previous period.
a) Final consumption in the domestic market by households.
b) Actual amount of stockbuilding and foreign balance.
c) National accounts implicit private consumption deflator.

ITALY

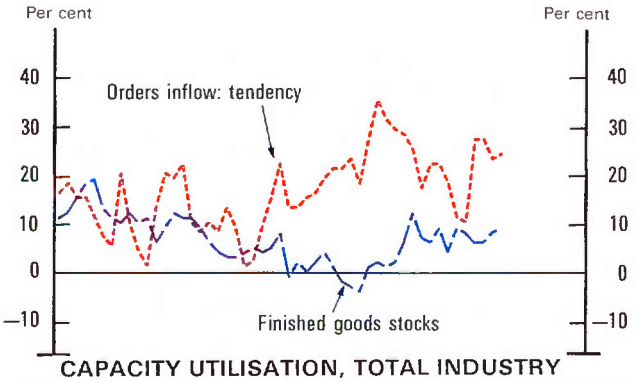
PRICES AND WAGES

Percentage change over corresponding month of previous year



BUSINESS SURVEYS

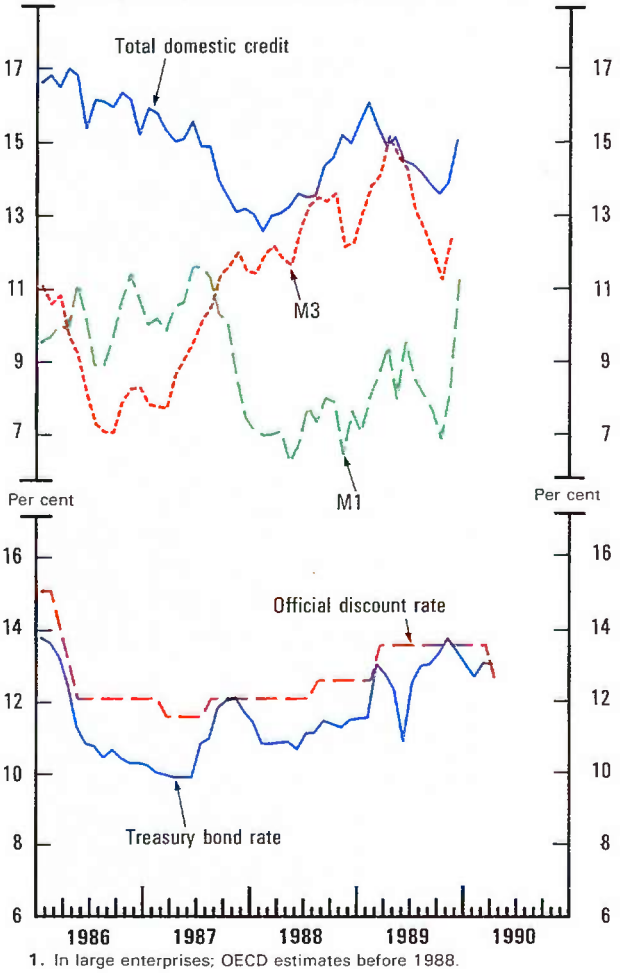
Balance between optimistic (+) and pessimistic (—) answers



CAPACITY UTILISATION, TOTAL INDUSTRY

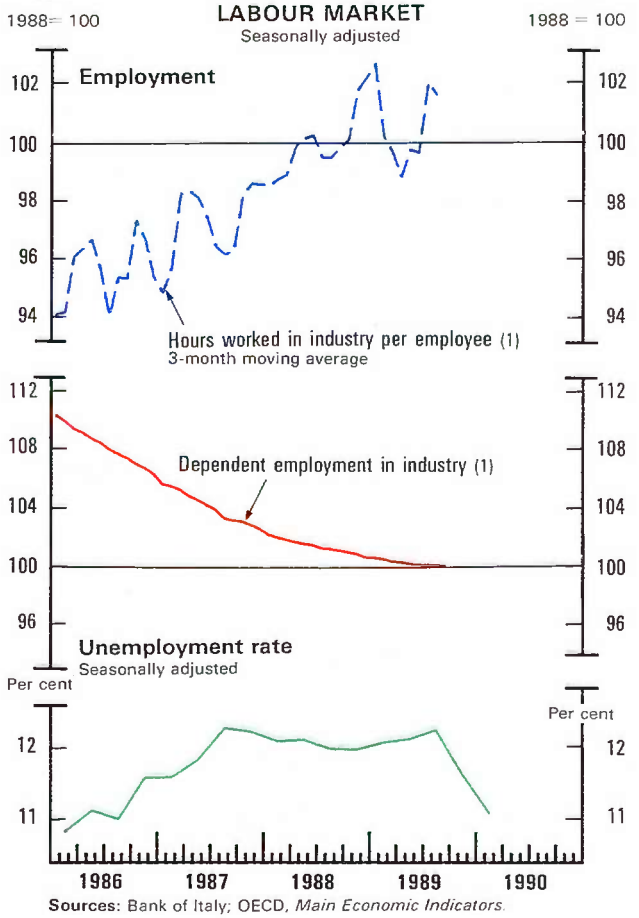
MONETARY INDICATORS

Percentage change over corresponding month of previous year



LABOUR MARKET

Seasonally adjusted



1. In large enterprises; OECD estimates before 1988.

Sources: Bank of Italy; OECD, *Main Economic Indicators*.

authorities lowered the discount rate by one point to 12.5 per cent at the end of May, and, at the same time, announced the lifting of remaining capital controls earlier than envisaged and the implementation of a fiscal programme designed to rein back the deficit which had escalated since the beginning of the year. Apart from short-term fluctuations, the monetary authorities would appear to have little scope for lowering interest rates unilaterally and durably, particularly given the scale of the Treasury's 1990 borrowing requirement. As evidenced by the recent widening of the deficit, managing fiscal policy is never easy, especially where curbing expenditure is concerned. Implementation of the recent corrective measures does, however, provide some prospect of stabilising the general government borrowing requirement between 1989 and 1990 at around 10¼ per cent of GDP.

Most indicators suggest that economic activity was buoyant in early 1990 and that demand and output prospects remain favourable. While continuing high interest rates could damp investment growth, they will help boost household income; domestic demand could expand over the projection period at about the same pace as in 1989. Inflation is one of the main uncertainties in the projections. Private sector wage bargaining is likely to be influenced by the outcome of negotiations that have already taken place in the public sector (9 per cent salary increase in 1990). Moreover, the continuing buoyancy of household consumption could maintain pressure on prices, particularly in sectors not exposed to foreign competition. The slowdown in import prices began to ease inflationary pressures in the second half of 1989 but these are still strong and underlying inflation (excluding energy and food products) accelerated at the beginning of 1990. The rate of price rises is unlikely to slow significantly until the second semester of 1990. With the outlook for export market growth still bright but with competitiveness expected to weaken, the current-account deficit could come down only gradually, to around 0.8 per cent of GDP through 1991. However, if fears of a surge in wage costs were to materialise, the consequent worsening of Italy's relative competitive position could cause a more marked deterioration in the current balance.

Recent trends

Growth of final domestic demand, while still brisk in the second half of 1989, at an annual rate of 2.5 per cent, was appreciably less rapid than in the first. Private consumption weakened most, adversely affected by the rises in indirect taxes and slower growth of real disposable income – and especially of wages – over the year. On the other hand, investment continued to expand strongly, reflecting the modernisation and rationalisation of the productive system as well as the extension of capacity, as evidenced by the increase in non-residential construction. With the continuing strength of world demand, export growth remained brisk in the second half of last year, at around 8 per cent for goods and services. Because of the slowdown in final domestic demand and the ending of substantial stockbuilding of raw materials, goods and services imports turned round, falling by 1 per cent at an annual rate in the second semester. Despite a slowing of GDP growth in the second half, employment rose at the end of the year and the unemployment rate stabilised at around 12 per cent. This aver-

ITALY

Appropriation account for households

Percentage changes from previous year

	1987 trillion lire	1987	1988	1989	1990	1991
Compensation of employees	439.6	8.8	10.5	9.7	9.5	8.5
Income from property and other	333.4	6.1	8.4	12.0	10.0	10.0
Current transfers received	213.9	10.1	11.2	11.2	9.7	8.5
Total income	986.9	8.2	9.9	10.8	9.7	9.0
Less: direct taxes	101.4	8.7	11.0	14.3	11.0	9.8
current transfers paid	182.4	7.0	10.2	12.4	8.8	8.5
Disposable income	703.1	8.4	9.7	9.8	9.8	9.0
Consumers' expenditure	602.6	9.7	9.9	10.0	9.6	9.0
Saving ratio (as a percentage of disposable income)	–	14.3	14.2	14.1	14.2	14.2

age figure nonetheless masks widening disparities between the North, where the unemployment rate fell by almost 1 point in 1989 to 6 per cent, and the Centre and especially the South (where it is above 20 per cent).

Inflation remains high. The monthly rise in the consumer price eased between the first and the second half of 1989, accelerating again in the beginning of 1990. The rise over twelve months in the cost of living index, which reached 7 per cent in mid-1989, was still close to 6 per cent in April 1990[1]. Underlying inflation appeared to be running at an annual rate of 7 per cent early this year. The slower growth of import prices last summer and the decline at the start of 1990 helped to hold down costs. Moreover, some ¾ of a percentage point of the rise in prices in 1989 was due to the increase in indirect taxes and duties. Nonetheless, pressure on prices has been maintained by higher unit labour costs, continuing high capacity utilisation and strong aggregate demand. The current account deficit narrowed very considerably in the second semester of 1989 under the combined effect of an improvement in the real trade balance and more favourable terms of trade. For the year as a whole, the current deficit was nonetheless substantial, at over $11 billion or 1.3 per cent of GDP, as a result of the steep deterioration in the invisibles balance. For the first quarter of 1990, the deficit on a customs basis (cif-fob) was barely smaller than it was in the same period of the previous year.

Policies

The 1990 Finance Act sought to stabilise the nominal central government borrowing requirement at around the L 133 000 billion reached in 1989, bringing it down from 11.3 to 10.4 per cent of GDP. To achieve this target, measures were framed to cut by L 20 000 billion the deficit that would have been recorded on the basis of unchanged legislation. These measures were aimed primarily at boosting tax receipts by L 15 000 billion and cutting health care expenditure. The adjustment of the lira exchange rate at the beginning of January 1990 was accompanied by measures to reduce budget spending commitments in the first half-year so as to hold down the Treasury borrowing requirement. Despite these moves, the 1990 budget projections were revised upwards in March by L 14 350 billion, bringing the deficit to the equivalent of 11.5 per cent of GDP. About 60 per cent of this reflected higher debt-service payments; the rest was largely due to a surge in transfer payments and especially wage costs, following the public sector wage agreements (9 per cent increase in 1990). In the light of these revised estimates the government decided to introduce a new plan at end-May to reduce the budget deficit to virtually the level initially targeted. The plan provides for expenditure cuts totalling L 6 500 billion (transfer payments to industry, the defence and health sectors) and increases in revenue totalling L 5 250 billion (taxes on water, gas and selected fuels, stamp duties on financial transactions). It has been estimated that this package could add around 0.3 points to the price index in 1990.

The general government borrowing requirement on a national accounts basis (i.e. excluding financial transactions by central government) could amount, as in 1989, to 10.2 per cent of GDP in 1990. The primary deficit (i.e. excluding interest payments) will probably be reduced by ½ percentage point of GDP and could virtually be wiped out in 1991 (0.3 per cent of GDP). Overall, the orientation of the cyclically-adjusted primary balance will be mildly restrictive in 1990 and broadly neutral in 1991.

The decision of the monetary authorities not to follow the rise in interest rates in Europe in October 1989 led to the lira depreciating against the other European currencies, and reserves dropped sharply, in contrast to developments in the first nine months of the year. Because of the exceptionally high Treasury borrowing requirement in the last months of the year and the inhibiting effect on bank liquidity of strikes in the banking sector, there was heavy pressure on interest rates and the Bank of Italy was forced to intervene in order to finance the Treasury deficit and boost bank liquidity. Following the announcement of the lira's inclusion in the narrow EMS band and of the accompanying fiscal measures, interest rates eased only slightly and there was a massive inflow of capital, resulting in upward pressure on the lira in the first semester. This led the monetary authorities to lower the discount rate by 1 point in conjunction with the May fiscal programme. Given the projected behaviour of interest rate levels in the European countries with which Italy still has an inflation differential and the Treasury's very considerable financial requirements in 1990, up to the second half of 1991 short and long-term interest rates are unlikely to change much.

Prospects

Given the present setting of economic policy and international trade prospects, growth could continue to run at slightly over 3 per cent through 1991. In the short term, the business climate and the corporate investment outlook remain favourable, as do households' expectations. Consumption will be buoyed by

ITALY

Balance of payments

Value, $ billion

	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Seasonally adjusted										
Exports	127.4	140.3	169	186	67.3	73.0	83	87	91	95
Imports	128.6	142.3	169	188	69.3	73.0	82	87	91	96
Trade balance	–1.1	–2.0	0	–1	–1.9	0.0	0	0	0	–1
Non-factor services, net	3.7	1.2	2	2	0.9	0.4	1	1	1	1
Investment income, net	–7.1	–8.3	–9	–9	–4.1	–4.2	–5	–5	–4	–5
Private transfers, net	1.5	1.0	2	2	0.5	0.4	1	1	1	1
Services and private transfers, net	–2.0	–6.1	–5	–5	–2.6	–3.4	–3	–3	–2	–3
Official transfers, net	–2.8	–3.5	–3	–3	–1.6	–1.9	–2	–2	–2	–2
Current balance	–6.0	–11.6	–9	–10	–6.2	–5.3	–4	–4	–4	–5
Memorandum items (s.a.a.r.)										
Per cent changes in volume[a]										
Exports	8.7	8.3	7.1	6.0	14.0	9.5	6.7	5.5	6.0	6.3
Imports	3.8	10.1	7.5	6.7	14.0	3.7	9.9	6.7	6.5	7.2

Note: Detail may not add, due to rounding.
a) Customs basis.

the rise in disposable income due both to pay increases (particularly in the civil service) and to the growth of income on financial saving, induced by high interest rates. The household saving ratio could settle at around its 1988-1989 level[2]. Strong demand growth and high capacity utilisation should give further impetus to investment, particularly in plant and machinery; it could expand steadily at a rate of around 6 per cent at an annual rate to end-1991.

Export growth could slacken – to around 5 to 6 per cent – owing to the continued worsening of Italy's competitive position and slower growth of export markets. Events in central and eastern European countries are unlikely to have more than a limited direct effect on the Italian economy over the projection period, largely because these countries account for less than 3 per cent of Italy's exports. Nonetheless, some sectors (such as the automobile industry) which have established themselves locally could rapidly benefit from the opening-up of these markets. On the assumption that domestic demand remains brisk, imports will continue to grow by around 6 per cent. The external contribution to growth would be negative, as to around ¼ to ½ percentage point.

Inflation is expected to slow only very gradually. Moderate rises in import prices over the projection period are likely to be offset by domestic factors which will continue to push up costs. Thus, the upward trend in per capita compensation is unlikely to slacken significantly, given the climate in which wage contracts in the private sector will be renegotiated. With productivity likely to slow slightly in line with output, unit labour costs are set to rise at an annual rate of between 4½ and 5 per cent through 1991. Furthermore, continuing strong growth of household consumption will push up prices of private services, particularly because of the opportunities afforded by such events as the World Cup.

Given the projected trend in real foreign trade and the likely improvement in the terms of trade, the trade in goods could be close to balance in 1990 and the travel account improve somewhat. All told, the current account deficit could narrow by $3 billion in 1990, bringing it down to less than 1 per cent of GDP in that year as well as in 1991.

NOTES

1. Cost-of-living index for manual and non-manual workers.
2. The saving ratio in the Households' Appropriation Account (around 14 per cent of disposable income) is much lower than that used up to now (around 22 per cent). It is based on a new version of the Household Accounts published in the beginning of 1990 by the Italian Statistics Institute (ISTAT) which now counts only households strictly defined, excluding unincorporated enterprises (with up to 100 employees) which had hitherto been included.

UNITED KINGDOM

Key features

The response of the United Kingdom economy to the tightening of monetary policy, which began in the middle of 1988, has continued. The housing market has cooled off noticeably, and, notwithstanding the resilience of consumer spending, there is now clear evidence that aggregate demand growth is slowing. Business investment has fallen off and destocking has commenced, contributing to a marked reduction in import growth. Although improving export performance has damped the fall in output growth, capacity utilisation (excluding North Sea oil) dropped in the second half of 1989, and the decline in unemployment has more recently come to a virtual halt. Whilst the external deficit now appears to be on a downward trend, inflation has remained stubbornly high, rising even further in recent months.

Given the uneven pace of adjustment and persisting inflationary pressures, sterling has been vulnerable to confidence factors and political uncertainties. The increasing recognition that domestic interest rates need to remain high for a considerable period ahead has led to a further rise in mortgage rates, and long-term interest rates have firmed markedly in line with international developments. The March 1990 Budget reaffirms the Government's commitment to take sterling into the EMS exchange rate mechanism once a variety of conditions, including a reduction in United Kingdom inflation, have been met. The Budget statement main-

UNITED KINGDOM

Demand, output and prices

Percentage changes from previous period, seasonally adjusted at annual rates, volume (1985 prices)

	1987 current prices billion £	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Private consumption	264.1	6.0	7.0	3.8	1.0	1.5	4.2	1.1	0.8	1.3	1.6	1.7
Government consumption	85.3	1.1	0.4	0.5	0.7	1.0	0	2.6	–0.3	0.8	1.1	1.1
Gross fixed investment	73.4	8.6	13.7	4.8	–0.5	1.2	1.4	3.2	–2.4	–0.4	1.6	2.1
Public[a]	11.6	–8.2	–6.3	9.5	3.9	4.4	34.7	17.3	–1.2	2.1	5.4	4.9
Private residential	12.6	6.5	10.3	–6.2	–2.4	–0.2	–16.6	11.2	–9.0	–1.3	–0.6	1.7
Private non-residential	49.2	14.5	19.6	6.4	–1.0	0.8	0.1	–1.0	–1.2	–0.8	1.3	1.5
Final domestic demand	422.9	5.4	6.9	3.4	0.7	1.4	2.9	1.8	0	0.9	1.5	1.7
* change in stockbuilding	1.4[b]	0.1	0.7	–0.2	–1.2	–0.3	–0.4	–2.3	–0.9	–0.8	–0.1	–0.1
Total domestic demand	424.3	5.5	7.6	3.2	–0.5	1.1	2.5	–0.4	–0.8	0.2	1.3	1.6
Exports of goods and services	107.1	5.1	0.7	4.1	7.5	6.8	4.7	8.2	7.4	6.8	6.9	6.8
Imports of goods and services	112.3	7.6	12.6	7.1	2.1	3.9	7.9	–1.4	3.9	2.0	4.3	4.8
* change in foreign balance	–5.2[b]	–0.7	–3.5	–1.1	1.4	0.8	–1.2	2.7	0.8	1.3	0.7	0.5
* compromise adjustment	–0.4[b]	–0.1	0.5	0.2	0	0	0.1	0.1	0	0	0	0
GDP at market prices[c]	418.6	4.7	4.5	2.3	0.9	1.9	1.5	2.4	0	1.5	2.0	2.1
GDP implicit price deflator[e]	–	5.0	6.5	6.7	4.9	5.6	7.2	4.6	5.2	4.7	6.0	5.8
Memorandum items												
Consumer prices[d e]	–	4.1	4.8	5.5	4.5	5.3	5.0	6.6	3.9	3.8	5.8	5.6
Industrial production	–	5.6	7.0	4.8	0.3	1.8	5.0	1.4	–0.8	1.3	1.8	2.0
Unemployment rate	–	10.4	8.2	6.2	6.1	6.5	6.5	5.8	6.0	6.2	6.4	6.5

* As a percentage of GDP in the previous period.

a) Including nationalized industries and public corporations.

b) Actual amount of stockbuilding, foreign balance and compromise adjustment.

c) Data for GDP in the past are based on a compromise estimate which is the average of the expenditure, output and income estimates of GDP.The compromise adjustment is the difference between compromise GDP and the expenditure estimate of GDP.

d) National accounts implicit private consumption deflator.

e) The replacement of "domestic rates" by the Community Charge in England and Wales as from April 1990 lowers the level of nominal consumer spending and GDP at market prices and of the related deflators.

tained a target for narrow money but postponed the envisaged lowering of the target range, following some overshoot during the past year. The Public Sector Debt Repayment in the financial year ending in March 1990 was considerably lower than projected a year ago, reflecting, among other things, overspending by local authorities; economic activity appears to have been broadly in line with expectations. For the current financial year, with some net tax increases, the authorities budgeted for a surplus similar to the expected outcome for 1989/90. Further ahead, they project a gradual move towards a balanced budget. This seems to imply that the tight stance of fiscal policy would remain broadly unchanged over the next two years as it apparently did last year.

Against this policy background, domestic demand is projected to drop in the near term and recover only slowly thereafter. Buoyant foreign demand is likely to prevent GDP from falling, but output growth is expected to remain significantly below that of productive potential over the next eighteen months or so. This should result in a continued improvement in the external balance and a reversal of the rise in inflation as reduced demand pressures both squeeze profit margins and induce a fall in wage growth. There are, however, considerable risks and uncertainties surrounding this outlook. On the one hand, the sustained buoyancy of narrow money and the revival of retail sales since the turn of the year could be indicative of stronger-than-projected consumer demand. On the other, the downturn of fixed investment and inventories may be more pronounced than expected, given the business sector's large financial deficit and the rise in long-term interest rates. A major risk would seem to be that the renewed rise in retail price inflation (due to higher mortgage rates and the effects of the introduction of the Community Charge – a "poll tax" replacing a property tax) may give a further boost to wage claims. Renewed sterling weakness, perhaps in response to rising interest rates abroad, or to disappointing inflation or trade data, could also pose a threat to the Government's counter-inflation effort.

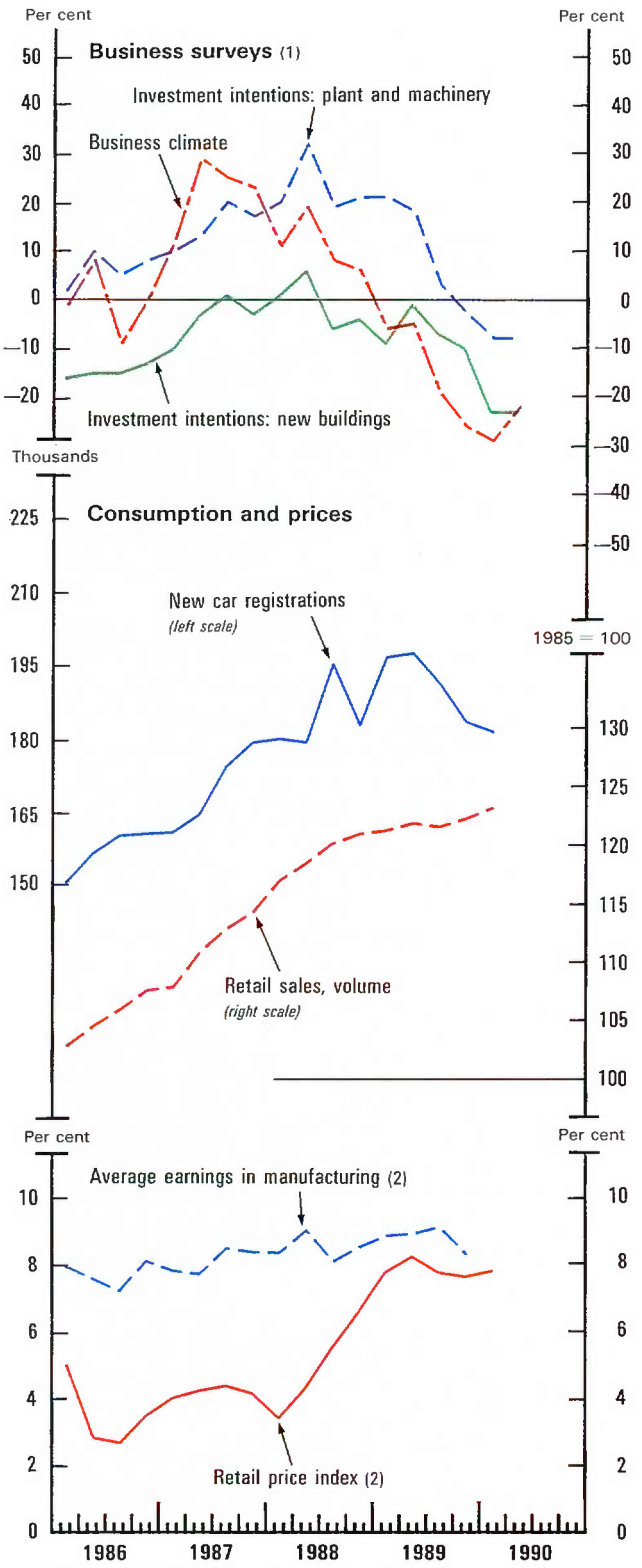
Recent trends

The renewed pick-up in GDP growth in the second half of 1989 reflects a recovery in North Sea oil and gas production following a series of accidents; the growth in onshore activity continued to slow, broadly mirroring the pace of manufacturing output. Growth in final domestic demand, though weakening, remained resilient. Public investment continued to expand strongly, and public consumption and housing investment revived temporarily following earlier falls. This partly offset lower growth in private consumption and some fall in business investment. Total domestic demand seems nonetheless to have declined somewhat in the second half of 1989 as a result of a sharp reduction of inventories towards the end of the year. The associated fall in imports together with an improving export performance – attributable to abating capacity pressures and exchange-rate depreciation – resulted in a marked amelioration in the real foreign balance, following two years of shrinking net exports. A fall in the trade deficit was outweighed, however, by a deterioration in the invisibles account – partly reflecting erratically high transfers to the EC – so that the current-account deficit rose further in the second half of 1989. In the past few months, however, the deficit has been on a downward trend.

The labour market has responded to output developments with a considerable lag. The latest Labour Force Survey indicates that the expansion of demand for labour has been stronger than thought before. Employment growth during 1989 is now put at nearly 3 per cent, which implies a virtual stagnation of non-oil productivity in this period. Productivity growth in manufacturing alone has held up better but also slowed considerably, despite labour shedding in the course of 1989. Unemployment stopped falling only recently at a level of just over 5½ per cent of the labour force (some 6 per cent according to the OECD's standardised measure). With labour market conditions remaining tight, pay settlements have continued to edge up, moving over the last year from under 7 per cent into the 8 to 9 per cent range. There is, however, a wide dispersion of settlements: the highest tended to be located in the private service sector but public-sector wages also rose faster than the average. As wage drift has diminished, largely due to reduced overtime work, the underlying growth in effective earnings has hardly accelerated since mid-1988. But diminishing productivity gains have pushed up unit labour costs, and the fall in the exchange rate has added to cost pressures. As profit margins have proved very resilient, indicators of underlying inflation have resumed their upward trend. The rise in non-food producer prices, which had hardly varied through most of 1989, has edged up in recent months. And the twelve-month increase in the retail price index excluding mortgage interest has picked up again after several months of stability; excluding also the effect of the introduction of the Community Charge ("poll tax"), it reached 6½ per cent in April as compared with 9½ per cent for the unadjusted retail price index.

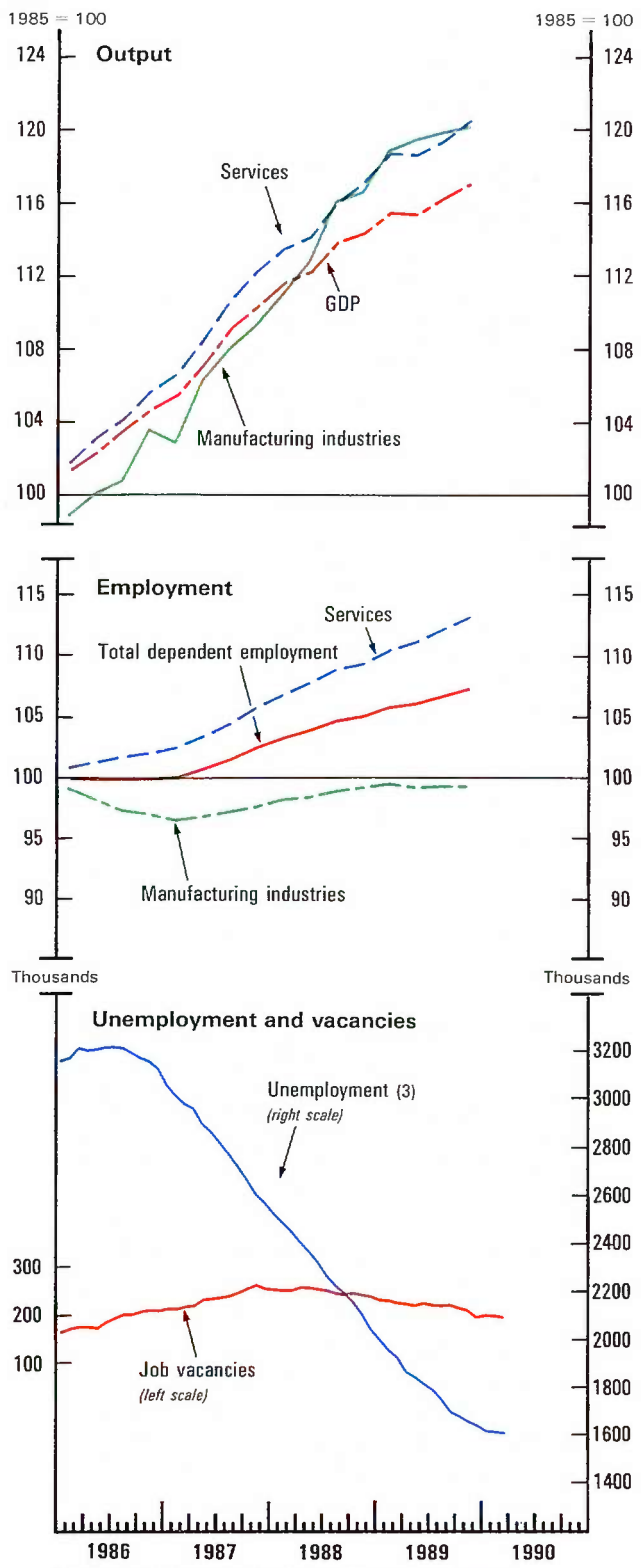
UNITED KINGDOM

RECENT INDICATORS



1. Balance between *positive* and *negative* answers.
2. Change over 4 quarters.
3. Claimants aged 18 and over.

OUTPUT AND LABOUR MARKET



Sources: CBI, *Economic Trends* and *Employment Gazette*.

UNITED KINGDOM

Appropriation account for households

Percentage changes from previous year

	1987 billion £	1987	1988	1989	1990	1991
Compensation of employees	227.1	7.9	11.2	10.8	9.2	7.6
Income from property and other	74.8	9.3	14.3	10.8	8.2	6.8
Current transfers received	52.5	3.1	2.7	5.5	6.5	7.4
Total income	354.4	7.5	10.6	10.0	8.6	7.4
Less: direct taxes	43.7	6.9	11.3	11.0	10.9	7.4
current transfers paid[a]	30.7	9.6	12.5	3.7	24.5	12.0
Disposable income	280.1	7.4	10.2	10.6	6.6	6.9
Consumers' expenditure[a]	264.1	10.3	12.1	9.5	5.6	6.9
Saving ratio (as a percentage of disposable income)	–	5.7	4.1	5.0	6.0	6.0

a) The replacement of "domestic rates" by the Community Charge in England and Wales as from April 1990 is reflected in lower consumer expenditure and higher deductions from income.

Policies

The 1989/90 Budget (for the year ending in March) was for a broadly unchanged Public Sector Debt Repayment (PSDR) of about £14 billion. Latest estimates put the PSDR at around £8 billion. About half of the fall in the surplus can be traced to overspending by local authorities. This has been particularly marked in their capital spending, as they sought to forestall the new controls which took effect in April. Excluding privatisation proceeds, which were somewhat lower than assumed, the PSDR is estimated to have dropped from £7½ billion to just under £4 billion rather than rising to £9 billion as projected. The net stock of public debt has fallen by more than a third since the middle of the 1980s to an estimated 28 per cent of GDP at the end of March 1990.

The March 1990 Budget projects a PSDR of £7 billion in 1990/91, or £2 billion excluding privatisation proceeds. While there will be a partial reversal of the factors that explain last year's shortfall, this is expected to be offset by the effects of lower growth. Measures proposed in the Budget are expected to produce a modest increase in the yield from taxation (by just under £½ billion from an indexed base). The Budget also provides a range of incentives to save, which will, however, largely take effect in 1991. These include the establishment of tax-exempt special savings accounts (TESSAs), and the abolition of composite rate tax (withholding tax on bank and building society deposits) and of stamp duty on share transactions. Compared with the January public expenditure White Paper, general government expenditure has been revised upwards by £3 billion, reflecting higher estimates for local authority spending and debt interest payments. Even allowing for these adjustments, there would appear to be a risk that public expenditure may overshoot projections, given higher-than-expected inflation and recent developments in local authority spending. On present plans, the PSDR is estimated to drop to £3 billion in 1991/92, implying a move into budget deficit if privatisation proceeds are excluded.

Monetary conditions have been affected by abrupt changes in financial-market sentiment reflecting in part domestic political uncertainties. In the two months following the rise in interest rates in early October, the effective exchange rate fell by over 6 per cent, taking sterling to about its level three years earlier. By late February, sterling had almost recovered the ground lost in late 1989. But this has been followed by renewed weakness since March. The authorities have left interest rates unchanged, considering monetary conditions sufficiently tight to bear down on inflation; but they have intervened at times in foreign exchange markets to mitigate the fall in the exchange rate. However, the perception that high interest rates would have to remain in place for some time triggered a new round of mortgage rate increases in February. Long-term interest rates, which had hardly reacted to the sharp rise in short-term rates up to late 1989, have firmed markedly in recent months, leading to some flattening of the downward sloping yield curve. This reflects above all international developments, although domestic factors, such as inflation expectations, the fiscal position and funding policy, may also have played a role. Despite a year and a half of high interest rates, growth in the broad monetary aggregates remains buoyant. Narrow money has continued to grow above target, although some progress has been made in reining it back towards its target range. But broad money growth has yet to show any significant easing, and the twelve-month expansion of banks' and

UNITED KINGDOM

Balance of payments

Value, $ billion

	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Seasonally adjusted										
Exports	143.7	151.3	174	192	74.5	76.8	85	89	94	99
Imports	180.6	189.2	204	218	95.3	93.9	101	103	107	111
Trade balance	–36.9	–37.9	–31	–25	–20.8	–17.1	–17	–14	–13	–12
Non-factor services, net	7.2	6.5	6	8	3.7	2.8	3	3	4	4
Investment income, net	9.5	5.0	2	1	3.9	1.1	1	1	0	0
Private transfers, net	–0.5	–0.5	–1	–1	–0.3	–0.2	0	0	0	0
Services and private transfers, net	16.1	11.0	8	8	7.4	3.6	4	4	4	4
Official transfers, net	–5.8	–7.2	–6	–6	–2.5	–4.7	–3	–3	–3	–4
Current balance	–26.6	–34.0	–29	–23	–15.9	–18.1	–15	–13	–12	–11
Memorandum items (s.a.a.r.)										
Per cent changes in volume[a]										
Exports	1.2	5.5	9.2	7.2	3.4	14.0	7.8	7.4	7.1	7.2
Imports	13.5	7.8	2.5	3.7	8.4	–1.3	5.0	1.4	4.3	4.8

Note: Detail may not add, due to rounding.
a) Customs basis.

building societies' sterling lending, though falling back from earlier peak rates, has remained high at around 20 per cent.

Prospects

Against this policy background and in the light of recent indicators, the adjustment of the economy is projected to continue only gradually. Survey evidence points to a weak picture for economic activity in 1990 though not to any significant fall in output. Whilst the business climate has deteriorated markedly, it is still well above the level reached at the troughs of the two most recent recessions. Consumer confidence, though, has already fallen to about the levels recorded during the 1980/81 recession. Investment intention surveys do not yet point to a significant decline in capital spending, but a downward revision of investment plans may not be delayed for long. While total order books have remained depressed, export optimism has strongly recovered. Foreign demand is projected to remain the mainstay of economic activity; with export performance likely to continue to improve, net exports could contribute 1½ percentage points to GDP growth in 1990. This should outweigh a likely fall in domestic demand, resulting from continued destocking, a modest decline in fixed investment and subdued growth in consumer spending. The latter is expected to be damped by both a further rise in the personal saving ratio and lower growth in disposable income due to a sharply diminishing rise in employment. Although the saving ratio is projected to stabilise, the expansion of private consumption is likely to remain modest in 1991. With destocking projected to peter out and the fall in fixed investment likely to be reversed, growth in total domestic demand is expected to resume. Notwithstanding a diminishing improvement in the real foreign balance – as a result of accelerating import growth and reduced export market gains – GDP growth is therefore likely to recover in 1991, but should remain significantly below the growth of potential output.

With sluggish output growth, little change is projected in employment over the next eighteen months or so. Even though labour-supply growth may fall below that of the working age population, the rate of unemployment is likely to increase. Easier labour-market conditions should restrain the rise in effective earnings. Together with a resumption of productivity gains, this should damp cost pressures. As profit margins can be expected to come under pressure, inflation may subside gradually from the second half of 1990 onwards. Inflation figures in the table summarising the projections are distorted by the reform of local taxation, the replacement of domestic rates by the Community Charge leading to a sharp drop in the levels of the private consumption deflator and the GDP deflator at market prices. Some terms-of-trade gains along with the outlook for rising real net exports should make for a gradual narrowing of the current-account deficit, which may come down to some 2 per cent of GDP by the end of 1991.

CANADA

Key features

The Canadian economy remained quite resilient throughout 1989. Despite a shift to a more restrictive monetary policy, and a significantly negative contribution to growth from the foreign balance, real GDP expanded at an annual rate of 2 per cent in the fourth quarter of 1989. Output based GDP fell in the first two months of 1990, but employment continued to advance briskly in the first four months of the year and there was a recovery in net exports. The unemployment rate dropped to an eight and a half-year low of 7.2 per cent in March/April. Despite some moderation, the year-on-year increase in consumer prices was still 5 per cent in April.

In late January 1990, the Bank of Canada eased monetary conditions modestly. But when the exchange rate depreciated by almost 4 per cent in a fortnight, despite stepped-up intervention reflected in a sharp run-down in foreign reserves, short-term interest rates were raised to seven-year highs. The medium-term fiscal consolidation effort continued in the February 1990 budget, with additional expenditure restraint designed to offset higher debt service charges in FY 1990/91. Against a background of higher world interest rates and stubborn domestic inflation pressures, Canadian interest rates are likely to remain high, thereby clouding prospects for attaining official deficit targets over the projection period, on unchanged policy assumptions.

During 1990 and 1991, output growth is expected to remain below the growth of potential output, sufficient to open up a small output gap. Underlying inflation therefore is projected to moderate gradu-

CANADA

Demand, output and prices

Percentage changes from previous period, seasonally adjusted at annual rates, volume (1981 prices)

	1987 current prices billion C$	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Private consumption	323.8	4.9	4.3	4.0	2.2	1.9	3.9	3.3	1.8	2.0	1.8	2.0
Government consumption	105.3	0.7	3.1	2.2	2.0	2.0	1.0	2.6	1.8	1.8	2.0	2.0
Gross fixed investment	115.2	11.7	13.2	7.1	3.1	4.9	9.4	2.2	3.5	3.3	5.2	5.8
Public[a]	12.9	3.6	5.3	8.4	2.9	0.3	8.0	13.2	–0.3	–0.3	0.5	0.5
Private residential	39.2	16.4	4.6	4.1	0.9	0.9	5.6	2.2	1.0	–0.5	1.0	2.1
Private non-residential	63.1	11.1	18.9	8.2	4.1	7.3	11.3	0.5	5.2	5.5	7.7	8.2
Final domestic demand	544.3	5.6	6.2	4.5	2.4	2.7	4.8	2.9	2.3	2.3	2.7	3.0
* change in stockbuilding[a]	1.2[b]	–0.6	–0.4	1.0	0.2	0.1	1.4	0.8	0	0	0.2	0
Total domestic demand	545.5	4.9	5.8	5.5	2.6	2.8	6.3	3.7	2.2	2.3	2.9	3.0
Exports of goods and services	144.4	6.5	9.5	–0.9	1.0	3.5	–0.4	–1.8	1.6	2.6	3.5	4.2
Imports of goods and services	139.3	9.0	13.9	7.2	3.1	4.0	9.9	3.5	2.5	4.0	4.0	4.0
* change in foreign balance[a]	5.1[b]	–0.5	–1.1	–2.7	–0.7	–0.2	–3.3	–1.8	–0.3	–0.5	–0.2	0
* error of estimate[a]	0.0[b]	0.2	0.4	0.1	0.1	0	–0.1	0.3	0	0	0	0
GDP at market prices	550.6	4.5	5.0	2.9	2.0	2.6	2.8	2.2	1.9	1.8	2.7	3.0
GDP implicit price deflator	–	4.4	4.1	4.8	4.1	4.2	5.4	3.9	4.2	4.1	4.7	3.4
Memorandum items												
Consumer prices[c]	–	4.0	3.7	4.6	4.4	5.2	4.9	4.7	4.4	4.1	6.5	3.8
Industrial production	–	5.6	6.2	0.9	–0.6	1.1	0.5	–0.3	–1.0	0	1.5	1.5
Unemployment rate	–	8.8	7.8	7.5	7.7	8.2	7.6	7.5	7.6	7.9	8.1	8.3

* As a percentage of GDP in the previous period.
a) Excluding nationalized industries and public corporations.
b) Actual amount of stockbuilding, foreign balance and error of estimate.
c) National accounts implicit private consumption deflator.

CANADA

Appropriation account for households

Percentage changes from previous year

	1987 billion Can.$	1987	1988	1989	1990	1991
Compensation of employees	299.1	8.9	9.0	9.3	7.6	6.6
Income from property and other	96.6	9.8	10.3	10.8	10.7	9.3
Transfers received	68.8	8.2	6.3	6.3	6.4	6.5
Less: interest on consumer debt	5.4	17.2	16.9	29.0	13.3	7.5
Total income	459.2	8.9	8.8	8.9	8.0	7.2
Less: direct taxes	70.2	12.7	13.0	5.9	11.3	8.8
other transfers paid	30.4	10.6	10.5	2.6	15.2	10.6
Disposable income	358.5	8.0	7.8	10.1	6.8	6.5
Consumers' expenditure	323.8	9.1	8.2	8.8	6.7	7.2
Saving ratio (as a percentage of disposable income)	–	9.7	9.4	10.4	10.4	9.9

ally, although further progress will be partly masked by the one-time effects of the introduction of the goods and services tax, as a replacement for the federal manufacturers' sales tax, in January 1991. Recently, however, the unemployment rate has declined unexpectedly, to well below current estimates of the natural rate; unless the latter has declined in parallel there is a risk of greater wage inflation than projected here. The current account deficit is not expected to show any improvement and might reach roughly 3½ per cent of GDP by 1991.

Recent Trends

Total domestic demand rose by 5.7 per cent in the fourth quarter of 1989 (all data at annual rates). Growth of private consumption, which had weakened sharply in the summer – in large part due to a fall in new car sales – rebounded. Similarly, private non-residential investment, which fell in the previous quarter, recovered to double digit growth rates. Stockbuilding, however, fell with a run down of retail and motor vehicle parts inventories. Export volumes fell for a third consecutive quarter reflecting weak auto sales in the United States and the effects of the drought on wheat exports. Imports continued to expand rapidly due to the high import content of buoyant equipment investment. Real GDP therefore grew at an annual rate of 2.0 per cent. The trade surplus dropped sharply despite a small terms-of-trade gain, and as the deficit on invisibles continued to increase, the current-account deficit rose to C$22.3 billion (annual rate) in the fourth quarter, reaching 3 per cent of GDP for 1989 as a whole, compared with 1.7 per cent in 1988.

Employment growth slowed in the second half of 1989, reflecting continuing declines in goods-producing industries. The unemployment rate, which had hit a low of 7.3 per cent in June, rose to 7.8 per cent in the early months of 1990. Regional balance, however, improved with an easing in tight labour markets in central Canada and employment gains in other regions. With the unemployment rate below most estimates of the natural rate, wage settlements, and especially compensation per employee, picked up. The growth of labour productivity remained poor, so overall unit labour costs rose by over 6 per cent in the second half of 1989; since corporate profit margins were squeezed sharply, the GDP deflator rose by only 3.9 per cent. The private consumption deflator, however, rose 4.7 per cent, due in part to indirect-tax increases. For 1989 as a whole, the CPI rose 5 per cent, the highest increase in five years, and above the average of other major OECD countries.

Current indicators point to a sustained, but modest pace of domestic demand and output growth, despite predictions of recession. Employment made substantial gains in the first four months of 1990 and the unemployment rate dropped to 7.2 per cent in March/April. Housing starts fell in April, but remain at high levels, especially in western Canada. Net exports recovered in the first quarter, and inventory levels are low relative to sales. Investment intentions are strong, with large planned increases in machinery and equipment and in the energy sector, due to ration-

alisation and restructuring stimulated by the Free Trade Agreement with the United States.

Policies

The general government deficit widened to 3.4 per cent of GDP in calendar year 1989, compared with 2.6 per cent in 1988. The federal Budget targets for FY 1989/90 (which ended on 31st March) appear to have been met, with the deficit constant as a proportion of GDP. The 1990 Budget announced renewed expenditure restraint and cash management initiatives to save C$2.8 billion in FY 1990/91 and C$3.8 billion in FY 1991/92 to offset higher debt service charges. Federal transfers to persons were exempted and no new taxes were announced. Approximately one-third of total expenditure savings comes from cutting transfers to provinces. Hence, the general government deficit will partly depend on the reactions of provincial governments to these cuts. OECD projections embody stronger nominal GDP growth than official projections and some tax increases by provincial governments resulting in larger government revenue projections. However, they also include significantly higher interest rates and debt service charges. The general government deficit is thus projected to fall by 0.7 per cent of GDP over the two coming calendar years, compared with 1 per cent in official projections. On a cyclically-adjusted basis, the general government deficit would decline by slightly more than 1½ per cent of GDP over two years, and the primary balance (i.e. excluding interest payments) by 2½ per cent of GDP.

On 1st January 1991, the federal government will introduce a VAT-type goods and services tax (GST), levied at a uniform rate of 7 per cent, to replace the existing 13.5 per cent federal sales tax (FST) levied on manufactured goods. GST revenues, net of GST tax credits to low income families, are projected at C$20.8 billion, compared with C$19 billion from the FST and miscellaneous excise taxes. This revenue gain will be offset initially by start-up costs[1].

Monetary policy was tightened in the course of 1989: despite falling short-term U.S. rates, Canadian short-term rates remained essentially flat from March to December 1989, and there was an easing of about half a point in long-term government yields. This led to a sharply inverted yield curve and a widening of short-term differentials *vis-à-vis* the United States to close to 4 points. Long rates, both nominal and real, remained above comparable U.S. rates. During 1989 the bilateral exchange rate appreciated from less than U.S. 84 to roughly U.S. 86.5 cents.

In late January 1990, in response to a perceived weakening in economic conditions, the Bank of Canada eased monetary policy with a 29 basis point drop in the bank rate. The drop in the bank rate generated market expectations that Canadian monetary policy might ease further, while interest rates of the three largest OECD countries were poised to rise. The exchange rate dropped by almost 4 per cent in a fortnight, despite stepped-up currency intervention. The reduction of the bank rate was reversed, and by March it had reached a seven-year high, against a background of the economy weakening less than expected. Commercial bank prime lending rates rose 0.75 points and long-term interest rates by more than 1½ points from their year end levels. Short-term differentials *vis-à-vis* the U.S. dollar rose to close to 5 percentage points and the exchange rate stabilised at roughly U.S. 85 cents compared with a low of about U.S. 82.5 cents in mid-February. The expansion of money and credit remains rapid, with growth in M2 and M2+ still close to 10 per cent at annual rates. Given persistent inflation pressures, the imminent introduction of the GST, and continuing high world interest rates, Canadian interest rates are projected to decline only modestly over the coming two years.

Prospects

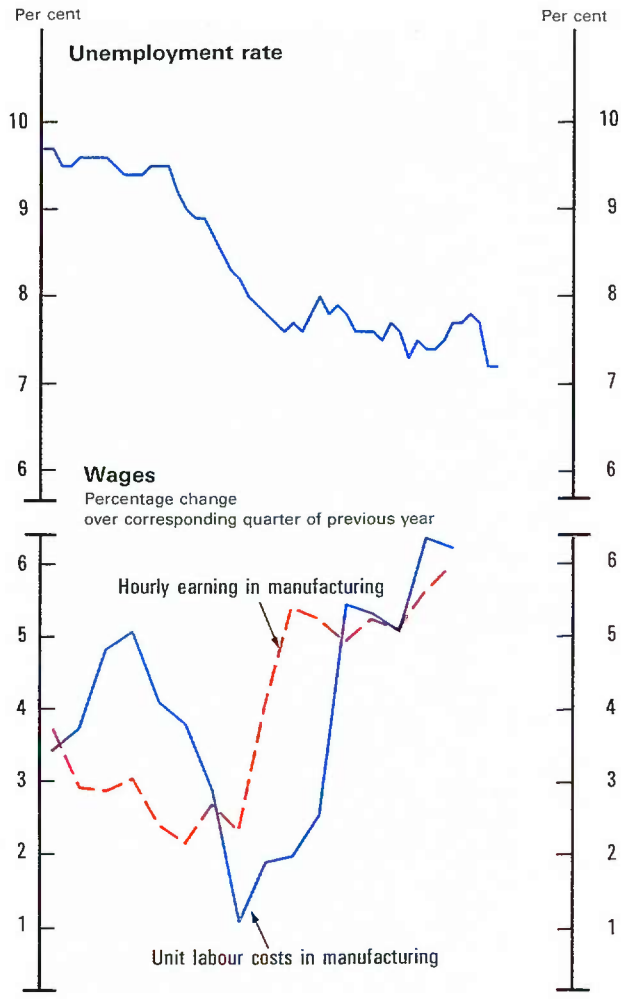
The continuing strength of private non-residential investment, and the sustained expansion of world trade may underpin steady, albeit modest, rates of domestic output growth. On the other hand, growth of private consumption, especially of durables, is projected to remain quite modest, and residential construction may come under increasing pressure from high interest rates. All in all, GDP in volume terms may expand at annual rates of 2 and 2½ per cent in 1990 and 1991 respectively, keeping actual below potential output growth throughout the projection period. Employment may increase only modestly in the coming two years, and given rising participation rates and high immigration, unemployment may edge up gradually. Structural reforms, notably those aimed at heightening competition via deregulation, free trade with the United States and tax reform, should boost the future level of potential output, perhaps significantly, thereby helping to alleviate inflation pressures.

Yet despite some easing, inflation pressures are likely to persist. Wage settlements rose to 6 per cent in the first quarter of 1990, with productivity gains still sluggish, unit labour cost increases were close to 7 per cent in early 1990. The introduction of the GST in

CANADA

THE LABOUR MARKET

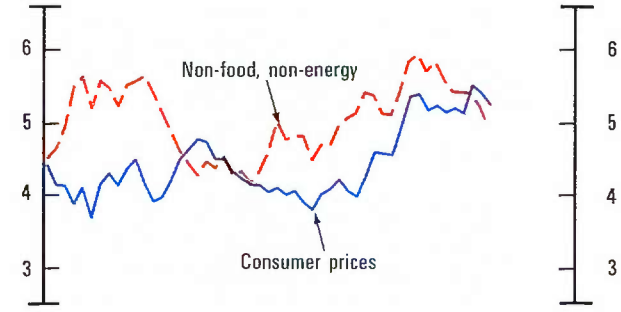
Adjusted for seasonal variations



INDUSTRIAL CAPACITY UTILISATION RATE (1)

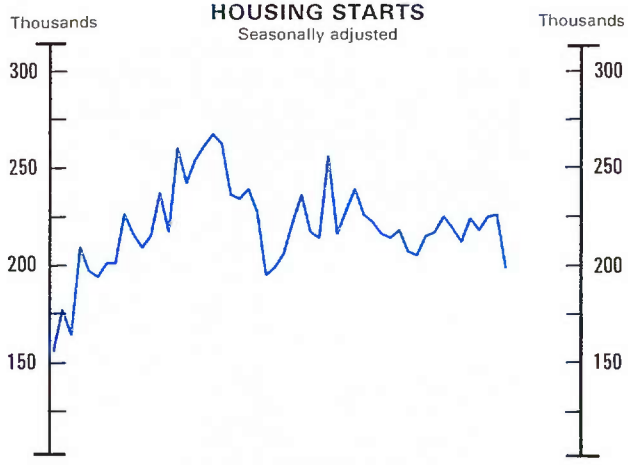
CONSUMER PRICE INDEX

Percentage change over corresponding month of previous year

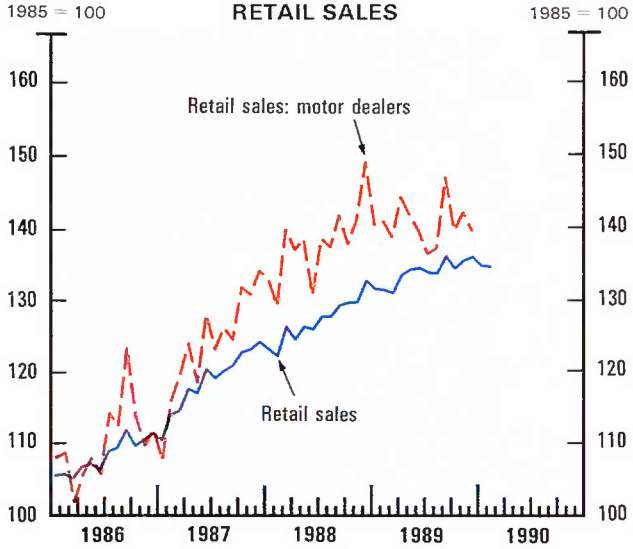


HOUSING STARTS

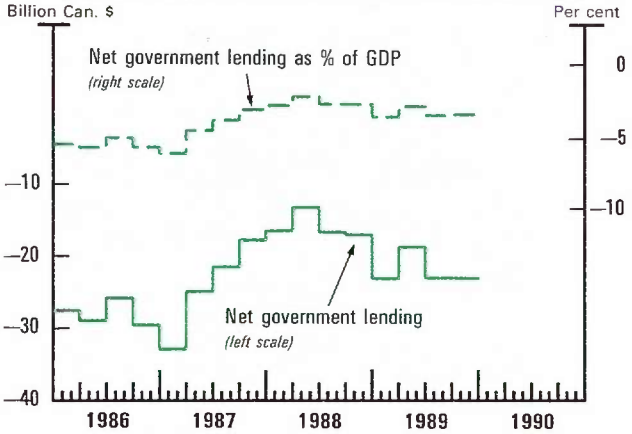
Seasonally adjusted



RETAIL SALES



GENERAL GOVERNMENT BUDGET BALANCE



1. As estimated by the Bank of Canada.

Sources: CANSIM, Statistics Canada;
OECD, *Main Economic Indicators.*

CANADA

Balance of payments

Value, $ billion

	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Seasonally adjusted										
Exports	114.7	121.0	124	132	61.0	60.0	61	63	65	67
Imports	105.9	115.9	121	129	57.6	58.3	60	62	64	66
Trade balance	8.8	5.0	3	3	3.4	1.7	2	2	1	2
Non-factor services, net	–5.7	–7.0	–8	–8	–3.4	–3.7	–4	–4	–4	–4
Investment income, net	–15.0	–18.9	–20	–23	–9.6	–9.2	–10	–11	–11	–12
Private transfers, net	4.0	4.9	5	6	2.5	2.4	3	3	3	3
Services and private transfers, net	–16.6	–21.0	–23	–25	–10.5	–10.5	–11	–12	–12	–13
Official transfers, net	–0.6	–0.6	–1	–1	–0.3	–0.3	0	0	0	0
Current balance	–8.4	–16.6	–20	–23	–7.5	–9.1	–10	–10	–11	–12
Memorandum items (s.a.a.r.)										
Per cent changes in volume[a]										
Exports	10.0	–0.7	1.1	3.4	0.1	–1.6	1.7	2.7	3.3	4.1
Imports	14.6	7.5	3.1	4.1	10.8	3.4	2.6	4.0	4.1	4.1

Note: Detail may not add, due to rounding.
a) Customs basis.

1991 will entail a step increase in the CPI of roughly 1¼ per cent. Little, if any wage response is assumed.

Exports of primary commodities are projected to recover from their low levels of 1989, although manufactured exports could grow more modestly than world trade, reflecting slow expansion of U.S. imports (particularly of automobiles). With import volume growth remaining sustained, little improvement in real net exports is projected and no further terms-of-trade gains are predicted. Given the trend deterioration in net service payments, the current-account deficit could reach almost US$23 billion in 1991, roughly 3½ per cent of GDP, almost twice its historical average.

NOTE

1. Transitional start-up costs are estimated to boost the deficit temporarily by C$1.8 billion and C$2 billion in FY 1990/91 and 1991/92.

AUSTRALIA

Real GDP rose by nearly 5 per cent in 1989 compared with 3.6 per cent the year before. The volume of imports of goods and services rose much faster than exports, reflecting boom conditions in domestic markets and some losses in competitiveness. Demand growth was strongest in areas of high import intensity. As a consequence, notwithstanding improved terms of trade, the current account deficit reached a record level of US$15.7 billion in 1989, or 5.6 per cent of GDP. In the course of 1989, however, growth in total domestic demand slowed markedly, easing tensions. In a setting of high interest rates, gross fixed investment fell sharply in the second half of the year, pulling down imports of goods and services. As firms shifted sales from domestic to foreign markets, notably those for manufactured goods, exports of goods and services gathered strength. In line with the weakening of economic activity in the course of the year, employment growth decelerated, and the rate of unemployment, in a reversal of earlier declines, began to edge upward in early 1990. Despite a moderation of unit labour costs during 1989 and continued wage restraint, inflation, as measured by the private consumption deflator, remained well above rates in trading partners.

Amid growing signs that the economy had been slowing, the monetary stance was relaxed in early 1990, reducing the excess of short-term over long-term interest rates. Given projections of sharply reduced output growth, short-term interest rates are assumed to ease somewhat further. On the customary assumption of unchanged policy, the fiscal stance would be restrictive in 1990, easing in 1991. As part of a new agreement between the Government and the union movement, income tax cuts, worth A$2.5 billion in a full year, were announced in February 1990, taking effect on 1st January 1991. As in the past, the tax cuts are designed to underpin wage restraint. Given a projected rise in unemployment, aggregate wages are assumed to rise in the range of 6½ to 7 per cent in both 1990 and 1991, broadly in line with the agreed wage target for 1990-91. Inflation, as measured by the private consumption deflator, could fall into the same range, leaving little room for real wage gains.

As suggested by most recent indicators, growth in real GDP is projected to diminish sharply in 1990, and to recover thereafter. In view of subdued demand prospects and high real interest rates, all components of private fixed investment may fall in 1990. A

AUSTRALIA

Demand, output and prices

Percentage changes, volume (1985 prices)

	1987 current prices billion A$	1987	1988	1989	1990	1991
Private consumption	164.2	2.0	3.4	4.8	2.1	2.4
Government consumption	50.1	1.4	2.7	4.6	2.4	1.4
Gross fixed capital formation	67.6	3.5	9.6	9.4	–7.3	1.1
Final domestic demand	281.9	2.2	4.7	5.9	–0.2	1.9
* change in stockbuilding	0.1 [a]	0.1	0.8	0.5	–1.1	0.1
Total domestic demand	281.9	2.4	5.5	6.4	–1.3	2.0
Exports of goods and services	46.1	10.0	2.9	3.7	4.4	7.4
Imports of goods and services	49.6	3.3	15.3	20.6	–1.7	2.9
* change in foreign balance	–3.5 [a]	1.1	–2.1	–3.3	1.1	0.7
GDP at market prices [b]	279.1	4.0	3.6	4.9	0.3	2.8
GDP implicit price deflator	–	7.5	9.0	7.8	5.8	6.1
Memorandum items						
Consumer prices [c]	–	7.9	7.0	6.7	6.8	6.3
Industrial production	–	4.7	5.2	5.6	1.9	3.4
Unemployment rate	–	8.0	7.1	6.1	6.9	7.2
Household saving ratio [d]	–	6.5	6.7	7.9	8.8	9.0
General government financial balance [e]	–	–1.1	0.7	1.2	2.3	2.2
Current balance ($ billion)	–	–8.0	–9.9	–15.7	–14.3	–12.8

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) Includes statistical discrepancy not included in the components.
c) National accounts implicit private consumption deflator.
d) As a percentage of disposable income.
e) As a percentage of GDP.

rebound is projected for 1991, reflecting a steady decline in interest rates and improved business confidence. Real private consumption should decelerate in 1990 along with reduced employment growth, but pick up in 1991, when cuts in personal income taxation take effect. Slower growth, especially a slump in investment which has a high import content, is likely to result in a fall of imports from exceptionally high levels in 1989. Reflecting increased domestic economic slack, export volumes may grow more rapidly. As a consequence, the current account deficit may narrow, perhaps reaching US$13 billion or 4.3 per cent of GDP in 1991.

AUSTRIA

For more than two years economic growth has been unexpectedly robust, bringing Austria back among the fastest-growing countries in OECD Europe. The upswing was initially export-led, reflecting the buoyancy of international trade, a favourable commodity structure and improved international competitiveness. In 1989, the Tax Reform supported activity, which became more broadly-based without, however, exerting excessive pressure on productive capacity. Total output grew by 3¾ per cent in 1989, ½ a percentage point less than in 1988 but more than twice the average of 1981-87. While exports remained strong – and the current account returned to slight surplus – total domestic demand growth slowed to a more sustainable pace in 1989, as the stockbuilding cycle ended. Nonetheless, real private consumption grew faster, boosted by a marked rise in wages and cuts in income taxes. Investment in machinery and equipment was stimulated by better profit developments, good sales prospects and high rates of capacity utilisation, with industrial investment recovering after two years of steady decline. Construction investment tended to level off after the spring of 1989. With renewed domestic cost pressure and continued rises on import prices, consumer price increases picked up to a rate of 2½ per cent. Better employment prospects raised participation rates and foreign labour supply, but employment increased even faster, thereby bringing about a further reduction in the rate of unemployment.

AUSTRIA

Demand, output and prices

Percentage changes, volume (1983 prices)

	1987 current prices billion Sch	1987	1988	1989	1990	1991
Private consumption	835.1	3.0	3.0	3.3	3.4	3.0
Government consumption	280.4	0.4	0.7	1.0	0.5	0.5
Gross fixed capital formation	340.8	2.9	5.8	4.6	4.2	4.2
Final domestic demand	1 456.3	2.5	3.2	3.2	3.1	2.9
* change in stockbuilding	14.1[a]	0.4	1.5	0.2	0.6	0.1
Total domestic demand	1 470.4	2.8	4.7	3.3	3.6	2.9
Exports of goods and services	527.2	2.4	8.8	11.1	8.0	7.1
Imports of goods and services	519.8	4.7	10.0	9.7	8.5	6.9
* change in foreign balance	7.4[a]	–0.9	–0.6	0.4	–0.3	0
GDP at market prices	1 477.8	1.9	4.2	3.8	3.4	2.9
GDP implicit price deflator	–	2.4	2.0	2.6	3.0	3.3
Memorandum items						
Consumer prices[b]	–	0.9	1.8	2.6	3.2	3.6
Industrial production	–	1.0	4.4	5.9	3.4	2.6
Unemployment rate	–	3.8	3.6	3.4	3.2	3.2
Household saving ratio[c]	–	12.3	12.6	14.1	12.6	11.6
General government financial balance[d]	–	–4.3	–3.1	–2.7	–1.1	–0.3
Current balance ($ billion)	–	–0.2	–0.3	0	0.2	–0.3

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.
c) As a percentage of disposable income.
d) As a percentage of GDP.

The fiscal policy assumptions underlying the present projections reflect the Government's aim to reduce the federal deficit from 3½ per cent of GDP in 1989 to 2½ per cent in 1992. Resumed fiscal drag after 1989 and expenditure restraint would imply that policy might cease to support activity in 1990 and 1991. The main objective of monetary policy remains to ensure stability of the schilling against the Deutschemark. Given the less strong external position and slightly less favourable inflation prospects than in Germany, the positive interest-rate premium may widen somewhat on both short-term and long-term interest rates.

Export growth is likely to remain buoyant over the projection period, though less so than in 1988-89. Exports to central and eastern European countries should pick up but some weakening of international competitiveness could induce losses in market shares in 1991. Given improved employment prospects and high profit levels, the trend of average gross wages is likely to steepen over the projection period, but the resumption of fiscal drag might reduce the rate of growth of households' disposable income. However, a fall of the saving ratio to more normal levels should sustain private consumption growth. Investment in machinery and equipment is likely to lose some of its momentum, while construction activity may recover somewhat. Government demand for goods and services is expected to rise only modestly, in line with medium-term consolidation objectives. In all, total domestic demand growth might reach 3½ per cent in 1990, but should slow to 3 per cent in 1991 as stock-building returns to more sustainable levels. The resulting deceleration of import growth is likely to be smaller than that for exports, making for a small negative contribution of the foreign balance to the growth of output. On this basis real GDP could grow by 3½ per cent in 1990, and slightly less in 1991. Employment gains would moderate and the rate of unemployment would stay around 3¼ per cent. The rate of consumer-price inflation may pick up to 3½ per cent by the end of the projection period, while the current account may remain in broad balance.

BELGIUM

Economic performance in Belgium continues to be marked by buoyant output growth, moderate inflation and a substantial external surplus. The growth rate of merchandise exports remains strong, and the BLEU current surplus appears to have widened further to nearly 2½ per cent of GDP in 1989. Domestic demand has continued to be investment-led: in 1989 business fixed investment rose about 15 per cent in volume terms for the second consecutive year. However, there are signs of a recent shift in strength from investment to consumer demand in response to rapid household income increases generated, in part, by mounting wage gains and continuing declines in effective personal tax rates. The unemployment rate is continuing on a downward trend; the labour market is probably approaching a state where real wage growth would begin to exceed labour productivity increases. While inflation has risen little over the past year, the pick-up in underlying inflation (excluding food and energy) has been slightly greater; however, increases in the prices of services and rents remain modest. In recent months there has been a slight easing, reflecting declining import prices (especially for energy) and diminishing strains on capacity. Nevertheless, there remains a risk of excessive demand pressure and a loss of competitiveness unless output growth stabilises at a more sustainable rate in the near future.

In response to further increases in foreign rates, Belgian short-term interest rates continued to rise until late January and long-term rates until early March. More recently, however, there has been some reversal of this trend. This improvement may be partly attributable to the reduction in the rate of withholding tax on interest income from 25 to 10 per cent in March. Despite lower-than-expected yields on both personal and corporate tax accounts, the 1989 State budgetary outcome was better than expected, due in part to slower spending by the Regions and Communities subsequent to the 1989 constitutional reform. The 1990 budget was recently adjusted to meet prior deficit objectives because of BF 54 billion (0.9 per cent of GDP) of additional expenditure (⅔ of which on debt service). The bulk of the "savings" were found by reduced transfers to the social-security system, while a one-shot advance in the collection of personal taxes will boost revenues. Action has been taken in a number of other domains: unemployment insurance programmes are being reformed; greater flexibility has been introduced into the pension system with the possible age of retirement having been reduced to 60; a plan to improve the yield of direct taxation has been adopted; and introduction of greater competition in the financing of government debt and its separation from the setting of monetary policy through the deregulation of

BELGIUM

Demand, output and prices

Percentage changes, volume (1985 prices)

	1987 current prices billion BF	1987	1988	1989	1990	1991
Private consumption	3 447.0	2.9	2.4	3.6	3.9	3.7
Government consumption	893.8	1.3	–0.7	0.4	0.3	0.3
Gross fixed capital formation	828.7	5.2	16.0	14.3	7.0	4.6
Final domestic demand	5 169.5	3.0	4.0	5.0	3.9	3.4
* change in stockbuilding	11.5[a]	0.6	0.3	0.1	0.1	0
Total domestic demand	5 181.0	3.6	4.3	5.0	4.0	3.4
Exports of goods and services	3 476.2	7.1	8.2	8.0	6.7	6.0
Imports of goods and services	3 335.3	9.3	8.3	9.0	7.5	6.8
* change in foreign balance	140.9[a]	–1.6	–0.1	–0.9	–0.8	–0.8
GDP at market prices	5 321.9	2.0	4.3	4.2	3.3	2.7
GDP implicit price deflator	–	2.0	1.9	3.8	4.1	3.7
Memorandum items						
Consumer prices[b]	–	1.5	1.7	3.1	3.1	3.3
Industrial production	–	2.1	6.0	3.6	3.3	2.8
Unemployment rate	–	11.3	10.3	9.3	8.7	8.3
Household saving ratio[c]	–	11.9	13.3	14.1	14.1	13.7
General government financial balance[d]	–	–7.2	–6.8	–6.5	–6.1	–6.0
Current balance ($ billion)[e]	–	2.7	3.5	3.8	4.6	3.7

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) Private consumption deflator.
c) As a percentage of disposable income.
d) As a percentage of GDP.
e) Balance for BLEU.

financial markets has been proposed. In addition, a closer pegging of the franc to the Deutschemark has been announced.

While a limited slowdown in output growth may already be under way, real GDP may still rise by some 3¼ per cent in 1990, led by robust albeit slowing business fixed investment growth. Consumer demand should continue to pick up in line with buoyant interest- and labour-income growth, but the rate of residential construction is expected to reach a plateau. Declining net exports may continue to curb real growth; however there may be little change in the BLEU current surplus this year because of further terms-of-trade gains and an improvement in the invisibles balance. By 1991, however, reduced competitiveness and stability of the terms of trade may reverse the trend to mounting surpluses. While employment growth may diminish, although less markedly than production growth, unemployment is likely to continue to fall, adding to wage pressures. The pick-up in inflation seems likely, however, to be limited by the strength of the currency and import competition, leading to slowing increases in profit margins.

DENMARK

During 1989 and early 1990 the Danish economy was gradually recovering from the recession it entered in late 1986. Private consumption stopped falling in the course of the year, with in particular a resumption of growth in car sales. Total business investment stagnated, however, despite the positive impact of special factors (a major bridge project and the reflagging of ships in response to a new shipping register). Wage rises have decelerated to around the average for countries maintaining fixed exchange rates within the EMS, reflecting relatively high unemployment. The sustained weakness of domestic demand had led to a marked reduction of the current-account deficit since 1986 and this trend continued into 1989; while the repatriation of ships boosted imports and interest payments on the large external debt increased, export performance improved substantially, with exporters maintaining their share of relatively buoyant markets

DENMARK

Demand, output and prices

Percentage changes, volume (1980 prices)

	1987 current prices billion DKr	1987	1988	1989	1990	1991
Private consumption	377.7	–1.7	–1.7	–0.5	1.1	2.0
Government consumption	176.2	2.5	–0.9	–0.5	–0.8	–0.4
Gross fixed capital formation	133.1	–7.4	–4.8	–1.4	0.2	4.5
Final domestic demand	687.0	–1.9	–2.1	–0.6	0.5	1.9
* change in stockbuilding	–4.0[a]	–1.1	–0.1	0.7	0.1	0
Total domestic demand	683.0	–3.0	–2.2	0.1	0.6	1.9
Exports of goods and services	220.1	4.8	6.7	6.4	4.0	4.3
Imports of goods and services	207.2	–2.2	1.2	4.3	3.1	4.3
* change in foreign balance	12.9[a]	2.5	2.0	1.0	0.5	0.2
GDP at market prices	695.9	–0.6	–0.2	1.1	1.1	2.0
GDP implicit price deflator	–	5.0	4.2	4.0	3.1	3.1
Memorandum items						
Consumer prices[b]	–	4.8	4.0	5.0	2.8	3.0
Industrial production	–	–3.0	1.9	2.5	3.5	4.0
Unemployment rate	–	7.8	8.6	9.3	9.3	9.0
General government financial balance[c]	–	2.5	0.3	–0.4	–0.5	0
Current balance ($ billion)	–	–3.0	–1.8	–1.4	–1.6	–1.7

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.
c) As a percentage of GDP.

for the first time in six years. In all, the current-account deficit in 1989 was lower as a share of GDP than at any time since the early 1970s. In spite of decelerating wages, consumer-price inflation was higher in 1989 as a whole compared with 1988, but decelerated from the beginning of 1990, partly due to cuts of indirect taxes on products subject to intense border trade.

The impact of fiscal policy may be broadly neutral in 1990. While the actual stance of policy appears to be slightly restrictive, following two years of support to activity, this could be offset by the abolition of the tax on consumer interest payments, which had yielded little revenue but had damped consumers' propensity to spend. Also, the increase envisaged in proceeds from privatisation may have only a slight negative effect on domestic demand. For 1991, the projection is based on a slight tightening of policy, reflecting expenditure restraint by both central and local government. While the differential between Danish and German short-term interest rates – which decreased in early 1990 following an increase in 1989 – may narrow further, a significant fall in short-term rates seems unlikely; long-term rates are projected to move up gradually to the levels of short rates.

Despite the repeal of the consumer interest tax and an easing of regulations concerning housing loans, the household saving ratio is projected to remain stable during the projection period in view of high interest rates and the adverse effect on household wealth of depressed conditions on the housing market. The same factors may work against residential investment: only a modest upturn is projected from its current very low level. Measured business investment may grow only slowly in the current year, as the reflagging of merchant ships, which inflated recorded values in 1989, will be completed. Abstracting from this special factor, business investment is expected to grow more vigorously, even though a relatively high level of investment was maintained during the 1987-88 recession. Despite the effective appreciation of the krone, only small losses of export-market shares are projected: with domestic demand recovering only gradually, there should be continuing pressure on producers to export. Excluding the effects on recorded trade data of the reflagging of ships, imports should increase in line with domestic demand. The positive contribution from net exports to growth of GDP may therefore decline gradually. With labour-force growth assumed to remain low, the modest pick-up projected for production should induce job creation sufficient to bring about a slight fall in unemployment. This tightening of labour markets could bring wage moderation to an end. The continued, albeit faltering, improvement in the trade balance in volume terms is likely to be offset by some further increase in net interest payments; the current deficit may be broadly unchanged.

FINLAND

Following a decade in which GDP growth averaged close to 4 per cent per annum, the Finnish economy appears to be facing a period of slower expansion. In 1988 and 1989, GDP growth at around 5 per cent, driven by booming investment and consumption, led to overheating. Despite modest import price increases and substantial productivity gains, inflation pressures intensified and wages and consumer prices accelerated. The unemployment rate of 3.5 per cent was the lowest registered since 1975. The external balance deteriorated substantially, pushing the current-account deficit to 4.2 per cent of GDP.

Increasing imbalances have triggered responses from both economic policy and financial markets. In 1989, fiscal policy was set to be more restrictive than initially planned and monetary conditions were tightened substantially. The spread between domestic and foreign short-term rates increased significantly following the revaluation of the currency in the spring and – in the autumn – disappointing trade data; thus, with interest rates rising abroad, Finnish short-term rates rose from 11 per cent to around 16 per cent by the end of the year. Responding to higher interest rates, housing prices and share prices have declined since April 1989, and industrial production and retail sales have stagnated since late 1989. Business and consumer confidence have fallen significantly. Weakening prospects were also a major factor inducing most trade unions and employers' federations to accept the Government's proposal for a comprehensive incomes policy agreement in early 1990. In return for low nominal wage increases the agreement guarantees an average increase of 4.5 per cent in wage-earners' real disposable incomes over the two-year contract period by means of index clauses and some tax relief.

No major changes are expected in economic policies and their mix in 1990 and 1991. Despite a decline in the Spring of 1990, interest rates are likely to remain high and could even rise a little over the projection period, reflecting both deliberate policy decisions and market expectations. Fiscal policy is expected to remain slightly restrictive in 1990 but may ease somewhat in 1991, given the limitations set by the incomes policy agreement and plans for continuing tax reform in the 1991 budget.

Private consumption is projected to slow during 1990 and 1991, reflecting weakening income prospects and a rising saving ratio. Investment is likely to be significantly affected by high interest rates and falling capacity utilisation. A particularly strong decline is projected for housing investment, once dwellings currently under construction are completed towards the end of 1990. Despite the rather low contractual wage increases under the incomes-policy agreement, unit

FINLAND

Demand, output and prices

Percentage changes, volume (1985 prices)

	1987 current prices billion MK	1987	1988	1989	1990	1991
Private consumption	214.0	5.7	5.0	3.5	2.5	1.5
Government consumption	81.3	4.5	2.5	3.4	3.0	2.7
Gross fixed capital formation	93.3	5.4	9.8	12.4	1.0	–3.6
Final domestic demand	388.6	5.4	5.6	5.6	2.2	0.4
* change in stockbuilding	–0.9[a]	0.3	0.9	0.8	–0.2	0
Total domestic demand	387.7	5.7	6.5	6.4	2.0	0.4
Exports of goods and services	100.0	2.6	3.9	1.6	2.1	3.0
Imports of goods and services	97.8	9.0	11.5	9.4	2.8	0.5
* change in foreign balance	2.3[a]	–1.8	–2.3	–2.5	–0.3	0.7
GDP at market prices	391.6	3.3	5.2	5.0	1.7	1.1
GDP implicit price deflator	–	5.3	6.9	6.8	6.9	5.2
Memorandum items						
Consumer prices[b]	–	3.7	4.6	5.5	6.5	5.3
Industrial production	–	4.2	5.2	3.0	1.5	1.5
Unemployment rate	–	5.1	4.6	3.5	3.8	4.5
General government financial balance[c]	–	–1.2	1.4	2.7	2.5	1.4
Current balance ($ billion)	–	–1.8	–3.0	–4.9	–6.4	–6.5

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts private consumption deflator.
c) As a percentage of GDP.

labour costs are likely to continue to grow rapidly, reflecting increases in indirect labour costs, carry-over from earlier agreements and significant wage drift given tight labour market conditions. Despite a projected squeeze of profit margins this will probably lead to accelerating consumer prices in 1990 and weakening competitiveness throughout the projection period. Losses of market shares may continue despite falling pressure on domestic production capacity. As a result, foreign trade is projected to contribute negatively to growth again in 1990 and, in spite of increasing export-market growth, to give only a modest positive contribution in 1991. With the terms of trade roughly unchanged, the current-account deficit could surpass 4½ per cent of GDP in 1990 before levelling off in nominal terms in 1991.

GREECE

Economic performance deteriorated sharply in 1989 and recent indicators point to a continuation of adverse trends in the first half of 1990. Inflation in 1989 was nearly four times as high as the EC average and rose further in early 1990. A relaxation of wage and fiscal policies during a protracted electoral period was the most important factor behind the rapid increase in consumption expenditures in 1989. In spite of the sharp rise in real unit labour costs, fixed investment remained buoyant, reflecting lagged effects of the 1986-87 recovery in profits. The steep rise of domestic demand and the continued deterioration in international competitiveness widened the trade gap in volume terms, limiting output growth. Expectations of drachma devaluation associated with political uncertainty led, in the first four months of 1990, to substantial capital flight, speculative imports and reduced recorded invisible receipts. The current-account deficit widened to nearly 5 per cent of GDP in 1989 and was running at double that rate in the first quarter of 1990.

The public sector borrowing requirement (PSBR) reached 19 per cent of GDP in 1989, mainly driven by generous tax allowances, higher interest payments, stronger public consumption, and reduced

GREECE

Demand, output and prices

Percentage changes, volume (1970 prices)

	1987 current prices billion Dr	1987	1988	1989	1990	1991
Private consumption	4 319.4	0.8	3.3	3.1	2.5	2.0
Government consumption	1 243.0	1.8	6.4	5.9	1.5	1.5
Gross fixed capital formation[a]	1 056.0	–8.0	9.3	8.9	3.2	4.1
Final domestic demand	6 618.4	–0.4	4.6	4.4	2.4	2.2
* change in stockbuilding	38.8[b]	–0.4	0.1	0.2	–0.1	0
Total domestic demand	6 657.2	–0.8	4.7	4.6	2.3	2.2
Exports of goods and services	1 536.8	16.0	7.6	4.0	4.0	5.0
Imports of goods and services	1 993.4	16.6	6.5	9.0	6.3	4.6
* change in foreign balance	–456.7[b]	–0.9	–0.1	–1.8	–1.0	–0.2
* error of estimate	60.4[b]	1.7	–0.8	0	0	0
GDP at market prices	6 261.0	0	3.9	2.9	1.4	2.1
GDP implicit price deflator	–	14.2	14.3	14.9	21.0	19.0
Memorandum items						
Consumer prices[c]	–	15.7	14.0	15.6	20.5	19.0
Manufacturing production	–	–1.6	5.2	2.0	1.8	2.0
Unemployment rate	–	7.4	7.7	7.5	7.9	8.2
Household saving ratio[d]	–	16.8	20.3	21.0	18.0	16.4
General government financial balance[e]	–	–12.0	–14.5	–17.8	–17.2	–16.5
Current balance ($ billion)	–	–1.2	–1.0	–2.6	–3.6	–3.4

* As a percentage of GDP in the previous period.
a) Excluding ships operating overseas.
b) Actual amount of stockbuilding, foreign balance and error of estimate.
c) National accounts implicit private consumption deflator.
d) As a percentage of disposable income.
e) As a percentage of GDP.

efforts to collect taxes in an electoral period. Credit to the private sector was squeezed by high real lending rates (of some 10 per cent). Even so, total credit exceeded its 13-14 per cent target by almost 7 percentage points. The new government formed after the April elections announced restrictive policies for 1990-91. Increases in VAT rates and in administrative prices, combined with public-wage curbs, should reduce the PSBR in 1990 as a share of GDP by one percentage point compared with 1989, and by four points compared with an unchanged policy situation. In 1991, the assumed continuation of restrictive fiscal measures together with government proceeds from privatisation plans should further reduce the PSBR. Even so, in the absence of structural measures public deficits will remain excessive. Monetary policy can be expected to remain restrictive. The tight credit targets for 1990 (15 to 16 per cent for private-sector credit and 17.4 to 18.6 per cent for public-sector credit) may well be overshot, even though real interest rates are set to rise further.

Wage settlements so far point to an annual wage increase of about 19 per cent in 1990, which, in conjunction with persistently weak productivity gains, makes for a slight acceleration in unit labour costs. Price inflation is expected to run even faster, owing to the steep increases in regulated prices and higher indirect taxes, but may moderate to around 15 per cent by end-1991 on the assumption that wage indexation is discontinued. Sustained by a fall in the household saving ratio from its high 1989 level, private consumption is projected to grow moderately. Fixed investment is likely to decelerate due to reduced profitability and the high cost of credit, also contributing to the slowdown in domestic demand. With external competitiveness worsening further, the real foreign balance may continue to deteriorate, and output growth is likely to remain weak in 1990 and 1991. Despite some amelioration in the second half of 1990 reflecting the tighter policy stance, the current external deficit may well exceed US$3 billion in both years (about 5 per cent of GDP).

ICELAND

After several years of boom conditions during the mid-1980s, when fish catches were increasing and the terms of trade improving, the Icelandic economy has been going through a period of adjustment, as a result of the need to conserve fish stocks and reduce real wages. GDP is estimated to have fallen by 3½ per cent in 1989, with final domestic demand declining by 7 per cent. A further significant cut in the cod quota in 1990 will reduce export production, so that this is likely to be another difficult year. At best, output is

ICELAND

Demand, output and prices

Percentage changes, volume (1980 prices)

	1987 current prices million IKr	1987	1988	1989	1990
Private consumption	131.7	16.4	–4.0	–8.0	–1.0
Government consumption	36.8	6.1	4.2	1.0	1.0
Gross fixed capital formation	41.0	19.0	–1.3	–10.4	3.6
Final domestic demand	209.5	15.0	–2.0	–6.8	0.3
* change in stockbuilding	–0.3	0.8	1.4	–1.2	0.3
Total domestic demand	209.2	15.9	–0.7	–8.0	0.7
Exports of goods and services	73.5	4.0	–4.2	1.3	0.6
Imports of goods and services	74.5	22.9	–3.1	–10.0	2.1
* change in foreign balance	–1.0	–7.0	–0.2	4.6	–0.6
GDP at market prices	208.2	8.7	–0.9	–3.8	0.1
GDP implicit price deflator	–	20.8	23.9	20.0	11.0
Memorandum item					
Consumer prices[b]	–	16.8	25.3	21.1	14.0
Unemployment rate	–	0.5	0.6	1.7	2.3
Current balance ($ billion)	–	–0.2	–0.2	–0.1	–0.1

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) Consumer price index.

likely to be flat, with investment recovering and consumption spending levelling off. The unemployment rate seems set to rise further.

The authorities are pursuing a cautious budgetary strategy, necessitated by the need to reduce the treasury and current account deficits. The 1980s saw a persistent increase in overseas debt, and interest payments on foreign debt have risen to 4½ per cent of GDP. Inflation, at 20 per cent in 1989, has also remained much higher than the OECD average despite the recent slowing in wage growth. A reduction to about 11 per cent is projected this year, following a rather moderate wage settlement and an improvement in the terms of trade. However, this projection assumes an unchanged rate for the krona.

Given this picture for demand and inflation, the current account deficit could stabilise at 2 to 2½ per cent of GDP, with the trade surplus sufficient to offset about half of the deficit on the service account. Monetary policy is expected to remain restrictive, with real interest rates unlikely to fall below their current rather high levels. However, given the build-up of bank liquidity in recent years, a faster expansion of bank credit and a worsening of the current account cannot be ruled out.

IRELAND

The Irish economy has continued to grow strongly, with real GNP expanding by 4 per cent in 1989. Buoyant growth in private domestic demand, led by household consumption and business investment, more than compensated for the continued decline of net exports and public consumption. Private consumption was stimulated by the strength of real disposable incomes, arising from the recovery of employment, reductions in income taxes, and a fall in the saving ratio. Business investment expanded significantly, induced by strong export and consumption growth. It was broadly-based, including a strong recovery of plant and private housing construction. Merchandise imports rose sharply, reflecting the rapid expansion of domestic

IRELAND

Demand, output and prices

Percentage changes, volume (1985 prices)

	1987 current prices million Ir£	1987	1988	1989	1990	1991
Private consumption	11 686	2.5	3.2	5.0	4.1	4.0
Government consumption	3 571	–3.8	–4.3	–2.6	0.3	0.3
Gross fixed capital formation	3 394	–1.9	–1.7	10.4	9.7	7.2
Final domestic demand	18 651	0.5	0.9	4.7	4.5	4.1
* change in stockbuilding	20[a]	–1.0	–0.7	0.2	0.2	0.3
Total domestic demand	18 671	–0.4	0.2	4.9	4.7	4.3
Exports of goods and services	11 785	13.4	8.7	11.5	7.4	6.7
Imports of goods and services	10 468	5.0	3.9	11.7	7.6	7.1
* net factor income paid abroad	–1 957[a]	0.1	–2.9	–2.2	–1.8	–1.3
* change in foreign balance[b]	–640[a]	6.1	1.0	–1.2	–1.2	–1.0
GNP at market prices	18 031	5.6	1.2	4.0	3.8	3.7
GNP implicit price deflator	–	2.1	2.9	4.4	3.3	3.0
Memorandum items						
Consumer prices[c]	–	2.7	2.4	4.0	3.0	3.1
Industrial production	–	9.8	10.9	11.9	7.7	6.7
Unemployment rate	–	17.5	16.7	15.5	14.9	14.6
Household saving ratio[d]	–	18.3	16.3	15.7	15.2	15.0
General government financial balance[e]	–	–9.2	–2.6	–2.8	–1.1	–0.1
Current balance ($ billion)	–	0.4	0.7	0.5	0.3	0.2

* As a percentage of GNP in the previous period.
a) Actual amount of stockbuilding, foreign balance and net factor income paid abroad.
b) Includes factor income flows.
c) National accounts implicit private consumption deflator.
d) As a percentage of disposable income.
e) As a percentage of GDP.

demand, in particular for capital goods and consumer durables, with the rate of import growth slightly exceeding that of exports.

Labour market conditions, alleviated by persistent emigration, have continued to improve due to strong growth in employment. The rate of unemployment fell by over 1 percentage point in 1989 to 15½ per cent. Average compensation per employee increased by 3¾ per cent in 1989, slightly less than the rate of inflation. Wage moderation reflected both the continued high unemployment and the incomes policy under the Programme for National Recovery which expires in 1990. Consumer prices increased by 4 per cent, due mainly to rising import prices and mortgage rates. The current external surplus fell by half a percentage point in 1989 to 1.8 per cent of GNP, with the increases in the trade surplus and EC transfers being a little more than offset by an expansion of outflows on account of net factor earnings associated with strong export growth.

The Government has continued to pursue fiscal consolidation. The outturn for the Exchequer borrowing requirement in 1989 was 2½ per cent of GNP, already below the original medium-term target (3 per cent) set for 1993 in the National Development Plan announced in 1989. The better-than-expected result was mainly due to the buoyancy of tax revenues, in particular of indirect taxes, arising from strong domestic demand growth and improved tax collection procedures. The 1990 Budget aims at a further modest reduction of the Exchequer borrowing requirement to 2.1 per cent of GNP this year and the elimination of the current budget deficit by 1993. Monetary policy aims at containing the rate of inflation by maintaining the stability of the exchange rate within the EMS. Against the background of higher interest rates abroad, the monetary authorities raised the Short-term Facility rate four times during 1989, by a cumulative 4 percentage points.

Recent indicators suggest continued strength in demand and output, and GNP is projected to rise by 3¾ per cent in both 1990 and 1991. Employment growth is likely to continue, with the rate of unemployment falling below 15 per cent in 1991. Inflation is projected to decelerate to 3 per cent in 1990 and 1991, reflecting recent exchange-rate appreciation, reductions in indirect taxes, and moderate wage increases. The current-account surplus is projected to fall to 0.6 per cent of GNP in 1991, with strong increase in imports being partly offset by increasing transfers from the EC's regional funds.

LUXEMBOURG

Economic activity in Luxembourg, while still strong, weakened somewhat in 1989. Greater buoyancy of domestic demand, driven by private consumption, was more than offset by a significant reduction in the contribution of the real foreign balance to growth. This reflected a slowing of exports, in the context of more subdued demand faced by the steel industry both at home and abroad: raw steel output grew only 1.6 per cent in 1989 compared with 10 per cent in 1988. Activity in the other sectors, however, remained extremely robust: substantial industrial output growth continued, and services – particularly financial services – registered further rapid expansion. A marked rise in employment in banking (over 10 per cent in 1989) underpinned a 3 per cent increase in total domestic employment. Over half of all new jobs created were filled by cross-border workers. The unemployment rate, already very low, fell further to 1.3 per cent. Upward pressure on inflation became more marked in 1989, reflecting price rises for both imported and locally produced goods. The increase in the consumer price index, which was 3.6 per cent over the year to April 1990, has decelerated slightly in recent months, in line with the evolution of energy prices.

In annual average terms, price and wage growth are unlikely to slow significantly over the projection period, given inflation trends in Luxembourg's main partner countries and continuing labour-market pressures. However, the outlook for economic growth remains bright. Domestic demand should accelerate; business surveys point to a pick-up in industrial investment. Growth of capital expenditure in the public sector and in traded services is also expected to remain brisk, while continuing large-scale job creation should help to stimulate household income and consumption. These developments, coupled with the less favourable outlook in the steel industry, are likely to have an adverse effect on the real trade balance. All in all, real GDP growth is likely to remain at around 3½ per cent in 1990 before slowing, along with investment, next year. Given Luxembourg's traditionally prudent fiscal policy – a surplus of 1 per cent of GDP is budgeted for 1990 – and assuming the international economic climate remains favourable, the room for manoeuvre

LUXEMBOURG

Demand, output and prices

Percentage changes, volume (1985 prices)

	1987 current prices billion LF	1987	1988	1989	1990	1991
Private consumption	132.0	4.1	1.8	3.4	3.3	3.2
Government consumption	39.3	2.6	3.1	2.5	2.3	2.3
Gross fixed capital formation	55.7	6.5	3.2	2.9	9.0	7.0
Final domestic demand	227.0	4.4	2.3	3.2	4.5	4.0
* change in stockbuilding	0.1[a]	0.7	0.3	0.3	–0.1	0
Total domestic demand	227.1	5.2	2.7	3.5	4.4	4.0
Exports of goods and services	224.3	5.2	8.9	6.9	6.3	6.1
Imports of goods and services	225.2	7.4	7.6	7.0	7.3	6.9
* change in foreign balance	–0.9[a]	–2.1	1.7	0.2	–0.9	–0.9
GDP at market prices	226.2	2.8	4.3	3.5	3.4	3.0
GDP implicit price deflator	–	0.9	2.2	3.4	3.5	3.4
Memorandum items						
Consumer prices[b]	–	1.5	2.6	3.4	3.1	3.3
Industrial production	–	–0.7	9.2	9.0	5.0	4.0
Unemployment rate	–	1.6	1.4	1.3	1.3	1.3

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.

acquired by the government is probably sufficient for it to implement the tax and social-security reforms already announced. Finally, it should be noted that, in agreement with the Belgian authorities, the two-tier exchange-rate system was abolished in March of this year.

THE NETHERLANDS

Economic activity accelerated further in 1989, with GDP growing by over 4 per cent. Faster private consumption growth contributed substantially, picking up from 1¼ per cent in 1988 to 3½ per cent last year, mainly reflecting strong employment growth and reduced indirect taxation. Investment in plant and equipment has been buoyant too. With output of tradeables constrained by capacity limits, growth in exports of goods has slowed somewhat, in spite of further improvement in competitiveness. Even so, the surplus on current account widened from Gld 11 billion in 1988 to over Gld 15 billion in 1989 or 3¼ per cent of GDP, mainly as a result of a mounting surplus on non-factor services. Inflation, virtually absent in recent years, crept up to 2½ per cent in the course of 1989. On a year-to-year basis, however, it was only 1.1 per cent, owing to a cut in the VAT rate as from 1st January 1989. Wage increases have been moderate despite falling unemployment, and unit labour costs have been decreasing in the business sector. Labour costs have risen less than wage rates as employers' social security contributions have been lowered.

On a cyclically-adjusted basis, fiscal policy will be expansionary during the projection period. Major tax changes went into effect in January 1990, including cuts in employees' social security contributions, partially offset by increases in personal income taxes. In addition, new investment in tunnels, state roads and flood barriers will be undertaken. Public sector wages are likely to begin to catch up after the prolonged "freeze" in the 1980s, while interest payments by the government will be boosted by the rise in interest rates. As a result, the steady reduction of the government deficit recorded in recent years may come to a halt in the projection period, notwithstanding boom conditions.

Interest rates will continue to be dominated by developments in Germany. Yet there is room for a fall in the differential vis-à-vis Germany, given the growing strength of the guilder relative to the Deutschemark. Money growth was buoyant last year, but is expected to taper off in the projection period given the rise in interest rates.

NETHERLANDS

Demand, output and prices

Percentage changes, volume (1980 prices)

	1987 current prices billion Gld	1987	1988	1989	1990	1991
Private consumption	263.2	3.0	1.3	3.4	3.8	2.9
Government consumption	70.4	2.0	0	0.4	0.5	0.9
Gross fixed capital formation	86.7	0.6	9.9	4.6	2.4	0.8
Final domestic demand	420.3	2.3	2.9	3.1	2.9	2.1
* change in stockbuilding	–2.3[a]	–0.2	–0.5	0.4	0.5	0.2
Total domestic demand	418.0	2.2	2.4	3.6	3.4	2.3
Exports of goods and services	226.4	4.0	7.9	6.0	5.8	5.9
Imports of goods and services	213.2	6.0	7.2	4.9	6.1	4.8
* change in foreign balance	13.2[a]	–1.0	0.6	0.8	0	0.9
GDP at market prices	431.2	1.1	3.0	4.3	3.3	3.1
GDP implicit price deflator	–	–0.5	1.6	0.8	3.0	2.7
Memorandum items						
Consumer prices[b]	–	–0.3	0.6	1.1	2.4	2.7
Industrial production	–	0.6	4.7	3.9	3.5	3.1
Unemployment rate[c]	–	8.7	8.3	7.4	6.8	6.4
Household saving ratio[d]	–	2.1	2.4	3.8	5.0	4.1
General government financial balance[e]	–	–6.5	–5.0	–5.1	–5.1	–5.0
Current balance ($ billion)	–	2.9	5.4	6.9	7.8	8.8

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.
c) Data for 1987 and 1988 are Central Planning Bureau estimates of unemployment based on the new measurement method which was officially introduced only from the beginning of 1989. Unemployment rates under the old method are 12.6 and 12.5 respectively.
d) As a percentage of disposable income.
e) As a percentage of GDP.

Domestic demand is likely to remain buoyant, especially this year, while production growth slows down slightly. Private consumption will be spurred by net tax cuts. Import growth may accelerate this year due to a shift of business investment from structures to equipment. Moreover, high interest rates combined with cuts in housing subsidies may considerably lower residential construction. While nominal wage growth is projected to accelerate, the labour share may remain unchanged, given an improvement in the terms of trade this year and another reduction in employers' social security contributions next year. Employment may grow strongly in terms of full-time equivalents, and even more so in terms of numbers of persons. Registered unemployment is projected to decline further. The current-account surplus is likely to widen further as a consequence mainly of the terms-of-trade gain.

NEW ZEALAND

A year ago, economic prospects were for a moderate, albeit sustained recovery in economic activity, following a prolonged recession and sharply rising unemployment. These cautiously optimistic economic prospects were integrally related to the wide-sweeping microeconomic structural reforms in previous years and the attainment of lower inflation.

In the event, real GDP may have grown by less than 1 per cent in 1989. This disappointing outcome was due to developments in the foreign balance: exports stagnated, reflecting the effects of drought and a rebuilding of agricultural stocks, while import volumes rose substantially as a result of strong increases in machinery and equipment investment and a bunching of aircraft imports. The current account deficit widened from less than 2 per cent of GDP in 1988 to roughly 4.5 per cent in 1989[1]. Retail sales and private consumption remained weak. Government consumption was flat. Investment in machinery and equipment has been sustained, even though business confidence weakened in the wake of business failures and higher interest rates. Private sector employment declined in 1989, reflecting a continuation of industry restructuring. However, the unemployment rate

NEW ZEALAND

Demand, output and prices

Percentage changes, volume (1976/77 prices)

	1987 current prices million NZ$	1987	1988	1989	1990	1991
Private consumption	34 548	1.3	1.7	1.6	1.8	2.0
Government consumption	9 673	–0.5	–3.0	–0.4	–1.0	0
Gross fixed capital formation	12 152	2.9	0.5	7.2	2.5	3.9
Final domestic demand	56 373	1.4	0.7	2.8	1.6	2.3
* change in stockbuilding[a]	2 561[b]	2.2	–0.9	3.0	0	–0.4
Total domestic demand	58 934	3.6	–0.2	5.7	1.5	1.8
Exports of goods and services	15 879	2.8	3.5	1.7	3.2	4.2
Imports of goods and services	16 153	12.4	–1.5	14.2	2.0	1.5
* change in foreign balance	–274[b]	–3.6	1.9	–5.1	0.3	0.9
GDP at market prices	58 660	0.1	1.7	0.7	2.0	2.9
GDP implicit price deflator	–	15.2	8.6	5.9	4.2	3.8
Memorandum item						
Consumer prices[c]	–	13.5	6.0	5.7	5.1	3.8
Unemployment rate	–	4.1	6.0	7.2	7.2	7.2
Current balance ($ billion)	–	–1.7	–0.7	–1.8	–1.8	–1.4

* As a percentage of GDP in the previous period.
a) Including statistical discrepancy and valuation adjustment.
b) Actual amount of stockbuilding and foreign balance.
c) National accounts implicit private consumption deflator.
Note: Data refer to calendar rather than fiscal years.

stopped rising during the course of the year, stabilising at roughly 7 per cent, due to falling labour-force participation rates. The rise in the consumer price index was temporarily boosted by the mid-1989 increase in the goods and services tax from 10 to 12.5 per cent; it was 7 per cent year-on-year in the first quarter of 1990, while the quarter-to-quarter increase dropped to an annual rate of 3.6 per cent.

The July 1989 budget, covering fiscal year 1989/90 (beginning 1st July) embodied a financial deficit of 1 per cent of GDP, and an overall fiscal surplus (including asset sales) of 4.4 per cent of GDP. Financial balance or a small surplus is projected for FY 1990/91. The March 1990 Economic Statement announced the privatisation of Telecom, as well as unilateral commitments to lower tariffs, and amendments to the Labour Relations Act to give greater impetus to industry and enterprise bargaining. The stance of monetary policy remains firm, with high real interest rates and a modestly inverted yield curve. The Reserve Bank Governor has signed a contract committing the monetary authorities to bringing down inflation to the 0 to 2 per cent range by end-1992. If achieved, this would eventually entail an appreciating nominal exchange rate. Since mid-1989, the exchange rate has declined modestly *vis-à-vis* the U.S. dollar and to a small extent on a trade-weighted basis.

Real GDP may expand at a modest rate in the coming two years, led by a recovery in the foreign balance. Private non-residential investment may decelerate significantly from the rapid growth recorded in 1989, but should continue to expand, underpinned by better productivity and rising profitability. Modest employment gains are projected, but no faster than labour-force growth: the rate of unemployment may not change. The current wage round is generating wage settlements in the 4 to 5 per cent range, with somewhat larger increases in earnings. Inflation may decelerate noticeably, to below 4 per cent in 1991, in response to continuing labour-market slack. The current-account deficit is forecast to drop back to some 3 to 3½ per cent of GDP in 1991.

NOTE

1. Revisions to the invisibles deficit increased the current account deficit for the year to March 1989 by roughly 1 per cent of GDP.

NORWAY

After two years of contraction, Mainland activity picked up in the course of 1989. Unemployment, however, remains high by Norwegian standards. Despite a strong dose of fiscal expansion introduced in Spring 1989, Mainland domestic demand has remained subdued so far. Gains in real disposable household income have been reflected in higher savings rather than increased consumption. Nonetheless, the saving ratio remained negative in 1989. Low capacity utilisation in the Mainland economy has depressed investment, though in the latter part of 1989 there was a recovery in most manufacturing sectors. Likewise, traditional imports (i.e. excluding ships) have picked up recently after declining for three consecutive years. Growth in traditional exports (i.e. excluding oil and ships) has weakened, though benefiting from strong expansion abroad and better cost performance at home. Sharp increases in both output and prices boosted export revenues of the oil sector – by 50 per cent in 1989 – but continued buoyancy of imports of ships limited the improvement in the current account. Overall wage inflation, though still remaining high in some sectors, has decelerated significantly, reflecting direct income regulation, slack in the labour market and sharp declines in bonus payments. Consumer price increases, helped by strong gains in productivity, have fallen to the lowest rate for ten years and below the OECD average.

The 1990 National Budget is officially estimated to have relaxed the fiscal stance by ½ per cent of Mainland GDP. For 1991, the impact of fiscal policy changes on demand is projected to be neutral with the growth of general government expenditure falling behind that of Mainland GDP. Sharp increases in government net revenues from petroleum activity may, however, prevent the general government budget balance from sliding into deficit. Central bank interest rates have remained unchanged since last November. Helped by official intervention, the krone has remained stable against a basket of currencies. Given slight further increases in interest rates projected for other European countries, Norwegian rates are likely to follow. However, favourable current-account developments can be expected to cushion the pressure for higher rates. The 1989 Income Regulation Act expired in March 1990, and the Government has refrained

NORWAY

Demand, output and prices

Percentage changes, volume (1984 prices)

	1987 current prices billion NKr	1987	1988	1989	1990	1991
Private consumption	298.1	–1.0	–2.5	–1.9	1.7	1.8
Government consumption	116.1	4.0	0.5	2.5	2.5	1.8
Gross fixed capital formation	157.3	0.3	3.0	–4.3	–23.1	18.2
Final domestic demand	571.5	0.3	–0.4	–1.7	–4.9	5.4
* change in stockbuilding	1.2[a]	–1.2	–2.5	–0.4	4.2	–2.6
Total domestic demand	572.7	–1.0	–3.2	–2.2	0.1	2.0
Exports of goods and services	200.2	3.5	6.1	14.5	5.7	7.3
Imports of goods and services	211.4	–6.8	–2.5	0.7	1.5	5.0
* change in foreign balance	–11.2[a]	4.4	3.8	6.9	2.6	2.4
GDP at market prices[b]	561.5	3.5	0.9	5.0	2.7	3.9
GDP implicit price deflator	–	6.0	2.9	1.8	2.7	3.3
Memorandum items						
Consumer prices[c]	–	7.6	6.2	4.4	4.7	4.7
Industrial production[d]	–	0.9	0.1	0.2	1.7	2.6
Unemployment rate	–	2.1	3.2	5.0	5.0	4.9
Household saving ratio[e]	–	–6.3	–3.8	–1.0	–0.7	0.2
General government financial balance[f]	–	4.8	3.1	1.0	1.2	0.5
Current balance ($ billion)	–	–4.1	–3.7	0.2	1.6	3.2

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) GDP excluding oil and shipping: 1988: -1.0, 1989: -1.2, 1990: 1.2, 1991: 2.5.
c) National accounts implicit private consumption deflator.
d) Excluding oil sector.
e) As a percentage of disposable income.
f) As a percentage of GDP.

from extending statutory controls on wages as a means to limit inflation pressures.

Continued large increases in oil and gas output during the projection period will show up in higher growth rates for total activity than for Mainland output. However, growth of onshore output is itself set to accelerate, driven by increases in Mainland demand. Only a small further increase is expected in the household saving ratio; advances in real disposable income would therefore largely translate into higher consumer spending. Investment growth in the Mainland sectors is expected to be subdued in 1990 but to pick up in 1991. Given the import compression that has taken place in recent years, increases in Mainland demand are likely to be accompanied by rapid growth of traditional imports. Non-oil exports will be boosted by continued high market growth abroad and improved competitiveness, but could be increasingly affected by supply constraints during the projection period. Higher activity in the Mainland economy may just be sufficient to absorb increases in labour supply so that current high levels of unemployment could persist. Labour-market slack should help keep wage rises significantly below the OECD average. Buoyant energy exports should make for sizeable current-account surpluses, notwithstanding a likely weakening of the Mainland external position.

PORTUGAL

Domestic demand growth decelerated significantly in 1989, but GDP growth – at 5.4 per cent – was higher than the year before. The unemployment rate fell to around 5 per cent. The tighter monetary policy pursued since March 1989 helped to curtail the growth of private consumption, particularly of consumer durables. The expansion of investment, while still brisk, slowed appreciably, from an average annual rate of 15 per cent in volume in 1987 and 1988 to 7.5 per cent in 1989. The expansion of import volumes eased, while exports grew by more than 16 per cent in volume terms, as new productive capacity was put into operation. As a result, the external balance contributed positively to GDP growth in 1989, following a large negative contribution the year before, and the current-account deficit declined to 1.2 per cent of GDP. Inflation (measured by the consumer price index) averaged 12.6 per cent in 1989. Following a deceleration in the

PORTUGAL

Demand, output and prices

Percentage changes, volume (1985 prices)

	1987 current prices billion Esc	1987	1988	1989	1990	1991
Private consumption	3 335.7	5.4	6.6	3.1	3.2	3.0
Government consumption	787.8	4.9	5.3	2.0	2.7	2.5
Gross fixed capital formation	1 250.8	15.1	15.0	7.5	9.0	8.0
Final domestic demand	5 374.3	7.4	8.3	4.0	4.6	4.2
* change in stockbuilding	171.0[a]	2.2	–1.5	0.3	0.2	0.3
Total domestic demand	5 545.3	9.3	6.5	4.1	4.6	4.4
Exports of goods and services	1 774.7	8.6	10.2	16.5	9.5	8.5
Imports of goods and services	2 145.2	20.0	16.1	10.6	9.7	8.3
* change in foreign balance	–370.5[a]	–4.4	–3.2	0.8	–1.0	–0.8
GDP at market prices	5 174.8	5.3	3.9	5.4	4.0	4.0
GDP implicit price deflator	–	11.2	11.6	12.8	12.0	11.0
Memorandum items						
Consumer prices[b]	–	10.0	10.0	12.7	12.0	11.0
Industrial production[c]	–	2.3	6.3	4.5	4.0	3.7
Unemployment rate	–	7.1	5.8	5.3	5.3	5.3
Household saving ratio[d]	–	25.5	22.2	21.9	21.7	22.0
Current balance ($ billion)	–	0.7	–1.1	–0.6	–1.1	–1.4

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.
c) Industrial production index.
d) As a percentage of disposable income.

autumn, consumer prices accelerated again in early 1990 and the 12-month rate of increase reached 12.7 per cent in April, partly reflecting one-off factors such as rises in public tariffs and termination of some price controls.

Monetary policy remains moderately restrictive. The growth of the main monetary aggregates slowed in the course of 1989, but the growth of total domestic liquidity (including non-bank financing) was nonetheless brisk because of large foreign capital inflows and increases in liquid assets not subject to credit controls. The growth target for L- (liquid assets) has been set at 8.2 per cent for 1990 on average, compared with the 11.7 per cent actual increase in 1989. Short and long-term interest rates have risen recently, and this is likely to continue in 1990 as credit ceilings are being phased out, to be replaced by indirect monetary controls. The 1990 budget projects a substantial worsening of the deficit, which could increase to 7.7 per cent of GDP, against 4.3 per cent in 1989. The latter very favourable outturn was partly due to temporary effects from the acceleration of revenue collection resulting from the implementation of the tax reform. The projected strong rise in expenditure (above 20 per cent) is due to the growth of debt-service payments as well as non-interest expenditure, with continued repercussions of the reform of the civil service wage scales, and further investment spending in line with the growth of EC assistance. On the other hand, growth of receipts in 1990 will be slower than in 1989 as the temporary effects of the tax reform on tax collection are exhausted. The privatisation programme launched in 1989 will be continued in 1990; revenues raised will be used to reimburse part of the public debt, including the debt of public enterprises.

Under the combined effects of the expansionary thrust of fiscal policy and the difficulties encountered in curtailing the growth of liquidity, domestic demand growth is likely to remain brisk in 1990. Government investment will continue to be promoted by EC assistance, and final demand growth (in volume terms) could be close to 4½ per cent. On the other hand, the next two years are likely to see a deterioration in the external contribution to growth compared with the favourable 1989 outturn, and GDP growth is projected to decelerate to around 4 per cent, with the current account deficit widening to 2½ per cent of GDP in 1991. Demand pressure along with strains on some segments of the labour market make any significant easing of inflation in the short term unlikely, and the rise in prices is projected to remain at close to 12 per cent in 1990, slowing to 11 per cent in 1991.

SPAIN

Following rapid growth up to the first half of 1989, activity began to slow somewhat. The restrictive stance of economic policy adopted since mid-1989 has curbed the growth of private consumption and residential investment, leaving the boom in business and public investment, however, largely unaffected. Dependent employment grew by 6 per cent during the year, bringing the rate of unemployment below 17 per cent by the end of 1989 from 18.5 per cent a year earlier. Wage settlements and consumer-price inflation have stabilised at annual rates of around 7.5 per cent and 7 per cent respectively since May 1989. The trade deficit stopped widening in the third quarter of 1989, reflecting the moderation of domestic demand growth. Yet, as a result of its steep increases earlier in the year, as well as shrinking tourism receipts, the current-account deficit reached $11.6 billion (3 per cent of GDP) in 1989 and remained around that level in early 1990. The 1989 deficit was more than covered by private capital inflows, with foreign private investment nearly doubling to $13 billion. Official reserves have remained at around $45 billion since May 1989.

The general government deficit shrank by 1 percentage point to 2.1 per cent of GDP in 1989, reflecting cyclical factors, a speeding up in tax collection and delays of tax reimbursements. The deficit may decline only slightly in 1990, reflecting further steep growth in public investment and tax reimbursements. For 1991, fiscal policy is assumed to be slightly restrictive. Government fixed investment as a share of GDP may reach 5.4 per cent, of which three-fourths is projected to be covered by government savings.

The July credit restrictions, accompanied by rising interest rates, led to a sharp deceleration in the growth of ALP (the wide monetary aggregate) in the last few months of 1989. The 1989 annual monetary targets were, nonetheless, significantly overshot. The policy stance remains restrictive in 1990, with credit and ALP growth targets fixed at 10 per cent and 6.5 to 9.5 per cent respectively. High interest rates persisted in the first four months of 1990 and the growth of monetary aggregates decelerated to below the target range, while the peseta continued to be the strongest currency within the EMS. Credit restrictions seem to

SPAIN

Demand, output and prices

Percentage changes, volume (1980 prices)

	1987 current prices billion Ptas	1987	1988	1989	1990	1991
Private consumption	22 852.0	5.8	4.6	5.5	3.9	3.9
Government consumption	5 463.3	9.0	4.0	5.5	3.4	3.1
Gross fixed capital formation	7 355.0	14.5	14.3	13.6	10.3	6.3
Final domestic demand	35 670.3	8.1	6.6	7.4	5.4	4.4
* change in stockbuilding	25.1[a]	0.6	0.5	0.7	–0.1	0.2
Total domestic demand	35 695.4	8.6	7.1	8.0	5.3	4.5
Exports of goods and services	7 042.0	5.9	5.7	4.4	5.5	5.6
Imports of goods and services	7 005.0	20.8	14.1	17.5	9.4	7.7
* change in foreign balance	37.0[a]	–2.9	–2.0	–3.4	–1.5	–1.1
GDP at market prices	35 732.4	5.6	5.2	4.9	4.2	3.8
GDP implicit price deflator	–	5.9	5.5	6.9	6.9	6.4
Memorandum items						
Consumer prices[b]	–	5.7	4.9	6.6	6.8	6.4
Industrial production[c]	–	4.4	4.4	4.0	3.7	3.6
Unemployment rate	–	20.5	19.5	17.3	16.1	15.2
Household saving ratio[d]	–	8.0	7.7	7.0	8.0	7.1
General government financial balance[e]	–	–3.2	–3.1	–2.1	–2.0	–1.4
Current balance ($ billion)	–	0	–3.7	–11.0	–14.7	–17.6

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.
c) Value added.
d) As a percentage of disposable income.
e) As a percentage of GDP.

have triggered a rapid expansion of commercial paper within the non-financial private sector, cushioning the squeeze on liquidity. Given the authorities' commitment to contain inflation, the projections assume no change in the stance of monetary policy. Real interest rates would therefore remain at historically high levels and money velocity continue to rise.

The growth of average earnings, including compensations for the overshooting of last year's price target, is expected to rise to around 8½ per cent in 1990 but to moderate somewhat thereafter. Inflation pressure may ease off slightly during the projection period, reflecting weakening domestic demand pressure, faster productivity growth and a slowdown in import prices. Tax reimbursements and high pay rises suggest a resumption of fast private consumption growth after some hesitation in early 1990. In line with the Budget, government consumption is assumed to decelerate in 1990. The growth of fixed investment may slow markedly, while remaining the most dynamic element of demand. Residential investment is likely to be most affected by high real interest rates, as well as by a decrease in tax relief, and may therefore show the sharpest deceleration. The prospective flattening of the steep upward trend of foreign capital inflows may also damp private investment activity. Though losing momentum, public-sector investment is likely to continue at a high rate in view of the major infrastructure projects that are being carried out.

Output may decelerate less than demand on account of reduced import growth. Reflecting the marked increase in export capacity, export growth is expected to pick up in 1990-91 despite the continuing rise in relative unit labour costs. Reduced international competitiveness may also make for increased import penetration notwithstanding the tapering-off of EC trade-creation effects. On these trends and expectations, GDP growth may well dip below its potential rate in 1991, accompanied by an even more marked slowdown in employment growth and a more moderate decline in unemployment. The deterioration in the real foreign balance should be partly offset by improved terms of trade and, with higher net transfer receipts, the increase in the current-account deficit may be more limited over the projection period than during the preceding two years. Given high rates of return on both financial and real assets, Spain should continue to be well placed to attract the capital inflows to finance its current-account deficit.

SWEDEN

The economy continued to be subject to excess demand pressures in 1989 and early 1990 despite production growth below the OECD average and a rapid increase of labour supply. Continued weak productivity developments combined with high and rising nominal wage increases put upward pressure on prices which in early 1990 received a further boost as indirect taxes were raised in the first phase of the comprehensive tax reform. Domestic demand was led by robust investment activity, with the business sector investment ratio in 1989 reaching its highest level in more than a decade, despite falling profitability as a result of deteriorating international competitiveness. Private consumption slowed down considerably as the saving ratio rose in response to past increases in household indebtedness, the passing of a wave of renewal of the private car stock, reduced energy consumption as a result of mild weather and anticipation of the effects of the 1990/91 tax reform which lowers the tax value of interest deductions. As in previous years, the external balance contributed negatively to growth as market shares were lost both on domestic and foreign markets. The current-account balance deteriorated more than the balance on goods and services mainly because net interest payments abroad continued to increase substantially. The increase is related to the cost of borrowing abroad to finance large outward direct investments, the returns of which – moreover – are counted in Sweden's balance of payments only to the extent that they are actually repatriated.

The fiscal policy stance will be determined largely by the tax reform, which entails a lowering of income-tax rates to be financed by a broadening of the tax base for both direct and indirect taxes. Whereas the first step of the reform, introduced in early 1990, was revenue-neutral, the final stage beginning in 1991 will not be fully financed. Furthermore, the abolition of the temporary social security contribution in respect of the "Work Environment Fund" will entail some fiscal relaxation. Partly offsetting these expansionary effects, the VAT-rate will be raised temporarily from mid-1990 to the end of 1991, while the planned increase in the employers' share of sickness compensation for their employees is expected to be balanced by a cut in payroll taxes. Heightened inflation expectations due to a government crisis in early 1990 led to some increase in the differential between Swedish and international short-term interest rates. This difference is expected to be maintained and could, in view of expected inflation and current-account developments,

SWEDEN

Demand, output and prices

Percentage changes, volume (1985 prices)

	1987 current prices billion SKr	1987	1988	1989	1990	1991
Private consumption	542.5	4.6	2.5	0.7	1.0	1.8
Government consumption	271.2	1.3	1.0	1.9	1.8	1.8
Gross fixed capital formation	193.0	7.6	6.4	9.5	1.0	–4.8
Final domestic demand	1 006.7	4.3	2.9	2.8	1.2	0.4
* change in stockbuilding	–4.5[a]	–0.2	0.3	0.6	0	0
Total domestic demand	1 002.2	4.0	3.2	3.4	1.2	0.4
Exports of goods and services	332.3	3.9	3.3	3.4	2.6	3.1
Imports of goods and services	313.6	7.2	5.8	6.8	3.8	3.6
* change in foreign balance	18.7[a]	–1.1	–0.9	–1.3	–0.5	–0.3
GDP at market prices	1 020.9	2.9	2.3	2.1	0.7	0.1
GDP implicit price deflator	–	4.8	6.6	7.4	10.2	8.8
Memorandum items						
Consumer prices[b]	–	5.3	6.3	6.5	10.6	9.3
Industrial production	–	2.2	1.9	2.1	1.0	0.8
Unemployment rate	–	1.9	1.6	1.4	1.6	2.0
Household saving ratio[c]	–	–3.4	–5.1	–3.7	–2.4	–1.4
General government financial balance[d]	–	4.2	3.4	5.3	4.6	3.2
Current balance ($ billion)	–	–1.1	–2.2	–5.0	–7.7	–11.1

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.
c) As a percentage of disposable income.
d) As a percentage of GDP.

even increase over the projection period. Long interest rates are expected to catch up gradually with the new and higher level of short-term rates.

The saving ratio may rise further over the projection period given its current low level, high interest rates, household indebtedness, the tax reform and prospects of weak economic activity. The same factors may trigger a downturn in residential investment. Business investment could also start falling in view of weakening international competitiveness and depressed domestic demand. With falling market shares on both domestic and foreign markets the external balance could continue to contribute negatively to growth, which, as a result, could be very low. Unemployment may start rising but perhaps not to the point of affecting wage increases much within the next year or so. Wage rises may, however, be reduced in 1991 when the tax reform gives a positive contribution to disposable income. With lower imported inflation and weak domestic demand, consumer-price rises could slow somewhat despite a further increase of indirect taxation. The current account is expected to continue deteriorating rather rapidly, mainly driven by increasing interest payments, but also in response to a weakening balance on goods and services.

SWITZERLAND

In 1989, growth of output again exceeded estimated potential growth as the economy completed its seventh year of expansion. Capacity utilisation in industry rose further, to the highest level attained in two decades, and inflation picked up sharply in the course of the year. But industrial production, which had grown vigorously by some 7 per cent in 1988, expanded by only 1.7 per cent last year. This may indicate that capacity limits have been reached and that growth of real GDP may weaken.

Fiscal policy may be slightly expansionary in 1990, after a broadly neutral fiscal stance in 1989, as tax relief for families and compensation for fiscal drag come into effect. Some budgetary tightening is projected for 1991, mirroring the authorities' efforts to counter a possible deterioration of federal financial balances. Monetary policy is assumed to remain restrictive in order to contain inflation and to stabilise the Swiss franc *vis-à-vis* the Deutschemark. Short-term interest rates may therefore remain at their current high levels in 1990 and 1991. Current indicators point

SWITZERLAND

Demand, output and prices

Percentage changes, volume (1980 prices)

	1987 current prices billion SF	1987	1988	1989	1990	1991
Private consumption	150.2	2.1	2.2	2.0	2.1	2.3
Government consumption	33.0	1.8	3.2	2.8	3.5	3.0
Gross fixed capital formation	64.4	7.4	6.9	5.2	3.5	2.7
Final domestic demand	247.6	3.4	3.6	3.0	2.7	2.5
* change in stockbuilding	5.0[a]	0.3	–0.3	0.3	–0.1	0
Total domestic demand	252.6	3.6	3.2	3.2	2.5	2.5
Exports of goods and services	90.5	1.7	5.2	6.0	6.0	5.0
Imports of goods and services	88.4	5.5	5.4	5.4	5.4	4.8
* change in foreign balance	2.1[a]	–1.8	–0.4	–0.1	–0.1	–0.2
GDP at market prices	254.7	2.0	3.0	3.3	2.6	2.4
GDP implicit price deflator	–	2.6	2.5	3.4	4.5	3.4
Memorandum items						
Consumer prices[b]	–	1.5	2.3	3.6	4.5	3.5
Industrial production	–	0.6	7.1	1.7	3.0	2.5
Unemployment rate	–	0.8	0.7	0.6	0.6	0.6
Current balance ($ billion)	–	7.6	8.4	6.0	7.0	8.0

* As a percentage of GDP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.

to a continuation of buoyant infrastructure investment. The recent rise in nominal interest rates is assumed to have only a limited impact on business investment expenditures as *real* long-term interest rates have increased only a little. Residential construction, however, is projected to be adversely affected by the rise in mortgage interest rates and land prices as well as by banks' more stringent lending criteria.

Wage settlements in late 1989 and early 1990 point to nominal wage increases of 5½ to 6 per cent. Because of the acceleration of inflation in late 1989 to 5 per cent, intermediate wage negotiations are envisaged for a number of industries in the summer of 1990. Together with continuing employment gains, total nominal disposable income may grow by some 6½ per cent in 1990 and 1991. With an expected stabilisation of the high household saving rate in 1990, growth of real private consumption may gradually recover from relative weakness last year, despite higher inflation. Inflation may peak after the next adjustment of rents to increased mortgage rates in May 1990. However, the effect of monetary tightening on the exchange rate has already damped import prices. The projection assumes that decelerating import prices will lead to falling consumer price inflation in the second half of 1990 and in 1991. For 1990 on average, however, inflation is likely to be higher (4½ per cent) than in 1989.

Export markets for manufactures may expand at 7 to 8 per cent rates in 1990 and 1991. Helped by the lagged effect of the Swiss franc's real effective depreciation in 1988 and 1989, Swiss exports of goods and services may grow in 1990 at the same pace as in 1989, but decelerate somewhat in 1991. Import growth is likely to remain broadly stable. Altogether, real GDP could decelerate slightly, to the estimated rate of potential output growth (2½ per cent). Given the only moderate slowdown in activity, the unemployment rate may remain at its very low level. With the terms of trade continuing to deteriorate, the trade deficit is set to widen further. Owing to the unabated strength of investment income, however, the current external surplus, after declining in 1989, is projected to rise. In relation to GDP, it may stabilise at about 3¼ per cent in 1990, but could increase slightly in 1991.

TURKEY

Output growth weakened in 1988 and 1989, after a strong expansion in the preceding two years. Last year total domestic demand recovered from stagnation in 1988, but agricultural output fell sharply, due to a poor harvest, and real GNP growth may have slowed to less than 2 per cent. As a result, unemployment – already high – continued to rise.

Private consumption, which had slowed in 1988, gained some momentum as real disposable income of households recovered in 1989. But public investment continued to fall, reflecting the effects of fiscal tightening. Total private investment was depressed by sluggish residential investment and subdued business investment. Merchandise export growth also slowed, mainly as a result of the real appreciation of the Turkish lira, the adverse effect of the drought on agricultural exports and payments problems of Iraq. With imports picking up vigorously, the trade deficit widened from $1.8 billion in 1988 to about $4.2 billion in 1989. But because of a continued increase in net service incomes and increased workers' remittances, the current external account remained in surplus in 1989, amounting to almost $1 billion (1.2 per cent of GNP).

Economic policies turned out to be more expansionary than announced at the beginning of the year: money supply accelerated strongly, and despite improved tax collection the public sector deficit as a share of GNP remained at around 6½ per cent in 1989. In combination with the sharp rise in food prices, caused by the drought, and the strong increase in unit labour costs following high wage increases, consumer price inflation accelerated to over 70 per cent in 1989 on average.

Economic activity appears to have recovered gradually in the second half of 1989, in response to the effect of substantial wage increases on household consumption. Recent indicators point also to an improvement of industrial production in late 1989 and early 1990.

Official objectives of economic policy are assumed to be unchanged over the projection period. The main target of monetary policy remains the stability of the Turkish lira in real effective terms. Following the import tariff reduction and the recent real appreciation of the Turkish lira, inflation may decline somewhat this year and next. Prospects of a somewhat better harvest should also support some decline in inflation. Nonetheless, this year's average inflation rate still may exceed the 60 per cent mark. Short- and long-term interest rates could decrease in line with inflation. Fiscal policy continues to aim at a reduction of the public sector deficit, mainly through revenue increases.

TURKEY

Demand, output and prices

Percentage changes, volume (1982 prices)

	1987 current prices billion TL	1987	1988	1989	1990	1991
Private consumption	39 097.8	6.5	2.7	3.3	3.8	3.2
Government consumption	5 313.8	5.0	2.1	1.5	3.4	3.2
Gross fixed capital formation	14 082.7	5.6	–1.4	–2.8	5.6	7.1
Final domestic demand	58 494.3	6.2	1.8	2.0	4.1	3.9
* change in stockbuilding	736.0[a]	0	–1.2	1.1	0.1	0
Total domestic demand	59 230.3	6.0	0.6	3.1	4.1	3.8
Exports of goods and services	14 451.6	28.0	18.4	6.0	6.4	6.5
Imports of goods and services	15 291.9	18.9	5.8	10.8	6.0	5.0
* change in foreign balance	–840.3[a]	1.1	3.0	–1.4	0	0.4
GNP at market prices	58 390.0	7.4	3.7	1.7	4.2	4.3
GNP implicit price deflator	–	38.4	65.9	69.3	60.0	52.0
Memorandum items						
Consumer prices[b]	–	34.8	63.3	71.7	62.0	52.0
Manufacturing production	–	10.7	1.0	2.1	9.0	7.7
Unemployment rate[c]	–	9.5	9.8	10.4	10.9	11.2
Current balance ($ billion)	–	–0.8	1.6	1.0	0.3	0.5

* As a percentage of GNP in the previous period.
a) Actual amount of stockbuilding and foreign balance.
b) National accounts implicit private consumption deflator.
c) New series.

Public investment is projected to resume a modest increase after decreasing sharply last year. Private investment could recover when interest rates decrease and when export demand picks up. Foreign direct investment might contribute to this process. Current wage settlements and the assumed normal harvest would suggest the continuation of the recent trend growth of private consumption. Better domestic food supplies would also dampen import demand. Export markets should continue to expand at a rate of about 7 per cent. The induced growth of exports of goods and services may, however, be impeded somewhat by the recent strength of the Turkish lira. Overall, real GNP growth should pick up in 1990 and 1991. Given the strong increase of the population in the past, this is unlikely to be sufficient to prevent a rise in unemployment. With continued vigorous expansion of tourism earnings and private transfers, the current external account may remain in a small, but declining surplus.

DETAILED PROJECTIONS AND OTHER BACKGROUND INFORMATION

DEMAND AND OUTPUT

Table 22

Growth of real GNP/GDP in the OECD area[a]

Percentage changes from previous period, seasonally adjusted at annual rates

	1987 Share in total OECD	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	36.0	3.7	4.4	3.0	2.3	2.5	3.2	2.4	2.1	2.5	2.5	2.4
Japan	19.0	4.6	5.7	4.9	4.7	4.0	4.0	5.9	4.4	3.9	4.0	4.0
Germany	8.9	1.7	3.6	4.0	3.9	3.4	6.2	0.9	5.5	3.7	3.4	3.1
France[b]	7.0	2.4	3.8	3.7	3.1	2.9	4.5	2.5	3.4	3.1	2.8	2.8
Italy[b]	6.0	3.0	4.2	3.2	3.1	3.2	3.3	2.5	3.3	3.1	3.2	3.1
United Kingdom[b]	5.4	4.7	4.5	2.3	0.9	1.9	1.5	2.4	0	1.5	2.0	2.1
Canada[b]	3.3	4.5	5.0	2.9	2.0	2.6	2.8	2.2	1.9	1.8	2.7	3.0
Total of above countries	85.8	3.6	4.6	3.5	3.0	3.0	3.7	3.0	3.0	3.0	3.0	2.9
Other OECD countries[c]	14.2	3.0	3.4	3.8	2.5	2.7	4.6	2.8	2.4	2.6	2.7	2.8
Total OECD	100.0	3.5	4.4	3.6	2.9	2.9	3.8	3.0	2.9	2.9	2.9	2.9
Four major European countries	27.4	2.8	4.0	3.4	2.9	2.9	4.2	2.0	3.4	3.0	2.9	2.8
OECD Europe	39.8	2.8	3.8	3.5	2.9	2.8	4.2	2.2	3.3	2.9	2.8	2.8
EEC	34.3	2.8	3.9	3.5	3.0	3.0	4.3	2.2	3.4	3.0	3.0	2.9
Total OECD *less* the United States	64.0	3.5	4.4	3.9	3.3	3.2	4.2	3.3	3.4	3.1	3.2	3.2
Industrial Production :												
Major seven countries	–	3.4	6.4	4.1	2.3	3.1	4.2	2.3	2.0	3.0	3.0	3.1
Total OECD	–	3.3	6.1	4.0	2.4	3.1	4.2	2.4	2.2	3.0	3.0	3.1

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) GDP.
c) Half-yearly data must be interpreted with care since for most of these countries, amounting to over 50 per cent of the total GDP of the smaller countries, half-yearly growth rates were obtained by simple interpolation. For details on yearly basis, see Table 23.

Table 23

Growth of real GNP/GDP in other OECD countries[a]

Percentage changes from previous year

	1987 Share in total OECD	1987	1988	1989	1990	1991
Austria	0.9	1.9	4.2	3.8	3.4	2.9
Belgium	1.1	2.0	4.3	4.2	3.3	2.7
Denmark	0.8	–0.6	–0.2	1.1	1.1	2.0
Finland	0.7	3.3	5.2	5.0	1.7	1.1
Greece	0.4	0	3.9	2.9	1.4	2.1
Iceland	0	8.7	–0.9	–3.8	0.1	..
Ireland[b]	0.2	5.6	1.2	4.0	3.8	3.7
Luxembourg	0	2.8	4.3	3.5	3.4	3.0
Netherlands	1.7	1.1	3.0	4.3	3.3	3.1
Norway	0.7	3.5	0.9	5.0	2.7	3.9
Portugal	0.3	5.3	3.9	5.4	4.0	4.0
Spain	2.3	5.6	5.2	4.9	4.2	3.8
Sweden	1.3	2.9	2.3	2.1	0.7	0.1
Switzerland	1.4	2.0	3.0	3.3	2.6	2.4
Turkey[b]	0.5	7.4	3.7	1.7	4.2	4.3
Total of above European countries	12.4	3.0	3.4	3.7	2.8	2.7
Australia	1.6	4.0	3.6	4.9	0.3	2.8
New Zealand	0.3	0.1	1.7	0.7	2.0	2.9
Total of above countries	14.2	3.0	3.4	3.8	2.5	2.7

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) GNP.

Table 24

Growth of nominal GNP/GDP in the OECD area[a]

Percentage changes from previous period, seasonally adjusted at annual rates

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	6.9	7.9	7.2	6.6	7.1	7.6	6.0	6.7	6.9	7.1	7.0
Japan	4.3	6.3	6.5	7.5	6.6	5.9	7.8	7.6	6.9	6.6	6.5
Germany	3.7	5.2	6.5	7.0	6.9	9.5	2.8	8.9	7.5	6.8	6.5
France[b]	5.3	7.0	7.3	6.6	5.7	7.6	6.8	6.7	6.1	5.6	5.6
Italy[b]	9.3	10.6	9.7	9.2	8.8	9.7	7.7	10.0	8.9	8.9	8.6
United Kingdom[b]	9.9	11.3	9.2	5.9	7.7	8.8	7.1	5.2	6.3	8.2	8.0
Canada[b]	9.1	9.3	7.8	6.1	6.9	8.3	6.1	6.2	6.0	7.5	6.5
Total of above countries	6.3	7.6	7.3	6.9	7.0	7.7	6.3	7.2	7.0	7.1	6.9
Other OECD countries[c]	9.3	11.0	11.8	10.7	10.0	12.5	10.3	10.9	10.6	10.1	9.5
Total OECD	6.7	8.1	8.0	7.5	7.4	8.4	6.9	7.8	7.5	7.5	7.3
Four major European countries	6.6	8.0	7.9	7.2	7.2	8.9	5.7	7.8	7.2	7.2	7.0
OECD Europe	7.3	8.9	9.1	8.5	8.1	10.0	7.2	9.1	8.4	8.2	7.8
EEC	6.7	8.1	8.2	7.6	7.5	9.1	6.3	8.3	7.6	7.5	7.3
Total OECD *less* the United States	6.6	8.2	8.4	8.0	7.6	8.8	7.4	8.4	7.8	7.7	7.4

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) GDP.
c) Half-yearly data must be interpreted with care since for most of these countries, amounting to over 50 per cent of the total GDP of the smaller countries, half-yearly growth rates were obtained by simple interpolation. For details on yearly basis, see Table 25.

Table 25

Growth of nominal GNP/GDP in other OECD countries[a]

Percentage changes from previous year

	1987 Share in total OECD	1987	1988	1989	1990	1991
Austria	0.9	4.4	6.3	6.4	6.5	6.3
Belgium	1.1	4.0	6.3	8.1	7.5	6.5
Denmark	0.8	4.4	4.1	5.1	4.2	5.2
Finland	0.7	8.7	12.5	12.2	8.8	6.4
Greece	0.4	14.2	18.7	18.2	22.7	21.5
Iceland	0	31.3	22.6	15.5	11.1	..
Ireland[b]	0.2	7.8	4.2	8.6	7.3	6.8
Luxembourg	0	3.8	6.7	7.0	7.0	6.5
Netherlands	1.7	0.6	4.6	5.1	6.4	5.9
Norway	0.7	9.7	3.8	6.9	5.5	7.3
Portugal	0.3	17.1	15.9	18.9	16.5	15.5
Spain	2.3	11.8	11.0	12.1	11.3	10.4
Sweden	1.3	7.9	9.1	9.6	10.9	8.9
Switzerland	1.4	4.7	5.5	6.8	7.3	5.9
Turkey[b]	0.5	48.6	71.8	72.1	66.7	58.4
Total of above European countries	12.4	8.8	10.7	11.7	11.3	10.2
Australia	1.6	11.7	13.0	13.0	6.1	9.0
New Zealand	0.3	15.2	10.5	6.7	6.3	6.8
Total of above countries	14.2	9.3	11.0	11.8	10.7	10.0

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) GNP.

Table 26

Development of real total domestic demand in the OECD area[a]

Percentage changes from previous period, seasonally adjusted at annual rates

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	3.2	3.3	2.4	2.0	2.4	2.1	2.3	1.6	2.3	2.4	2.4
Japan	5.4	7.6	5.9	5.0	3.6	5.6	6.7	4.7	4.0	3.6	3.4
Germany	2.9	3.7	2.8	4.0	3.4	3.1	2.4	5.5	2.7	3.6	3.6
France	3.6	4.0	3.2	3.3	3.0	2.3	3.4	3.3	3.1	2.9	2.9
Italy	4.7	4.7	3.3	3.1	3.4	4.0	0.3	4.4	3.5	3.4	3.3
United Kingdom	5.5	7.6	3.2	–0.5	1.1	2.5	–0.4	–0.8	0.2	1.3	1.6
Canada	4.9	5.8	5.5	2.6	2.8	6.3	3.7	2.2	2.3	2.9	3.0
Total of above countries	4.0	4.8	3.5	2.9	2.8	3.3	3.1	2.9	2.8	2.9	2.8
Other OECD countries[b]	3.7	3.6	4.4	2.6	2.6	4.9	3.7	2.1	2.5	2.6	2.7
Total OECD	4.0	4.6	3.6	2.9	2.8	3.5	3.2	2.8	2.7	2.8	2.8
Four major European countries	4.0	4.8	3.1	2.7	2.8	3.0	1.6	3.4	2.5	2.9	3.0
OECD Europe	4.0	4.4	3.4	2.9	2.8	3.4	2.4	3.2	2.6	2.8	2.9
EEC	4.0	4.6	3.5	3.0	2.9	3.3	2.4	3.4	2.6	3.0	3.0
Total OECD *less* the United States	4.4	5.4	4.3	3.4	3.0	4.4	3.7	3.5	2.9	3.1	3.0

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) Half-yearly data must be interpreted with care since for most of these countries, amounting to over 50 per cent of the total GDP of the smaller countries, half-yearly growth rates were obtained by simple interpolation. For details on yearly basis, see Table 27.

Table 27

Development of total domestic demand in other OECD countries[a]

Percentage changes from previous year

	1987 Share in total OECD	1987	1988	1989	1990	1991
Austria	0.9	2.8	4.7	3.3	3.6	2.9
Belgium	1.1	3.6	4.3	5.0	4.0	3.4
Denmark	0.8	–3.0	–2.2	0.1	0.6	1.9
Finland	0.7	5.7	6.5	6.4	2.0	0.4
Greece	0.4	–0.8	4.7	4.6	2.3	2.2
Iceland	0	15.9	–0.7	–8.0	0.7	..
Ireland	0.2	–0.4	0.2	4.9	4.7	4.3
Luxembourg	0	5.2	2.7	3.5	4.4	4.0
Netherlands	1.7	2.2	2.4	3.6	3.4	2.3
Norway	0.7	–1.0	–3.2	–2.2	0.1	2.0
Portugal	0	9.3	6.5	4.1	4.6	4.4
Spain	2.3	8.6	7.1	8.0	5.3	4.5
Sweden	1.3	4.0	3.2	3.4	1.2	0.4
Switzerland	1.4	3.6	3.2	3.2	2.5	2.5
Turkey	0.6	6.0	0.6	3.1	4.1	3.8
Total of above European countries	12.1	3.9	3.5	4.1	3.1	2.7
Australia	1.6	2.4	5.5	6.4	–1.3	2.0
New Zealand	0.3	3.6	–0.2	5.7	1.5	1.8
Total of above countries	14.0	3.7	3.6	4.4	2.6	2.6

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table 28

Growth of gross private non-residential fixed capital formation in the OECD area[a]

Percentage changes from previous period, seasonally adjusted at annual rates

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	3.9	8.4	3.3	3.2	3.4	3.8	3.2	3.2	3.1	3.5	3.5
Japan	8.2	15.5	17.8	10.2	5.1	17.6	18.5	8.5	6.0	4.9	4.6
Germany	4.2	7.3	9.6	6.6	5.0	16.5	4.2	8.1	6.1	4.8	4.3
France	6.9	10.7	7.0	6.5	6.0	6.6	5.1	7.5	6.0	6.0	6.0
Italy	9.8	10.9	6.9	5.7	6.1	8.0	3.5	6.6	6.2	6.1	5.8
United Kingdom	14.5	19.6	6.4	–1.0	0.8	0.1	–1.0	–1.2	–0.8	1.3	1.5
Canada	11.1	18.9	8.2	4.1	7.3	11.3	0.5	5.2	5.5	7.7	8.2
Total of above countries	6.4	11.1	8.8	5.9	4.9	9.9	7.8	5.4	5.1	4.9	4.6
Other OECD countries[b]	7.3	9.3	9.0	3.0	4.5	11.7	7.0	2.0	2.9	6.9	7.2
Total OECD	6.4	10.8	8.9	5.5	5.0	10.2	7.7	4.9	4.8	5.2	5.0
Four major European countries	7.9	10.5	8.4	5.8	4.5	10.0	6.3	6.0	4.8	4.5	4.3
OECD Europe	7.5	9.9	8.8	5.2	5.1	10.3	6.6	5.1	4.3	5.6	5.4
EEC	7.7	10.4	9.1	6.0	4.9	10.7	6.9	6.1	5.0	5.0	4.8
Total OECD *less* the United States	7.8	12.2	11.7	6.2	5.3	13.8	8.5	5.7	5.2	5.6	5.3

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) Half-yearly data must be interpreted with care since for most of these countries, amounting to over 50 per cent of the total GDP of the smaller countries, half-yearly growth rates were obtained by simple interpolation. For details on yearly basis, see Table 29.

Table 29

Growth of gross private non-residential fixed capital formation in other OECD countries[a]

Percentage changes from previous year

	1987	1988	1989	1990	1991
Austria	5.4	7.2	6.0	5.8	5.6
Belgium	6.2	16.6	14.9	10.0	6.5
Denmark	–9.3	–5.6	0.5	2.0	5.6
Finland	6.6	9.9	12.4	0	–2.0
Greece	–8.0	12.8	10.5	4.5	6.5
Iceland	20.0	–2.7	–14.1	5.8	..
Ireland	2.8	3.8	15.2	12.1	8.5
Luxembourg	6.5	3.2	2.9	9.0	7.0
Netherlands	0.9	10.0	6.7	6.4	3.3
Norway	–2.2	4.3	–1.0	–30.1	27.3
Portugal	15.1	15.0	7.5	9.0	8.0
Spain	20.3	14.1	13.9	9.0	5.5
Sweden	7.0	5.9	11.4	1.0	–5.0
Switzerland	10.4	9.4	5.9	3.8	2.4
Turkey	18.4	13.3	3.7	9.0	10.0
Total of above European countries	7.5	9.5	8.7	3.9	5.0
Australia	5.8	9.1	11.7	–4.7	0.9
New Zealand	9.6	–0.6	9.4	3.0	5.0
Total of above countries	7.3	9.3	9.0	3.0	4.5

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table 30

Contributions to changes in real GNP/GDP in the OECD area

As a per cent of real GNP/GDP in the previous period, seasonally adjusted at annual rates

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States											
Private consumption	1.8	2.2	1.8	1.4	1.3	1.5	2.2	1.1	1.2	1.3	1.3
Public expenditure	0.5	0.1	0.5	0.4	0.4	0.7	0.1	0.6	0.3	0.4	0.4
Private residential construction	0	0	–0.1	0	0.1	–0.2	–0.4	0.2	0.1	0.2	0.2
Other private investment	0.5	1.0	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4
Stockbuilding	0.5	0.1	–0.2	–0.2	0.2	–0.3	0	–0.6	0.3	0.1	0
Exports	1.4	2.1	1.5	0.9	1.2	1.8	1.0	0.7	1.1	1.2	1.2
Imports	–1.1	–1.0	–0.9	–0.6	–1.1	–0.8	–1.0	–0.2	–1.0	–1.2	–1.2
GNP	3.7	4.4	3.0	2.3	2.5	3.2	2.4	2.1	2.5	2.5	2.4
Japan											
Private consumption	2.4	2.9	1.9	2.2	2.0	1.4	2.5	2.2	2.0	1.9	1.9
Public expenditure	0.5	0.6	0.1	0.2	0.2	0.2	0	0.2	0.2	0.2	0.2
Private residential construction	1.1	0.7	0.2	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.2
Other private investment	1.5	3.0	3.7	2.4	1.3	3.6	4.1	2.0	1.5	1.2	1.1
Stockbuilding	–0.3	0.3	–0.1	0	0.1	0.1	–0.2	0.1	0.2	0.1	–0.1
Exports	0.7	1.5	2.8	2.6	2.0	2.5	2.6	3.0	1.9	2.0	2.1
Imports	–1.3	–3.2	–3.7	–3.0	–1.7	–4.0	–3.4	–3.2	–2.1	–1.6	–1.6
GNP	4.6	5.7	4.9	4.7	4.0	4.0	5.9	4.4	3.9	4.0	4.0
Germany											
Private consumption	1.9	1.5	1.0	2.1	1.9	0.7	0.9	2.3	2.9	1.6	1.5
Public expenditure	0.3	0.5	0	0.3	0.4	0.2	–0.7	0.8	0.5	0.4	0.3
Private residential construction	–0.1	0.2	0.3	0.3	0.2	1.0	–0.1	0.5	0.3	0.2	0.2
Other private investment	0.5	0.9	1.1	1.1	0.9	2.0	–0.1	1.7	1.0	0.9	0.7
Stockbuilding	0.1	0.4	0.4	0	–0.2	–0.8	2.3	0	–2.1	0.4	0.7
Exports	0.3	1.9	3.6	2.6	3.2	6.3	–0.3	3.2	4.3	2.9	2.6
Imports	–1.4	–1.9	–2.3	–2.6	–3.0	–3.1	–1.1	–3.0	–3.2	–2.9	–2.9
GNP	1.7	3.6	4.0	3.9	3.4	6.2	0.9	5.5	3.7	3.4	3.1
France											
Private consumption	1.8	1.9	2.0	1.9	1.7	1.4	2.3	1.7	1.8	1.7	1.7
Public expenditure [a]	0.6	0.8	0.5	0.5	0.5	0.7	0.2	0.5	0.6	0.5	0.5
Residential construction	0.2	0.3	0.1	0	–0.1	–0.1	0.2	–0.1	–0.1	–0.1	–0.1
Other investment	0.8	1.3	0.9	0.8	0.8	0.8	0.6	1.0	0.8	0.8	0.8
Stockbuilding	0.2	–0.2	–0.2	0.2	0	–0.5	0.1	0.2	0.1	0	0
Exports	0.6	1.9	2.6	1.5	1.6	4.2	0.5	1.9	1.6	1.5	1.6
Imports	–1.8	–2.1	–2.1	–1.7	–1.8	–2.2	–1.4	–1.8	–1.6	–1.8	–1.8
GDP	2.4	3.8	3.7	3.1	2.9	4.5	2.5	3.4	3.1	2.8	2.8
Italy											
Private consumption	2.7	2.6	2.4	2.2	2.2	2.4	1.8	2.3	2.2	2.1	2.1
Public consumption	0.8	0.6	0.2	0.4	0.4	0.2	0.2	0.5	0.5	0.4	0.4
Residential construction	–0.1	–0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Other investment	1.2	1.4	0.9	0.8	0.9	1.1	0.5	0.9	0.9	0.9	0.8
stockbuilding	0.3	0.4	–0.2	–0.2	0	0.3	–2.3	0.7	0	0	0
exports	0.7	1.1	2.3	1.5	1.5	2.6	1.9	1.5	1.4	1.5	1.6
imports	–2.5	–1.8	–2.6	–1.7	–1.9	–3.5	0.3	–2.7	–1.9	–1.8	–1.9
GDP	3.0	4.2	3.2	3.1	3.2	3.3	2.5	3.3	3.1	3.2	3.1
United Kingdom											
Private consumption	3.7	4.4	2.4	0.7	1.0	2.7	0.7	0.5	0.9	1.0	1.1
Public expenditure	–0.1	–0.1	0.3	0.2	0.3	0.8	0.9	–0.1	0.2	0.4	0.3
Private residential construction	0.2	0.3	–0.2	–0.1	0	–0.5	0.3	–0.3	0	0	0
Other private investment	1.5	2.3	0.8	–0.1	0.1	0	–0.1	–0.2	–0.1	0.2	0.2
stockbuilding	0.1	0.7	–0.2	–1.2	–0.3	–0.4	–2.3	–0.9	–0.8	–0.1	–0.1
Exports	1.5	0.2	1.2	2.1	2.1	1.3	2.3	2.1	2.0	2.1	2.1
Imports	–2.2	–3.7	–2.3	–0.7	–1.3	–2.5	0.5	–1.3	–0.7	–1.4	–1.6
Compromise adjustment	–0.1	0.5	0.2	0	0	0.1	0.1	0	0	0	0
GDP	4.7	4.5	2.3	0.9	1.9	1.5	2.4	0	1.5	2.0	2.1
Canada											
Private consumption	2.7	2.4	2.2	1.2	1.1	2.1	1.8	1.0	1.1	1.0	1.1
Public expenditure	0.2	0.7	0.6	0.4	0.3	0.4	0.8	0.3	0.3	0.4	0.4
Private residential construction	1.0	0.3	0.3	0.1	0.1	0.4	0.2	0.1	0	0.1	0.1
Other private investment	1.5	2.6	1.3	0.7	1.2	1.8	0.1	0.9	0.9	1.3	1.4
Stockbuilding	–0.6	–0.4	1.0	0.2	0.1	1.4	0.8	0	0	0.2	0
Exports	2.1	3.1	–0.3	0.3	1.1	–0.1	–0.6	0.5	0.8	1.1	1.4
Imports	–2.6	–4.2	–2.3	–1.1	–1.4	–3.1	–1.2	–0.8	–1.3	–1.4	–1.4
Error of estimate	0.2	0.4	0.1	0.1	0	–0.1	0.3	0	0	0	0
GDP	4.5	5.0	2.9	2.0	2.6	2.8	2.2	1.9	1.8	2.7	3.0
Total of above countries [b]											
Private consumption	2.2	2.5	1.9	1.8	1.6	1.5	2.0	1.6	1.7	1.6	1.6
Public expenditure [c]	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.4	0.3	0.3	0.3
Private residential construction [c]	0.3	0.2	0	0.1	0.1	0	–0.1	0.1	0.1	0.1	0.1
Other private investment [a,c]	0.8	1.3	1.0	0.7	0.6	1.1	0.8	0.7	0.6	0.6	0.6
Stockbuilding [d]	0	0.1	0.1	–0.1	0	0	0.2	–0.2	–0.1	0.1	0
Exports	1.2	1.8	1.9	1.4	1.5	2.3	1.3	1.4	1.5	1.5	1.5
Imports	–1.2	–1.6	–1.7	–1.2	–1.3	–1.8	–1.3	–1.2	–1.2	–1.3	–1.3
GNP/GDP	3.6	4.6	3.5	3.0	3.0	3.7	3.0	3.0	3.0	3.0	2.9

Note: Components may not add to GNP/GDP growth due to rounding.

a) Public enterprises in France are included under *Other investment.*

b) Computed on the basis of 1987 values expressed in 1987 US dollars.

c) Government fixed asset formation for Italy is included in private investment.

d) Including error of estimate.

Table 31

Contributions to changes in real GNP/GDP in the other OECD countries

as per cent of real GNP/GDP in the previous period

	1988	1989	1990	1991
Australia[a]				
Private consumption	1.9	2.8	1.2	1.4
Government consumption	0.5	0.8	0.4	0.3
Gross fixed investment	2.2	2.3	–1.9	0.3
Stockbuilding	0.8	0.5	–1.1	0.1
Exports of goods and services	0.5	0.7	0.8	1.3
Imports of goods and services	–2.6	–3.9	0.4	–0.6
GDP	3.6	4.9	0.3	2.8
Austria				
Private consumption	1.7	1.9	1.9	1.7
Government consumption	0.1	0.2	0.1	0.1
Gross fixed investment	1.4	1.1	1.0	1.0
Stockbuilding	1.5	0.2	0.6	0.1
Exports of goods and services	3.5	4.6	3.6	3.3
Imports of goods and services	–4.1	–4.2	–3.9	–3.3
GDP	4.2	3.8	3.4	2.9
Belgium				
Private consumption	1.6	2.4	2.6	2.5
Government consumption	–0.1	0.1	0	0
Gross fixed investment	2.6	2.6	1.4	0.9
Stockbuilding	0.3	0.1	0.1	0
Exports of goods and services	6.4	6.5	5.6	5.2
Imports of goods and services	–6.5	–7.4	–6.4	–6.0
GDP	4.3	4.2	3.3	2.7
Denmark				
Private consumption	–0.9	–0.2	0.6	1.1
Government consumption	–0.2	–0.1	–0.2	–0.1
Gross fixed investment	–0.9	–0.3	0	0.8
Stockbuilding	–0.1	0.7	0.1	0
Exports of goods and services	2.5	2.5	1.7	1.8
Imports of goods and services	–0.4	–1.5	–1.2	–1.6
GDP	–0.2	1.1	1.1	2.0
Finland				
Private consumption	2.8	1.9	1.4	0.8
Government consumption	0.5	0.7	0.6	0.6
Gross fixed investment	2.3	3.1	0.3	–1.0
Stockbuilding	0.9	0.8	–0.2	0
Exports of goods and services	1.1	0.5	0.6	0.8
Imports of goods and services	–3.4	–3.0	–0.9	–0.2
GDP	5.2	5.0	1.7	1.1
Greece				
Private consumption	2.3	2.2	1.8	1.4
Government consumption	1.0	1.0	0.3	0.3
Gross fixed investment	1.3	1.3	0.5	0.6
Stockbuilding	0.1	0.2	–0.1	0
Exports of goods and services	1.9	1.1	1.1	1.4
Imports of goods and services	–2.0	–2.9	–2.1	–1.6
GDP	3.9	2.9	1.4	2.1
Iceland				
Private consumption	–2.6	–5.0	–0.6	..
Government consumption	0.8	0.2	0.2	..
Gross fixed investment	–0.3	–2.4	0.8	..
Stockbuilding	1.4	–1.2	0.3	..
Exports of goods and services	–1.6	0.5	0.2	..
Imports of goods and services	1.3	4.1	–0.8	..
GDP	–0.9	–3.8	0.1	..
Ireland				
Private consumption	2.1	3.4	2.8	2.8
Government consumption	–0.9	–0.5	0.1	0.1
Gross fixed investment	–0.3	2.0	2.0	1.6
Stockbuilding	–0.7	0.2	0.2	0.3
Exports of goods and services	6.6	9.5	6.5	6.1
Imports of goods and services	–2.7	–8.4	–5.9	–5.7
GDP	1.2	4.0	3.8	3.7
Luxembourg				
Private consumption	1.0	1.9	1.9	1.8
Government consumption	0.5	0.4	0.3	0.3
Gross fixed investment	0.8	0.7	2.1	1.7
Stockbuilding	0.3	0.3	–0.1	0
Exports of goods and services	9.9	8.0	7.5	7.5
Imports of goods and services	–8.2	–7.8	–8.4	–8.3
GDP	4.3	3.5	3.4	3.0
Netherlands				
Private consumption	0.8	2.0	2.2	1.7
Government consumption	0	0.1	0.1	0.1
Gross fixed investment	2.0	1.0	0.5	0.2
Stockbuilding	–0.5	0.4	0.5	0.2
Exports of goods and services	4.8	3.8	3.8	4.0
Imports of goods and services	–4.2	–3.1	–3.8	–3.1
GDP	3.0	4.3	3.3	3.1

	1988	1989	1990	1991
Norway				
Private consumption	–1.2	–0.9	0.7	0.8
Government consumption	0.1	0.4	0.4	0.3
Gross fixed investment	0.7	–1.1	–5.3	3.1
Stockbuilding	–2.5	–0.4	4.2	–2.6
Exports of goods and services	2.9	7.1	3.1	4.0
Imports of goods and services	0.9	–0.2	–0.5	–1.7
GDP	0.9	5.0	2.7	3.9
New Zealand				
Private consumption	1.0	1.0	1.1	1.2
Government consumption	–0.5	–0.1	–0.1	0
Gross fixed investment	0.1	2.0	0.7	1.1
Stockbuilding	–0.9	3.0	0	–0.4
Exports of goods and services	1.3	0.6	1.2	1.6
Imports of goods and services	0.6	–5.7	–0.9	–0.7
GDP	1.7	0.7	2.0	2.9
Portugal				
Private consumption	4.1	2.0	2.0	1.9
Government consumption	0.9	0.4	0.5	0.4
Gross fixed investment	3.5	1.9	2.4	2.2
Stockbuilding	–1.5	0.3	0.2	0.3
Exports of goods and services	3.3	5.6	3.6	3.4
Imports of goods and services	–6.5	–4.8	–4.6	–4.1
GDP	3.9	5.4	4.0	4.0
Spain				
Private consumption	2.9	3.5	2.5	2.5
Government consumption	0.6	0.8	0.5	0.5
Gross fixed investment	3.2	3.3	2.7	1.7
Stockbuilding	0.5	0.7	–0.1	0.2
Exports of goods and services	1.2	0.9	1.1	1.2
Imports of goods and services	–3.2	–4.3	–2.6	–2.2
GDP	5.2	4.9	4.2	3.8
Sweden				
Private consumption	1.3	0.4	0.5	1.0
Government consumption	0.3	0.5	0.5	0.5
Gross fixed investment	1.2	1.9	0.2	–1.0
Stockbuilding	0.3	0.6	0	0
Exports of goods and services	1.2	1.2	1.0	1.2
Imports of goods and services	–2.1	–2.5	–1.5	–1.4
GDP	2.3	2.1	0.7	0.1
Switzerland				
Private consumption	1.4	1.2	1.3	1.4
Government consumption	0.4	0.4	0.5	0.4
Gross fixed investment	1.9	1.5	1.0	0.8
Stockbuilding	–0.3	0.3	–0.1	0
Exports of goods and services	2.1	2.4	2.5	2.1
Imports of goods and services	–2.5	–2.5	–2.6	–2.4
GDP	3.0	3.3	2.6	2.4
Turkey				
Private consumption	1.9	2.4	2.7	2.3
Government consumption	0.2	0.1	0.3	0.3
Gross fixed investment	–0.3	–0.5	1.0	1.3
Stockbuilding	–1.2	1.1	0.1	0
Exports of goods and services	4.7	1.7	1.9	2.0
Imports of goods and services	–1.7	–3.2	–1.9	–1.6
GDP	3.7	1.7	4.2	4.3
Total of above countries[b]				
Private consumption	1.5	1.8	1.6	1.6
Government consumption	0.3	0.4	0.3	0.3
Gross fixed investment	1.8	1.7	0.5	0.8
Stockbuilding	0.5	1.3	0.2	–0.1
Exports of goods and services	2.2	2.1	1.9	2.1
Imports of goods and services	–2.8	–3.6	–2.0	–1.9
GDP	3.4	3.8	2.5	2.7
OECD Europe[b]				
Private consumption	2.1	1.7	1.8	1.7
Government consumption	0.4	0.2	0.3	0.3
Gross fixed investment	1.6	1.3	0.8	0.8
Stockbuilding	0.3	0.2	–0.1	–0.1
Exports of goods and services	1.6	2.4	1.9	2.0
Imports of goods and services	–2.2	–2.3	–1.8	–1.9
GDP	3.8	3.5	2.9	2.8
Total OECD[b]				
Private consumption	2.3	1.9	1.7	1.6
Government consumption	0.3	0.3	0.3	0.3
Gross fixed investment	1.7	1.1	0.8	0.8
Stockbuilding	0.1	0.2	–0.1	0
Exports of goods and services	2.0	2.0	1.5	1.6
Imports of goods and services	–1.9	–1.9	–1.4	–1.4
GDP	4.4	3.6	2.9	2.9

a) Including the error of estimate of: 0.3, 1.7, 0.4, 0.

b) Aggregates were computed on the basis of 1987 values, expressed in 1987 US dollars.

Table 32

Gross public debt

Percentage of nominal GNP/GDP

	1981	1982	1983	1984	1985	1986	1987[a]	1988[a]	1989	1990	1991
United States	37.2	41.4	44.2	45.2	48.3	51.1	51.6	51.4	51.4	50.9	49.9
Japan	57.1	61.1	66.9	68.4	69.1	72.8	75.5	71.8	68.0	63.8	59.9
Germany[b]	36.3	39.5	40.9	41.5	42.2	42.4	43.7	44.4	42.7	42.1	41.5
France[c]	36.4	40.1	41.4	43.8	45.4	45.4	47.3	47.5	47.3	46.9	46.7
Italy	61.0	66.3	71.9	77.1	84.0	88.5	92.7	95.0	97.0	99.3	101.3
United Kingdom	54.5	53.1	53.3	54.8	53.3	51.9	49.5	44.0	39.6	37.0	34.6
Canada	45.1	50.1	56.1	58.8	64.6	68.6	68.8	68.5	69.2	70.0	70.1
Total of above countries[d]	44.5	48.3	51.6	53.2	55.5	57.9	59.1	58.1	57.0	55.7	54.4
Australia[c]	22.3	22.1	24.1	25.1	26.3	26.5	23.5	20.1	16.5	13.3	9.9
Austria[c]	39.3	41.6	46.0	47.9	49.6	54.0	57.5	58.6	57.8	55.4	52.4
Belgium	93.3	102.4	113.3	118.6	122.7	127.2	132.5	134.3	133.0	132.1	131.9
Denmark[c]	43.7	53.0	62.6	67.0	65.7	59.3	56.9	55.7	54.9	54.4	53.3
Finland[c]	14.6	17.1	18.7	19.1	19.0	18.8	20.0	18.3	15.5	13.2	12.1
Greece[c]	32.8	36.1	41.2	49.5	57.9	58.9	64.6	68.4	75.0	77.6	79.6
Ireland	83.5	92.2	104.7	113.2	117.7	133.2	135.6	132.8	125.4	118.2	110.9
Netherlands	50.3	55.5	61.9	66.1	69.6	71.3	75.0	77.7	80.1	81.8	83.5
Norway[c]	47.4	42.2	38.8	38.7	40.7	51.1	42.8	40.6	41.2	41.3	42.6
Spain[c]	23.3	29.0	35.0	41.8	47.3	48.1	48.4	48.5	47.3	46.3	45.1
Sweden	52.3	62.0	65.7	67.2	67.7	67.2	61.9	57.6	51.7	47.0	44.2
Total of smaller countries[d,e]	42.0	46.7	51.8	55.5	58.2	59.8	59.9	59.4	58.1	56.7	55.6
Total of European countries[d,e]	45.2	48.8	51.8	54.5	56.7	57.7	58.9	58.6	57.6	57.1	56.7
Total of above countries[d]	44.2	48.1	51.6	53.5	55.8	58.1	59.2	58.3	57.1	55.9	54.5

a) Partly estimated.
b) Excludes the German Unity Fund.
c) Does not exclude public sector mutual indebtedness.
d) 1987 GNP/GDP weights and exchange rates.
e) For the countries shown in the table.

Table 33

Net public debt

Percentage of nominal GNP/GDP

	1981	1982	1983	1984	1985	1986	1987[a]	1988[a]	1989	1990	1991
United States	18.5	21.4	23.8	24.7	26.7	28.7	30.0	29.8	29.8	29.2	28.2
Japan[b]	20.7	23.2	26.2	26.9	26.7	26.4	21.7	18.0	14.1	10.0	6.1
Germany[b,c]	17.4	19.8	21.4	21.6	21.9	21.6	22.9	23.6	21.9	21.3	20.7
France[b]	14.2	17.8	20.0	21.1	22.9	25.2	25.4	25.6	25.4	25.0	24.7
Italy	57.8	63.4	68.7	74.4	81.3	86.2	89.9	92.2	94.3	96.5	98.6
United Kingdom	46.5	45.6	46.0	47.5	46.4	45.5	42.8	37.3	32.9	30.3	27.9
Canada	10.0	16.5	22.5	26.1	32.8	37.2	37.6	37.3	38.0	38.8	39.0
Total of above countries[d]	22.7	25.6	28.3	29.6	31.2	32.6	32.3	31.3	30.1	28.9	27.6
Belgium	83.5	92.6	103.6	108.6	112.3	116.8	121.8	123.7	122.4	121.4	121.3
Denmark	16.6	26.4	34.2	37.2	35.0	28.4	25.1	23.9	23.1	22.7	21.5
Finland[b]	− 4.7	− 1.9	0.4	0.7	0.9	0.0	2.4	0.7	− 2.1	− 4.4	− 5.5
Netherlands[b]	27.3	31.3	36.5	39.9	43.0	46.5	52.1	54.8	57.2	58.9	60.6
Norway[b]	− 2.2	− 4.7	− 8.4	−12.5	−16.0	−21.0	−24.0	−26.2	−25.6	−25.5	−24.2
Spain	11.8	14.6	18.6	23.2	27.9	30.5	30.4	30.5	29.3	28.4	27.1
Sweden	− 5.2	4.4	10.5	12.6	16.1	16.1	10.8	6.5	0.6	− 4.1	− 6.9
Total of smaller countries[d,e]	22.9	27.1	31.8	34.7	37.1	38.5	39.0	38.5	37.3	35.9	34.8
Total of European countries[d,e]	29.0	32.3	35.4	37.6	39.7	41.1	41.9	41.7	40.7	40.2	39.7
Total of above countries[d,e]	22.7	25.8	28.7	30.2	31.9	33.3	33.1	32.2	31.0	29.8	28.4

a) Partly estimated.
b) Financial assets exclude corporate shares.
c) Excludes the German Unity Fund.
d) 1987 GNP/GDP weights and exchange rates.
e) Including gross financial liabilities for Australia, Austria, Greece and Ireland.

Table 34

General government net debt interest payments

as a percentage of total expenditures[a]

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
United States	5.0	5.1	5.5	6.6	6.6	6.4	6.2	6.2	6.7	6.9	6.8
of which: central government	10.3	10.8	11.3	12.9	13.2	13.1	13.2	13.5	14.6	14.7	14.5
Japan[b,c]	4.0	4.4	5.0	5.4	5.4	5.0	3.9	3.3	2.8	2.1	1.3
of which: central government[c]	11.4	12.7	15.4	16.6	17.2	17.6	16.7	15.9	..	..	..
Germany[b,d]	3.2	4.0	4.8	4.9	4.9	5.0	5.0	4.9	5.0	5.1	5.3
of which: central government[c]	3.9	2.1	3.2	3.4	3.0	3.4	5.3	7.6	..	..	..
France	2.5	2.4	3.4	3.6	3.9	4.1	4.0	3.9	4.0	4.3	4.4
of which: central government	4.4	3.9	5.7	6.1	6.7	6.9	6.8	7.1	..	..	..
Italy	11.9	13.8	14.3	15.2	14.5	15.4	14.4	14.7	16.1	17.2	17.2
of which: central government	16.1	17.1	17.6	18.6	17.1	18.8	17.9	18.4	..	..	..
United Kingdom	7.5	7.2	6.9	7.4	7.5	7.4	7.1	6.7	6.2	5.3	4.6
of which: central government[e]	4.6	4.7	5.0	5.7	5.4	5.3	5.5	5.2	..	..	..
Canada	5.9	6.5	6.5	7.9	8.9	9.3	9.2	9.6	10.8	12.1	13.1
of which: central government	13.0	13.7	12.9	14.4	16.3	17.2	17.3	18.8	..	..	..
Total major seven countries[f]	5.0	5.4	5.9	6.6	6.7	6.6	6.1	6.0	6.2	6.3	6.1
Major seven *less* the United States[f]	5.1	5.6	6.2	6.6	6.7	6.7	6.1	5.8	5.9	5.8	5.5
Australia[b]	2.9	2.9	4.0	5.1	5.5	6.1	6.2	6.2	5.8	3.3	1.1
Austria	3.9	4.6	4.6	5.5	5.6	5.6	6.2	6.3	6.6	7.0	7.3
Belgium[b,c]	12.4	14.6	15.1	16.2	17.6	18.9	18.4	18.3	19.3	20.4	21.1
Denmark[e]	3.0	4.2	7.1	9.7	10.4	9.2	8.0	7.3	6.5	6.7	6.7
Finland	0.5	0.9	1.6	1.9	2.1	1.8	1.7	1.6	1.1	1.0	0.8
Greece[b,c]	8.0	6.6	8.9	10.4	11.3	12.6	16.1	17.4	17.1	20.9	22.6
Ireland[c]	9.0	10.5	10.5	11.7	12.6	12.9	13.4	12.1	12.7	12.4	13.4
Netherlands	5.9	7.0	7.8	8.3	9.0	9.0	8.6	8.7	8.8	8.7	9.0
Norway	–0.4	–1.0	–0.9	–2.7	–3.3	–4.3	–3.1	–2.8	–4.1	–4.5	–5.1
Spain[b]	0.8	0.9	1.7	3.5	6.0	8.0	7.3	7.2	7.4	7.8	8.2
Sweden	0.5	2.4	2.9	3.8	4.9	3.7	2.3	0.9	0.7	0.1	–0.2
Total of smaller countries[f,g]	3.6	4.3	5.1	6.1	7.1	7.5	7.3	7.1	7.0	6.9	6.8
Total OECD[f,g]	4.9	5.3	5.8	6.5	6.7	6.7	6.3	6.1	6.3	6.3	6.2
Total OECD *less* the United States[f,g]	4.8	5.4	6.0	6.5	6.8	6.8	6.3	6.1	6.1	6.0	5.8

a) On a SNA basis except for the United States and the United Kingdom where the data are based on national methods. Total expenditures are defined as current receipts minus net lending.
b) OECD estimates and projections.
c) Net property income paid rather than net interest payments is used as the former is not available.
d) Excludes the German Unity Fund.
e) Net interest payments including dividends received are used.
f) 1987 GNP/GDP weights and exchange rates.
g) For the countries shown in the table.

Table 35

General government primary balance[a]

Surplus (+) or deficit (-) as a percentage of nominal GNP/GDP

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
United States	+0.7	–1.7	–1.8	–0.6	–1.0	–1.1	–0.3	+0.1	+0.3	+1.0	+1.3
Japan[b,c]	–2.5	–2.1	–2.0	–0.3	+0.9	+0.7	+2.0	+3.1	+3.6	+3.8	+3.7
Germany[b,d]	–2.1	–1.3	–0.3	+0.4	+1.1	+1.0	+0.5	+0.1	+2.4	+1.4	+1.4
France	–0.7	–1.6	–1.4	–0.9	–0.8	–0.6	+0.1	+0.2	+0.5	+1.0	+1.1
Italy	–6.1	–4.8	–3.7	–4.1	–5.2	–3.8	–3.8	–3.4	–1.9	–1.2	–0.9
United Kingdom	+0.8	+0.8	–0.2	–0.6	+0.6	+0.8	+1.7	+3.6	+3.6	+2.7	+2.0
Canada	+0.9	–3.0	–4.0	–2.9	–2.8	–1.4	–0.4	+1.5	+1.2	+2.2	+3.0
Total of above countries[e]	–0.9	–1.9	–1.8	–0.8	–0.6	–0.5	+0.2	+0.8	+1.4	+1.7	+1.8
Australia[b]	–0.3	–0.1	–3.1	–2.1	–1.2	–0.7	+1.1	+2.8	+3.1	+3.4	+2.6
Austria	+0.2	–1.1	–1.7	+0.2	+0.4	–0.8	–1.1	+0.1	+0.5	+2.2	+3.1
Belgium[b,c]	–6.1	–2.9	–2.9	–0.4	+1.0	+1.4	+2.6	+2.5	+3.1	+4.0	+4.3
Denmark[f]	–5.1	–6.5	–2.9	+1.7	+4.1	+8.5	+7.1	+4.6	+3.5	+3.5	+4.0
Finland	+1.4	–0.2	–1.0	+1.1	+1.0	+1.5	–0.5	+2.0	+3.1	+2.9	+1.7
Greece[b,c]	–7.7	–5.0	–4.8	–5.6	–8.6	–6.6	–4.2	–5.9	–9.0	–6.5	–5.1
Ireland[c]	–8.3	–7.8	–5.7	–3.2	–4.1	–3.7	–1.4	+4.0	+3.8	+5.1	+6.5
Netherlands	–2.1	–2.9	–1.7	–1.4	+0.4	–0.9	–1.5	–0.1	–0.3	–0.4	–0.1
Norway	+4.5	+3.9	+3.8	+6.3	+8.9	+3.8	+3.2	+1.6	–1.2	–1.2	–2.3
Spain[b]	–3.6	–5.3	–4.2	–4.1	–4.5	–2.8	–0.2	–0.2	+0.9	+1.2	+2.0
Sweden	–5.0	–5.4	–3.2	–0.5	–0.7	+1.0	+5.5	+3.9	+5.7	+4.7	+3.0
Total of smaller countries[e,g]	–2.6	–3.0	–2.5	–1.1	–0.4	0.0	+1.1	+1.4	+1.6	+1.9	+1.9
Total of European countries[e,g]	–2.3	–2.2	–1.6	–1.1	–0.7	–0.3	+0.1	+0.4	+1.3	+1.2	+1.2
Total of above countries[e]	–1.1	–2.0	–1.9	–0.8	–0.6	–0.5	+0.3	+0.9	+1.4	+1.7	+1.8

a) On a SNA basis except for the United States, the United Kingdom, Australia, Greece and Sweden, where the data are based on national methods. Primary balances exclude interest paid and received.
b) OECD estimates and projections.
c) Net property income paid rather than net interest payments is used as the former is not available.
d) Excludes the German Unity Fund.
e) 1987 GNP/GDP weights and exchange rates.
f) Net interest payments including dividends received are used.
g) For the countries shown in the table.

Table 36

Indicators of fiscal stance[a]

Change in general government financial balances as a percentage of nominal GNP/GDP[b]

		Change in:					Change in:		
		actual balance	cyclically-adjusted				actual balance	cyclically-adjusted	
			overall balance[c]	primary balance[d]				overall balance[c]	primary balance[d]
United States	1988	+0.5	–0.2	–0.2	Australia	1988	+1.9	+1.6	+1.5
	1989	0	–0.1	+0.1		1989	+0.5	–0.3	–0.5
	1990	+0.7	+1.0	+1.0		1990	+1.1	+2.3	+1.4
	1991	+0.4	+0.5	+0.5		1991	0	+0.1	–0.7
Japan[e]	1988	+1.4	+0.9	+0.7	Austria	1988	+1.2	+0.1	+0.2
	1989	+0.7	+0.5	+0.3		1989	+0.4	–0.4	–0.3
	1990	+0.4	+0.3	+0.1		1990	+1.6	+1.0	+1.2
	1991	+0.2	+0.3	+0.1		1991	+0.8	+0.6	+0.7
Germany[e,f]	1988	–0.3	–0.9	–0.9	Belgium	1988	+0.4	–0.8	–1.1
	1989	+2.3	+1.6	+1.6		1989	+0.3	–0.9	–0.4
	1990	–1.0	–1.7	–1.7		1990	+0.5	–0.1	+0.4
	1991	0	–0.5	–0.4		1991	0	–0.2	+0.1
France	1988	+0.1	–0.6	–0.6	Denmark	1988	–2.2	–0.8	–1.1
	1989	+0.4	–0.3	–0.3		1989	–0.6	0	–0.6
	1990	+0.3	–0.1	+0.1		1990	–0.1	+0.4	+0.5
	1991	+0.1	–0.1	–0.1		1991	+0.5	+0.4	+0.4
Italy	1988	+0.2	–0.6	–0.3	Finland	1988	+2.6	+1.7	+1.7
	1989	+0.7	+0.4	+1.3		1989	+1.3	+0.5	+0.3
	1990	0	–0.2	+0.5		1990	–0.2	+0.5	+0.5
	1991	+0.3	0	0		1991	–1.1	–0.1	–0.3
United Kingdom	1988	+2.3	+1.4	+1.1	Greece	1988	–2.6	–3.6	–2.7
	1989	+0.2	+0.3	+0.1		1989	–3.3	–3.9	–3.6
	1990	–0.6	+0.1	–0.2		1990	+0.6	+0.8	+2.7
	1991	–0.4	–0.1	–0.4		1991	+0.7	+0.5	+1.3
Canada	1988	+1.8	+0.9	+1.1	Ireland	1988	+6.6	+7.1	+5.8
	1989	–0.8	–0.6	–0.1		1989	–0.3	–1.3	–1.1
	1990	+0.4	+1.0	+1.5		1990	+1.7	+0.8	+0.5
	1991	+0.4	+0.7	+1.1		1991	+1.0	+0.2	+0.7
Average of major six (excluding United States)[g]	1988	+0.9	+0.3	+0.2	Netherlands	1988	+1.6	+1.0	+0.9
	1989	+0.8	+0.5	+0.5		1989	–0.1	–1.3	–1.3
	1990	0	–0.1	–0.1		1990	0	–0.7	–0.7
	1991	+0.1	+0.1	0		1991	+0.1	–0.5	–0.3
Average of major seven countries[g]	1988	+0.7	+0.1	0	Norway	1988	–1.7	+0.1	+0.2
	1989	+0.4	+0.3	+0.4		1989	–2.1	–3.3	–4.1
	1990	+0.3	+0.3	+0.4		1990	+0.2	+0.7	+0.5
	1991	+0.2	+0.3	+0.2		1991	–0.7	–1.2	–1.5
Average of total OECD countries[g,h]	1988	+0.7	+0.1	0	Spain	1988	+0.1	–0.8	–0.8
	1989	+0.4	+0.2	+0.3		1989	+0.9	+0.1	+0.3
	1990	+0.3	+0.3	+0.4		1990	+0.1	–0.4	–0.2
	1991	+0.2	+0.2	+0.2		1991	+0.6	+0.3	+0.5
Average of smaller countries[g,h]	1988	+0.5	+0.1	–0.1	Sweden	1988	–0.8	–1.1	–2.0
	1989	+0.3	–0.5	–0.5		1989	+1.9	+1.7	+1.6
	1990	+0.3	+0.4	+0.4		1990	–0.6	+0.3	–0.1
	1991	0	0	0		1991	–1.5	–0.2	–0.4

a) OECD estimates and projections. A positive sign indicates lower deficits or higher surpluses. Column 1 corresponds to the year-to-year changes in financial balances shown in Table 6.
b) The change in the actual balances is expressed as a share of actual GNP/GDP. The changes in cyclically-adjusted overall and primary balances are expressed as shares of trend GNP/GDP.
c) Reflects deliberate policy actions, fiscal drag, changes to debt service costs and variations in resource revenues.
d) Primary balances exclude interest paid and received.
e) Figures for 1988 are significantly affected by a number of special factors. These are discussed in *Economic Outlook 43*.
f) Excludes the German Unity Fund.
g) 1987 GNP/GDP weights and exchange rates.
h) For the countries shown in the table.

Table 37

Unemployment in the OECD area[a]

	1988 Unemployment (thousands)	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Unemployment rates												
United States	6 695	6.2	5.5	5.3	5.3	5.4	5.2	5.3	5.3	5.4	5.4	5.5
Japan	1 550	2.8	2.5	2.3	2.2	2.3	2.3	2.2	2.2	2.3	2.3	2.3
Germany	1 797	6.2	6.1	5.5	6.1	5.9	5.6	5.5	6.0	6.2	6.1	5.7
France	2 411	10.5	10.0	9.5	9.3	9.2	9.6	9.5	9.4	9.3	9.2	9.2
Italy	2 885	12.1	12.1	12.1	12.2	12.3	12.2	12.0	12.2	12.3	12.3	12.3
United Kingdom	2 322	10.4	8.2	6.2	6.1	6.5	6.5	5.8	6.0	6.2	6.4	6.5
Canada	1 031	8.8	7.8	7.5	7.7	8.2	7.6	7.5	7.6	7.9	8.1	8.3
Total of above countries	18 690	6.8	6.2	5.7	5.8	5.9	5.8	5.7	5.8	5.8	5.9	5.9
Other OECD countries[bc]	7 640	9.7	9.4	8.9	8.8	8.8	9.0	8.8	8.8	8.8	8.8	8.7
Total OECD[c]	26 329	7.4	6.9	6.4	6.4	6.5	6.5	6.3	6.4	6.5	6.5	6.5
Four major European countries	9 414	9.6	8.9	8.1	8.2	8.2	8.2	7.9	8.1	8.3	8.2	8.2
OECD Europe[c]	16 383	9.8	9.2	8.6	8.6	8.5	8.7	8.4	8.5	8.6	8.6	8.5
EEC	14 182	10.6	9.9	9.0	8.9	8.8	9.2	8.9	8.9	9.0	8.9	8.8
Total OECD *less* the United States[c]	19 634	8.0	7.5	6.9	6.9	7.0	7.0	6.8	6.9	7.0	7.0	7.0
Unemployment levels (millions)												
North America		8.6	7.7	7.5	7.7	8.0	7.5	7.6	7.7	7.8	8.0	8.1
OECD Europe		17.1	16.4	15.3	15.4	15.5	15.5	15.1	15.3	15.5	15.5	15.5
Total OECD		28.1	26.3	24.9	25.3	25.8	25.0	24.7	25.1	25.5	25.7	25.8

a) For sources and definitions, see "Sources and Methods". For unemployment rates standardized by OECD facilitating cross-country comparisons, see Table R18 in "Reference Statistics".
b) For details on a yearly basis, see Table 38.
c) The figures incorporate important revisions to Turkish data; see "Sources and Methods".

Table 38

Unemployment rates in other OECD countries[a]

Per cent of labour force

	1988 Unemployment (thousands)	1987	1988	1989	1990	1991
Austria	122	3.8	3.6	3.4	3.2	3.2
Belgium	425	11.3	10.3	9.3	8.7	8.3
Denmark	244	7.8	8.6	9.3	9.3	9.0
Finland	117	5.1	4.6	3.5	3.8	4.5
Greece	329	7.4	7.7	7.5	7.9	8.2
Iceland	1	0.5	0.6	1.7	2.3	..
Ireland	219	17.5	16.7	15.5	14.9	14.6
Luxembourg	3	1.6	1.4	1.3	1.3	1.3
Netherlands[b]	435	8.7	8.3	7.4	6.8	6.4
Norway	70	2.1	3.2	5.0	5.0	4.9
Portugal	262	7.1	5.8	5.3	5.3	5.3
Spain	2 852	20.5	19.5	17.3	16.1	15.2
Sweden	72	1.9	1.6	1.4	1.6	2.0
Switzerland	20	0.8	0.7	0.6	0.6	0.6
Turkey[c]	1 800	9.5	9.8	10.4	10.9	11.2
Total of above European countries[c]	6 969	10.0	9.7	9.3	9.1	9.0
Australia	575	8.0	7.1	6.1	6.9	7.2
New Zealand	96	4.1	6.0	7.2	7.2	7.2
Total of above countries[c]	7 640	9.7	9.4	8.9	8.8	8.8

a) For sources and definitions, see "Sources and Methods".
b) Values for 1987 and 1988 are based on estimates of unemployment using the new measurement method.
c) The figures incorporate important revisions to Turkish data; see "Sources and Methods".

Table 39

Growth of employment in the OECD area[a]

Total economy, percentage changes from previous period, seasonally adjusted at annual rates

	1988 Employment (thousands)	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	114 971	2.6	2.3	2.0	1.0	1.1	2.6	1.0	1.0	1.2	1.1	1.1
Japan	60 114	1.0	1.7	1.9	1.8	1.5	2.4	1.9	1.9	1.6	1.5	1.5
Germany	27 456	1.3	0.7	1.3	1.6	1.4	1.5	1.2	1.9	1.5	1.4	1.3
France	21 717	0.2	0.8	1.0	0.9	0.7	1.1	0.9	0.9	0.9	0.7	0.6
Italy	20 937	–0.1	1.7	–0.5	0.6	0.5	–1.6	1.1	0.3	0.5	0.5	0.5
United Kingdom	26 041	2.3	3.4	3.1	0.5	–0.1	3.3	2.4	–0.1	–0.2	0	0
Canada	12 245	2.9	3.2	2.0	1.3	1.0	2.4	1.6	1.3	0.9	1.0	1.0
Total of above countries	283 482	1.7	2.0	1.8	1.2	1.1	2.1	1.4	1.1	1.1	1.0	1.0
Other OECD countries[bc]	73 555	1.9	1.6	1.9	1.3	1.1	2.1	1.8	1.1	1.0	1.1	1.1
Total OECD[c]	357 037	1.8	1.9	1.8	1.2	1.1	2.1	1.4	1.1	1.1	1.1	1.1
Four major European countries	96 151	1.0	1.6	1.3	0.9	0.7	1.2	1.4	0.8	0.7	0.6	0.6
OECD Europe[c]	160 738	1.4	1.6	1.4	1.0	0.8	1.5	1.5	0.9	0.8	0.8	0.8
EEC	128 324	1.2	1.7	1.6	1.1	0.8	1.6	1.6	0.9	0.8	0.8	0.8
Total OECD *less* the United States[c]	242 066	1.4	1.7	1.7	1.3	1.0	1.8	1.7	1.2	1.0	1.0	1.0

a) For sources and definitions, see "Sources and Methods".
b) Half-yearly data must be interpreted with care since for most of these countries, half-yearly growth rates were obtained by simple interpolation. For details on a yearly basis, see Table 40.
c) The figures incorporate important revisions to Turkish data; see "Sources and Methods".

Table 40

Growth of employment in other OECD countries[a]

Total economy, percentage changes from previous year

	1988 Employment (thousands)	1987	1988	1989	1990	1991
Austria	3 308	0.5	0.3	1.4	1.2	1.0
Belgium	3 804	0.5	1.5	1.3	0.7	0.6
Denmark	2 595	0.5	–0.6	–0.7	0.4	0.8
Finland	2 431	–0.3	0.3	1.5	–0.5	–0.9
Greece	3 631	–0.1	1.6	1.2	0.4	0.4
Iceland	135	5.8	2.7	0.4	0.4	..
Ireland	1 091	0.6	0.3	0.8	1.0	0.8
Luxembourg	174	2.7	3.1	3.0	2.6	2.3
Netherlands	4 814	1.4	1.3	1.7	1.4	1.1
Norway	2 113	1.9	–0.6	–3.1	0	0.6
Portugal	4 281	2.6	2.7	2.0	1.5	1.2
Spain	11 781	3.1	2.9	4.1	2.3	1.9
Sweden	4 399	1.6	1.4	1.5	0.7	0.4
Switzerland	3 479	1.2	1.2	1.4	1.1	0.9
Turkey[b]	16 550	3.0	1.4	1.1	1.2	1.3
Total of above European countries[b]	64 587	1.9	1.5	1.6	1.2	1.1
Australia	7 468	2.2	3.7	4.4	2.0	1.4
New Zealand	1 500	0.6	–3.5	–0.5	0.5	1.0
Total of above countries[b]	73 555	1.9	1.6	1.9	1.3	1.1

a) For sources and definitions, see "Sources and Methods".
b) The figures incorporate important revisions to Turkish data; see "Sources and Methods".

Table 41

Growth of the labour force in the OECD area[a]

Percentage changes from previous period, seasonally adjusted at annual rates

	1988 Labour force (thousands)	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	121 666	1.7	1.5	1.8	1.1	1.3	2.2	1.2	1.0	1.3	1.2	1.2
Japan	61 664	1.1	1.4	1.7	1.8	1.6	2.0	1.7	1.9	1.7	1.6	1.6
Germany	29 253	1.0	0.7	0.6	2.2	1.2	0.6	0.9	3.0	2.0	1.0	0.6
France	24 128	0.4	0.2	0.5	0.7	0.6	0.4	0.7	0.6	0.7	0.6	0.5
Italy	23 822	0.8	1.7	–0.5	0.7	0.6	–1.3	0.7	0.7	0.7	0.5	0.5
United Kingdom	28 363	0.7	0.9	0.9	0.4	0.4	1.0	0.8	0.3	0.3	0.4	0.4
Canada	13 276	2.1	2.0	1.7	1.5	1.5	1.8	1.5	1.5	1.5	1.5	1.4
Total of above countries	302 172	1.3	1.3	1.3	1.3	1.1	1.5	1.2	1.3	1.3	1.1	1.1
Other OECD countries[bc]	81 194	1.4	1.3	1.3	1.2	1.0	1.5	1.2	1.2	1.0	1.0	1.0
Total OECD[c]	383 367	1.3	1.3	1.3	1.2	1.1	1.5	1.2	1.3	1.2	1.1	1.1
Four major European countries	105 565	0.7	0.9	0.4	1.0	0.7	0.2	0.8	1.2	1.0	0.6	0.5
OECD Europe[c]	177 121	1.0	1.0	0.7	1.0	0.8	0.6	0.8	1.1	1.0	0.8	0.7
EEC	142 506	0.9	0.9	0.5	1.0	0.7	0.4	0.8	1.1	0.9	0.7	0.6
Total OECD *less* the United States[c]	261 700	1.1	1.2	1.1	1.3	1.1	1.1	1.2	1.4	1.2	1.0	1.0

a) For sources and definitions, see "Sources and Methods".
b) Half-yearly data must be interpreted with care since for most of these countries, half-yearly growth rates were obtained by simple interpolation. For details on a yearly basis, see Table 42.
c) The figures incorporate important revisions to Turkish data; see "Sources and Methods".

Table 42

Growth of the labour force in other OECD countries[a]

Percentage changes from previous year

	1988 Labour force (thousands)	1987	1988	1989	1990	1991
Austria	3 430	1.2	0.1	1.2	0.9	0.9
Belgium	4 229	0.1	0.3	0.2	0.1	0.1
Denmark	2 839	0.5	0.2	0.1	0.4	0.4
Finland	2 548	–0.6	–0.2	0.4	–0.2	–0.2
Greece	3 960	–0.1	2.0	1.0	0.8	0.7
Iceland	136	5.6	2.8	1.6	1.0	..
Ireland	1 310	0.8	–0.7	–0.6	0.2	0.5
Luxembourg	177	2.9	2.9	2.9	2.6	2.3
Netherlands	5 249	0.8	0.9	0.7	0.8	0.6
Norway	2 183	2.0	0.6	–1.3	0	0.5
Portugal	4 544	1.0	1.2	1.5	1.5	1.2
Spain	14 633	2.4	1.6	1.3	0.8	0.8
Sweden	4 471	1.2	1.1	1.3	0.9	0.8
Switzerland	3 498	1.3	1.1	1.3	1.1	0.9
Turkey[c]	18 350	1.8	1.8	1.8	1.7	1.7
Total of above European countries[c]	71 556	1.4	1.2	1.1	1.0	1.0
Australia	8 043	2.2	2.8	3.3	2.8	1.8
New Zealand	1 595	0.7	–1.5	0.8	0.5	1.0
Total of above countries[c]	81 194	1.4	1.3	1.3	1.2	1.0

a) For sources and definitions, see "Sources and Methods".
b) Values for 1987 and 1988 are based on estimates of unemployment using the new measurement method.
c) The figures incorporate important revisions to Turkish data; see "Sources and Methods".

Table 43

Productivity (business sector)

Average percentage change at annual rate

	Total factor productivity[a]			Labour productivity[b]			Capital productivity		
	1960-73	1973-79	1979-88	1960-73	1973-79	1979-88	1960-73	1973-79	1979-88
United States	1.6	−0.4	0.4	2.2	0.0	0.8	0.2	−1.1	−0.4
Japan	6.0	1.5	2.0	8.6	3.0	3.2	−2.5	−3.1	−1.7
Germany	2.6	1.7	0.7	4.5	3.1	1.6	−1.4	−1.1	−1.1
France	4.0	1.7	1.6	5.4	3.0	2.6	0.9	−1.0	−0.5
Italy	4.6	2.2	1.0	6.3	3.0	1.6	0.3	0.3	−0.6
United Kingdom	2.3	0.6	1.8	3.6	1.5	2.4	−0.6	−1.5	0.4
Canada	2.0	0.7	0.3	2.8	1.5	1.5	0.5	−0.7	−2.0
Austria	3.4	1.3	0.9	5.8	3.2	2.0	−2.3	−3.2	−1.8
Belgium	3.8	1.4	1.2	5.3	2.8	2.3	0.4	−1.9	−1.3
Denmark	2.8	1.2	1.0	4.3	2.6	1.7	−1.0	−2.2	−0.9
Finland	3.4	1.7	2.3	5.0	3.4	3.2	0.1	−1.8	0.3
Greece	5.8	1.5	−0.7	8.8	3.4	0.1	−1.0	−2.7	−2.6
Ireland	4.1	2.6	2.5	5.0	3.6	3.9	2.0	0.2	−0.9
Netherlands	3.0	1.4	0.8	4.8	2.7	1.6	−0.6	−1.3	−0.9
Norway	3.6	−0.4	1.4	4.1	0.1	2.0	0.9	−2.9	−1.6
Spain	4.1	1.5	2.1	6.0	3.5	3.4	−1.8	−4.9	−1.9
Sweden	2.9	0.5	1.2	4.1	1.5	1.8	0.0	−1.9	−0.6
Switzerland	1.9	−0.4	0.8	3.2	0.8	1.6	−1.9	−3.8	−1.2
Australia	1.7	0.8	0.5	2.7	2.2	1.1	−0.4	−1.8	−0.6
New Zealand	1.1	−2.1	0.7	1.8	−1.5	1.4	−0.5	−3.4	−0.7
OECD Europe	3.3	1.4	1.2	5.0	2.6	2.1	−0.4	−1.4	−0.7
OECD	2.9	0.6	0.9	4.1	1.4	1.6	−0.4	−1.5	−0.8

a) TFP growth is equal to a weighted average of the growth in labour and capital productivity. The sample-period averages for capital and labour shares are used as weights.
b) Real value added per employed person.

INFLATION PROJECTIONS

Table 44

GNP/GDP deflators in the OECD area [a]

Percentage changes from previous period, seasonally adjusted at annual rates

	Average 1976-85	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	6.1	3.1	3.3	4.1	4.2	4.5	4.3	3.6	4.5	4.3	4.5	4.5
Japan	2.8	–0.3	0.6	1.5	2.7	2.6	1.8	1.8	3.0	2.9	2.5	2.4
Germany	3.6	2.0	1.5	2.5	3.0	3.4	3.1	1.9	3.2	3.7	3.3	3.3
France [b]	9.2	2.8	3.0	3.4	3.3	2.8	3.0	4.1	3.2	2.9	2.8	2.7
Italy [b]	14.6	6.1	6.1	6.3	5.9	5.5	6.2	5.1	6.5	5.6	5.5	5.4
United Kingdom [b]	9.7	5.0	6.5	6.7	4.9	5.6	7.2	4.6	5.2	4.7	6.0	5.8
Canada [b]	6.6	4.4	4.1	4.8	4.1	4.2	5.4	3.9	4.2	4.1	4.7	3.4
Total of above countries	6.2	2.6	2.9	3.7	3.8	3.9	3.9	3.2	4.1	3.9	4.0	3.9
Other OECD countries [c]	10.1	6.0	7.3	7.7	7.9	7.1	7.7	7.3	8.3	7.8	7.1	6.5
Total OECD	6.8	3.1	3.5	4.3	4.4	4.4	4.4	3.8	4.7	4.5	4.4	4.2
Four major European countries	8.7	3.7	3.9	4.4	4.1	4.1	4.6	3.7	4.3	4.1	4.2	4.1
OECD Europe	9.2	4.3	4.9	5.5	5.4	5.1	5.5	4.9	5.7	5.3	5.2	4.9
EEC	8.9	3.8	4.0	4.5	4.5	4.4	4.7	4.0	4.7	4.4	4.4	4.3
Total OECD *less* the United States	7.1	3.0	3.7	4.3	4.5	4.3	4.5	3.9	4.8	4.6	4.4	4.1

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) GDP deflator.
c) Half-yearly data must be interpreted with care since for most of these countries, amounting to over 50 per cent of the total GDP of the smaller countries, half-yearly growth rates were obtained by simple interpolation. For details on yearly basis, see Table 45.

Table 45

GNP/GDP deflators in other OECD countries[a]

Percentage changes from previous year

	Average 1977-86	1987	1988	1989	1990	1991
Austria	4.8	2.4	2.0	2.5	3.0	3.3
Belgium	5.3	2.0	1.9	3.8	4.1	3.7
Denmark	7.8	5.0	4.2	4.0	3.1	3.1
Finland	8.4	5.3	6.9	6.8	6.9	5.2
Greece	18.2	14.2	14.3	14.9	21.0	19.0
Iceland	44.0	20.7	23.8	20.0	11.0	..
Ireland[b]	11.6	2.1	2.9	4.4	3.3	3.0
Luxembourg	5.4	0.9	2.2	3.4	3.5	3.4
Netherlands	3.9	–0.5	1.6	0.8	3.0	2.7
Norway	7.6	6.0	2.9	1.8	2.7	3.3
Portugal	21.8	11.2	11.6	12.8	12.0	11.0
Spain	14.3	5.9	5.5	6.9	6.9	6.4
Sweden	9.2	4.8	6.6	7.4	10.1	8.8
Switzerland	3.5	2.6	2.5	3.4	4.5	3.4
Turkey[b]	46.6	38.4	65.7	69.3	60.1	52.0
Total of above European countries	10.2	5.6	7.1	7.8	8.2	7.3
Australia	8.6	7.5	9.0	7.8	5.8	6.1
New Zealand	13.7	15.1	8.7	5.9	4.3	3.8
Total of above countries	10.1	6.0	7.3	7.7	7.9	7.1

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) GNP deflator.

Table 46

Private consumption deflators in the OECD area [a]

Percentage changes from previous period, seasonally adjusted at annual rates

	Average 1976-85	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	6.2	4.7	3.9	4.4	4.8	4.6	5.0	3.4	5.6	4.5	4.6	4.6
Japan	3.6	–0.2	–0.1	1.7	2.8	2.5	1.9	2.2	3.0	2.9	2.5	2.4
Germany	3.4	0.6	1.2	3.1	2.6	3.3	4.9	1.5	2.6	3.6	3.2	3.2
France	9.3	3.1	2.7	3.3	3.0	2.8	3.5	3.4	2.9	2.8	2.8	2.8
Italy	14.3	4.9	5.3	6.0	6.1	5.6	6.4	5.7	6.4	5.9	5.6	5.2
United Kingdom	9.3	4.1	4.8	5.5	4.5	5.3	5.0	6.6	3.9	3.8	5.8	5.6
Canada	7.3	4.0	3.7	4.6	4.4	5.2	4.9	4.7	4.4	4.1	6.5	3.8
Total of above countries	6.4	3.0	2.8	3.8	4.0	4.0	4.3	3.4	4.4	4.0	4.0	3.9
Other OECD countries [b]	10.5	5.7	6.6	7.7	8.0	7.2	7.6	8.0	8.2	7.8	7.3	6.7
Total OECD	7.0	3.4	3.3	4.3	4.6	4.4	4.7	4.0	4.9	4.5	4.5	4.3
Four major European countries	8.5	2.9	3.2	4.3	3.8	4.1	4.9	3.9	3.8	3.9	4.1	4.0
OECD Europe	9.2	3.6	4.3	5.4	5.2	5.1	5.8	5.2	5.2	5.2	5.2	4.9
EEC	8.8	3.1	3.3	4.4	4.2	4.3	4.9	4.3	4.1	4.2	4.4	4.2
Total OECD *less* the United States	7.4	2.6	3.0	4.3	4.5	4.4	4.6	4.3	4.6	4.5	4.5	4.1

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) Half-yearly data must be interpreted with care since for most of these countries, amounting to over 50 per cent of the total GDP of the smaller countries, half-yearly growth rates were obtained by simple interpolation. For details on yearly basis, see Table 47.

Table 47

Private consumption deflators in other OECD countries[a]

Percentage changes from previous year

	Average 1977-86	1987	1988	1989	1990	1991
Austria	4.9	0.9	1.7	2.6	3.2	3.6
Belgium	5.7	1.5	1.7	3.1	3.1	3.3
Denmark	8.4	4.8	4.0	5.0	2.8	3.0
Finland[b]	8.6	3.7	4.7	5.5	6.5	5.3
Greece	18.3	15.7	14.0	15.6	20.5	19.0
Iceland[b]	44.4	16.7	25.1	21.1	14.1	..
Ireland	11.6	2.6	2.5	4.0	3.0	3.1
Luxembourg	6.2	1.5	2.6	3.4	3.1	3.3
Netherlands	4.1	–0.3	0.6	1.1	2.4	2.7
Norway	8.5	7.6	6.1	4.4	4.7	4.7
Portugal	22.3	10.0	10.0	12.7	12.0	11.0
Spain	14.5	5.7	4.9	6.6	6.8	6.4
Sweden	9.8	5.3	6.3	6.5	10.6	9.3
Switzerland	3.3	1.5	2.3	3.6	4.5	3.5
Turkey	49.9	34.8	63.3	71.8	62.0	51.9
Total of above European countries	10.7	5.2	6.6	7.9	8.2	7.4
Australia	9.0	7.9	7.0	6.7	6.8	6.3
New Zealand	13.6	13.5	6.0	5.7	5.1	3.8
Total of above countries	10.5	5.7	6.6	7.7	8.0	7.2

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) Consumer price index.

Table 48

Wholesale prices

Percentage changes from previous period, not seasonally adjusted

	At average annual rate				At actual rate					
	Average 1977-86	1987	1988	1989	12 months to Mar. 1990[a]	6 months to Mar. 1990[a]	Dec.	Jan.	Feb.	Mar.
United States[b]	4.9	2.6	4.0	5.0	1.5	1.1	0.3	1.7	–0.4	–0.2
Japan	1.2	–3.8	–1.0	2.6	3.9	0.3	0.1	0.1	0.1	0.7
Germany	2.5	–3.8	1.1	5.1	–0.2	–0.2	0.2	–0.2	–0.6	0.6
France[b,c]	2.5	0.5	5.3	5.5	1.2[d]	–1.5[d]	-	→	←	-
Italy	11.1	2.6	4.7	6.4	5.6	3.7	0.4	2.9	–1.0	..
United Kingdom[b,c]	8.1	4.4	4.8	5.4	6.0	3.5	0.2	1.1	0.5	0.6
Canada[b,c]	7.2	2.7	4.4	2.3	0.2	0.4	–0.3	0.4	0.7	–0.1
Total of above countries[e]	4.4	1.0	3.2	4.7	3.6	0.2	0.2	..	..	..
Austria	2.9	–2.0	–0.2	1.7	2.9	2.3	0.9	0.8	–0.1	0.2
Belgium[f]	..	–2.9	1.6	6.7	0.8	–1.5	0.1	–1.5	–0.1	..
Denmark[b,c]	6.9	1.1	3.8	6.2	5.8	0.9	0	..	..	..
Finland[b]	6.5	0.8	5.3	5.9	2.5	0.2	0.2	0.1	–0.5	0.1
Greece	20.0	9.2	10.2	13.4	13.2	8.1	1.3	1.3	0.8	..
Ireland	8.2	0.7	4.1	5.5	2.0	–1.8	–0.7	..	..	..
Luxembourg[b]	..	–6.5	2.6	7.6	1.7	–0.6	–0.9	1.0	..	..
Netherlands[b,c]	3.6	–1.9	1.7	3.5	–0.2	–0.9	–0.3	0	0.1	..
Norway	7.2	6.0	5.3	5.5	2.7	1.3	0.1	1.4	0.2	–0.3
Spain[b]	12.3	0.8	3.0	4.2	2.3	0.9	0	0.6	0.2	–0.2
Sweden[b]	9.0	2.7	6.0	7.1	4.0	2.5	0.6	1.5	0.2	–0.2
Switzerland	1.7	–2.0	2.3	4.3	2.0	1.2	0.5	–0.2	0.2	0.7
Turkey	47.3	32.1	68.3	69.6	67.3	28.9	3.3	6.4	5.5	3.6
Australia	9.2	7.3	2.6	4.6	8.6	1.3	0.2	0.8	1.3	..
Memorandum item										
EEC[e]	6.0	0.7	3.8	5.6	3.9	0.7	0.2	..	..	..

a) Or latest available month.
b) Producer prices.
c) Manufacturing sector.
d) Since producer prices are available only on a quarterly basis, the figures shown for the rates of change over 12 and 6 months are calculated as the rate of change over 4 and 2 quarters respectively to the latest quarter available, which in this case is the fourth quarter of 1989.
e) The country weights used in the aggregate indices are derived from 1985 gross domestic product and the gross domestic product purchasing power parity for 1985. Only the countries shown are included in the area totals.
f) New series starting from 1980.

Table 49

Consumer prices

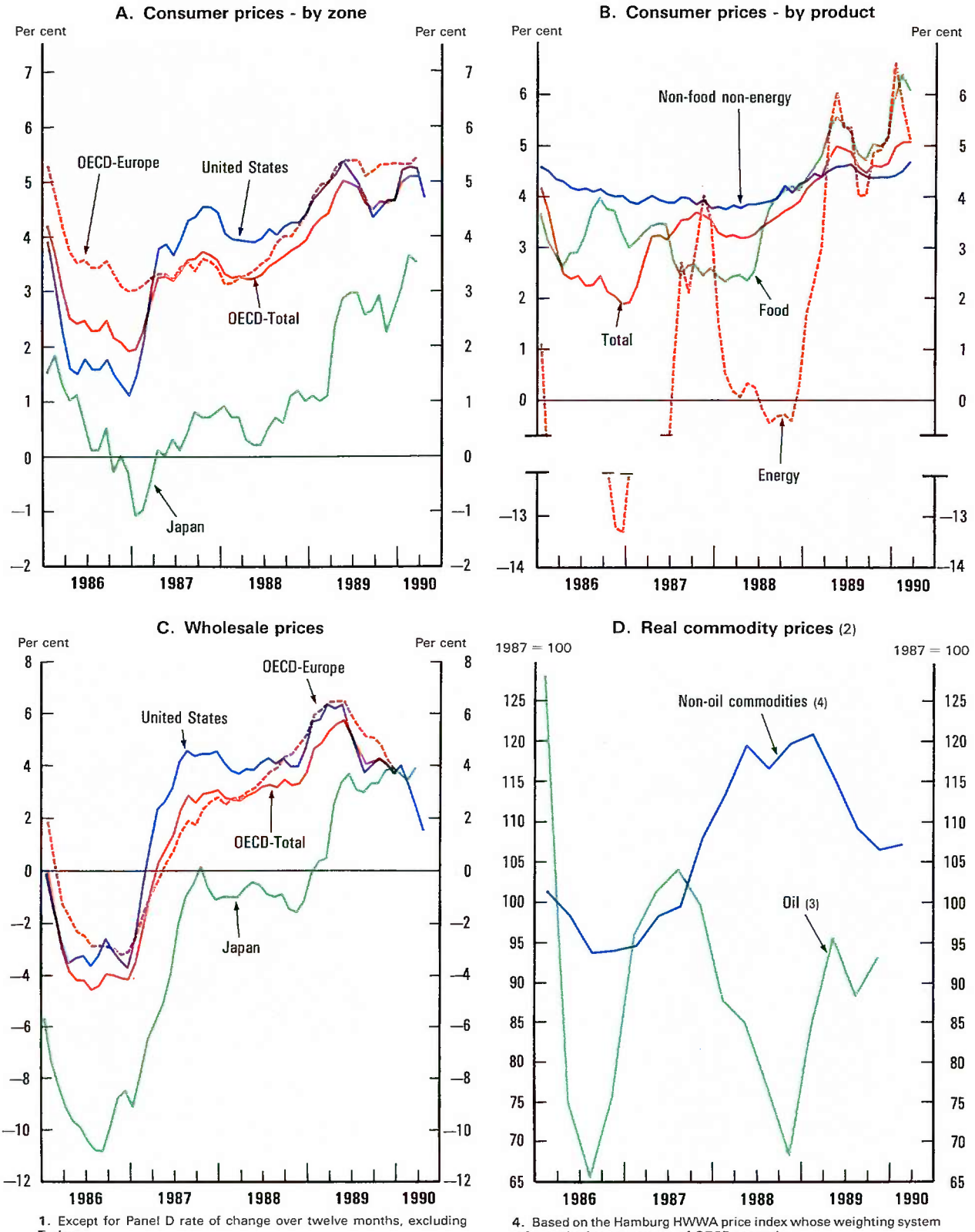
Percentage changes from previous period, not seasonally adjusted

	At average annual rate					At actual rate					
	Average 1968-77	Average 1977-86	1987	1988	1989	12 months to Mar. 1990	6 months to Mar. 1990	Dec.	Jan.	Feb.	Mar.
United States	6.4	6.8	3.7	4.1	4.8	5.2	3.0	0.2	1.0	0.5	0.5
Japan	9.7	3.3	0.1	0.7	2.3	3.5	0.7	0.1	0.2	0.3	0.4
Germany	4.9	3.5	0.2	1.3	2.8	2.7	1.8	0.3	0.6	0.4	0.1
France	8.3	9.3	3.1	2.7	3.6	3.4	1.6	0.1	0.3	0.2	0.3
Italy[a]	10.9	13.8	4.6	5.0	6.6	6.1	3.6	0.5	0.6	0.7	0.4
United Kingdom	12.1	8.7	4.2	4.9	7.8	8.1	4.1	0.3	0.6	0.6	1.0
Canada	6.7	7.7	4.4	4.0	5.0	5.3	2.4	–0.1	0.8	0.6	0.3
Total of above countries[b]	7.7	6.9	2.9	3.3	4.5	4.9	2.5	0.2	0.7	0.4	0.5
Austria	6.3	4.4	1.4	2.0	2.5	3.1	1.5	0.2	0.7	0.7	0.1
Belgium	7.3	5.7	1.6	1.2	3.1	3.4	1.2	0.4	0.4	0.2	0.2
Denmark	8.5	8.3	4.0	4.6	4.8	3.0	1.0	0	–0.6	0.2	0.3
Finland	10.0	8.0	4.1	5.1	6.6	6.6	3.1	0.6	1.5	0.4	0.3
Greece	10.2	20.3	16.4	13.5	13.7	17.8	9.6	1.8	0.7	0.1	3.8
Iceland[c]	24.5	45.5	18.3	25.7	20.7	21.6	8.8	2.1	0.5	1.6	0.8
Ireland	12.6	11.5	3.2	2.1	4.0	4.2[d]	1.7[d]	→	←	0.3[e]	→
Luxembourg	6.6	5.5	–0.1	1.4	3.4	3.5	1.8	0.1	0.8	0.1	0
Netherlands	7.7	4.0	–0.7	0.7	1.1	2.2	0.7	0	–0.2	0.4	0.4
Norway	8.2	8.4	8.7	6.7	4.6	4.5	2.4	–0.1	0.8	0.4	1.1
Portugal[c]	15.0	21.1	9.4	9.7	12.6	12.8	7.5	1.1	1.7	2.3	0.6
Spain	12.1	13.4	5.2	4.8	6.8	7.0	3.0	0.4	1.0	0.6	0.4
Sweden	7.9	8.9	4.2	5.8	6.4	11.2	8.0	0.3	3.2	0.5	2.8
Switzerland	5.2	3.4	1.4	1.9	3.2	5.0	3.5	0.7	0.6	0.3	0.3
Turkey[f]	17.2	47.2	38.9	75.4	69.6	69.8	32.0	3.5	3.8	4.2	4.9
Australia	9.3	8.6	8.5	7.2	7.6	8.6[d]	3.6[d]	→	←	0.6[e]	→
New Zealand	10.4	12.9	15.8	6.4	5.7	7.0[d]	2.2[d]	→	←	0.3[e]	→
Memorandum item											
EEC[b]	9.3	9.2	3.4	3.6	5.3	5.4	2.8	0.3	0.5	0.5	0.5

a) Index for households of wage and salary earners.
b) The country weights used in the aggregate indices are based on the private consumption and the purchasing power parity for consumer expenditure of the preceding year.
c) Excluding rent.
d) Since consumer prices are available only on a quarterly basis, the figures shown for the rates of change over 12 and 6 months are calculated as the rate of change over 4 and 2 quarters respectively to the latest quarter available.
e) The monthly rate is calculated as the change between the two most recent quarterly indices, expressed at a monthly rate and centered at the mid-month of the quarter.
f) 1968-1969: Istanbul index (84 items); 1970-1981: Istanbul index (154 items); from 1982, Turkish index.

CHART N

RECENT PRICE DEVELOPMENTS (1)



1. Except for Panel D rate of change over twelve months, excluding Turkey.
2. Deflated by the OECD GDP deflator.
3. OECD import price index.
4. Based on the Hamburg HWWA price index whose weighting system reflects the import pattern of OECD countries.

Sources: OECD, *Main Economic Indicators,* Hamburg Institute's HWWA Index of World Market Prices of Raw Materials.

Table 50

Consumer prices non-food, non-energy

Percentage changes from previous period, not seasonally adjusted

	At average annual rate				At actual rate					
	Average 1977-86	1987	1988	1989	12 months to Mar. 1990	6 months to Mar. 1990	Dec.	Jan.	Feb.	Mar.
United States	7.1	4.1	4.4	4.5	4.9	3.0	0.2	0.4	0.6	0.8
Japan	3.7	1.5	1.1	2.6	3.0	0.4	0.1	–0.4	–0.2	0.4
Germany	3.7	1.1	2.5	2.3	2.4	1.6	0	0.5	0.5	0.2
France	9.1	4.2	3.3	3.0	2.6	1.3	0	0.2	0.2	0.4
Italy	14.4	5.6	5.7	6.4	6.1 [a]	3.5 [a]	0.2	1.0	0.7	..
United Kingdom	9.1	4.8	5.9	8.5	8.3	4.2	0.2	0.4	0.6	1.2
Canada	7.1	4.6	4.8	5.5	4.9	2.1	0.1	0.3	0.5	0.3
Total of above countries [b]	7.1	3.7	3.8	4.4	4.6	2.4	0.1	0.3	0.5	0.7
Austria	4.6	2.3	2.7	3.2	3.4	1.9	0.2	0.6	0.9	0.1
Belgium	5.7	3.4	2.1	2.7	2.8	1.1	0.3	0.3	0.4	0.3
Denmark	8.0	4.6	5.5	4.8	3.9	1.8	–0.2	–0.1	0.5	0.6
Finland	8.1	4.6	6.2	7.4	6.9	2.8	0.6	1.3	0.3	0.4
Ireland [d]	12.2	3.7	2.1	3.9	4.5	2.0	→	←	0.3	→
Luxembourg	5.7	1.7	2.1	3.2	3.0	1.7	0.1	0.6	0.3	0.1
Netherlands	4.1	1.4	1.2	1.2	1.3	0.3	–0.1	–0.8	0.4	0.6
Norway	8.2	9.5	6.4	4.7	3.5	1.8	0	0.2	0.5	1.1
Spain	14.1	6.2	6.0	6.7	6.7	4.0	0.4	0.7	1.2	0.6
Switzerland	3.1	2.2	2.1	3.1	4.8	3.2	0.1	0.5	0.6	0.4
Australia [d]	8.4	9.4	7.1	7.4	8.0	4.6	→	←	..	→
New Zealand [d]	12.9	16.0	6.6	5.1	6.3	2.4	→	←	0.4	→
Total OECD [b]	7.3	3.9	3.9	4.5	4.7	2.5	0.2	0.3	0.5	0.6
OECD Europe [b]	8.8	4.1	4.2	4.9	4.7	2.6	0.1	0.5	0.6	0.5
EEC [b]	9.1	4.1	4.2	4.9	4.7	2.6	0.1	0.5	0.6	0.5

a) To latest available month.

b) The country weights used in the aggregate indices are based on the private consumption and the purchasing power parity for consumer expenditure of the preceding year. Only the countries shown are included in the area totals.

d) See notes *d* and *e* of Table 49.For Australia, the latest quarter available is the fourth quarter of 1989.

Note: Non-food, non-energy consumer prices include beverage and tobacco prices except for Germany, Luxembourg and Spain; they also include gasoline prices in the case of Australia, New Zealand, Austria, Ireland, Luxembourg and Norway. Data for Italy are based on the survey of all households.

Table 51

Hourly earnings in manufacturing[a]

Percentage changes

	Average 1977-1986	From previous year						
		1987	1988	1989	1989 Q1	1989 Q2	1989 Q3	1989 Q4
United States	6.2	1.8	2.7	2.9	3.2	2.8	3.0	2.7
Japan[b]	4.7	1.7	4.5	5.7	5.0	5.7	5.8	5.9
Germany	4.5	4.2	4.3	4.1	3.8	3.9	4.4	4.4
France[cd]	11.6	5.1	4.6	4.6	4.8	4.6	4.5	4.5
Italy[d]	15.6	8.0	9.0	10.5	12.8	11.5	10.6	7.3
United Kingdom[e]	11.8	8.1	8.5	8.8	8.8	8.9	9.1	8.3
Canada	7.2	2.4	4.9	5.5	5.2	5.1	5.6	6.0
Total of above countries	7.2	3.2	4.3	4.8	4.9	4.8	4.9	4.6
Austria[d]	5.6	5.0	3.4	4.5	3.5	3.8	4.6	5.8
Belgium	5.8	1.0	2.9	4.2	3.1	4.6	4.0	5.1
Denmark[f]	8.1	9.4	6.5	5.1	6.3	5.2	4.4	4.6
Finland[d]	9.8	6.8	8.7	8.4	10.3	8.0	8.5	7.1
Greece	23.2	9.6	18.4	19.8	20.3	19.6	19.6	19.6
Ireland	13.3	5.8	5.3	4.4	4.4	4.7	5.0	3.5
Netherlands[c]	3.9	1.4	1.3	1.4	1.6	1.3	1.3	1.3
Norway	8.5	16.2	5.7	5.2	3.6	5.9	5.6	5.6
Spain[g]	17.0	7.5	8.3	6.9	8.8	6.7	5.8	6.7
Sweden	8.5	6.5	8.0	9.9	9.8	9.2	10.5	10.2
Australia[h]	9.3	6.0	7.0	7.5	8.8	6.8	7.8	6.6
New Zealand[i]	11.3	7.8	7.6	4.0	4.9	4.1	3.3	3.8
Total of above OECD countries	7.5	3.5	4.5	5.0	5.1	4.9	5.0	4.8
Total of above European countries	10.1	6.1	6.2	6.4	6.9	6.5	6.5	5.9
Total of above EEC countries	10.4	5.9	6.2	6.4	6.9	6.5	6.4	5.8

a) Aggregates are calculated using 1987 GDP weights and exchange rates.
b) Monthly earnings.
c) Hourly rates.
d) Total industry.
e) Weekly earnings.
f) Mining and manufacturing.
g) All activities excluding government and agriculture.
h) Weekly earnings, all non-farm activities.
i) Weekly rates, all activities.

Table 52

Capital income shares in the business sector[a]

	Average for the period		1986	1987	1988[b]	1989[b]	1990	1991
	1975-1979	1980-1986						
United States	33.7	33.2	33.5	33.4	33.3	32.7	32.1	32.2
Japan	29.8	30.5	31.5	31.1	31.4	31.2	31.1	30.8
Germany	34.3	32.3	34.7	34.6	35.5	36.7	37.4	38.1
France[c]	29.4	29.5	33.7	34.7	35.8	36.8	37.2	37.5
Italy	34.7[d]	36.1	38.3	37.9	37.5	37.3	37.0	37.1
United Kingdom[c]	30.1	31.4	31.4	32.2	32.0	30.6	28.9	29.1
Canada	36.2	37.5	37.4	37.5	37.2	36.1	34.7	35.0
Total of above countries	32.3	32.4	33.5	33.5	33.7	33.4	33.1	33.2
Austria[e]	29.9	31.6	35.9	36.4	38.1	37.8	37.1	36.4
Belgium	29.9	30.4	33.2	33.4	35.6	36.6	37.1	37.0
Denmark	30.2	32.3	34.9	31.7	32.9	36.0	36.4	37.1
Finland	28.5[d]	33.4	32.5	32.5	33.5	34.3	33.1	32.4
Greece[e]	19.7	24.9	26.8	28.0	28.0	26.4	27.2	29.0
Ireland	17.7	19.5	22.9	24.5	25.2	29.5	31.5	32.3
Netherlands[e]	29.6	35.2	38.0	38.2	39.4	40.6	40.7	41.0
Norway[f]	21.7	25.6	24.8	25.5	24.9	27.9	27.2	28.0
Spain	29.9	33.0	36.7	37.8	39.1	40.1	39.7	39.7
Sweden	25.7	32.8	34.4	33.8	34.3	32.8	31.3	30.5
Switzerland[c]	22.5	20.4	22.1	21.3	21.0	21.3	21.5	20.5
Australia	32.6	34.2	36.2	37.8	39.1	39.4	36.8	37.7
New Zealand[e]	30.7	34.0	38.1	39.7	43.0	44.1	44.7	45.6
Total of above smaller countries	28.0	31.0	33.3	33.6	34.6	35.3	34.8	34.9
Total of above European countries	30.5	31.7	34.1	34.3	34.9	35.3	35.2	35.5
Total of above OECD countries	31.7	32.2	33.5	33.5	33.8	33.7	33.3	33.4

a) For details concerning methodology see "Sources and Methods".
b) Partly OECD estimates.
c) Excluding the adjustment to employment for unpaid family workers (see footnote (a)) for which data are not available.
d) Average 1977-1979.
e) Excluding adjustment to employment for unpaid family workers prior to : 1981 for Greece, 1985 for Austria, 1986 for New Zealand, 1987 for Netherlands.
f) "On-shore" economy (i.e excluding shipping as well as crude petroleum and gas extraction).
Source: OECD National Accounts and OECD estimates.

Table 53

Rates of return on capital in the business sector[a]

	Average for the period		1986	1987	1988[b]	1989[b]	1990	1991
	1975-1979	1980-1986						
United States	17.0	16.5	17.9	19.0	19.6	19.6	19.4	19.6
Japan	14.9	14.5	15.1	15.0	15.3	15.1	14.9	14.4
Germany	13.5	11.8	12.9	12.9	13.4	13.9	14.4	14.7
France[c]	11.5	10.7	12.4	12.8	13.5	14.0	14.2	14.2
Italy	12.7[d]	13.2	14.9	15.0	15.1	15.1	14.9	14.9
United Kingdom[c]	9.2	9.3	9.7	10.0	10.3	10.0	9.3	9.4
Canada	13.4	14.5	15.1	16.2	16.9	16.6	15.7	15.7
Total of above countries	14.7	14.3	15.5	16.0	16.5	16.5	16.3	16.4
Austria[e]	11.9	10.8	12.0	12.0	12.7	12.5	12.4	12.1
Belgium	14.0	13.6	15.2	15.4	16.7	17.2	17.4	17.0
Denmark	10.0	9.8	11.0	9.6	9.6	10.5	10.6	10.7
Finland	8.2[d]	10.1	9.9	9.9	10.4	11.0	10.4	9.9
Greece[e]	9.5	9.7	9.3	9.4	9.6	9.2	9.8	10.8
Ireland	4.5	5.1	6.2	7.0	7.0	8.4	9.1	9.4
Netherlands[e]	12.3	13.3	14.4	14.3	14.9	15.2	15.3	15.5
Norway[f]	8.1	8.4	7.9	8.2	7.7	7.9	7.5	7.8
Spain	14.2	12.6	13.7	14.7	15.5	16.7	16.5	16.6
Sweden	7.7	10.1	10.8	10.6	11.2	10.5	9.8	9.3
Switzerland[c]	8.3	7.4	8.2	7.9	7.7	7.9	8.0	7.6
Australia	10.9	10.5	10.7	11.4	12.5	13.6	12.0	12.3
New Zealand[e]	10.4	11.0	12.2	14.1	17.0	17.8	17.9	18.2
Total of above smaller countries	10.9	10.9	11.7	11.8	12.5	12.9	12.7	12.6
Total of above European countries	11.5	11.2	12.3	12.5	12.9	13.2	13.2	13.3
Total of above OECD countries	14.2	13.8	14.9	15.4	15.9	16.0	15.8	15.9

a) For details concerning methodology see "Sources and Methods".
b) Partly OECD estimates.
c) Excluding the adjustment to employment for unpaid family workers (see footnote (a)) for which data are not available.
d) Average 1977-1979.
e) Excluding adjustment to employment for unpaid family workers prior to : 1981 for Greece, 1985 for Austria, 1986 for New Zealand, 1987 for Netherlands.
f) "On-shore" economy (i.e excluding shipping as well as crude petroleum and gas extraction).
Source: OECD National Accounts and OECD estimates.

Table 54

Compensation per employee in the business sector[a]

Percentage changes from previous period

	Average annual rate			1986	1987	1988	1989	1990	1991
	1965-73[b]	1973-79	1979-86						
United States	6.1	8.1	6.0	3.9	4.2	4.7	5.3	5.6	5.7
Japan	14.8	12.4	4.2	3.1	3.0	3.4	4.3	5.2	5.2
Germany	9.4	7.7	4.6	3.9	3.2	3.3	2.4	4.5	5.0
France	9.8	14.8	10.5	4.3	3.8	4.3	4.8	4.6	4.4
Italy	11.7	21.0	14.5	7.0	7.8	8.8	9.4	8.5	7.4
United Kingdom	9.9	17.4	10.0	8.6	6.1	7.9	7.5	8.8	8.0
Canada	6.7	10.6	7.4	3.3	6.6	6.0	7.2	7.0	5.5
Total of above countries	9.3	11.2	6.7	4.3	4.3	4.8	5.2	5.8	5.7
Austria	10.1	10.2	6.0	3.9	3.0	3.7	5.3	6.4	6.5
Belgium	13.3	12.9	6.9	5.0	2.1	2.4	4.8	5.6	5.8
Denmark	11.0	12.9	8.0	5.1	8.1	3.1	3.2	3.4	3.5
Finland	12.1	15.8	11.1	7.7	8.2	9.9	9.7	10.4	8.4
Greece	12.0	20.3	20.0	12.3	9.2	15.2	19.8	19.5	18.0
Ireland	13.9	19.6	12.7	4.2	6.9	3.3	3.8	4.8	5.9
Netherlands	14.2	10.2	3.5	2.1	1.5	1.7	1.4	4.5	4.4
Norway	10.2	10.4	10.3	10.7	8.4	6.6	3.4	4.6	5.4
Portugal	13.2	26.9	19.9	18.5	20.2	8.9	14.0	14.0	13.0
Spain	14.4	22.8	12.6	8.2	7.3	6.1	6.1	8.6	7.7
Sweden	8.4	13.5	8.9	8.5	7.0	8.1	9.8	11.1	7.2
Switzerland	9.6	5.8	5.5	5.0	4.8	4.8	5.3	6.2	6.2
Australia	7.8	15.0	9.6	6.4	6.3	6.8	8.1	7.2	6.6
New Zealand	9.3	13.9	11.3	18.8	13.9	8.4	4.9	4.5	4.0
Total of above smaller countries	11.5	14.3	9.0	6.8	6.1	5.6	6.2	7.4	6.7
Total of above European countries	10.7	14.3	9.2	5.9	5.2	5.6	5.7	6.6	6.2
Total of above OECD countries	9.6	11.6	7.0	4.6	4.5	4.9	5.4	6.0	5.8

a) 1987 GDP weights and exchange rates.
b) Starting year for Canada is 1966, for Belgium and Netherlands 1970.

Table 55

Unit labour costs in the business sector[a]

Percentage changes from previous period

	Average annual rate			1986	1987	1988	1989	1990	1991
	1965-73[b]	1973-79	1979-86						
United States	4.7	8.1	5.1	3.0	3.3	3.4	5.0	4.8	4.2
Japan	5.4	9.2	1.2	1.7	–0.8	–0.8	1.2	2.1	2.5
Germany	4.6	4.2	3.5	2.8	2.1	0.1	–0.1	2.0	2.8
France	4.3	11.4	7.9	1.6	1.3	0.9	1.8	2.1	2.1
Italy	5.5	17.6	12.8	5.0	4.9	5.0	6.0	5.4	4.3
United Kingdom	5.9	15.6	7.2	4.6	3.4	6.6	9.1	8.6	5.7
Canada	3.8	8.9	6.0	3.0	4.7	4.0	6.1	6.2	3.7
Total of above countries	4.9	9.4	5.0	2.8	2.3	2.3	3.7	4.0	3.6
Austria	3.6	6.8	4.2	4.2	1.3	–0.7	2.7	3.9	4.4
Belgium	7.7	9.8	4.5	3.5	0.8	–0.7	1.6	2.8	3.5
Denmark	7.0	10.0	5.6	4.2	9.4	0.8	0.8	2.7	1.9
Finland	6.6	12.0	7.8	3.5	4.3	3.7	5.4	7.2	5.5
Greece	3.3	16.4	19.8	11.7	9.1	12.5	17.6	18.1	15.8
Ireland	7.8	15.4	8.6	4.9	2.2	–0.7	–1.5	0.4	2.0
Netherlands	8.9	7.3	1.8	1.3	1.9	–0.2	–1.4	2.4	2.1
Norway	6.1	10.3	8.1	12.3	8.5	8.4	1.2	2.2	2.3
Portugal	5.3	26.1	18.6	13.3	16.7	7.4	9.7	10.8	9.4
Spain	7.9	18.8	9.0	6.9	4.3	3.4	5.0	6.4	5.4
Sweden	4.5	11.9	6.9	6.6	4.8	7.1	9.1	11.0	7.2
Switzerland	6.2	5.1	3.8	3.2	3.8	2.8	3.2	4.4	4.6
Australia	7.6	13.0	8.2	8.8	4.2	6.9	7.9	9.1	4.9
New Zealand	7.5	15.7	9.8	22.4	14.7	2.3	3.7	3.0	2.0
Total of above smaller countries	6.8	11.8	6.8	6.1	4.6	3.4	4.2	5.9	4.7
Total of above European countries	5.5	11.3	7.1	3.9	3.2	2.7	3.6	4.5	3.9
Total of above OECD countries	5.2	9.7	5.3	3.3	2.6	2.4	3.8	4.3	3.7

a) 1987 GDP weights and exchange rates.
b) Starting year for Canada is 1966, for Belgium, Netherlands and Australia 1970.

Table 56

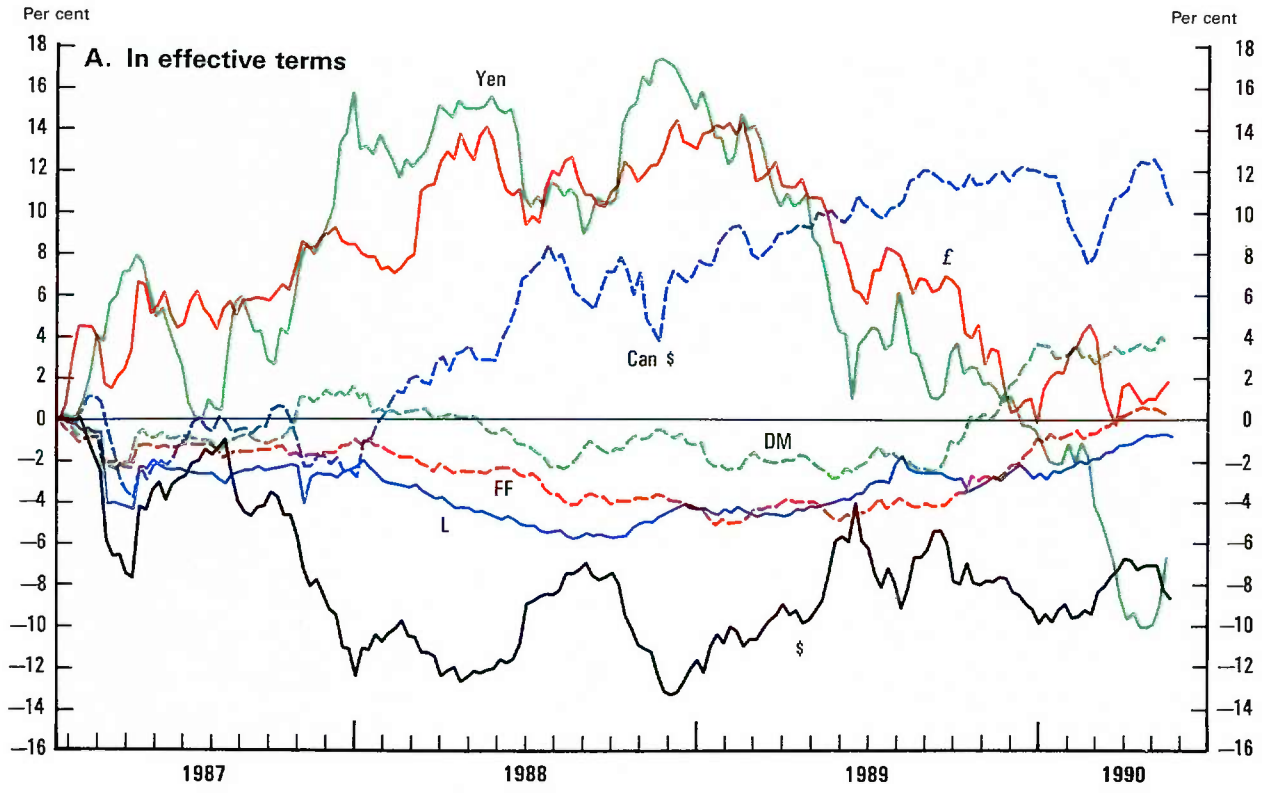
Exchange rate changes of selected currencies

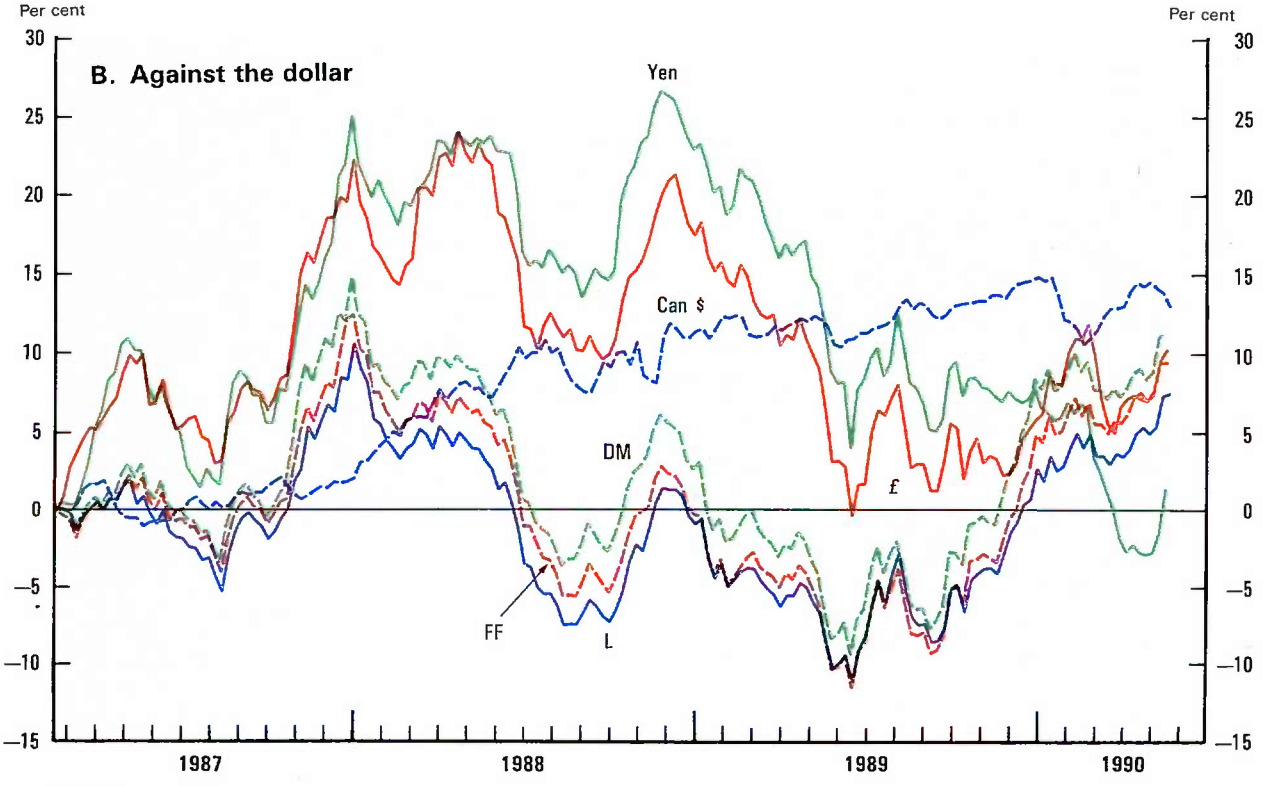
		2nd May, 1990 - Percentage changes from:						
		EO46[a]	One year ago	Louvre[b]	Plaza[c]	$ Peak[d]	1980 (average)	1973-80 (average)
Dollar	effective	1.25	2.50	–7.00	–30.25	–34.75	–6.25	–9.00
	vis-à-vis yen	*11.50*	*18.45*	*3.09*	*–34.54*	*–39.26*	*–30.06*	*–39.06*
	vis-à-vis DM	*–8.20*	*–10.69*	*–7.62*	*–41.84*	*–50.42*	*–7.17*	*–25.92*
	vis-à-vis FF	*–9.27*	*–11.40*	*–6.77*	*–36.02*	*–45.75*	*33.83*	*24.87*
	vis-à-vis £	*–3.96*	*2.56*	*–6.95*	*–17.95*	*–35.08*	*41.56*	*26.85*
Yen	effective	–11.75	–17.25	–10.00	24.75	29.25	51.00	69.75
	vis-à-vis $	*–10.31*	*–15.58*	*–3.00*	*52.78*	*64.63*	*42.98*	*64.10*
	vis-à-vis DM	*–17.66*	*–24.60*	*–10.39*	*–11.14*	*–18.37*	*32.73*	*21.56*
	vis-à-vis FF	*–18.63*	*–25.20*	*–9.56*	*–2.25*	*–10.68*	*91.36*	*104.91*
	vis-à-vis £	*–13.86*	*–13.42*	*–9.74*	*25.36*	*6.87*	*102.41*	*108.16*
DM	effective	3.00	5.50	3.00	18.50	23.00	30.25	50.00
	vis-à-vis $	*8.93*	*11.97*	*8.25*	*71.94*	*101.69*	*7.72*	*34.99*
	vis-à-vis yen	*21.45*	*32.63*	*11.60*	*12.54*	*22.51*	*–24.66*	*–17.74*
	vis-à-vis FF	*–1.17*	*–0.79*	*0.92*	*10.00*	*9.43*	*44.17*	*68.57*
	vis-à-vis £	*4.62*	*14.83*	*0.73*	*41.08*	*30.93*	*52.50*	*71.24*
FF	effective	3.25	4.75	0.50	4.00	7.75	–13.75	–15.00
	vis-à-vis $	*10.22*	*12.86*	*7.26*	*56.30*	*84.32*	*–25.28*	*–19.92*
	vis-à-vis yen	*22.89*	*33.69*	*10.58*	*2.31*	*11.96*	*–47.74*	*–51.20*
	vis-à-vis DM	*1.19*	*0.80*	*–0.91*	*–9.09*	*–8.61*	*–30.64*	*–40.68*
Sterling	effective	–1.50	–8.75	1.50	–17.25	–6.25	–23.00	–21.00
	vis-à-vis $	*4.12*	*–2.50*	*7.47*	*21.87*	*54.04*	*–29.36*	*–21.17*
	vis-à-vis yen	*16.09*	*15.50*	*10.79*	*–20.23*	*–6.43*	*–50.60*	*–51.96*
	vis-à-vis DM	*–4.41*	*–12.92*	*–0.72*	*–29.12*	*–23.63*	*–34.42*	*–41.60*
Lira	effective	2.25	3.50	–0.75	3.75	–1.00	–21.75	–39.00
	vis-à-vis $	*9.13*	*11.67*	*5.09*	*57.36*	*71.84*	*–30.74*	*–37.97*
	vis-à-vis yen	*21.68*	*32.28*	*8.33*	*3.00*	*4.38*	*–51.56*	*–62.20*
	vis-à-vis DM	*0.19*	*–0.26*	*–2.92*	*–8.48*	*–14.80*	*–35.71*	*–54.05*
Can $	effective	0.75	1.75	12.00	5.50	4.50	–1.25	–12.25
	vis-à-vis $	*0.52*	*1.16*	*13.96*	*18.00*	*19.78*	*0.15*	*–8.72*
	vis-à-vis yen	*12.08*	*19.82*	*17.48*	*–22.77*	*–27.24*	*–29.95*	*–44.37*
	vis-à-vis DM	*–7.72*	*–9.66*	*5.27*	*–31.37*	*–40.61*	*–7.03*	*–32.38*
BF	effective	3.75	5.50	2.25	12.00	14.00	–4.50	1.75
	vis-à-vis $	*10.96*	*13.64*	*8.73*	*68.78*	*97.10*	*–15.93*	*0.31*
Guilder	effective	2.75	5.00	2.50	15.00	19.50	19.75	30.50
	vis-à-vis $	*9.44*	*12.39*	*8.79*	*71.91*	*103.49*	*4.80*	*27.00*
SF	effective	4.50	8.25	0.75	4.50	12.25	25.25	53.00
	vis-à-vis $	*11.40*	*16.21*	*6.68*	*64.38*	*100.55*	*15.79*	*62.00*
	vis-à-vis DM	*2.27*	*3.79*	*–1.45*	*–4.40*	*–0.57*	*7.49*	*20.00*
SKR	effective	–1.00	–1.25	–0.25	–6.00	–7.00	–23.00	–27.75
	vis-à-vis $	*4.87*	*4.94*	*6.48*	*39.49*	*57.72*	*–30.73*	*–28.73*
AUS $	effective	–4.00	–3.75	8.00	–17.00	–31.00	–37.00	–45.00
	vis-à-vis $	*–4.42*	*–5.95*	*12.26*	*9.22*	*7.64*	*–34.57*	*–39.23*
	vis-à-vis yen	*6.57*	*11.41*	*15.73*	*–28.51*	*–34.62*	*–54.24*	*–62.97*
Peseta	effective	3.25	2.50	14.50	10.75	5.75	–23.00	–34.50
	vis-à-vis $	*9.97*	*9.78*	*21.16*	*61.95*	*76.57*	*–32.42*	*–37.37*
	vis-à-vis DM	*0.96*	*–1.95*	*11.93*	*–5.81*	*–12.45*	*–37.26*	*–53.60*
Taiwan $	effective	–3.00	–1.25	29.75	26.50	17.25	41.50	39.50
	vis-à-vis $	*–2.65*	*–2.20*	*32.50*	*52.99*	*49.15*	*36.42*	*41.79*
	vis-à-vis yen	*8.54*	*15.85*	*36.59*	*0.14*	*–9.40*	*–4.59*	*–13.60*
	vis-à-vis DM	*–10.63*	*–12.65*	*22.40*	*–11.02*	*–26.05*	*26.64*	*5.03*
Korean won	effective	–4.75	–4.75	18.50	2.75	–7.50	–12.25	–36.00
	vis-à-vis $	*–5.10*	*–5.97*	*21.37*	*26.40*	*20.32*	*–13.90*	*–32.14*
	vis-à-vis yen	*5.81*	*11.38*	*25.12*	*–17.26*	*–26.91*	*–39.78*	*–58.65*
	vis-à-vis DM	*–12.88*	*–16.02*	*12.12*	*–26.48*	*–40.34*	*–20.07*	*–49.73*
ECU	*vis-à-vis $*	*9.50*	*10.86*	*6.97*	*58.86*	*87.27*	*–12.10*	*–11.47*
	vis-à-vis yen	*22.09*	*31.32*	*10.28*	*3.98*	*13.75*	*–38.53*	*–46.05*
	vis-à-vis DM	*0.53*	*–0.99*	*–1.18*	*–7.60*	*–7.15*	*–18.41*	*–34.42*
SDR	*vis-à-vis $*	*1.98*	*0.94*	*2.83*	*27.93*	*26.98*	*0.07*	*6.78*
	vis-à-vis yen	*13.70*	*19.56*	*6.00*	*–16.26*	*–22.87*	*–30.02*	*–34.93*
	vis-à-vis DM	*–6.38*	*–9.85*	*–5.01*	*–25.59*	*–37.04*	*–7.11*	*–20.90*

a) 31st October, 1989.
b) 16th-20th February, 1987.
c) 16th-20th September, 1985.
d) 4th-8th March, 1985.

CHART O

EXCHANGE RATE CHANGES SINCE LOUVRE ACCORD (1)





1. 22 February 1987.
Note: Last data plotted 14-18 May 1990.

Table 57

Exchange rates in the OECD area and in the four Asian NIEs

Spot rates in terms of units of national currency per US $

	1987	1988	1989	1990[a]	1991[a]	1989		1990		1991	
						I	II	I[a]	II[a]	I[a]	II[a]
United States	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Japan	144.6	128.2	138.0	155.9	158.5	133.2	142.7	153.2	158.5	158.5	158.5
Germany	1.797	1.756	1.880	1.688	1.687	1.892	1.868	1.689	1.687	1.687	1.687
France	6.009	5.956	6.380	5.676	5.656	6.424	6.336	5.696	5.656	5.656	5.656
Italy	1297	1302	1372	1241	1237	1383	1360	1246	1237	1237	1237
United Kingdom	0.612	0.562	0.611	0.608	0.609	0.594	0.629	0.606	0.609	0.609	0.609
Canada	1.326	1.231	1.184	1.171	1.167	1.193	1.176	1.175	1.167	1.167	1.167
Austria	12.64	12.34	13.23	11.88	11.86	13.31	13.15	11.89	11.86	11.86	11.86
Belgium-Luxembourg	37.34	36.77	39.40	34.92	34.80	39.62	39.18	35.05	34.80	34.80	34.80
Denmark	6.838	6.730	7.310	6.438	6.412	7.358	7.262	6.464	6.412	6.412	6.412
Finland	4.396	4.186	4.288	3.983	3.981	4.299	4.277	3.986	3.981	3.981	3.981
Greece	135.2	141.6	162.1	166.3	189.0	159.6	164.6	160.6	172.0	184.0	194.0
Iceland	38.68	43.03	57.11	61.01	..	53.18	61.04	61.01	61.00	..	..
Ireland	0.672	0.657	0.706	0.630	0.628	0.708	0.703	0.633	0.628	0.628	0.628
Netherlands	2.026	1.977	2.121	1.899	1.896	2.134	2.108	1.901	1.896	1.896	1.896
Norway	6.737	6.517	6.903	6.533	6.533	6.867	6.939	6.533	6.533	6.533	6.533
Portugal	140.8	143.9	157.1	150.2	154.8	155.8	158.4	149.1	151.3	153.6	155.9
Spain	123.5	116.5	118.4	106.9	106.1	118.6	118.2	107.6	106.1	106.1	106.1
Sweden	6.340	6.129	6.446	6.116	6.105	6.432	6.460	6.127	6.105	6.105	6.105
Switzerland	1.491	1.463	1.635	1.462	1.447	1.638	1.633	1.476	1.447	1.447	1.447
Turkey	855	1419	2120	2971	4150	1996	2244	2487	3455	3950	4350
Australia	1.429	1.281	1.265	1.332	1.340	1.235	1.295	1.324	1.340	1.340	1.340
New Zealand	1.695	1.529	1.674	1.742	1.760	1.646	1.702	1.724	1.760	1.760	1.760
Singapore	2.016	2.013	1.950	1.874	1.874	1.945	1.954	1.874	1.874	1.874	1.874
Taiwan	31.80	28.57	26.28	26.30	26.40	26.92	25.63	26.20	26.40	26.40	26.40
Korea	825.0	730.3	669.2	702.1	705.5	671.5	666.8	698.7	705.5	705.5	705.5
Hong Kong	7.798	7.806	7.799	7.796	7.790	7.791	7.807	7.801	7.790	7.790	7.790

a) On the technical assumption that exchange rates remain at their average level on 2nd May 1990 except for Greece, Iceland, Portugal and Turkey where exchange rates vary according to official exchange rate policy.

CHART P

EXCHANGE RATES OF MAJOR CURRENCIES AGAINST THE DOLLAR

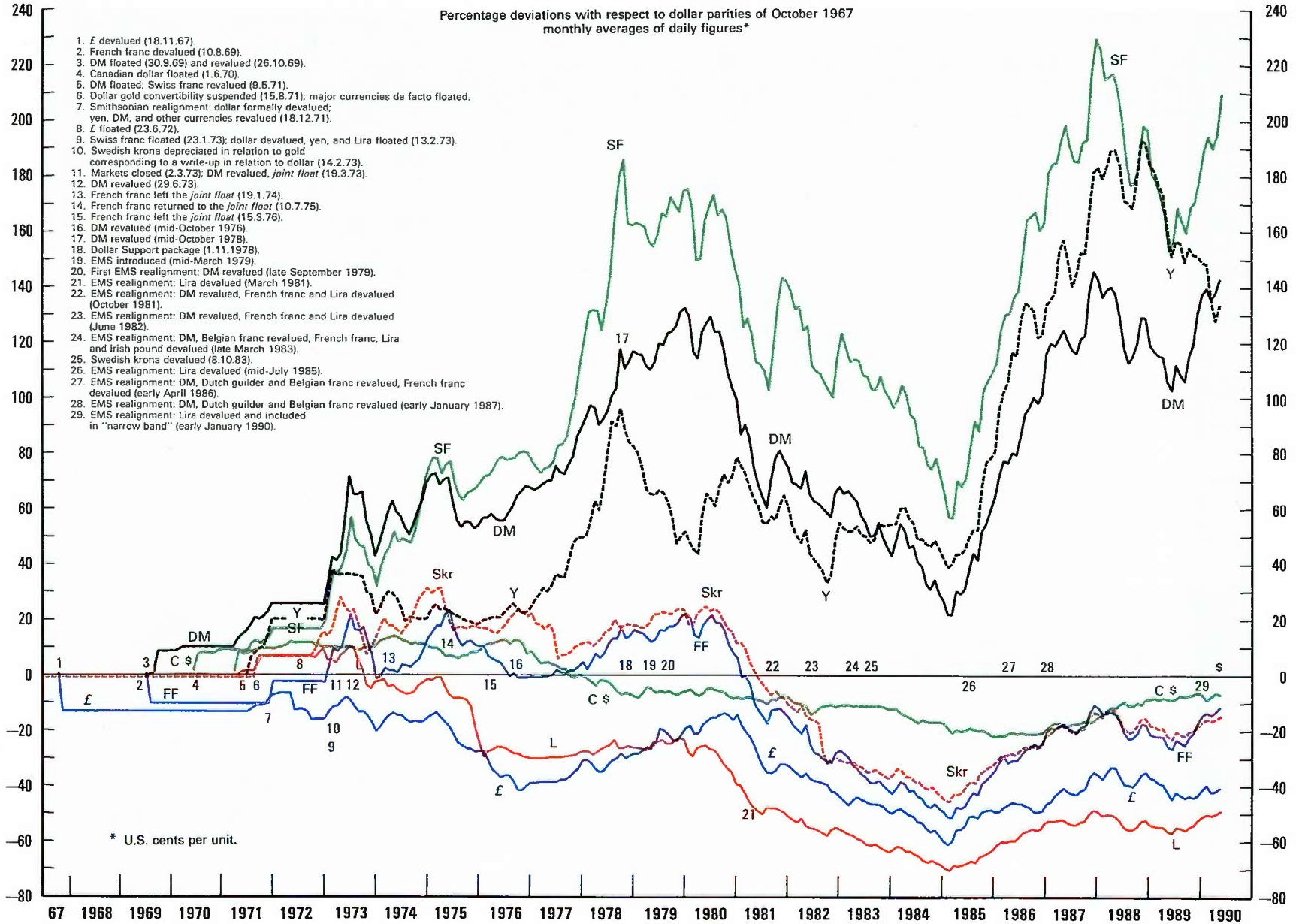


Table 58

Effective exchange rates in the OECD area and in the four Asian NIEs[a]

Indices, 1987=100

	1987	1988	1989	1990[b]	1991[b]	1989 I	1989 II	1990 I[b]	1990 II[b]	1991 I[b]	1991 II[b]
United States	100	93	95	96	97	94	96	96	96	96	97
Japan	100	109	102	88	87	105	98	89	87	87	87
Germany	100	100	99	104	105	98	100	104	104	105	105
France	100	98	97	102	102	97	98	101	102	102	102
Italy	100	97	98	101	102	98	99	101	102	102	102
United Kingdom	100	106	103	97	97	106	100	97	97	97	97
Canada	100	105	111	113	113	110	112	112	113	113	113
Austria	100	100	100	102	102	99	100	102	102	102	102
Belgium-Luxembourg[c]	100	99	98	102	102	98	99	102	102	102	102
Denmark	100	98	96	103	103	95	97	102	103	103	103
Finland	100	101	105	107	107	105	106	107	107	107	107
Greece	100	93	87	79	70	88	85	81	76	71	68
Iceland	100	87	70	61	..	75	65	61	61	..	..
Ireland	100	97	97	104	105	95	98	104	105	105	105
Netherlands	100	100	99	103	103	98	99	103	103	103	103
Norway	100	100	100	99	99	100	99	99	99	99	99
Portugal	100	95	92	89	86	93	91	90	88	87	86
Spain	100	103	108	112	113	108	108	111	112	113	113
Sweden	100	100	101	99	100	101	101	99	100	100	100
Switzerland	100	99	94	98	100	94	94	97	99	100	100
Turkey	100	59	41	20	12	43	39	27	14	12	11
Australia	100	106	111	107	107	113	109	107	107	107	107
New Zealand	100	104	98	96	96	98	98	97	96	96	96
Singapore	100	100	107	112	112	106	108	111	112	112	112
Taiwan	100	108	121	121	121	117	124	121	120	121	121
Korea	100	108	122	117	117	121	124	117	117	117	117
Hong Kong	100	96	100	98	99	99	100	98	99	99	99

a) The calculation of effective exchange rates now includes the four Asian NIE's. For details on the method of calculation refer to the section in "Sources and Methods" in *Economic Outlook* 39.
b) On the technical assumption that exchange rates remain at their level on 2nd May 1990 except for Greece, Iceland, Portugal and Turkey.
c) Commercial rate.

Table 59

Volume of imports of major OECD countries and country groups

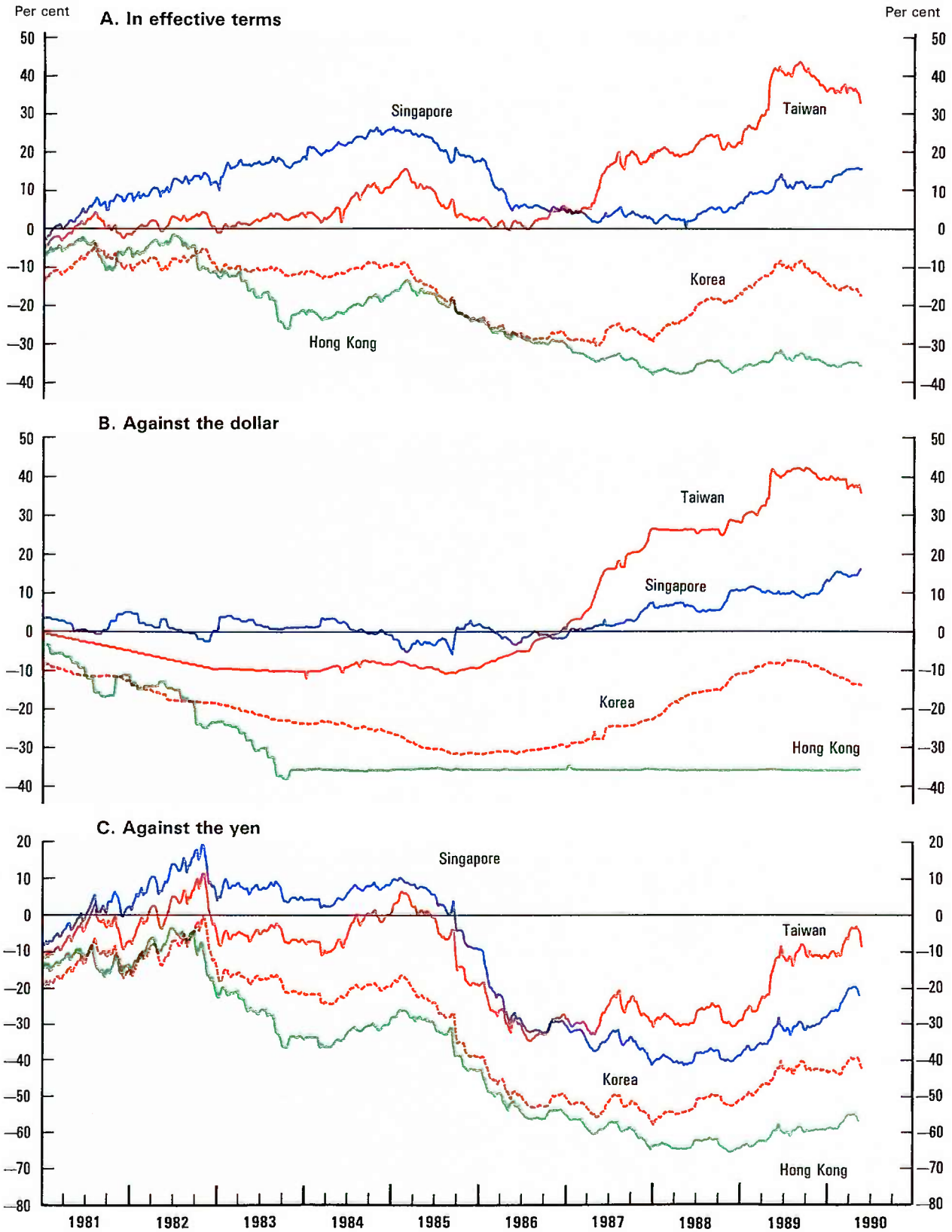
Customs basis, percentage changes from previous period, seasonally adjusted at annual rates[a]

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States[b]	4.8	6.0	5.8	4.6	7.9	2.8	9.9	0.7	7.5	8.1	7.9
Japan	9.0	16.7	7.9	6.9	5.6	7.8	8.9	6.7	5.5	5.6	5.6
Germany	5.3	6.6	7.9	8.6	9.9	4.5	8.7	8.1	9.4	10.1	10.0
France	7.6	9.2	8.7	7.2	6.5	8.1	7.2	7.7	6.1	6.7	6.6
Italy	10.2	3.8	10.1	7.5	6.7	14.0	3.7	9.9	6.7	6.5	7.2
United Kingdom	6.9	13.5	7.8	2.5	3.7	8.4	–1.3	5.0	1.4	4.3	4.8
Canada	9.0	14.6	7.5	3.1	4.1	10.8	3.4	2.6	4.0	4.1	4.1
Total of above countries	6.7	8.9	7.5	5.8	6.9	6.5	6.8	5.0	6.4	7.1	7.2
Other OECD countries	8.5	7.5	8.9	5.9	5.5	12.0	5.0	6.3	5.8	5.4	5.4
Total OECD	7.2	8.5	7.9	5.8	6.5	8.0	6.3	5.3	6.2	6.6	6.7
Four major European countries	7.1	8.3	8.5	6.6	7.1	8.0	4.9	7.6	6.2	7.3	7.5
OECD Europe	7.8	7.8	8.3	6.5	6.5	9.1	5.1	7.5	6.1	6.6	6.6
EEC	8.1	8.3	8.5	6.9	6.9	9.2	4.9	8.1	6.4	7.0	7.0
Total OECD *less* the United States	7.9	9.3	8.5	6.1	6.1	9.6	5.3	6.7	5.8	6.2	6.3

a) Seasonally adjusted data are used for calculating semi-annual as well as annual changes. The latter may therefore differ from changes based on unadjusted or annual data.
b) Derived from values and unit values on a *National Account* basis.

CHART Q

EXCHANGE RATES OF SELECTED NIEs (1)



1. Percentage variations from average 1980 levels.

Note: Last data plotted 14-18 May 1990.

Table 60

Volume of exports of major OECD countries and country groups

Customs basis, percentage changes from previous period, seasonally adjusted at annual rates[a]

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States[b]	16.8	20.5	12.5	8.4	9.8	16.8	8.3	8.2	8.8	9.9	10.6
Japan	0.4	4.3	4.4	6.6	8.5	3.3	1.7	8.7	7.3	8.9	9.0
Germany	2.8	7.1	8.8	6.4	6.3	9.1	1.8	8.8	6.4	6.3	6.3
France	3.4	7.9	8.7	6.7	6.1	15.5	2.6	8.9	6.6	5.9	5.9
Italy	3.0	8.7	8.3	7.1	6.0	14.0	9.5	6.7	5.5	6.0	6.3
United Kingdom	5.3	1.2	5.5	9.2	7.2	3.4	14.0	7.8	7.4	7.1	7.2
Canada	7.0	10.0	–0.7	1.1	3.4	0.1	–1.6	1.7	2.7	3.3	4.1
Total of above countries	5.5	9.1	7.7	6.9	7.3	9.6	4.9	7.9	6.9	7.4	7.7
Other OECD countries	5.8	6.2	7.2	5.7	5.9	9.7	4.0	6.4	6.0	5.9	5.8
Total OECD	5.5	8.3	7.6	6.6	6.9	9.6	4.6	7.5	6.6	7.0	7.2
Four major European countries	3.4	6.4	8.1	7.1	6.4	10.2	5.4	8.3	6.5	6.3	6.4
OECD Europe	4.3	6.5	7.8	6.6	6.2	10.1	4.8	7.6	6.2	6.1	6.1
EEC	4.2	6.6	8.0	6.9	6.3	10.4	4.5	8.3	6.4	6.3	6.3
Total OECD *less* the United States	3.9	6.3	6.7	6.2	6.4	8.3	3.9	7.4	6.2	6.4	6.5

a) Seasonally adjusted data are used for calculating semi-annual as well as annual changes. The latter may therefore differ from changes based on unadjusted or annual data.

b) Derived from values and unit values on a *National Account* basis.

Table 61

Foreign trade volumes of selected other OECD countries

Customs basis, percentage changes

	Exports					Imports				
	1987	1988	1989	1990	1991	1987	1988	1989	1990	1991
Austria	2.7	8.1	10.9	9.4	7.2	5.2	10.0	10.8	8.1	7.0
Belgium-Luxembourg	6.9	5.8	8.7	6.9	6.0	8.2	5.2	6.9	7.8	7.1
Denmark	2.4	5.0	7.5	3.4	4.5	–1.8	–1.8	2.1	3.0	4.8
Finland	1.6	3.3	0	2.0	3.1	9.0	8.9	10.2	2.4	0
Ireland	18.0	8.8	10.0	7.8	7.2	10.2	6.7	11.0	7.7	7.2
Netherlands	3.9	8.2	5.4	5.5	6.0	6.3	7.2	5.6	6.5	5.1
Norway	13.6	6.5	17.2	5.2	7.9	–1.9	–3.4	–1.0	–0.3	4.5
Spain	7.4	7.4	7.3	7.3	6.8	26.4	18.6	19.0	10.5	7.8
Sweden	2.9	3.3	5.6	2.6	3.1	6.9	4.8	8.1	3.9	3.9
Switzerland	1.4	7.0	5.7	5.7	5.2	6.3	5.3	5.3	5.2	4.8
Total of smaller European countries	5.6	6.6	7.4	5.7	5.8	8.8	7.2	8.1	6.5	5.7
Australia	9.3	0.2	4.8	5.4	7.5	2.6	16.5	21.0	–2.1	3.0
New Zealand	2.7	4.1	–1.0	4.0	3.0	10.4	–7.7	14.8	1.0	1.1
Total of smaller countries	5.8	6.2	7.2	5.7	5.9	8.5	7.5	8.9	5.9	5.5

Table 62

Foreign trade prices (average values) of major OECD countries and country groups

Percentage changes, national currency terms

	Exports					Imports				
	1987	1988	1989	1990	1991	1987	1988	1989	1990	1991
United States	–2.8	4.7	2.0	0	2.8	7.0	2.7	1.0	0.3	1.7
Japan	–6.1	–2.5	6.8	7.9	3.9	–7.6	–5.4	11.9	12.3	4.9
Germany	–2.7	0.8	4.3	0.9	3.5	–6.1	0.6	7.3	–1.2	3.1
France	–0.3	3.6	5.8	–0.6	2.9	–1.0	2.5	7.1	–2.2	3.0
Italy	0.4	2.1	8.0	2.0	3.5	–1.6	7.5	8.5	0.4	3.6
United Kingdom	4.2	0.3	8.6	4.5	3.6	2.7	–0.6	5.6	4.7	3.0
Canada	–1.7	–1.1	1.9	0.6	2.4	–4.4	–3.0	–2.1	0.5	1.9
Total of above countries	–2.0	1.2	5.1	2.2	3.3	0	1.0	5.0	1.5	2.8
Other OECD countries	–1.3	4.3	7.0	1.8	3.8	–2.0	3.4	7.0	2.0	4.4
Total OECD	–1.8	2.0	5.6	2.1	3.4	–0.6	1.7	5.6	1.6	3.2
Four major European countries	–0.4	1.5	6.1	1.4	3.4	–2.1	2.0	7.1	0.2	3.1
OECD Europe	–0.9	2.4	6.5	1.5	3.6	–2.1	2.7	7.3	0.8	3.7
EEC	–1.4	1.8	6.3	1.1	3.3	–2.9	1.9	6.9	0.1	3.2
Total OECD *less* the United States	–1.6	1.6	6.2	2.5	3.5	–2.8	1.4	7.0	2.1	3.7

Table 63

Foreign trade prices (average values) of selected other OECD countries

Percentage changes, national currency terms

	Exports					Imports				
	1987	1988	1989	1990	1991	1987	1988	1989	1990	1991
Austria	–2.7	0.2	3.4	0.9	2.7	–4.1	0.3	3.2	0	2.9
Belgium-Luxembourg	–6.0	3.1	8.0	–0.4	3.0	–6.9	3.7	6.9	–1.5	3.0
Denmark	–0.9	0.2	5.7	0.3	3.0	–4.2	2.5	7.0	–0.1	3.0
Finland	2.0	4.9	5.5	0.8	3.9	–2.3	1.8	3.3	0.8	4.0
Ireland	–3.4	5.5	8.4	–0.3	2.5	–3.6	4.5	9.7	–0.3	3.5
Netherlands	–7.2	0.8	6.0	–0.9	1.9	–5.9	–0.3	7.0	–1.7	1.9
Norway	–3.1	–1.6	6.4	1.6	2.2	2.6	5.6	8.0	3.1	3.0
Spain	2.6	4.4	4.5	1.1	3.5	–2.2	–1.3	2.1	0	2.7
Sweden	3.0	4.9	5.2	3.3	3.0	3.5	3.2	4.9	3.7	4.3
Switzerland	–1.0	1.5	6.2	0.7	3.6	–4.2	4.5	8.4	1.3	3.9
Total of smaller European countries	–1.6	3.9	7.1	1.7	3.8	–2.2	3.8	7.6	1.7	4.4
Australia	3.8	11.2	5.6	3.0	2.9	2.4	–3.1	–1.9	6.1	3.4
New Zealand	5.7	6.3	7.7	3.1	3.5	–4.6	–0.7	9.0	3.9	3.0
Total of smaller countries	–1.3	4.3	7.0	1.8	3.8	–2.0	3.4	7.0	2.0	4.4

CHART R

MEASURES OF RELATIVE COMPETITIVE POSITION

Indices in US $ terms; 1987 = 100

Relative unit labour costs in manufacturing
Relative average value of manufactured exports
Relative consumer prices

Projections

Fall indicates improvement in competitive position

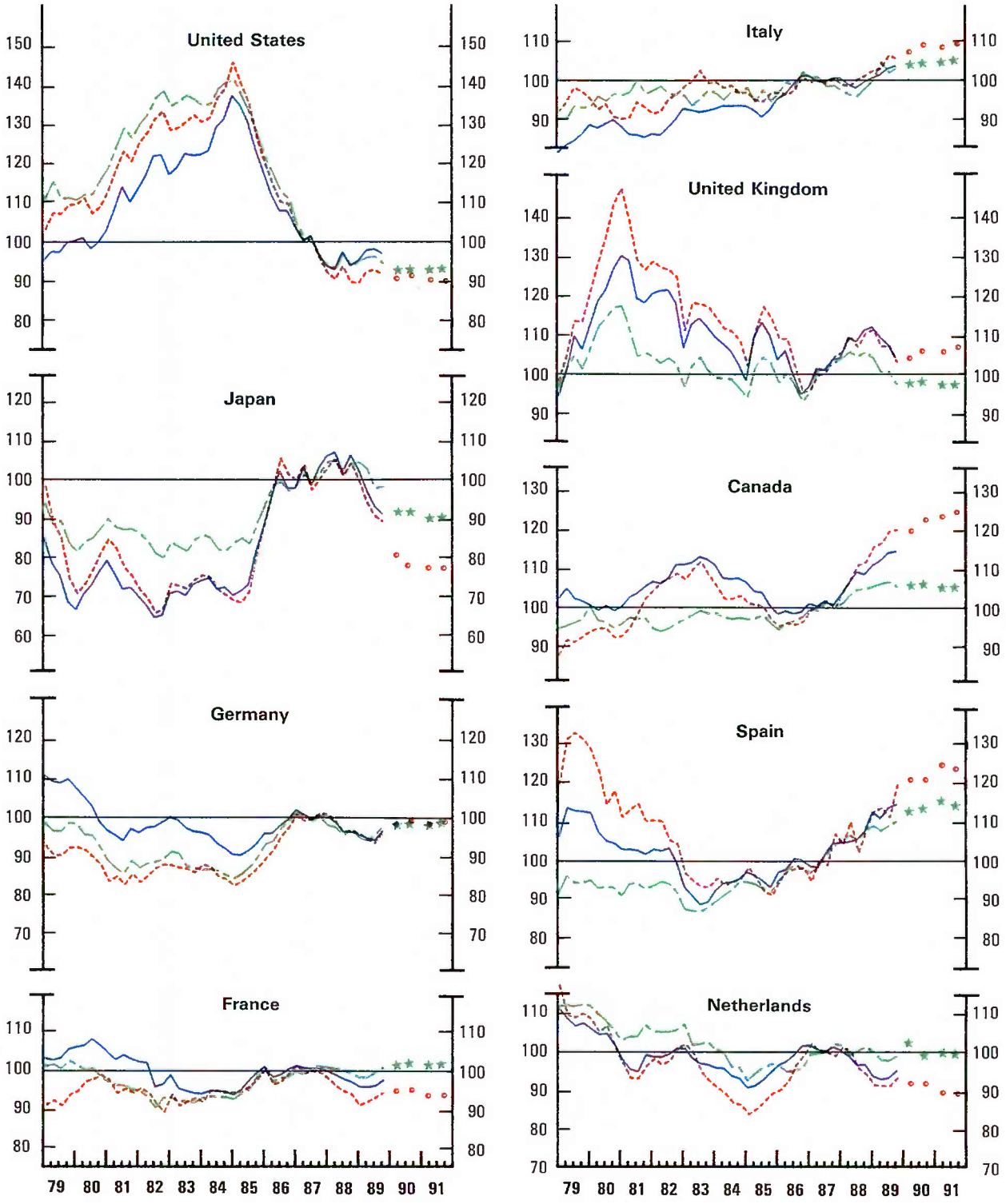


CHART R (continued)

MEASURES OF RELATIVE COMPETITIVE POSITION

Indices in US $ terms; 1987 = 100

Relative unit labour costs in manufacturing
Relative average value of manufactured exports
Relative consumer prices

Projections

Fall indicates improvement in competitive position

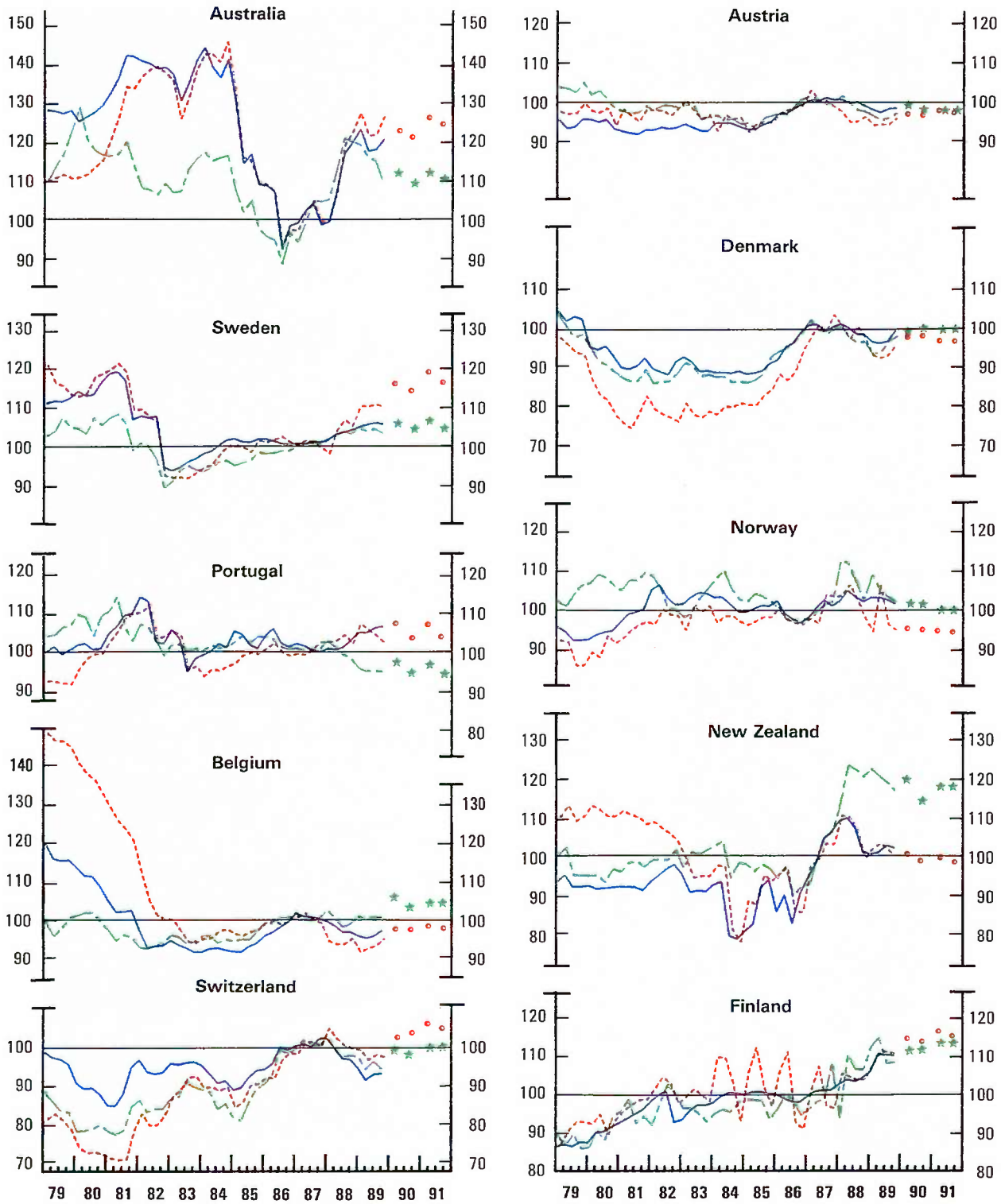


Table 64

Commodity trade projections: UNITED STATES

Percentage changes from previous period, at annual rates

	Exports								Imports							
	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II
Average values																		
Food	9	3	–6	2	–14	–5	2	2	2	6	–5	–6	2	–14	–6	2	2	2
Raw materials	9	8	1	4	–2	0	5	3	4	3	5	2	4	–2	3	4	4	4
Energy	3	21	5	3	8	4	3	3	3	11	20	4	3	3	4	3	3	3
Manufactures	79	2	1	3	–2	1	3	3	3	80	–1	0	1	–5	3	1	1	2
Total		2.0	0.0	2.8	–3.5	0.5	2.5	2.8	2.9		1.0	0.3	1.7	–5.1	2.5	1.3	1.8	1.8
Volumes																		
Food	9	6	6	5	–10	15	5	6	5	6	6	7	3	17	5	3	4	3
Raw materials	9	5	4	8	9	0	8	8	8	3	–4	4	3	–1	8	3	3	4
Energy	3	9	3	3	5	4	1	4	4	11	7	9	6	11	10	5	6	6
Manufactures	79	13	10	11	12	8	9	11	12	80	7	4	9	10	–1	9	9	8
Total		12.5	8.4	9.8	8.3	8.2	8.8	9.9	10.6		5.8	4.6	7.9	9.9	0.7	7.5	8.1	7.9

Note: For explanations of this table see "Sources and Methods". The projections for commodity components have been rounded to the nearest integer.

Table 65

Commodity trade projections: JAPAN

Percentage changes from previous period, at annual rates

	Exports									Imports								
	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II
Average values																		
Food	1	4	5	4	5	5	6	3	3	15	11	4	3	–1	6	5	2	3
Raw materials	1	11	12	5	18	10	9	4	3	16	14	7	4	10	6	6	3	3
Energy	0	18	17	5	37	15	10	3	3	27	14	23	5	33	26	10	3	3
Manufactures	98	7	8	4	5	10	7	3	3	42	10	12	6	12	12	11	4	4
Total		6.8	7.9	3.9	4.4	10.0	7.3	2.8	2.8		11.9	12.3	4.9	14.5	13.1	9.1	3.5	3.6
Volumes																		
Food	1	3	2	4	–3	3	3	4	4	15	4	8	5	3	11	5	5	5
Raw materials	1	–4	–2	4	–15	3	3	4	4	16	3	–2	3	6	–8	3	3	3
Energy	0	48	17	3	84	2	3	2	3	27	6	4	4	6	3	3	4	4
Manufactures	98	4	7	9	1	9	7	9	9	42	13	11	7	13	11	7	7	8
Total		4.4	6.6	8.5	1.7	8.7	7.3	8.9	9.0		7.9	6.9	5.6	8.9	6.7	5.5	5.6	5.6
Exchange rate ($ per unit of local currency)		–7	–11	–2	–13	–13	–7	0	0									

Note: For explanations of this table see "Sources and Methods". The projections for commodity components have been rounded to the nearest integer. Average values are given in local currency, but are derived from estimated dollar indices.

Table 66

Commodity trade projections: GERMANY

Percentage changes from previous period, at annual rates

	Exports								Imports							
	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II
Average values																		
Food	5	6	–1	3	–2	–3	2	3	3	11	2	–4	3	–2	–8	3	3	3
Raw materials	2	9	2	3	0	3	3	3	3	6	12	–5	3	–7	–8	2	3	3
Energy	1	1	–3	3	16	–15	3	3	3	10	17	–5	3	9	–15	3	3	3
Manufactures	92	4	1	4	2	–1	4	3	4	73	5	0	3	2	–2	3	3	3
Total		4.3	0.9	3.5	1.7	–0.7	3.4	3.5	3.5		7.3	–1.2	3.1	0.1	–3.7	2.5	3.3	3.4
Volumes																		
Food	5	4	4	5	1	5	5	5	5	11	3	4	4	2	5	4	4	4
Raw materials	2	6	1	5	–12	6	5	5	5	6	7	7	9	7	6	9	9	9
Energy	1	13	–2	3	–22	6	6	2	2	10	–5	10	7	29	3	7	6	7
Manufactures	92	9	7	7	1	10	6	7	7	73	12	9	11	9	9	10	11	11
Total		8.8	6.4	6.3	1.8	8.8	6.4	6.3	6.3		7.9	8.6	9.9	8.7	8.1	9.4	10.1	10.0
Exchange rate ($ per unit of local currency)		–7	11	0	3	22	0	0	0									

Note: For explanations of this table see "Sources and Methods". The projections for commodity components have been rounded to the nearest integer.

Table 67

Commodity trade projections: FRANCE

Percentage changes from previous period, at annual rates

	Exports								Imports							
	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II
Average values																		
Food	15	4	–3	3	–3	–6	2	3	3	11	3	–9	3	–7	–15	1	3	3
Raw materials	4	15	–2	0	3	–5	–1	0	1	5	20	–9	3	–9	–14	2	3	3
Energy	2	13	–7	3	6	–16	2	3	3	11	20	–7	3	6	–16	2	3	3
Manufactures	79	6	0	3	1	–2	3	3	3	74	6	–1	3	1	–4	3	3	3
Total		5.8	–0.6	2.9	1.0	–2.9	2.3	3.1	3.1		7.1	–2.2	3.0	0.3	–5.5	2.3	3.2	3.2
Volumes																		
Food	15	11	8	7	7	8	7	7	7	11	5	4	4	4	4	4	3	3
Raw materials	4	6	7	6	7	7	6	6	6	5	9	4	3	4	4	4	3	3
Energy	2	8	7	6	8	6	7	6	6	11	2	3	3	3	3	3	4	3
Manufactures	79	8	6	6	1	9	6	6	6	74	11	8	8	8	9	7	8	7
Total		8.7	6.7	6.1	2.6	8.9	6.6	5.9	5.9		8.7	7.2	6.5	7.2	7.7	6.1	6.7	6.6
Exchange rate ($ per unit of local currency)		–7	12	0	3	24	1	0	0									

Note: For explanations of this table see "Sources and Methods". The projections for commodity components have been rounded to the nearest integer.

Table 68

Commodity trade projections: ITALY

Percentage changes from previous period, at annual rates

	Exports								Imports							
	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II
Average values																		
Food	6	–3	–6	2	–10	–8	2	2	2	14	–1	–5	2	–8	–8	2	3	2
Raw materials	2	2	1	3	2	0	3	3	3	9	9	–2	3	4	–7	3	3	3
Energy	2	15	–5	3	5	–13	2	3	3	14	19	–5	3	5	–13	2	3	3
Manufactures	89	9	2	4	4	2	3	4	4	63	6	2	4	2	2	3	4	4
Total		8.0	2.0	3.5	4.0	0.7	2.7	3.8	3.8		8.5	0.4	3.6	5.3	–3.0	2.7	3.9	3.9
Volumes																		
Food	6	20	7	6	11	5	5	6	6	14	13	5	4	4	6	4	3	4
Raw materials	2	15	6	6	8	5	6	6	5	9	9	4	4	3	6	3	4	4
Energy	2	4	4	5	5	3	4	5	5	14	8	5	4	4	5	5	3	3
Manufactures	89	6	5	6	4	6	6	6	6	63	12	8	8	4	11	7	9	9
Total		8.3	7.1	6.0	9.5	6.7	5.5	6.0	6.3		10.1	7.5	6.7	3.7	9.9	6.7	6.5	7.2
Exchange rate ($ per unit of local currency)		–5	11	0	3	19	1	0	0									

Note: For explanations of this table see "Sources and Methods". The projections for commodity components have been rounded to the nearest integer.

Table 69

Commodity trade projections: UNITED KINGDOM

Percentage changes from previous period, at annual rates

	Exports								Imports							
	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II
Average values																		
Food	7	8	7	3	17	3	4	3	3	11	5	3	3	10	–2	4	3	2
Raw materials	3	6	6	6	9	5	7	5	6	6	10	4	3	15	–1	4	3	3
Energy	11	21	3	3	17	–3	4	3	3	7	18	4	3	21	–3	4	3	3
Manufactures	79	4	5	3	5	5	4	3	3	77	4	5	3	8	4	4	3	3
Total		8.6	4.5	3.6	4.5	4.4	4.6	3.3	3.3		5.6	4.7	3.0	10.1	2.6	3.6	2.7	2.9
Volumes																		
Food	7	10	1	4	–9	5	4	4	4	11	3	4	3	9	3	3	4	3
Raw materials	3	4	6	5	10	5	5	5	5	6	–1	–2	3	–17	4	3	4	3
Energy	11	–20	10	–3	37	4	1	–4	–4	7	5	1	5	–9	4	5	5	5
Manufactures	79	11	10	8	13	9	9	8	9	77	9	3	4	0	5	2	4	5
Total		5.5	9.2	7.2	14.0	7.8	7.4	7.1	7.2		7.8	2.5	3.7	–1.3	5.0	1.4	4.3	4.8
Exchange rate ($ per unit of local currency)		–8	1	0	–11	8	–1	0	0									

Note: For explanations of this table see "Sources and Methods". The projections for commodity components have been rounded to the nearest integer.

Table 70

Commodity trade projections: CANADA

Percentage changes from previous period, at annual rates

	Exports								Imports							
	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II	Weights	1989	1990	1991	1989 II	1990 I	1990 II	1991 I	1991 II
Average values																		
Food	9	4	–5	2	–16	–2	0	2	3	6	0	0	2	4	–2	0	3	3
Raw materials	16	3	–1	4	–14	4	4	3	4	4	1	–3	4	–11	0	2	4	5
Energy	10	8	3	3	1	4	2	3	3	5	6	2	3	–1	4	2	3	3
Manufactures	65	0	1	2	–4	3	2	2	2	85	–3	1	2	–4	3	1	2	2
Total		1.9	0.6	2.4	–5.0	2.8	2.0	2.4	2.6		–2.1	0.5	1.9	–3.8	2.6	0.7	2.4	2.2
Volumes																		
Food	9	–20	9	3	23	6	3	3	4	6	8	2	5	–5	4	6	4	5
Raw materials	16	0	3	5	–1	4	4	5	5	4	10	1	3	–4	2	3	4	4
Energy	10	–5	2	4	–1	4	3	4	4	5	13	3	5	0	3	6	5	4
Manufactures	65	1	1	3	–1	0	2	3	4	85	7	3	4	5	2	4	4	4
Total		–0.7	1.1	3.4	–1.6	1.7	2.7	3.3	4.1		7.5	3.1	4.1	3.4	2.6	4.0	4.1	4.1
Exchange rate ($ per unit of local currency)		4	1	0	3	0	1	0	0									

Note: For explanations of this table see "Sources and Methods". The projections for commodity components have been rounded to the nearest integer.

Table 71

Trade balances of major OECD countries and country groups[a]

Seasonally adjusted, $ billion

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
United States	–159.5	–127.2	–113.3	–107	–105	–55.9	–57.4	–53	–53	–53	–52
Japan	96.4	95.0	76.9	69	81	43.4	33.5	34	35	39	42
Germany	70.2	79.0	78.5	95	95	39.7	38.9	47	48	48	47
France	–9.2	–8.3	–10.7	–10	–12	–4.4	–6.3	–5	–5	–6	–7
Italy	–0.1	–1.1	–2.0	0	–1	–1.9	0	0	0	0	–1
United Kingdom	–17.9	–36.9	–37.9	–31	–25	–20.8	–17.1	–17	–14	–13	–12
Canada	9.1	8.8	5.0	3	3	3.4	1.7	2	2	1	2
Total of above countries	–11.0	9.2	–3.3	20	35	3.4	–6.8	8	12	15	19
Other OECD countries	–18.5	–15.2	–28.6	–32	–33	–13.8	–14.8	–16	–16	–16	–17
Total OECD	–29.5	–6.0	–31.9	–12	1	–10.4	–21.5	–8	–4	–1	2
Four major European countries	43.0	32.6	28.0	54	56	12.5	15.5	26	29	28	27
OECD Europe	24.5	16.4	2.2	23	21	0.1	2.1	10	13	12	10
EEC	30.6	18.2	6.6	28	26	1.8	4.9	13	15	14	12
Total OECD *less* the United States	130.0	121.2	81.4	95	106	45.5	35.8	45	50	52	54

a) Detail may not add, due to rounding.

Table 72

Trade balances of other OECD countries

$ billion

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Austria	–3.3	–3.5	–3.4	–3.3	–3.9	–4.9	–4.9	–5.3	–5.6	–6.2
Belgium-Luxembourg	–2.9	–1.2	–0.8	–0.2	1.1	0.8	1.9	1.8	2.7	1.7
Denmark	–0.8	0.2	–0.2	–0.7	–1.1	0.8	1.8	2.3	3.1	3.3
Finland	0.2	0.1	1.5	0.9	1.6	1.4	1.1	–0.2	–0.4	0.4
Greece	–4.8	–4.3	–4.2	–5.1	–4.4	–5.5	–6.1	–7.4	–8.6	–9.2
Iceland	–0.2	0	0	0	0.1	0	0	0.1	0.2	..
Ireland	–1.1	–0.2	0.3	0.6	1.1	2.6	3.1	3.2	3.8	4.0
Netherlands	4.6	4.2	5.6	5.5	7.3	5.1	8.5	7.9	9.1	10.8
Norway	2.4	4.4	5.2	4.7	–2.1	–0.8	–0.1	3.5	5.0	6.2
Portugal	–4.8	–2.3	–2.0	–1.5	–1.7	–3.4	–5.5	–5.2	–6.2	–6.8
Spain	–9.3	–7.6	–4.3	–4.2	–6.4	–12.8	–18.0	–24.1	–29.9	–33.4
Sweden	–0.4	1.9	3.4	2.3	5.1	4.5	7.0	6.0	5.9	5.1
Switzerland	–1.3	–2.3	–2.3	–2.0	–2.0	–3.1	–3.2	–4.3	–5.1	–5.6
Turkey	–2.7	–3.0	–2.9	–3.0	–3.1	–3.2	–1.8	–4.2	–5.0	–4.8
Total of above European countries	–24.3	–13.5	–4.3	–5.9	–8.3	–18.6	–16.2	–25.8	–31.0	–34.4
Australia	–2.6	0	–0.9	–1.3	–2.1	–0.5	–1.0	–3.7	–1.8	–0.4
New Zealand	–0.3	0.3	–0.5	0.1	0.2	0.5	2.0	0.9	1.0	1.3
Total of above countries	–27.1	–13.1	–5.7	–7.1	–10.2	–18.5	–15.2	–28.6	–31.8	–33.5

Table 73

Current balances of major OECD countries and country groups

$ billion, seasonally adjusted, at annual rates

	1987	1988	1989	1990	1991	1989		1990		1991	
						I	II	I	II	I	II
United States[a]	–159.6	–125.6	–103.7	–100	–97	–106.5	–101.0	–101	–98	–98	–96
Japan	87.0	79.6	57.2	49	59	64.1	50.2	48	49	55	64
Germany	45.2	48.5	52.7	63	62	56.5	48.9	62	64	63	61
France	–4.4	–3.4	–3.6	–2	–3	–0.5	–6.8	–3	–2	–3	–4
Italy	–1.5	–6.0	–11.6	–9	–10	–12.4	–10.7	–8	–9	–9	–11
United Kingdom	–6.2	–26.6	–34.0	–29	–23	–31.8	–36.3	–31	–27	–23	–23
Canada	–7.1	–8.4	–16.6	–20	–23	–15.0	–18.2	–19	–21	–23	–23
Total of above countries	–46.6	–41.7	–59.7	–48	–35	–45.7	–73.8	–52	–44	–38	–32
Other OECD countries	–7.9	–7.9	–24.7	–29	–32	–23.3	–26.0	–28	–30	–31	–33
Total OECD	–54.5	–49.7	–84.4	–77	–67	–69.0	–99.8	–80	–74	–69	–65
Four major European countries	33.0	12.6	3.5	24	26	11.7	–4.8	21	27	28	24
OECD Europe	34.8	15.3	–3.7	10	8	6.3	–13.7	9	12	11	5
EEC	35.4	14.7	–0.9	15	14	8.6	–10.4	13	18	17	12
Total OECD *less* the United States	105.0	75.9	19.3	23	30	37.6	1.1	21	24	29	31

a) The historical data for the U.S. current account exclude the effects of changes in exchange rates on the dollar values of direct investment asset and liability stocks. They thus differ somewhat from the official data as currently recorded and published by the U.S. authorities.

Table 74

Current balances of other OECD countries

$ billion

	1987	1988	1989	1990	1991
Austria	–0.2	–0.3	0	0.2	–0.3
Belgium-Luxembourg	2.7	3.5	3.8	4.6	3.7
Denmark	–3.0	–1.8	–1.4	–1.6	–1.7
Finland	–1.8	–3.0	–4.9	–6.4	–6.5
Greece	–1.2	–1.0	–2.6	–3.6	–3.4
Iceland	–0.2	–0.2	–0.1	–0.1	..
Ireland	0.4	0.7	0.5	0.3	0.2
Netherlands	2.9	5.4	6.9	7.8	8.8
Norway	–4.1	–3.7	0.2	1.6	3.2
Portugal	0.7	–1.1	–0.6	–1.1	–1.4
Spain	0	–3.7	–11.0	–14.7	–17.6
Sweden	–1.1	–2.2	–5.0	–7.7	–11.1
Switzerland	7.6	8.4	6.0	7.0	8.0
Turkey	–0.8	1.6	1.0	0.3	0.5
Total of above European countries	1.8	2.7	–7.1	–13.2	–17.7
Australia	–8.0	–9.9	–15.7	–14.3	–12.8
New Zealand	–1.7	–0.7	–1.8	–1.8	–1.4
Total of above countries	–7.9	–7.9	–24.7	–29.3	–32.0

Table 75

Investment income of major OECD countries and country groups

Seasonally adjusted, $ billion

	1987	1988	1989	1990	1991	1989		1990		1991	
						I	II	I	II	I	II
United States[a]	6.4	3.2	3.2	0	–2	0.5	2.6	0	0	–1	–2
Japan	16.7	21.0	23.4	29	36	9.9	13.5	14	15	16	19
Germany	3.9	4.6	10.6	12	15	5.5	5.0	6	6	7	8
France	–0.4	0.1	–0.5	–1	–1	0.1	–0.5	0	0	0	0
Italy	–6.6	–7.1	–8.3	–9	–9	–4.1	–4.2	–5	–5	–4	–5
United Kingdom	7.9	9.5	5.0	2	1	3.9	1.1	1	1	0	0
Canada	–12.5	–15.0	–18.9	–20	–23	–9.6	–9.2	–10	–11	–11	–12
Total of above countries	15.4	16.4	14.5	13	16	6.3	8.3	6	7	7	9
Other OECD countries	–17.2	–21.5	–24.5	–30	–33	–12.4	–12.0	–14	–15	–16	–17
Total OECD	–1.8	–5.2	–9.9	–17	–17	–6.2	–3.8	–8	–9	–9	–8
Four major European countries	4.7	7.1	6.8	4	5	5.4	1.4	2	3	3	3
OECD Europe	–4.8	–4.4	–5.7	–12	–14	–0.6	–5.1	–6	–6	–7	–7
EEC	–7.0	–7.2	–5.9	–12	–12	–0.7	–5.2	–6	–6	–6	–6
Total OECD *less* the United States	–8.3	–8.4	–13.1	–17	–14	–6.7	–6.4	–8	–9	–8	–6

a) The historical data for the U.S. current account exclude the effects of changes in exchange rates on the dollar values of direct investment asset and liability stocks. They thus differ somewhat from the official data as currently recorded and published by the U.S. authorities.

Table 76

Investment income of other OECD countries

$ billion

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Austria	–0.4	–0.4	–0.4	–0.3	–0.7	–0.9	–0.9	–0.8	–1.0	–1.2
Belgium-Luxembourg	–0.2	–0.2	–0.1	–0.1	0.1	0.4	0.4	1.1	1.3	1.4
Denmark	–2.2	–2.0	–2.2	–2.5	–3.5	–4.1	–4.3	–4.5	–5.6	–5.7
Finland	–1.1	–1.0	–1.1	–1.0	–1.4	–1.7	–1.9	–2.2	–3.0	–3.7
Greece	–0.7	–0.8	–0.9	–1.1	–1.3	–1.4	–1.5	–1.5	–2.1	–2.2
Iceland	–0.1	–0.1	–0.1	–0.1	–0.2	–0.2	–0.2	–0.2	–0.2	..
Ireland	–1.5	–1.6	–1.9	–2.2	–2.8	–3.1	–3.9	–4.3	–5.3	–5.6
Netherlands	0	0.3	0.1	0.6	–0.1	0.2	–0.7	1.0	0.2	0.1
Norway	–1.9	–1.7	–1.5	–1.0	–1.1	–1.2	–1.9	–2.6	–2.8	–2.4
Portugal	–1.2	–1.1	–1.2	–1.2	–1.0	–0.9	–0.9	–0.8	–0.9	–0.9
Spain	–2.3	–2.5	–2.4	–1.8	–2.0	–2.8	–3.5	–3.6	–4.1	–4.6
Sweden	–1.8	–2.0	–2.2	–2.3	–2.3	–2.6	–3.1	–4.2	–6.0	–8.2
Switzerland	6.0	6.2	6.7	6.8	8.5	10.5	13.0	12.1	13.9	15.4
Turkey	–1.4	–1.4	–1.4	–1.3	–1.7	–1.8	–2.1	–1.8	–1.5	–1.4
Total of above European countries	–8.8	–8.3	–8.7	–7.6	–9.3	–9.5	–11.4	–12.5	–16.9	–19.3
Australia	–2.6	–3.3	–4.3	–4.7	–5.0	–5.9	–8.1	–10.1	–11.1	–11.7
New Zealand	–0.7	–0.9	–1.1	–1.3	–1.4	–1.8	–2.0	–1.9	–1.8	–1.7
Total of above countries	–12.1	–12.5	–14.1	–13.7	–15.7	–17.2	–21.5	–24.5	–29.8	–32.7

Table 77

Non-factor services of major OECD countries and country groups[a]

Seasonally adjusted, $ billion

	1987	1988	1989	1990	1991	1989		1990		1991	
						I	II	I	II	I	II
United States	7.7	13.1	20.6	21	27	8.4	12.2	10	11	13	14
Japan	–22.4	–32.3	–39.0	–45	–52	–19.1	–19.8	–22	–23	–25	–27
Germany	–12.7	–16.8	–17.9	–22	–25	–8.4	–9.5	–11	–11	–12	–13
France	10.6	11.6	15.5	18	20	7.8	7.7	9	9	10	10
Italy	6.1	3.7	1.2	2	2	0.9	0.4	1	1	1	1
United Kingdom	9.3	7.2	6.5	6	8	3.7	2.8	3	3	4	4
Canada	–5.2	–5.7	–7.0	–8	–8	–3.4	–3.7	–4	–4	–4	–4
Total of above countries	–6.7	–19.3	–20.0	–26	–27	–10.1	–9.9	–13	–13	–13	–14
Other OECD countries	22.0	19.6	17.4	20	22	8.7	8.7	10	10	11	11
Total OECD	15.3	0.4	–2.6	–6	–6	–1.4	–1.2	–3	–3	–3	–3
Four major European countries	13.2	5.6	5.4	5	6	4.0	1.4	2	3	3	3
OECD Europe	38.4	28.5	27.7	30	32	15.0	12.7	15	15	16	16
EEC	33.0	26.1	24.7	27	29	13.6	11.1	13	14	14	15
Total OECD *less* the United States	7.6	–12.7	–23.2	–27	–32	–9.8	–13.4	–13	–14	–15	–17

a) Detail may not add, due to rounding.

Table 78

Non-factor services of other OECD countries

$ billion

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Austria	4.5	4.1	3.6	3.6	4.9	5.6	5.5	6.2	6.7	7.0
Belgium-Luxembourg	1.9	2.1	1.7	1.7	2.8	3.1	3.0	2.8	2.8	2.9
Denmark	0.9	0.8	0.7	0.6	0.3	0.5	0.9	0.9	1.2	1.4
Finland	0.3	0.1	–0.2	–0.4	–0.6	–1.0	–1.5	–1.8	–2.1	–2.1
Greece	1.9	1.4	1.4	1.2	1.6	2.7	2.9	2.3	2.5	2.8
Iceland	0	0.1	0	0	0.1	0	0	0	0	..
Ireland	–0.2	–0.2	–0.2	–0.2	–0.4	–0.5	–0.1	0.1	0.1	0.1
Netherlands	0.8	0.5	0.5	0	–1.0	–0.2	–0.7	–0.1	0.5	0.8
Norway	0.7	–0.1	–0.2	0	–0.5	–1.1	–0.7	0.2	0.4	0.3
Portugal	0.2	0.4	0.5	0.8	1.0	1.2	1.0	1.0	1.3	1.5
Spain	5.8	6.3	7.6	7.6	11.2	13.0	13.3	12.2	13.6	13.9
Sweden	–0.4	0	–0.1	–0.6	–1.3	–1.6	–4.5	–4.8	–5.3	–5.6
Switzerland	0.4	0.9	0.8	1.1	1.4	1.7	0.4	–0.1	–0.1	–0.1
Turkey	0.9	0.8	0.9	1.3	1.3	1.8	3.4	3.4	3.7	3.6
Total of above European countries	17.8	17.2	17.2	16.7	20.9	25.2	22.9	22.3	25.4	26.5
Australia	–3.0	–2.7	–3.5	–3.4	–2.9	–2.6	–2.3	–3.9	–3.7	–3.4
New Zealand	–0.8	–0.5	–0.6	–0.4	–0.5	–0.6	–1.0	–1.1	–1.3	–1.3
Total of above countries	13.9	14.0	13.2	12.8	17.5	22.0	19.6	17.4	20.5	21.8

Table 79

Competitive positions

Indices, 1987 = 100

	Average 1985-87	1988	1989	1990	1991	Average 1985-87	1988	1989	1990	1991
	Manufacturing unit labour costs in local currency					*Export prices of manufactures in local currency*				
United States	101	100	102	103	105	104	102	104	105	108
Japan	102	98	98	100	101	111	97	104	112	117
Germany	97	99	100	102	105	102	101	105	106	110
France	97	98	99	100	102	100	104	110	110	113
Italy	96	103	109	114	117	101	103	111	114	119
United Kingdom	99	103	108	115	120	97	102	106	111	114
Canada	97	103	108	113	117	99	99	99	100	102
Austria	98	96	97	100	104	102	100	103	105	108
Belgium-Luxembourg	101	96	97	100	103	104	103	110	110	114
Denmark	92	102	101	103	105	100	102	107	107	110
Finland	98	104	109	116	121	98	105	114	115	121
Netherlands	97	99	96	95	95	105	103	107	107	109
Norway	91	104	102	105	107	96	111	113	113	114
Portugal	89	109	118	126	134	94	108	111	118	125
Spain	94	103	109	115	120	97	105	109	112	116
Sweden	96	104	113	123	129	97	105	111	115	119
Switzerland	97	103	106	111	115	100	102	109	109	113
Australia	95	107	116	123	129	91	110	109	114	119
New Zealand	92	104	109	113	117	97	118	129	134	141
Singapore	110	103	110	125	137	103	99	98	98	101
Taiwan	101	106	111	115	117	101	102	98	101	105
Korea	95	111	125	130	132	96	101	100	110	114
Hong Kong	104	108	113	116	117	96	102	107	112	116
	Relative unit labour costs in manufacturing, in a common currency					*Relative export prices of manufactures, in a common currency*				
United States	117	91	91	91	90	117	94	95	93	93
Japan	90	103	93	79	77	94	103	100	92	91
Germany	93	98	95	99	99	94	97	95	99	99
France	98	96	93	95	94	98	100	99	102	102
Italy	98	100	104	108	109	99	97	103	105	106
United Kingdom	105	108	107	105	106	99	105	100	98	98
Canada	98	108	118	121	124	98	103	106	106	105
Austria	97	95	94	96	97	98	99	96	98	98
Belgium-Luxembourg	98	94	93	97	98	98	100	100	104	104
Denmark	90	99	93	98	97	95	98	95	99	100
Finland	101	104	110	114	116	98	104	111	111	113
Netherlands	94	98	92	92	90	97	100	98	101	99
Norway	98	102	97	95	94	100	108	105	101	99
Portugal	99	102	104	105	105	101	100	95	95	95
Spain	97	106	114	121	124	97	106	109	113	115
Sweden	100	103	110	115	117	98	102	103	105	105
Switzerland	94	102	98	103	105	93	99	95	98	99
Australia	106	112	124	121	125	98	114	114	110	111
New Zealand	94	106	101	99	99	96	119	119	116	117
Singapore	121	103	114	132	142	109	98	99	101	101
Taiwan	96	113	130	132	131	93	108	113	113	114
Korea	101	120	150	145	143	98	108	116	119	119
Hong Kong	116	103	109	107	106	103	97	101	102	102

Table 80

Trade in manufactured goods: export market growth and relative export performance

Percentage changes from previous year

	(1) Import volume				(2) Export market growth[a]				(3) Export volume				(4) = (3) - (2) Relative export performance			
	1988	1989	1990	1991	1988	1989	1990	1991	1988	1989	1990	1991	1988	1989	1990	1991
United States	6.6	6.5	4.0	8.7	15.0	8.9	6.1	6.2	24.5	13.2	9.7	10.6	8.3	3.9	3.4	4.2
Japan	30.5	12.7	10.5	7.5	10.5	8.0	5.6	7.6	4.2	4.3	6.6	8.6	–5.7	–3.4	0.9	1.0
Germany	9.4	12.1	9.4	11.0	10.6	9.0	7.5	8.9	8.2	9.2	6.8	6.5	–2.2	0.2	–0.6	–2.2
France	12.3	10.7	8.3	7.5	10.4	9.2	7.1	7.4	7.4	8.4	6.4	5.8	–2.7	–0.8	–0.6	–1.5
Italy	10.1	11.8	8.1	8.4	10.5	9.2	7.0	7.4	9.5	6.5	5.3	5.9	–0.9	–2.5	–1.6	–1.4
United Kingdom	18.2	9.4	2.9	3.7	9.3	9.0	6.9	7.4	6.6	11.0	9.6	8.5	–2.5	1.8	2.6	1.0
Canada	17.4	7.0	3.3	4.0	7.5	6.9	4.4	8.4	12.5	1.0	0.6	3.0	4.7	–5.6	–3.6	–4.9
Total of the above countries	11.9	9.3	6.1	7.8	11.1	8.7	6.5	7.6	10.4	8.4	7.1	7.7	–0.6	–0.3	0.6	0.1
Austria	12.0	11.9	8.0	7.0	9.8	9.9	7.5	8.1	8.5	11.7	10.0	7.5	–1.1	1.6	2.3	–0.5
Belgium-Luxembourg	7.1	7.5	8.8	7.8	10.8	9.8	7.1	7.5	5.8	9.2	7.1	5.9	–4.5	–0.5	–0.1	–1.5
Denmark	–1.4	1.7	4.0	5.8	8.9	8.3	5.4	6.4	4.7	8.5	5.0	5.5	–3.9	0.2	–0.4	–0.8
Finland	10.6	14.1	1.9	–0.5	9.4	8.6	5.6	6.3	4.6	1.8	2.0	2.8	–4.4	–6.2	–3.5	–3.3
Ireland	5.0	13.0	8.2	7.8	12.7	9.7	5.8	6.5	6.8	12.6	8.3	7.8	–5.2	2.6	2.4	1.2
Netherlands	8.5	8.5	7.2	5.7	10.4	9.6	7.2	7.7	10.6	6.5	6.9	7.3	0.1	–2.8	–0.3	–0.4
Norway	–3.0	–1.1	–0.6	4.6	10.3	8.5	6.0	6.4	2.5	11.2	5.1	6.5	–7.1	2.5	–0.8	0.1
Portugal	26.6	7.4	13.0	9.6	10.8	9.7	6.5	7.0	10.2	23.9	13.4	9.5	–0.6	13.0	6.5	2.4
Spain	25.7	22.1	12.4	8.7	10.3	8.4	6.9	7.2	9.0	9.4	7.9	8.2	–1.2	0.9	1.0	0.9
Sweden	6.6	9.9	4.2	4.2	8.9	8.2	5.3	6.4	4.4	4.8	2.6	3.1	–4.1	–3.1	–2.6	–3.0
Switzerland	7.4	5.4	5.5	4.9	11.3	9.9	7.2	7.7	6.6	7.8	6.0	5.3	–4.2	–1.9	–1.1	–2.3
Total of smaller European countries	9.1	9.4	7.1	6.2	10.3	9.3	6.7	7.3	6.9	8.2	6.4	6.2	–3.0	–0.9	–0.3	–1.0
Australia	18.7	20.8	–1.2	2.9	13.5	10.1	6.6	6.4	12.2	14.7	12.2	7.4	–1.1	4.2	5.3	0.9
New Zealand	–7.4	15.9	0.7	0.6	18.3	13.4	4.7	6.0	–3.0	5.6	5.0	3.0	–18.0	–6.8	0.3	–2.8
Total of smaller countries	9.4	10.3	6.4	5.9	10.4	9.3	6.7	7.2	7.0	8.3	6.5	6.2	–3.1	–0.9	–0.1	–1.0
Total OECD	11.2	9.6	6.2	7.3	10.9	8.8	6.5	7.5	9.6	8.4	7.0	7.3	–1.2	–0.4	0.5	–0.2
Total of non-OECD	10.1	6.0	6.8	6.8	10.9	8.2	6.3	7.4	11.8	5.5	6.8	7.6	0.9	–2.5	0.4	0.2
of which:																
Developing areas	13.0	6.5	6.9	7.1	11.8	8.4	6.1	7.7	13.2	5.6	7.0	7.6	1.3	–2.6	0.8	–0.1
Four major Asian NIEs	23.8	10.6	8.9	9.0	11.3	8.1	5.8	7.6	16.1	4.5	6.0	7.3	4.3	–3.4	0.2	–0.3

a) The calculation of market growth is based on the growth of import volume [panel (1) above] in each exporting country's markets, with weights based on manufacturing trade flows in 1985.

Source: Trade Matrix Tape - United Nations Statistical Office, OECD *Foreign Trade By Commodities.*

Table 81

Market prices of selected primary commodities exported by developing countries[a]

Indices of dollar prices, 1987=100

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Food and tropical beverages	100.0	114.3	110.4	105	108	118.9	101.9	104	106	107	108
of which											
Food	100.0	130.1	138.0	142	146	135.8	140.1	141	143	145	147
Tropical beverages	100.0	101.1	87.4	74	76	104.8	69.9	74	75	75	76
Agricultural raw materials	100.0	108.2	107.8	112	116	108.5	107.1	110	113	115	118
Minerals, ores and metals	100.0	146.3	145.8	131	134	155.9	135.7	131	131	133	135
Total	100.0	120.9	118.7	113	117	125.7	111.8	113	114	116	118
Memorandum item											
Export prices of OECD manufactures	100.0	105.7	104.9	112	115	104.8	104.9	111	113	115	116

a) Indices through 1989 I are based on data compiled by UNCTAD.

Table 82

Oil market conditions[a]

in million of barrels per day (mbd)

	1987	1988	1989	1990	1991	1989 I	1989 II	1990 I	1990 II	1991 I	1991 II
Demand											
OECD consumption[b]	36.0	37.2	37.6	38.0	38.6	37.3	37.9	37.5	38.4	38.3	38.9
OPEC consumption[b]	3.9	4.0	4.1	4.3	4.4	4.1	4.1	4.3	4.3	4.4	4.4
NODC consumption	9.5	10.0	10.6	11.0	11.5	10.4	10.8	10.8	11.2	11.3	11.7
OECD stock change[c]	0.3	–0.1	0.1	0	0	0.1	0.1	0	0	0	0
Other stock change[d]	–1.0	–0.1	0	0	0	–0.7	0.7	0	0	0	0
Total demand	48.7	51.0	52.4	53.3	54.5	51.2	53.6	52.6	53.9	54.0	55.0
Supply											
Total supply	48.7	51.0	52.4	53.3	54.5	51.2	53.6	52.6	53.9	54.0	55.0
of which:											
OECD production	16.8	16.6	15.9	15.9	15.9	16.0	15.8	16.0	15.8	15.9	15.9
NODC production	9.0	9.3	9.7	9.9	10.1	9.6	9.8	9.9	10.0	10.0	10.1
Centrally-planned economies net exports	2.1	2.2	1.9	1.7	1.6	1.9	1.9	1.6	1.7	1.5	1.6
Processing gain	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
OPEC production	19.6	21.6	23.6	24.5	25.7	22.4	24.8	23.8	25.1	25.3	26.1
Trade											
OECD net imports	18.4	19.0	20.5	20.8	21.4	20.1	20.9	20.2	21.3	21.1	21.7
NODC net imports	–1.6	–1.5	–1.0	–0.6	–0.1	–1.1	–0.9	–0.7	–0.5	–0.2	0
Net exports of OPEC	15.6	17.4	19.5	20.2	21.3	18.3	20.7	19.5	20.8	20.9	21.7
Memorandum items											
Production of High and Low Absorbers[e]	20.1	22.0	24.2	25.1	26.3	23.0	25.4	24.4	25.7	25.9	26.7
Net exports of Low and High Absorbers[e]	16.2	18.0	20.1	20.8	21.9	18.9	21.3	20.1	21.4	21.5	22.3
OECD stock/consumption ratio (days)[f]	97.7	98.2	95.1	..	..	96.4	93.8	94.8	..	..	..
OECD oil consumption/GNP ratio (1980=100)	76.8	75.8	74.1	72.6	71.8	..	..	..	..	..	..
OECD crude oil import price (fob, $ bl.)[g]	16.9	13.8	16.5	17.2	17.7	16.2	16.7	17.0	17.3	17.5	17.8

a) Estimates of processing gains and Natural Gas Liquids are included in both demand and supply. Detail may not add due to rounding.
b) Includes marine bunkers.
c) By technical assumption, stocks are assumed to be unchanged from 1989 II, the most recent historical observation.
d) Including statistical, reporting and estimation errors.
e) OPEC, plus Oman and Bahrain.
f) Half-yearly figures represent period-beginning stock levels divided by the half-year's consumption. Yearly figures are an average of the two half-years.
g) Using import weights and prices for six large OECD economies.

Table 83

Oil prices

	Index of OECD real end-user price of petroleum products (1985=100)	OECD import price of crude (cif $ per bl)	Spot market refined product price[a] ($ per bl)	OPEC crude oil production[b] (mbd)
1979	87.5	19.34	31.29	30.8
1980	106.2	32.91	33.73	31.4
1981	113.9	36.34	34.05	22.8
1982	108.8	33.94	31.59	18.8
1983	104.1	30.00	28.29	17.7
1984	101.9	28.98	27.68	17.7
1985	100.0	27.45	30.13	16.2
1986	75.4	15.04	17.87	18.2
1987	73.7	17.90	20.13	17.9
1988	69.7	14.84	17.41	19.9
1989	71.3	17.44	21.01	22.0
1988 Q1	70.2	16.07	17.33	17.9
Q2	70.9	15.71	18.58	18.8
Q3	70.4	14.48	16.55	20.2
Q4	67.9	13.08	17.19	22.7
1989 Q1	68.2	16.15	19.21	20.3
Q2	74.0	18.31	21.71	21.3
Q3	71.4	17.12	20.23	22.4
Q4	71.6	18.17	22.88	24.0
1990 Q1	72.5	..	22.31	23.9
1989 March	68.5	17.03	20.36	20.1
April	73.4	18.61	23.85	21.0
May	74.7	18.64	21.73	21.4
June	73.8	17.67	19.54	21.6
July	72.3	17.50	19.60	21.8
August	71.0	16.81	19.71	22.6
September	70.8	17.06	21.38	22.7
October	72.0	17.67	21.89	23.5
November	71.3	18.07	21.90	24.1
December	71.4	18.76	24.85	24.2
1990 January	73.7	19.94	23.89	23.5
February	72.3	19.70	22.10	24.0
March	71.6	..	20.93	24.3

a) Up to 1984, derived by weighting each product average price by its importance in the production of a typical European refinery. Since 1985, derived by weighting each spot fob product price produced in a typical European refinery; this price tends to be more representative of netback prices which are not published. According to the definition used prior to 1984, the 1985 average would be equal to $26.88 per barrel.

b) Excluding Natural Gas Liquids, including Oman and Bahrain.

Table 84

Summary of balance of payments on current account in the OECD area and the non-OECD regions[a]

$ billion

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Trade balance										
OECD	–26	–25	–52	–48	–11	–30	–6	–32	–12	1
Non-OECD *of which:*	36	43	75	60	26	75	59	78	64	47
OPEC	68	48	59	58	14	37	28	49	51	53
Four major Asian NIEs	–8	–4	4	8	19	25	22	19	15	13
Other non-OPEC Asia	–29	–31	–26	–37	–30	–22	–27	–27	–25	–26
Latin America, excluding OPEC	3	20	28	25	15	18	25	25	26	26
Africa, excluding OPEC	–13	–7	–7	–3	–2	–3	–5	–2	–5	–6
USSR and Eastern countries	15	17	18	10	11	20	15	15	4	–14
World[b]	10	19	23	13	15	45	53	46	52	48
Services and private transfers, net										
OECD	24	29	21	13	9	12	–4	–9	–20	–20
Non-OECD *of which:*	–111	–95	–98	–89	–72	–65	–71	–82	–85	–89
OPEC	–71	–65	–61	–53	–41	–40	–41	–43	–46	–48
Four major Asian NIEs	6	5	3	2	4	6	7	4	5	5
Other non-OPEC Asia	9	9	6	6	7	6	5	3	3	3
Latin America, excluding OPEC	–42	–35	–36	–34	–31	–28	–32	–36	–36	–37
Africa, excluding OPEC	–7	–6	–5	–6	–8	–7	–8	–7	–6	–6
USSR and Eastern countries	–6	–4	–5	–3	–3	–2	–2	–3	–4	–6
World[b]	–87	–66	–77	–75	–63	–53	–75	–91	–105	–109
Balance on goods, services and private transfers										
OECD	–2	5	–31	–34	–2	–17	–10	–41	–32	–19
Non-OECD *of which:*	–75	–52	–24	–28	–45	10	–12	–4	–20	–41
OPEC	–3	–17	–3	5	–27	–4	–13	6	5	5
Four major Asian NIEs	–3	2	7	10	23	31	29	23	20	19
Other non-OPEC Asia	–20	–22	–20	–32	–23	–16	–22	–24	–22	–23
Latin America, excluding OPEC	–39	–15	–8	–9	–16	–10	–7	–11	–11	–10
Africa, excluding OPEC	–20	–12	–13	–9	–11	–10	–12	–10	–12	–12
USSR and Eastern countries	9	12	14	6	8	18	13	12	0	–20
World[b]	–77	–48	–54	–63	–48	–7	–21	–45	–53	–60
Official transfers, net										
OECD	–24	–22	–24	–28	–33	–37	–40	–43	–45	–48
Non-OECD *of which:*	8	9	10	13	15	14	15	16	27	35
OPEC	–4	–4	–3	–3	–2	–3	–2	–2	–2	–2
Four major Asian NIEs	0	0	0	0	0	0	0	0	0	0
Other non-OPEC Asia	8	7	8	9	9	8	9	9	9	9
Latin America, excluding OPEC	1	1	1	1	1	2	2	2	2	2
Africa, excluding OPEC	4	4	4	5	6	6	6	7	7	7
USSR and Eastern countries	1	0	1	1	1	1	1	1	11	19
World[b]	–15	–12	–14	–14	–18	–24	–25	–27	–17	–13
Current balance										
OECD	–25	–17	–55	–62	–35	–55	–50	–84	–77	–67
Non-OECD *of which:*	–67	–43	–13	–15	–30	24	3	12	7	–6
OPEC	–7	–21	–6	2	–28	–6	–15	4	3	3
Four major Asian NIEs	–3	2	7	10	23	31	29	23	20	18
Other non-OPEC Asia	–12	–15	–13	–23	–14	–8	–13	–15	–13	–14
Latin America, excluding OPEC	–38	–14	–7	–8	–14	–8	–5	–9	–9	–9
Africa, excluding OPEC	–16	–8	–9	–4	–5	–4	–6	–3	–5	–5
USSR and Eastern countries	9	13	14	7	9	19	14	12	11	–1
World[b]	–92	–60	–69	–77	–66	–31	–46	–72	–70	–73

a) Historical data for the OECD area are aggregates of reported balance of payments data by each individual country. Because of various statistical problems as well as a large number of non-reporters among non-OECD countries, trade and current balances estimated on the basis of these countries own balance of payments records may differ from corresponding estimates shown in this table.

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.

Table 85

Trade volumes and prices in non-OECD regions

Percentage changes from previous year

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
OPEC										
Export volumes	–17	–12	0	–6	14	–5	14	12	5	5
Import volumes	4	–10	–10	–16	–18	–7	–1	2	6	6
Export prices	–10	–10	–2	–4	–42	21	–15	11	4	3
Import prices	–5	0	–2	0	10	10	6	3	4	3
Four major Asian NIEs										
Export volumes	4	14	20	3	13	20	16	5	5	7
Import volumes	0	8	15	–1	7	19	23	10	9	9
Export prices	–5	–5	0	–2	3	11	9	5	4	3
Import prices	–4	–3	–4	–2	1	13	8	2	3	3
Other non-OPEC Asia										
Export volumes	4	4	11	5	10	10	11	10	8	8
Import volumes	–1	7	8	14	–6	–1	8	6	6	6
Export prices	–5	–2	0	–5	–4	12	8	4	4	3
Import prices	–5	–4	–3	–3	4	13	8	4	3	4
Latin America, excluding OPEC										
Export volumes	–2	8	12	2	–7	6	7	1	5	6
Import volumes	–21	–22	6	1	1	2	9	4	5	6
Export prices	–5	–5	–2	–6	–5	7	9	9	3	3
Import prices	–2	–1	–4	–3	0	11	2	7	5	4
Africa, excluding OPEC										
Export volumes	–2	5	2	4	2	1	2	2	2	4
Import volumes	–6	–7	3	–11	–5	3	5	–2	5	4
Export prices	–9	–3	–1	–8	1	6	7	7	3	3
Import prices	–3	–2	–1	–1	8	9	5	4	4	3
USSR and Eastern countries										
Export volumes	9	7	5	–2	20	2	10	3	4	6
Import volumes	2	3	2	5	–15	–7	7	8	14	18
Export prices	–4	–6	–4	–5	–14	11	–2	6	4	5
Import prices	–6	–5	–2	–2	19	12	7	4	7	7
Total non-OECD										
Export volumes	–3	3	9	1	10	7	12	6	5	6
Import volumes	–3	–3	3	–1	–6	2	10	6	8	9
Export prices	–6	–5	–1	–4	–11	12	3	7	4	4
Import prices	–4	–3	–3	–2	6	12	7	4	4	4

Table 86

OECD countries' trade with non-OECD countries

Data based on $ values

	Value in $ billion				Percentage changes				Exports to non-OECD countries as a percentage of total exports		Imports from non-OECD countries as a percentage of total imports	
	Annual average 1985-88		1989 I		Annual rate 1985-88		1988 I to 1989 I		Average 1985-88	1989 I	Average 1985-88	1989 I
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports				
United States	91.4	142.4	64.4	88.4	13.6	10.1	14.8	10.3	36.4	35.5	36.4	37.9
Japan	86.4	80.2	53.6	50.8	12.2	6.2	9.4	8.8	39.2	39.5	54.1	49.6
Germany	44.6	40.9	27.1	25.0	12.8	9.9	12.9	9.7	17.4	15.9	20.1	18.8
France	28.9	27.6	17.9	16.7	6.9	4.7	13.5	8.3	22.7	20.6	19.8	17.4
Italy	22.1	30.1	12.9	18.3	6.7	–0.8	8.2	17.0	21.4	19.1	27.2	23.4
United Kingdom	25.5	22.1	15.0	14.3	11.1	15.2	2.8	10.1	21.1	20.0	15.4	14.3
Canada	9.0	9.6	5.2	6.9	12.0	14.0	–8.8	17.1	9.4	8.8	10.9	11.7
Total of the above countries	308.0	352.9	196.1	220.3	11.7	8.1	10.7	10.5	26.2	25.3	28.8	27.5
Austria	5.0	4.9	2.9	2.9	9.2	4.9	7.2	11.6	21.1	18.1	17.4	15.1
Belgium-Luxembourg	9.0	9.8	6.0	6.8	12.3	13.6	10.7	15.4	12.3	11.8	13.2	13.7
Denmark	3.3	3.2	1.8	2.0	12.5	8.6	–9.0	11.9	14.4	12.8	14.1	15.4
Finland	5.0	4.4	2.8	2.5	8.4	5.3	1.6	5.7	28.4	24.5	26.0	21.3
Greece	1.2	3.1	0.6	1.4	–7.2	–12.4	33.5	55.1	22.4	17.8	27.0	21.1
Iceland	0.1	0.1	0.1	0.1	18.0	11.0	25.7	5.6	9.1	14.0	10.2	10.4
Ireland	1.2	0.9	0.7	0.6	13.3	16.1	0.2	9.4	8.5	7.1	7.1	6.8
Netherlands	9.5	15.2	5.2	8.7	13.8	1.0	–7.6	9.0	11.0	9.8	18.6	16.9
Norway	2.3	2.4	0.9	2.1	–5.8	33.4	2.0	34.7	11.5	6.8	11.5	19.1
Portugal	0.8	2.5	0.4	1.5	6.6	5.8	13.1	16.2	10.0	7.1	22.0	16.7
Spain	6.6	12.2	3.7	7.6	1.1	1.4	2.8	17.4	21.8	16.7	29.9	21.3
Sweden	5.4	4.6	3.2	2.9	11.7	12.7	1.4	3.8	13.6	12.2	12.6	11.8
Switzerland	8.8	4.6	5.2	2.8	19.0	15.5	–2.8	–0.2	21.9	20.5	10.4	9.9
Turkey	3.9	4.8	2.1	2.7	9.0	0.7	–17.6	2.6	42.5	38.8	37.7	37.3
Total of smaller European countries	62.1	72.6	35.5	44.6	10.1	5.7	0	12.3	15.9	13.8	17.5	16.1
Australia	9.9	6.1	7.2	4.8	11.9	15.1	21.2	36.7	37.9	40.2	22.5	23.9
Total of smaller countries[a]	72.0	78.7	42.8	49.5	10.3	6.4	3.0	14.3	17.2	15.5	17.8	16.6
Total OECD[a]	380.0	431.6	238.9	269.8	11.4	7.8	9.3	11.1	23.8	22.7	25.8	24.5
Four major European countries	121.1	120.7	72.9	74.2	9.9	6.8	10.0	11.2	19.9	18.2	20.3	18.2
OECD Europe	183.2	193.3	108.4	118.8	9.9	6.4	6.5	11.6	18.3	16.5	19.1	17.4
EEC	152.7	167.6	91.2	102.9	9.7	5.9	8.1	12.2	18.0	16.3	19.7	17.7
Total OECD *less* the United States[a]	288.5	289.2	174.4	181.4	10.7	6.7	7.4	11.5	21.5	20.0	22.7	20.9

a) Excluding New Zealand for which figures are not available.

Table 87

OECD countries' trade with OPEC

Data based on $ values

	Value in $ billion				Percentage changes				Exports to OPEC as a percentage of total exports		Imports from OPEC as a percentage of total imports	
	Annual average 1985-88		1989 I		Annual rate 1985-88		1988 I to 1989 I		Average 1985-88	1989 I	Average 1985-88	1989 I
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports				
United States	12.5	22.6	7.1	14.5	4.2	0.4	5.2	23.1	5.0	3.9	5.8	6.2
Japan	12.5	30.8	5.5	16.2	–5.3	–10.4	–7.9	5.4	5.8	4.1	21.3	15.8
Germany	8.7	6.9	4.3	3.2	0.6	–12.6	3.5	8.5	3.5	2.5	3.6	2.4
France	6.6	7.7	3.1	3.7	–7.0	–16.8	4.0	25.5	5.3	3.6	5.8	3.8
Italy	6.5	10.6	3.1	4.6	–6.2	–17.4	1.9	11.7	6.5	4.6	9.8	5.9
United Kingdom	8.0	3.1	4.4	1.7	4.8	0.8	5.1	9.5	6.7	5.8	2.2	1.7
Canada	1.2	1.2	0.7	0.9	6.6	–11.2	0.2	67.6	1.3	1.2	1.4	1.5
Total of the above countries	55.8	82.9	28.2	44.8	–0.9	–9.0	1.5	14.1	4.9	3.6	6.9	5.6
Austria	0.9	0.7	0.4	0.3	–4.1	–15.2	–10.5	–5.0	4.0	2.6	2.7	1.5
Belgium-Luxembourg	1.6	2.1	0.8	1.4	–3.9	8.3	1.5	22.6	2.3	1.7	2.8	2.8
Denmark	0.6	0.4	0.3	0.3	2.4	–4.4	–5.6	27.9	2.7	2.2	1.9	2.0
Finland	0.3	0.2	0.2	0.1	–0.4	–24.7	–2.1	–43.7	2.0	1.4	1.5	0.4
Greece	0.4	1.3	0.1	0.4	–13.5	–43.5	–32.1	262.5	6.7	3.1	11.7	5.8
Iceland	0	0	0	0	122.3	43.1	–79.2	–26.0	1.2	0.4	0	0
Ireland	0.4	0	0.3	0	4.9	–1.1	1.6	154.1	3.1	2.6	0.3	0.5
Netherlands	2.4	5.0	1.1	2.8	5.1	–6.7	–11.0	21.5	2.8	2.0	6.2	5.5
Norway	0.1	0.1	0.1	0.1	6.2	1.3	–15.9	71.6	0.7	0.6	0.6	0.7
Portugal	0.1	1.0	0	0.6	–4.2	–12.6	–48.8	52.1	1.7	0.6	9.3	6.7
Spain	1.7	4.7	0.9	2.5	1.4	–12.5	–9.0	27.5	5.6	4.2	11.9	7.0
Sweden	1.1	0.5	0.5	0.3	3.8	–4.2	–16.2	16.8	2.7	2.0	1.4	1.2
Switzerland	1.9	0.7	0.8	0.1	6.9	–13.9	–22.4	–55.7	4.9	3.3	1.8	0.5
Turkey	2.5	2.7	1.1	1.3	–2.8	–9.3	–31.6	–10.9	27.2	19.7	21.9	17.7
Total of smaller European countries	14.0	19.5	6.6	10.1	0.8	–10.4	–15.5	18.1	3.6	2.6	4.9	3.6
Australia	1.5	1.0	1.0	0.8	–2.3	–4.0	36.4	39.9	5.8	5.3	3.7	3.8
Total of smaller countries[a]	15.5	20.4	7.6	10.9	0.5	–10.1	–11.2	19.4	3.8	2.7	4.8	3.6
Total OECD[a]	71.3	103.3	35.8	55.6	–0.6	–9.2	–1.5	15.1	4.6	3.4	6.4	5.1
Four major European countries	29.7	28.3	14.9	13.2	–1.6	–14.1	3.7	14.1	5.0	3.7	5.0	3.2
OECD Europe	43.7	47.7	21.5	23.3	–0.8	–12.6	–3.1	15.8	4.5	3.3	4.9	3.4
EEC	36.9	42.7	18.5	21.2	–1.1	–12.8	1.2	19.8	4.5	3.3	5.2	3.6
Total OECD *less* the United States[a]	58.9	80.7	28.7	41.1	–1.7	–11.6	–3.0	12.5	4.5	3.3	6.6	4.7

a) Excluding New Zealand for which figures are not available.

Table 88

OECD countries' trade with Asia and Oceania[a]

Data based on $ values

	Value in $ billion				Percentage changes				Exports to Asia and Oceania as a percentage of total exports		Imports from Asia and Oceania as a percentage of total imports	
	Annual average 1985-88		1989 I		Annual rate 1985-88		1988 I to 1989 I		Average 1985-88	1989 I	Average 1985-88	1989 I
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports				
United States	16.2	20.7	10.4	15.5	10.8	19.3	13.8	23.1	6.5	5.7	5.3	6.7
Japan	22.9	20.1	14.0	13.8	4.1	12.6	17.9	12.2	10.5	10.3	13.5	13.5
Germany	11.6	8.8	6.6	6.6	13.2	23.2	6.4	16.3	4.5	3.9	4.2	5.0
France	5.1	3.9	3.8	2.9	11.7	20.8	32.1	11.4	4.0	4.4	2.7	3.0
Italy	5.4	4.6	3.2	3.8	10.8	21.7	8.9	15.8	5.2	4.7	4.0	4.9
United Kingdom	6.2	4.8	4.0	3.4	16.7	21.5	7.3	10.6	5.1	5.4	3.3	3.4
Canada	2.3	1.4	1.1	1.1	19.0	31.3	–36.4	15.0	2.3	1.8	1.5	1.9
Total of the above countries	69.7	64.3	43.0	47.2	9.6	18.2	12.0	16.3	5.9	5.5	5.2	5.9
Austria	1.0	0.7	0.6	0.6	11.9	23.0	7.7	28.7	4.4	3.9	2.3	2.9
Belgium-Luxembourg	3.2	1.6	2.3	1.4	21.3	26.5	11.0	25.7	4.3	4.6	2.1	2.7
Denmark	0.9	0.7	0.4	0.5	14.4	24.2	–8.0	2.6	3.8	2.9	3.0	3.7
Finland	0.4	0.3	0.3	0.3	20.7	45.1	5.3	31.1	2.5	2.2	1.6	2.3
Greece	0.4	0.3	0.2	0.2	–1.7	21.5	65.8	15.3	6.5	6.4	2.8	3.4
Iceland	0	0	0	0	11.4	23.9	128.0	34.7	1.0	1.9	0.7	1.1
Ireland	0.2	0.2	0.1	0.1	9.0	24.9	21.8	0.2	1.3	1.1	1.5	1.5
Netherlands	2.0	2.2	1.2	1.5	11.3	17.5	0	6.2	2.4	2.2	2.7	2.8
Norway	0.5	0.4	0.3	0.4	–0.9	45.3	–8.8	99.7	2.5	2.0	1.7	4.0
Portugal	0.1	0.3	0.1	0.1	21.8	29.5	–17.5	–27.8	1.5	1.0	2.1	1.5
Spain	1.3	1.0	0.7	0.8	1.0	22.4	0.9	18.1	4.3	3.1	2.4	2.4
Sweden	1.4	0.7	1.0	0.5	22.7	28.3	2.7	2.9	3.5	3.6	1.9	2.0
Switzerland	2.1	0.8	1.3	0.6	22.2	25.7	5.5	13.2	5.3	5.3	1.8	2.0
Turkey	0.8	0.5	0.4	0.3	35.4	18.5	–6.7	13.2	8.1	7.5	3.8	4.5
Total of smaller European countries	14.4	9.6	8.8	7.3	15.8	24.1	4.7	16.1	3.6	3.4	2.2	2.6
Australia	3.3	1.7	2.2	1.4	10.2	22.7	22.2	38.9	12.7	12.5	6.1	7.1
Total of smaller countries[b]	17.7	11.3	11.0	8.8	14.7	23.9	7.8	19.3	4.2	4.0	2.5	2.9
Total OECD[b]	87.4	75.6	54.0	55.9	10.6	19.0	11.1	16.8	5.5	5.1	4.5	5.1
Four major European countries	28.4	22.1	17.6	16.7	13.2	22.1	11.8	14.1	4.6	4.4	3.6	4.1
OECD Europe	42.8	31.7	26.4	24.0	14.1	22.7	9.4	14.7	4.2	4.0	3.1	3.5
EEC	36.5	28.4	22.5	21.3	13.2	22.1	10.6	13.6	4.3	4.0	3.2	3.7
Total OECD *less* the United States[b]	71.2	54.9	43.7	40.4	10.5	18.9	10.5	14.5	5.3	5.0	4.2	4.7

a) Excluding Hong Kong, Singapore, Korea, Taiwan and OPEC countries.
b) Excluding New Zealand for which figures are not available.

Table 89

OECD countries' trade with Africa[a]

Data based on $ values

	Value in $ billion				Percentage changes				Exports to Africa as a percentage of total exports		Imports from Africa as a percentage of total imports	
	Annual average 1985-88		1989 I		Annual rate 1985-88		1988 I to 1989 I		Average 1985-88	1989 I	Average 1985-88	1989 I
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports				
United States	5.7	5.9	2.9	3.3	2.3	–2.9	–4.2	20.8	2.3	1.6	1.5	1.4
Japan	4.1	3.7	2.3	1.9	9.9	4.0	–3.6	–3.9	1.9	1.7	2.5	1.9
Germany	5.8	4.4	3.5	2.5	14.8	8.9	6.2	–0.3	2.2	2.1	2.2	1.9
France	8.0	5.4	4.8	3.2	8.4	7.1	7.4	–0.1	6.3	5.6	3.9	3.4
Italy	3.3	5.1	1.9	3.1	8.4	0.7	4.1	20.7	3.2	2.8	4.6	4.0
United Kingdom	4.0	3.3	2.2	1.7	9.1	2.5	–7.2	–4.8	3.3	2.9	2.4	1.7
Canada	0.7	0.4	0.3	0.3	1.7	12.1	–17.9	1.6	0.7	0.5	0.5	0.5
Total of the above countries	31.5	28.2	17.9	16.1	8.4	3.2	0.9	6.2	2.7	2.3	2.3	2.0
Austria	0.3	0.3	0.1	0.2	3.6	–4.2	–10.8	65.3	1.4	0.9	1.0	1.1
Belgium-Luxembourg	1.6	2.4	1.0	1.8	11.4	17.5	13.7	28.4	2.1	2.0	3.3	3.7
Denmark	0.4	0.2	0.2	0.1	17.2	–18.6	–26.2	59.3	1.8	1.7	0.9	1.0
Finland	0.2	0.1	0.1	0.1	–3.0	7.1	0.4	2.8	1.4	1.0	0.6	0.6
Greece	0.2	0.3	0.1	0.2	–11.1	5.5	–3.7	118.9	3.2	1.8	2.8	3.2
Iceland	0	0	0	0	10.3	49.0	261.5	103.6	0.1	0.4	0.2	0.4
Ireland	0.2	0.2	0.1	0.1	17.3	4.6	–19.5	7.8	1.7	1.1	1.3	1.0
Netherlands	1.8	1.4	0.9	0.7	12.1	2.6	–9.2	–14.9	2.0	1.7	1.7	1.3
Norway	0.4	0.3	0.2	0.4	–17.7	99.5	64.4	22.6	2.2	1.1	1.5	3.4
Portugal	0.3	0.5	0.2	0.3	8.2	19.4	47.4	15.6	4.1	3.7	4.6	3.8
Spain	1.5	1.7	0.8	1.0	–0.9	–3.7	–7.2	13.4	4.8	3.6	4.2	2.7
Sweden	0.7	0.2	0.3	0.1	1.9	–13.5	9.4	–11.0	1.8	1.3	0.6	0.3
Switzerland	0.8	0.4	0.4	0.4	12.6	46.0	–1.9	15.5	2.0	1.7	0.9	1.4
Turkey	0.2	0.4	0.2	0.3	26.8	22.8	6.7	13.3	2.4	3.1	3.0	3.8
Total of smaller European countries	8.7	8.4	4.7	5.7	6.4	10.7	0.1	17.7	2.2	1.8	2.0	2.0
Australia	0.5	0.2	0.3	0.1	–7.5	2.3	40.4	–7.3	1.9	1.8	0.9	0.4
Total of smaller countries[b]	9.1	8.7	5.0	5.8	5.6	10.5	2.0	17.2	2.2	1.8	2.0	1.9
Total OECD[b]	40.6	36.9	22.9	21.8	7.8	4.9	1.2	8.9	2.6	2.2	2.2	2.0
Four major European countries	21.1	18.2	12.4	10.6	10.2	4.8	3.7	4.3	3.5	3.1	3.1	2.6
OECD Europe	29.7	26.7	17.2	16.2	9.1	6.6	2.7	8.6	3.0	2.6	2.6	2.4
EEC	27.0	25.0	15.8	14.8	9.7	5.2	2.4	7.6	3.2	2.8	2.9	2.5
Total OECD *less* the United States[b]	35.0	31.0	20.1	18.5	8.8	6.4	2.0	7.0	2.6	2.3	2.4	2.1

a) Excluding OPEC countries.
b) Excluding New Zealand for which figures are not available.

Table 90

OECD countries' trade with Latin America[a]

Data based on $ values

	Value in $ billion				Percentage changes				Exports to Latin America as a percentage of total exports		Imports from Latin America as a percentage of total imports	
	Annual average 1985-88		1989 I		Annual rate 1985-88		1988 I to 1989 I		Average 1985-88	1989 I	Average 1985-88	1989 I
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports				
United States	30.9	39.7	22.0	24.5	12.6	5.2	23.2	10.1	12.4	12.1	10.2	10.5
Japan	7.7	6.3	4.2	3.9	3.2	9.6	8.6	4.3	3.5	3.1	4.2	3.8
Germany	4.5	5.7	2.7	3.6	11.7	11.0	23.2	16.2	1.8	1.6	2.8	2.7
France	3.9	3.4	2.4	2.2	15.1	10.9	5.6	11.4	3.0	2.7	2.4	2.3
Italy	1.8	3.1	1.1	2.2	13.6	4.4	15.3	33.0	1.7	1.6	2.8	2.9
United Kingdom	2.0	2.7	1.1	1.7	9.1	10.2	–1.5	8.8	1.7	1.4	1.9	1.7
Canada	1.9	2.5	0.9	1.7	5.2	10.2	–0.1	15.9	2.0	1.6	2.9	2.9
Total of the above countries	52.8	63.5	34.4	39.9	11.0	6.8	18.0	11.4	4.5	4.4	5.2	5.0
Austria	0.2	0.4	0.1	0.3	3.6	3.3	14.2	13.4	0.8	0.6	1.6	1.3
Belgium-Luxembourg	0.5	1.3	0.3	0.7	9.8	4.0	6.2	2.6	0.7	0.7	1.8	1.5
Denmark	0.6	0.7	0.3	0.5	4.1	13.8	–10.2	22.9	2.7	1.9	3.2	3.5
Finland	0.3	0.4	0.1	0.3	30.9	17.4	–50.8	24.1	1.5	0.9	2.2	2.3
Greece	0	0.2	0	0.1	62.5	28.1	806.4	2.8	0.3	0.8	1.6	1.7
Iceland	0	0	0	0	39.1	6.4	–5.3	–8.1	0.5	1.0	1.0	0.9
Ireland	0.1	0.1	0.1	0.1	12.0	18.1	14.1	5.3	1.0	0.8	0.8	0.9
Netherlands	0.9	2.3	0.5	1.4	13.2	0.2	13.0	14.0	1.1	1.0	2.9	2.6
Norway	0.7	0.6	0.1	0.5	–11.9	40.0	–20.6	14.4	3.5	1.1	2.8	4.8
Portugal	0.1	0.5	0	0.3	–9.0	18.9	29.8	–3.6	1.0	0.5	4.2	3.2
Spain	1.3	2.9	0.7	1.5	0.6	–0.6	28.2	2.1	4.1	3.3	7.2	4.3
Sweden	0.7	0.7	0.4	0.5	7.4	11.2	–5.7	5.4	1.8	1.4	2.0	1.9
Switzerland	1.1	0.9	0.6	0.7	12.8	33.1	–9.4	1.6	2.9	2.3	1.9	2.3
Turkey	0	0.3	0	0.2	27.1	13.1	266.0	9.2	0.2	0.5	2.2	2.4
Total of smaller European countries	6.6	11.3	3.3	7.0	7.0	8.1	1.7	7.7	1.7	1.3	2.7	2.5
Australia	0.2	0.3	0.1	0.3	6.4	14.2	–7.4	77.7	0.9	0.6	1.2	1.5
Total of smaller countries[b]	6.8	11.7	3.4	7.3	7.0	8.2	1.4	9.5	1.6	1.2	2.6	2.4
Total OECD[b]	59.6	75.1	37.8	47.2	10.5	7.0	16.3	11.1	3.7	3.6	4.5	4.3
Four major European countries	12.2	15.0	7.3	9.8	12.6	9.4	11.8	17.0	2.0	1.8	2.5	2.4
OECD Europe	18.8	26.3	10.6	16.8	10.6	8.8	8.5	12.9	1.9	1.6	2.6	2.5
EEC	15.8	23.0	9.3	14.4	11.1	7.2	12.4	13.6	1.9	1.7	2.7	2.5
Total OECD *less* the United States[b]	28.6	35.5	15.8	22.7	8.1	9.1	7.8	12.1	2.1	1.8	2.8	2.6

a) Excluding OPEC countries.
b) Excluding New Zealand for which figures are not available.

Table 91

OECD countries' trade with four Asian NIEs

Data based on $ values

	Value in $ billion				Percentage changes				Exports to four Asian NIEs as a percentage of total exports		Imports from four major Asian NIEs as a percentage of total imports	
	Annual average 1985-88		1989 I		Annual rate 1985-88		1988 I to 1989 I		Average 1985-88	1989 I	Average 1985-88	1989 I
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports				
United States	23.4	51.5	18.7	29.5	27.3	17.4	8.6	–0.3	9.1	10.3	13.1	12.7
Japan	35.6	16.6	25.9	13.2	30.0	36.0	12.5	14.3	15.8	19.1	10.9	12.9
Germany	4.7	6.4	3.9	4.2	34.1	36.2	35.8	0.8	1.8	2.3	3.0	3.2
France	2.3	2.9	1.9	2.2	27.6	46.4	18.6	–1.7	1.7	2.2	1.9	2.3
Italy	1.9	1.7	1.6	1.4	31.8	39.6	33.4	7.0	1.8	2.4	1.4	1.8
United Kingdom	3.4	5.8	2.2	4.3	20.0	33.6	3.1	17.6	2.8	3.0	3.9	4.3
Canada	1.9	3.8	1.7	2.7	32.9	19.5	29.0	8.9	1.9	2.9	4.3	4.5
Total of the above countries	73.2	88.8	56.0	57.4	28.9	24.2	13.3	4.6	6.1	7.2	7.1	7.2
Austria	0.2	0.6	0.2	0.5	29.1	46.5	43.0	13.7	0.9	1.3	1.9	2.4
Belgium-Luxembourg	1.0	0.7	0.8	0.5	28.5	41.3	27.6	3.7	1.3	1.6	0.9	1.1
Denmark	0.4	0.4	0.2	0.3	30.1	36.2	–27.7	5.5	1.7	1.7	1.9	2.5
Finland	0.3	0.3	0.2	0.3	33.8	53.7	54.6	14.1	1.4	2.1	1.6	2.3
Greece	0	0.3	0	0.2	39.7	79.9	104.2	11.0	0.4	0.9	2.3	2.9
Iceland	0	0	0	0	147.3	50.9	144.2	–23.0	0.3	1.5	1.6	1.8
Ireland	0.1	0.2	0.1	0.1	54.6	30.4	–7.7	–1.4	0.8	1.0	1.8	1.7
Netherlands	1.2	1.8	0.7	1.3	38.5	38.4	–30.7	–1.6	1.3	1.4	2.1	2.5
Norway	0.3	0.6	0.1	0.4	–9.1	25.1	7.1	36.8	1.5	0.9	2.8	3.5
Portugal	0	0.1	0	0.1	30.2	70.7	8.4	21.3	0.6	0.5	0.8	1.0
Spain	0.3	0.9	0.3	0.8	38.0	75.6	12.0	14.3	1.0	1.3	2.0	2.2
Sweden	0.7	1.0	0.5	0.7	19.3	36.7	22.0	5.6	1.6	1.9	2.5	2.8
Switzerland	1.5	0.9	1.2	0.7	37.3	34.0	11.6	0.7	3.7	4.8	2.0	2.3
Turkey	0.1	0.1	0.1	0.1	179.3	38.6	0.1	18.2	0.8	2.5	1.0	1.5
Total of smaller European countries	6.2	8.0	4.7	5.9	31.8	42.1	4.1	7.1	1.5	1.8	1.8	2.1
Australia	3.6	2.8	2.9	2.2	24.8	18.9	10.0	31.2	13.4	16.1	10.3	10.6
Total of smaller countries[a]	9.7	10.8	7.6	8.1	29.0	35.0	6.2	12.6	2.3	2.7	2.3	2.7
Total OECD[a]	83.0	99.6	63.6	65.5	28.9	25.3	12.4	5.5	5.1	6.0	5.8	6.0
Four major European countries	12.3	16.8	9.6	12.1	28.3	37.3	22.9	6.4	2.0	2.4	2.7	3.0
OECD Europe	18.5	24.8	14.3	18.0	29.5	38.8	16.0	6.6	1.8	2.2	2.3	2.6
EEC	15.4	21.3	11.9	15.4	29.6	39.1	15.5	6.0	1.8	2.1	2.4	2.7
Total OECD *less* the United States[a]	59.6	48.1	44.8	36.0	29.6	34.7	14.0	10.8	4.3	5.1	3.6	4.2

a) Excluding New Zealand for which figures are not available.

Table 92

OECD countries' trade with USSR and Eastern Europe

Data based on $ values

	Value in $ billion				Percentage changes				Exports to USSR and Eastern Europe as a percentage of total exports		Imports from USSR and Eastern Europe as a percentage of total imports	
	Annual average 1985-88		1989 I		Annual rate 1985-88		1988 I to 1989 I		Average 1985-88	1989 I	Average 1985-88	1989 I
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports				
United States	2.8	2.0	3.4	1.1	4.4	3.7	53.9	–7.1	1.1	1.9	0.5	0.5
Japan	3.6	2.6	1.8	1.8	5.3	25.5	–9.0	3.8	1.7	1.3	1.7	1.8
Germany	9.4	8.5	6.1	4.8	15.1	4.2	15.0	11.5	3.6	3.6	4.2	3.6
France	3.0	4.3	1.8	2.5	4.7	7.5	21.1	1.8	2.4	2.1	3.1	2.6
Italy	3.2	4.9	1.9	3.1	11.0	3.7	1.0	18.0	3.1	2.8	4.4	4.0
United Kingdom	1.8	2.5	1.1	1.4	11.8	11.5	4.2	10.4	1.5	1.5	1.7	1.4
Canada	1.1	0.3	0.4	0.2	–7.0	30.7	–31.8	26.0	1.2	0.7	0.3	0.4
Total of the above countries	24.8	25.1	16.6	14.9	9.0	7.5	13.6	8.6	2.1	2.1	2.1	1.9
Austria	2.3	2.2	1.4	1.1	13.7	0.8	11.1	2.4	9.7	8.8	8.0	5.9
Belgium-Luxembourg	1.1	1.7	0.6	0.9	4.0	3.9	2.2	–6.5	1.5	1.2	2.4	1.9
Denmark	0.4	0.7	0.3	0.4	16.0	–3.4	31.7	–1.0	1.9	2.4	3.2	2.8
Finland	3.4	3.1	1.9	1.5	5.5	0.5	3.1	1.5	19.7	16.9	18.4	13.3
Greece	0.3	0.7	0.1	0.3	–10.4	–5.3	85.6	21.6	5.1	4.5	5.6	4.1
Iceland	0.1	0.1	0.1	0	7.5	1.6	30.1	12.7	5.9	8.8	6.6	6.3
Ireland	0.1	0.2	0.1	0.1	11.2	4.7	4.6	17.3	0.6	0.5	1.4	1.1
Netherlands	1.2	2.4	0.8	1.1	17.7	–14.3	8.9	10.7	1.4	1.5	3.0	2.2
Norway	0.2	0.4	0.2	0.3	18.8	7.0	22.8	20.2	1.0	1.1	2.2	2.6
Portugal	0.1	0.1	0.1	0.1	2.9	2.9	41.1	7.5	1.1	0.8	1.0	0.6
Spain	0.6	1.0	0.3	1.0	–10.4	29.9	23.7	27.6	1.9	1.2	2.3	2.7
Sweden	0.9	1.5	0.5	0.9	11.2	4.9	4.9	–0.7	2.2	2.0	4.2	3.5
Switzerland	1.3	0.8	0.8	0.4	24.3	–7.9	–4.3	11.4	3.2	3.1	1.8	1.3
Turkey	0.4	0.7	0.3	0.5	21.8	17.1	17.2	29.7	3.8	5.5	5.8	7.4
Total of smaller European countries	12.3	15.7	7.4	8.6	10.0	0.5	8.2	7.1	3.1	2.9	3.8	3.1
Australia	0.8	0.1	0.7	0.1	5.1	29.2	56.6	58.1	3.2	3.9	0.4	0.5
Total of smaller countries[a]	13.1	15.8	8.1	8.7	9.7	0.6	11.2	7.5	3.1	2.9	3.6	2.9
Total OECD[a]	37.9	40.9	24.7	23.6	9.3	4.7	12.8	8.2	2.4	2.3	2.5	2.1
Four major European countries	17.4	20.3	10.9	11.8	12.1	5.6	12.1	10.8	2.8	2.7	3.4	2.9
OECD Europe	29.7	35.9	18.4	20.4	11.2	3.3	10.5	9.2	3.0	2.8	3.6	3.0
EEC	21.1	27.1	13.2	15.6	10.9	3.7	12.5	10.3	2.5	2.4	3.2	2.7
Total OECD *less* the United States[a]	35.2	38.9	21.3	22.5	9.7	4.8	8.2	9.0	2.6	2.4	3.1	2.6

a) Excluding New Zealand for which figures are not available.

TECHNICAL ANNEX

Sources and methods

The analysis in the *Economic Outlook* and the projections on which it is based are the work of the Country Studies and Economic Prospects, and General Economics Branches of the OECD Department of Economics and Statistics. The following notes describe various technical aspects of the projection methods used, and underlying statistical concepts, sources and methods.

PROJECTION METHODS

While taking into account official and unofficial national macroeconomic projections for Member countries, the OECD *Economic Outlook* projections are based on the OECD's independent assessment of the world economy. A key feature is the combination of individual country, general economic and area analyses, which aim to be internally and externally consistent. Emphasis is therefore placed on the role of international trade and financial linkages, and the overall assessment process depends critically on the consistent interaction of domestic and external factors (these latter acting through international trade and payments and financial markets and involving both OECD countries and the non-OECD regions), so as to achieve a consistent and convergent view of the world economy.

The *Economic Outlook* projections are *specifically conditional* on technical assumptions about exchange rates, energy prices, and the choice of economic policies – fiscal, monetary and structural. The primary considerations involved in the choice of these assumptions are as follows:

- *Exchange rates* against the U.S. dollar are generally *assumed* to remain constant over the projection period, at the level prevailing on a prespecified cut-off date, chosen in the course of the exercise, except for those countries with stated or *de facto* policies.
- Assumptions for the *official price of crude oil* are usually based on an assessment of the world oil market, subject to announced OPEC intentions, as far as they go. Beyond the short term, crude oil prices are typically assumed to be maintained constant in *real* terms, measured in relation to the price of OECD manufactures exports.
- *Fiscal and monetary policy* assumptions for individual countries are generally based upon stated official policies, with public sector expenditure and revenue projections being based upon the most recent budgetary statements.

Specific details of the main policy assumptions for individual countries are discussed in the corresponding Country Note sections of the *Economic Outlook*, whilst those concerning exchange rates and commodity prices are outlined in the corresponding subject chapters. The *Economic Outlook* presents a single assessment, that judged by the OECD to be "most likely" given the specific set of assumptions. Scenarios, indicating the effects of changing one or more of the assumptions, are also presented when they contribute to the illustration of a particular risk or uncertainty.

In the course of OECD's biannual macroeconomic assessment cycles, the OECD's world macroeconomic model, INTERLINK[1], is used extensively as a means of ensuring national and international consistency, though a considerable amount of country-specific expertise and judgement is brought to bear in the construction of the underlying individual country assessments. The *Economic Outlook* assessment "Round" typically begins with a number of model-based simulations which are designed to provide an initial, incremental update on the previous set of projections, taking into account changes in achieved and announced policies and revised technical assumptions (those broadly described above). Together with individual assessments of specific factors affecting each economy, the most recent data and information available from leading economic indicators and survey evidence, these simulations provide a starting point for the assessment of domestic and international developments.

Given this preliminary re-assessment, detailed discussions take place and analyses are carried out, involving both country and subject specialists. As a result, successive adjustments are made to the overall set of domestic and international projections with the international consequences of individual revisions to domestic country projections being carefully monitored and taken into account, in order to ensure consistency. Such a procedure ensures, from the outset, that the estimates of domestic developments, produced by country specialists, and international trade and financial developments, produced by topic specialists, are nationally and internationally coherent. A preliminary version of the *Economic Outlook* projections is presented to and discussed by the OECD Working Group on Short-Term Economic Prospects, where Member country delegates provide their analyses and detailed comment, drawing on national authority evidence and projections.

The OECD's economic projection procedures are therefore conditional and pragmatic, with model-based projections being revised and modified in the light of alternative expert views, new assumptions, and more recent evidence. Within the overall process, the INTERLINK model, however, provides a focal point for information flows and the discussion of specific issues, as well as serving as the Department's ongoing repository for empirical evidence and views on key macroeconomic relationships. Its data system and interfaces to the Department's Analytical Data Base (ADB) facilitate data submission and the historical updating of country statis-

tics, and ensure an efficient co-ordination of information for the production of the *Economic Outlook*. The ADB system is also used extensively in the production of OECD's *Economic Outlook*-related data products[2]. A more detailed account of the role, structure and simulation properties of OECD's INTERLINK model is given in Richardson (1988) and OECD (1988).

In presenting half-yearly demand, output and price projections, all estimates reported in the *Economic Outlook* are seasonally adjusted and shown in terms of percentage changes at annual rates. Further definitional notes relating to reporting conventions, in particular the measurement of semi-annual rates of growth, are given in the final section of this annex.

The domestic economy

Macroeconomic developments reflect a complex and *simultaneous* interaction of many economic variables and relationships. It is therefore virtually impossible fully to describe all of the relationships actually at work. The following paragraphs describe those which are particularly important to OECD projections. Although the specific details of domestic trends differ somewhat between individual OECD economies, the main features involved are broadly as outlined.

Domestic expenditure components

Two broad categories of domestic expenditure are generally distinguished – consumption and investment – which are further subdivided into various private and public sector components. Depending on the country concerned, further disaggregation may also be involved, e.g. into energy and non-energy sectors. The analysis and projection of private consumption typically depend on the evolution of real personal disposable income, with allowance made for the effects of changes in the rate of inflation, monetary and financial conditions, and also leading indicators of consumer confidence and retail sales. Particular attention is given, *inter alia*, to current trends in personal and business sector savings rates and asset holdings. Private investment is, for most countries, subdivided into at least three components – business fixed investment, residential construction and stockbuilding. Business fixed investment is typically assessed in relation to non-financial variables (sales, output and capacity utilisation) and financial variables (cash flow and interest rates) but also gives weight to available business survey information related to investment intentions, output and capacity expectations. Within INTERLINK itself, the demand for capital and labour is modelled jointly in the context of a production function framework, which in turn provides independent measures of productive potential[3]. Projections for residential construction take account of demographic trends, housing stocks, real income and financial conditions, but also draw on cyclical indicators for the construction sector, such as building starts and permits, the availability and cost of mortgage finance and land prices[4]. Projections of stockbuilding are usually made with reference to relevant stock-output and stock-sales ratios, taking account of recent trends, financial factors and specific supply-side influences.

Government non-wage expenditures, divided into non-wage consumption and investment, are treated as being exogenous policy assumptions, specified in either nominal or real terms, according to the varying practices adopted in the budgetary statements of Member countries. In a number of cases an independent assessment is made of expected outturns versus stated policy goals. Government wage expenditures may be set either in terms of nominal targets for the total wage bill or as the product of government employment and associated wage projections.

Methods involved in the analysis of external influences on output and real GNP, i.e. those coming from goods and services trade, are described below in the section concerning foreign trade and the balance of payments.

Employment, wages and prices

Employment and other labour market trends are commonly assessed in relation to changes in the levels of actual and expected output. Important additional elements relate to labour and factor productivity trends, capacity constraints and real factor costs. Unemployment rate projections are given by the combination of employment and labour supply projections, with the latter assessed judgmentally on the basis of demographic trends and participation rate assumptions.

Wage and earnings assessments take into account a number of key factors. Extensive use is made of the pattern of current wage settlement as a leading indicator, with pressure of demand in the labour market, productivity rates and the terms of trade also influencing the overall projection of real wages and compensation per employee. Allowing for these influences, wages are often assumed to adjust fully, or nearly so, to changes in consumer prices within a year for most countries, consistent with Phillips curve relationships in INTERLINK[5]. Combining employment, productivity growth, wage rate and contribution projections provides projections of unit labour costs as an input to the assessment of prices and inflation. Public sector wage projections are generally based on announced policies but may also be assumed to adjust gradually over time in line with private sector wages.

The assessment of domestic prices and inflation trends depends crucially on unit costs, the levels of demand and supply potential – and hence spare capacity – and foreign prices. Changes in domestic and import costs are typically assumed to be reflected in domestic prices within twelve to eighteen months. In making individual price projections, allowance is also made for a number of special factors affecting prices in individual countries – harvest yields, changes in taxes and subsidies and administered price regimes, for example, with respect to the Common Agricultural Policy. The overall set of domestic expenditure deflator in conjunction with goods and services trade prices and corresponding real expenditure components are then combined to give projections of total domestic demand and output deflators. The specific treatment of trade prices is discussed in more detail in the later section concerning the balance of payments.

Sectoral accounts

Appropriation accounts for the household and government sectors are projected for the seven major OECD economies and some smaller countries. Both accounts are constructed by identifying the different sources of income and expenditures, savings and net lending.

Household income consists primarily of the wage compensation of employees, self-employment income, and transfers. Property and other income – essentially dividends and interest – are evaluated in the light of business income and

debt interest flows. The sum of these elements is adjusted for direct taxes and transfers paid to give household disposable income. The latter is then split between household consumption and savings. Household taxes and transfers are projected on the basis of movements in the appropriate nominal bases – weighted functions of the relevant income components – and corresponding marginal tax and transfer rates. There is some variation in the detail of the treatment of transfers as between the larger and smaller economies. Social security receipts are projected on the basis of the unemployment rate, prices and wage compensation levels. Household net lending is obtained by subtracting housing investment from household savings.

For the United States a full disaggregation of revenues and expenditures is made as between State and Local and Federal accounts, with wage and non-wage expenditures also split between defence and non-defence spending. For the other major economies a relatively standardised total general government approach (described below) is adopted, while for some smaller economies there is a less detailed treatment of transfers, subsidies and property income. For a number of countries, specific allowance is also given to revenues and tax receipts from sectors of specific importance, for example, oil and gas.

The current receipts of the government sector are in general defined as the sum of direct taxes on household and business sectors, indirect taxes, social security, and other transfer receipts and interest-related property income. Indirect taxes are projected on the basis of weighted expenditures, combined with corresponding marginal tax elasticities. Business sector taxes are assessed on the basis of projected business income, making due allowance for the lags between accruals and payments. Social security and other transfer receipts are linked directly to the corresponding household sector payments, while property income is in general assumed to grow broadly in line with nominal GNP.

Current disbursements in nominal terms are made up of government current consumption, transfer payments, subsidies and interest payments. For the major economies, interest payments are assessed on the basis of the stocks of outstanding debt, the rate of roll-over in the stock and the relevant interest rates. Government net lending is then derived as current savings, less nominal investment, capital consumption and other miscellaneous capital transactions. The stock of government net financial liabilities is finally obtained as the cumulation of net lending, subject to statistical discrepancies.

Domestic monetary policies

For the major economies, prevailing monetary policies are examined against a range of monetary indicators. Typically, assumptions are made about the choice and stance of policy, taking into account recent policy announcements with respect to the choice of monetary targets, associated target ranges and instruments, by national authorities. Increasingly, this involves a strong interdependent element, given for example the importance of interest rates, exchange rates, output and prices to international transmission mechanisms. Effectively this means that international financial linkages are increasingly important in the overall global assessment, and hence the assumptions for short- and long-term interest rates and/or monetary aggregates for virtually all OECD countries may hinge critically on the assessment of monetary policy in the three largest ones.

Further details of a wider range of statistical and methodological issues are described in the Monetary and Fiscal Policies section of this annex.

Foreign trade

Particular attention is given in the forecasting Round to ensuring the consistency of international trade and price projections, trade representing a principal channel through which developments in one country affect other OECD economies. Six categories of international trade are customarily distinguished: manufactures; energy; food; raw materials; non-factor services; and other services. Various adjustment and reconciliation procedures are involved in linking customs basis foreign trade projections to the national accounts basis projections for individual countries.

The projections for total goods trade are based on a split into the following specific SITC categories:

- food: 0 + 1
- raw materials: 2 + 4
- energy: 3
- manufactures: 5 + 6 + 7 + 8 + 9

Projections for these components are weighted together using weights based on 1987 trade flows. These are approximately comparable to figures published in the OECD's monthly Statistics of Foreign Trade (Series "A"). The paragraphs below summarise how projections for these components are prepared. The structural specifications of equations used in the foreign trade projections are set out, for each country, in the OECD Secretariat's INTERLINK Technical Manual.

a) *Goods: volumes*

i) *Manufactures*

The initial projections of import volume growth for manufactured goods are derived from equations (in logarithm level form) in which the main explanatory variables are activity (demand) and lagged competitive position. The activity variable in the import equations is specified so that a distinction is made for most countries between the short-and long-term response of imports to a change in demand (i.e. demand is split into two components: a moving average, and the ratio of actual demand to this moving average). In addition, for some countries a lagged dependent variable is included in the specification. Export volume projections are based on export market growth, derived as weighted averages of the forecasts for imports of manufactured goods, with an allowance for the effects of competitive position. This is typically represented by relative prices, though in cases of divergent movements between relative prices and relative unit labour costs, *ad hoc* adjustments are sometimes made.

Expenditure elasticities for imports are, in general, estimated in the range of 1.5 to 2.5, while most of the price elasticities (import prices relative to domestic prices) range from –0.4 to –0.9, the response being lagged over two to three years. For export volumes, price elasticities (export prices relative to competitors' prices) are typically taken to be in the range of –1.0 to –2.0, lagged over three years, while market growth elasticities for most countries are close to unity.

ii) *Energy*

International trade in energy is concentrated in oil, and the forecasting effort is focused accordingly. At the interregional level, it is assumed that OPEC is the marginal supplier, with other producers setting prices relative to those of OPEC such that they are always able to sell their full capacity output.

The demand for oil is projected, in collaboration with the International Energy Agency, from relationships which link oil consumption to the real cost of imported oil. Judgmental adjustment is then made to reflect any unusual weather conditions and new developments in energy substitution.

With oil demand determined, net oil imports are obtained by subtracting expected domestic production and adjusting for any expected change in stocks. The movement in oil imports is then added to the projected movements of imports of other forms of energy.

iii) *Food and raw materials*

Import volumes of food are assumed to follow projected movements in real private consumption; import volumes of raw materials are assumed to follow movements in industrial production. While some allowance is made for the effects of large changes in competitiveness, trade volumes of food and raw materials are generally assumed to be relatively insensitive to changes in competitiveness over the projection period. Food and raw material exports are based on, *inter alia*, projected import volumes of other countries, with an allowance for factors affecting supply.

b) *Goods: unit values*

i) *Manufactures*

Projections for unit values of exports of manufactured goods are based initially on movements in unit labour costs, import prices, and competitors' export prices – the first two being subject to lags of up to one year. Some allowance is made for exceptionally high or low rates of capacity utilisation.

Import unit values are derived as weighted averages of foreign costs and domestic prices. The resulting import price projections are then modified to reflect time lags in the translation of exchange rate changes into import prices. In those countries where competitiveness has changed sharply, an allowance is made for price discrimination by foreign suppliers in the first half-year, partly reversed over the next two half-years. The export and import price equations have been estimated to ensure consistency at the world level. (For more details, see "Import and Export Price Equations of Manufactures", *OECD Economics and Statistics Department Working Papers* No. 43, R. Herd.)

ii) *Energy*

The customary technical assumption is that oil prices move in line with announced OPEC decisions and thereafter follow prices of OECD exports of manufactured goods. For some countries, adjustments are made to reflect natural gas contracts and thereby allow for the lag between the movements of natural gas and oil prices.

iii) *Food and raw materials*

In general, food and raw material unit values (in dollars) are derived from projected movements of spot commodity prices. Current OECD estimates suggest that about three-quarters of the change in spot industrial materials prices is passed through into OECD import unit values of raw materials within about six months.

Equations for OECD export unit values for food and raw materials utilise domestic cost pressure variables as well as world spot commodity prices as explanatory variables. In addition, food export unit value equations for EC countries are adjusted for the effects of the Common Agricultural Policy. Import unit values for food and raw materials are trade-weighted averages of partner-country export unit values.

c) *Services*

Projections of non-factor services are based on equations of broadly similar specification to those used for manufactures trade. Volumes of non-factor service debits (some two-thirds of total service flows) depend both on projected movements of import-content-weighted real expenditure, and the price of import of services relative to domestic prices. Non-factor service credits depend on market growth and each country's export prices relative to those of its competitors. A service trade share matrix is used to calculate market growth and competitors' prices. Export prices of services for each country are assumed to move in line with its total expenditure price deflator. Service export prices for non-OECD zones are assumed to move with the average for the OECD area. Import prices are then calculated from export prices using the service trade share matrix. Import elasticities of non-factor services with respect to import-content-weighted expenditure components are around 1.2, with price elasticities of –0.7 to –0.8 lagged over 1½ years. Non-factor service export projections are based on market growth in partner countries, with market growth elasticities around unity and prices elasticities of –0.4 to –0.5 lagged over 1½ years. Projections for investment income are based on equations that take account of external assets and liabilities and interest rates. Movements in external assets and liabilities are linked to capital outflows and current-account balances.

d) *Non-OECD*

Trade volumes and prices of non-OECD area are projected on the basis of six country groupings (see below for detail). Individual projections are made for some important non-OECD countries. Import and export prices for each group reflect world prices weighted according to the commodity structure of trade. Export volumes for each group are projected on the basis largely of OECD demand, with some account taken of demand from other non-OECD groupings and, in some cases, changes in competitiveness. For groups with large external assets such as OPEC, import volumes are in line with assessment of development plans. For other groups, import volumes are projected taking account of export revenues, the level of external financing and import prices.

MONETARY AND FISCAL POLICIES

Monetary aggregates (Table 4)

M1 is the narrowly-defined money supply, i.e. currency plus domestic demand deposits. M2, M2+CD, M3 and M4 are broadly-defined money stocks, which add to M1 domestic

savings deposits and other managed liabilities of banks and other financial institutions; and certificates of deposit (CD) in Japan, France and the United Kingdom. German CBM is central bank money, defined as currency in circulation plus commercial bank required reserves held at the central bank. In France, L signifies "liquidity", i.e. the sum of M3 and a wide range of other liquid assets. Similarly, in the United Kingdom, M5 is the sum of private sector liquid assets and deposits, while M0 is currency in circulation with the public plus bankers' operational balances with the central bank. For Italy, TDC is total domestic credit excluding bank acceptances.

Interest rate developments (Table 5)

Projections are based on the technical assumptions of unchanged policies and exchange rates. Interest rates used are:

Short-term rates: United States: 3-month Treasury bills; Japan: 3-6 month CD; Germany, United Kingdom, Italy: 3-month interbank rates; France: 3-month PIBOR; Canada: 90-day finance company paper.

Long-term rates: United States: 10-year government bonds; Japan: Central government bonds; Germany, United Kingdom: public sector bonds; France: public and semi-public sector bonds; Italy: Treasury bonds; Canada: long-term government bonds.

Cyclical and non-cyclical changes in general government financial balances (Table 36 and Chart E)

Changes in the budget balance can be decomposed into a cyclical and a non-cyclical component. The decomposition is aimed at separating cyclical budget changes resulting from the divergence between actual and trend output (the output gap) from those which are non-cyclical. The latter can be seen as a cause rather than an effect of output fluctuations and may be interpreted as indicative of discretionary policy adjustments. It should be noted, however, that changes in resource revenues – as a result of oil price changes, for example – and in interest payments – as a result of past debt accumulation or changes in interest rates – are neither cyclical nor purely discretionary. Yet these changes are reflected in the evolution of the non-cyclical component of the budget balance (cyclically-adjusted balance).

The cyclically-adjusted balance is derived by calculating the budget which would be obtained if the economy grew at its trend rate of growth. Denoting a cyclically-adjusted variable by an asterisk, the output gap is defined as the percentage deviation of actual real GDP (y_t) from its trend value (y_t^*)

$$g_t = (y_t^* - y_t) / y_t^*$$

Cyclically-adjusted revenues and expenditures are defined as

$$T_t^* = T_t . (1 + g_t . \eta)$$

$$G_t^* = G_t . (1 + g_t . \varepsilon)$$

where T_t are current receipts in year t, G_t is current expenditure (net of interest payments), η and ε are respectively the elasticity of current receipts and expenditure with respect to real output growth.

Changes in the cyclically-adjusted budget balances are reported in Table 36 as a ratio of trend output at current prices. Trend output growth is based on the average growth rate of real GDP/GNP from one cyclical peak to the next. The trend growth rate for the major seven economies averages approximately 3.1 per cent in 1989.

The cyclically-adjusted primary balance is obtained by netting net interest payments from the overall cyclically-adjusted balance. Since interest payments are outside the direct control of budgetary authorities (being determined by interest rates over which budgetary authorities have little control and the public debt level which is predetermined in any given year), the changes in the cyclically-adjusted primary balance – shown in Table 36 and Chart E – represent a better proxy for discretionary policy action than the changes in the overall cyclically-adjusted balance.

For a further discussion of these issues, see *OECD Department of Economics and Statistics Working Papers* No. 78, "Indicators of Fiscal Policy: A Re-Examination" (J.C. Chouraqui, R.P Hagemann and N. Sartor).

LABOUR FORCE DATA

This section outlines the sources and definitions of the data published in the Labour Markets and Inflation chapter. Where different series are available, those chosen are the ones which the OECD Economics and Statistics Department finds most useful for policy analysis and forecasting, usually because they are the most commonly cited, and are frequently published. The data are not always consistent with the national authorities' definitions and those published in the OECD's quarterly and annual publication *Labour Force Statistics* (LFS). Exceptions are noted below.

For most countries the source of these data is a labour force survey of a sample of households in which both components of the unemployment rate (UNR), unemployment levels (UN) and labour force (LF), are measured simultaneously. For the remaining countries, one of the components of the identity LF = UN + ET (employment) is derived from the other two, which are generally estimated from different sources. The term "total" is used with reference to labour force and employment to indicate that all armed forces (conscripts as well as professional military) are included. In some countries (indicated below), employment and labour force include professional military, but exclude conscripts. "Civilian" labour force and employment data exclude all military personnel. Unless otherwise specified, annual data refer to the average of either monthly or quarterly data; semi-annual data shown for the seven largest countries are averages of monthly or quarterly seasonally-adjusted figures.

United States

Unemployment, civilian employment and civilian labour force are from the monthly Current Population Survey of persons aged sixteen and over. The data are seasonally adjusted by the Bureau of Labor Statistics. All layoffs are included in unemployment.

Japan

Unemployment, employment and labour force (including national "self-defence" forces) are from the monthly labour force survey of persons aged fifteen and over. The data are seasonally adjusted by the OECD.

Germany

From 1984 on, annual data on employment and unemployment are drawn from the EC Labour Force Survey, but also include conscripts among the employed. Semi-annual data between any two benchmarks are interpolated on the basis of national series for registered unemployment and the labour force. The same procedure applies to the extrapolation of the series after the most recent benchmark and the data are therefore liable to revision when the subsequent survey becomes available. Employment series prior to 1984 are taken directly from the annual Mikrocensus. An estimate of standardised unemployment prior to 1984 is obtained by extrapolating backwards from the 1984 level of standardised unemployment using the growth rate of the unemployment series in the Mikrocensus. The definition of unemployment in the Mikrocensus is close to the ILO guidelines used in the EC survey. The national unemployment rate refers to the registered unemployed as a percentage of the dependent civilian labour force (i.e. the self-employed are excluded from the denominator), obtained from census and administrative sources.

France

INSEE provides OECD with monthly data on seasonally-adjusted unemployment rates and total labour force levels corresponding to the ILO guidelines. The unemployment rate is based on the results of the annual labour force survey held in March, and converted to a quarterly basis using end-of-month registrations. Unemployment levels are calculated using the relationship UN = UNR*LF/100, and total employment (ET) is then obtained as a residual.

Italy

Employment, unemployment and labour force are from the quarterly labour force survey of persons aged fourteen and over, held in January, April, July and October of each year. The definition of unemployment was revised in 1986 to be more in line with ILO guidelines. Persons with a marginal attachment to the labour force are now excluded. The employment figures from the quarterly labour force survey differ from those in the National Accounts source, *Conti Economici Trimestrali,* ISTAT. The latter are used for derived variables such as labour productivity and labour costs. They have recently been revised. A standard labour unit has been defined which measures the average volume of work carried out by a full-time worker. This revision increased employment by over 1½ million jobs.

United Kingdom

Seasonally-adjusted unemployment, total employment and total labour force (working population) are from the Department of Employment publication, *Employment Gazette.* The unemployment figures refer to claimants at Unemployment Benefit Offices. They exclude students seeking vacation work and those persons temporarily stopped from work. The number of employees is estimated from the census of employment, surveys of employees and the annual labour force survey. Self-employment is derived from the annual labour force survey, the census of agriculture and the census of population; it excludes unpaid family workers. Total employment equals the sum of employees, participants in work-related government training programmes, self-employment and the armed forces. Quarterly data for all series refer to the last month of the quarter. The national unemployment rate refers to unemployed claimants aged eighteen and over as a percentage of the total labour force.

Canada

Unemployment, civilian employment and civilian labour force are from the monthly labour force survey of persons aged fifteen and over. Unemployment includes persons who, while not actively looking for work in the preceding four weeks were available for work, but were on layoff or had a new job to start in four weeks or less. The data are seasonally adjusted by the national authorities.

Australia

Unemployment, total employment and the total labour force are from the monthly household labour force survey of persons aged fifteen and over. Only persons laid-off for less than four weeks (because of bad weather or plant breakdown) are included with the employed; all other layoffs are considered as unemployed or out of the labour force. The national unemployment rate is calculated with reference to the civilian labour force.

Austria

Unemployment, total employment and total labour force are from the quarterly labour force survey (microcensus) of persons aged fifteen and over carried out in March, June, September and December of each year. The figures have been adjusted by the OECD for breaks in the employment series at 1969/70, 1981/82 and 1983/84. The national unemployment rate refers to registered unemployment as a percentage of civilian employees from social insurance statistics plus the armed forces and the registered unemployed.

Belgium

Unemployment refers to end of June registrations, which comprise those unemployed persons entitled to benefits, other unemployed obliged to register and voluntarily registered persons. The mid-year estimate of the total labour force is based on the insured employed, border workers, the self-employed, all armed forces and the unemployed. The national authorities publish two unemployment rates which differ from the above because they relate only to the wholly unemployed registered with the Office National pour l'Emploi (ONEM), and they are expressed as a percentage of *i*) the insured labour force and *ii*) the total labour force.

Denmark

Unemployment refers to the registered unemployed aged 16 to 66 years and includes the partially unemployed converted to full-time equivalents; this is measured by dividing each person's hours of unemployment during the reference period by the number of hours for which that person is insured during the same period. Unemployment and total employment figures, corresponding to national accounts con-

cepts, are compiled from the Danish Central Register of Labour Market Statistics M(CRAM). The CRAM data are provided by the unemployment insurance funds, the public employment offices and the Central Population Register. Total labour force is then derived from the identity LF = ET + UN. The national rate refers to all registered unemployed expressed as a percentage of the CRAM estimate of total labour force. The *Economic Outlook* statistics differ from those published in LFS, which are based on the spring labour force survey.

Finland

Unemployment, civilian employment and civilian labour force are from the monthly labour force survey of persons aged 15 to 74. The labour force concept underlying the national unemployment rate includes the professional military but excludes conscripts. Unemployment figures now exclude persons over the age of 56 receiving a pre-retirement unemployment pension and not actively seeking work. Previously all persons receiving the pension were classified as unemployed. Data published in *Economic Outlook* take account of this revision, which reduced the 1986 unemployment rate by about 1½ percentage points.

Greece

Unemployment, total employment and total labour force are compiled from the annual labour force survey. The figures are completed or revised in line with the latest census results. All data refer to the second quarter of each year.

Iceland

The unemployed are registrations. Civilian employment, expressed in man-years, is compiled from accident insurance statistics. The labour force is derived from the identity LF = ET + UN.

Ireland

Unemployment, total employment and total labour force figures are derived from the annual labour force survey and relate to mid-April of each year. The national unemployment rate refers to the registered unemployed, persons on the "Live Register", as a percentage of the mid-April total labour force.

Luxembourg

Civilian employment includes non-resident persons working in Luxembourg and excludes nationals working over the border. The figures are derived from sickness insurance funds, pension funds and enterprise surveys. Unemployment refers to those registered at the employment agencies and resident in Luxembourg. The labour force is derived from the identity LF = ET + UN.

Netherlands

Unemployment refers to the monthly registered unemployed, excluding part-time unemployed (defined as persons seeking work for less than 20 hours per week), and the unemployed temporarily engaged in State-run unemployment relief programmes. There are breaks in the series at 1983, 1984 and 1989. Up until the end of 1988 the official series was derived solely from registration data provided by the labour offices. Under this procedure, there were 682 000 unemployed in 1988. However, surveys undertaken since late 1986 suggest these data overestimate the unemployment total: persons actually meeting the official definition of unemployment were estimated to number 435 000 in 1988. Since the beginning of 1989 the official series is based on a combination of registration data provided by the labour offices and the regular monthly survey undertaken by the Central Bureau of Statistics. Estimates for 1987 and 1988, in line with the new measurement methods, have been made by the OECD. Total employment, expressed in man-years, is taken from the National Accounts source; an adjustment is made for those who are in part-time or part-year employment to put them on a full-year equivalent basis. The total labour force is then derived from the identity LF = ET + UN. The national unemployment rate refers to registered unemployed seeking work for more than 20 hours per week expressed as a percentage of the dependent labour force including the armed forces. The labour force figures published in LFS are based on the annual labour force survey.

New Zealand

Unemployment, civilian employment and civilian labour force are from the quarterly survey of households which began in late 1985. The level of employment in the household survey is around 15 per cent higher than that estimated by the previous source: the non-agricultural establishment survey, supplemented by Department of Labour estimates of agricultural and other non-establishment workers. The new series for total employment and unemployment are chain-linked with the previous series at 1985. At the time of the introduction of the new household survey, the number of people registered as unemployed was close to the survey-based number of unemployed people.

Norway

Unemployment, employment and labour force are from the quarterly labour force survey of persons aged 16 to 74. The figures include the professional military, but exclude conscripts. The national authorities publish two unemployment rates; one is identical to the rate published in *Economic Outlook* and the second refers to registered unemployed as a percentage of total labour force including conscripts.

Portugal

Unemployment, civilian employment and civilian labour force are derived from the quarterly labour force survey of persons aged twelve and over. There are breaks in the series in 1973/74 and 1982/83. The data shown refer to continental Portugal; the professional army is included, conscripts are excluded. Figures reported in the *Economic Outlook* adopt the narrow definition of unemployment which applies a one-month reference period for job search. The national authorities also publish unemployment rates according to a wider definition which includes those persons who are not actively seeking work during the reference period.

Spain

Unemployment, employment and labour force are from the quarterly labour force survey of persons aged sixteen and over, held in March, June, September and December. The provinces of Ceuta and Melilla and permanent inmates at institutions, notably religious establishments, are excluded from the survey. Professional military are included whereas conscripts are excluded. Conscripts are added to total employment and labour force figures published in LFS and all data are adjusted to include Ceuta and Melilla and permanent inmates at institutions. New definitions were introduced into the Labour Force Survey during the first quarter of 1987; employment and labour force data in the second quarter of 1987 are, respectively, 0.5 and 0.3 percentage points higher than under the previous definitions. For homogeneity, employment and labour force series before 1987 have been adjusted using the Ministry of Finance procedure.

Sweden

Unemployment is from the monthly labour force survey of persons aged 16 to 64 (aged 16 to 74 prior to January 1986). Adjustments have not been made for this break in the series; in 1985 persons aged 65 to 74 were 0.5 per cent of all unemployed. Since January 1987 there has also been a significant revision to the definitions used in the labour force survey to bring them in line with the ILO guidelines. This has resulted in a reduction of the unemployment rate of around half a percentage point. Data for earlier years published in *Economic Outlook* have been revised accordingly. Employment is from the labour force survey. The labour force is derived from the identity LF = ET + UN. Both the numerator and the denominator of the national unemployment rate and the Swedish labour force data published in LFS are based on the results of the labour force survey.

Switzerland

Unemployment refers to the monthly registered unemployed, including the partially unemployed. Civilian employment figures, including permanent military personnel, are established using the census of enterprises, the census of population and the quarterly employment survey of enterprises. The labour force is derived from the identity LF = ET + UN. All data refer to the average of the seasonally-adjusted figures for March, June, September and December. The unemployment rate published by the national authorities refers to the registered unemployed, including the partially unemployed, as a per cent of the civilian labour force based on the 1980 census of population. Unemployment levels published in LFS refer to the average of twelve months.

Turkey

In 1989, the State Planning Organisation revised the labour market statistics from 1978 onwards. The new series on civilian employment, civilian labour force and unemployment are based on the provisional results of the 1988 Household Labour Force and sectoral value-added and productivity statistics. As before, unemployment is derived as a residual, but in the new series estimates for disguised unemployment in agriculture are excluded both from the labour force and employment figures.

COST AND PRICE DATA

Average compensation (Tables 10 and 54)

Average compensation is calculated as wage and non-wage labour costs, as estimated in the national accounts, per employed person.

Capital income shares and rates of return (Tables 52 and 53)

The estimates are derived from *OECD National Accounts* statistics. They refer to income generated from production, and hence exclude inflation gains and losses accruing to enterprises from holdings of tangible and financial assets and liabilities. The difference between value-added and compensation of employees (the gross operating surplus of enterprises) is taken as the measure of return to capital. In estimating the gross operating surplus, a wage component equal to average business-sector compensation has been imputed to self-employed persons after excluding from the latter unpaid family workers. However, for certain countries data on numbers of unpaid family workers are not available either for the whole or part of the period (see notes to the tables) covered. Adjustment to exclude the operating surplus of the housing sector has not been made owing to the paucity of data; however, estimates based on available data suggest that excluding this item might typically reduce capital income shares by around 6 percentage points and the rates of return on capital by around 3 percentage points. Evaluation of the consumption of fixed capital and of the capital stock is based on replacement cost. Current replacement cost is also used to evaluate changes in inventories when deriving the operating surplus. In principle, therefore, the estimates are *inflation-adjusted*. The capital stock estimates cover only assets included in non-residential gross fixed capital formation and hence exclude dwellings, inventories, monetary working capital, land and natural resources. The historical capital stock data are obtained from the supply block of the **OECD INTERLINK** model and, where possible, are based on national sources[6]. For the projection period they have been extrapolated using the perpetual inventory method, which involves accumulating past investment and dropping out assets at the end of their service lives. Value-added is calculated at factor cost, i.e. excluding net indirect taxes.

USE OF NATIONAL STATISTICS

National accounts

The figures shown in the country tables on Demand and Output follow, in general, the *OECD Standardised System*[7] definitions, which need not be summarised here. One important deviation from the *Standardised System* is the line public investment which includes, whenever possible, fixed capital formation by both general government and government-owned and controlled enterprises. The latters' definition and coverage may vary as between countries.

a) *United States*

Official quarterly national accounts, published by the Bureau of Economic Analysis of the U.S. Department of Commerce, are available through the first quarter of 1990. The Appropriation Account for households is on OECD definitions and differs slightly from official U.S. figures. Briefly, OECD disposable income equals U.S. disposable income minus consumer interest payments. OECD estimates of the savings ratio may thus differ by one- or two-tenths of a percentage point from estimates based on the official U.S. definition. Government fixed investment expenditures (including those of government enterprises) are included in "government expenditure" and no allowance is made for depreciation of government fixed capital. The investment figures, therefore, refer to the private sector only.

b) *Japan*

Annual and quarterly national accounts are published by the Economic Planning Agency. Figures for the second quarter of 1989 through to the fourth quarter of 1989 are preliminary estimates published by the Economic Planning Agency.

c) *Germany*

The historical figures for 1989 based on official data published by the Statistisches Bundesamt. Historical seasonally adjusted quarterly components of demand and GNP, available through the fourth quarter of 1989, are estimated by the Deutsche Bundesbank.

d) *France*

Quarterly accounts based on the *Enlarged System of National Accounts* (ESNA) were available only to the third quarter of 1989 along with partial data for the fourth quarter. Industrial production figures refer to the official quarterly index of industrial production and not to the value added in the industrial sector.

e) *Italy*

The definitions used are those of the OECD System of National Accounts. Half-yearly series, in constant prices, up to end-1989 are based on quarterly national accounts (1980 base year) published by the *Istituto Centrale di Statistica* (ISTAT). The Appropriation Account of households for 1988 and 1989 is estimated by the OECD on official national figures.

f) *United Kingdom*

National accounts data up to the fourth quarter of 1989 are taken from *Economic Trends*, CSO. The three official estimates of GDP, output, expenditure and income are averaged to yield a "compromise" GDP estimate.

g) *Canada*

Official quarterly national accounts through the fourth quarter of 1989 are published by Statistics Canada. Over the projection period, the residual error is assumed to remain unchanged from the level of the second half of 1989.

Current statistics

Unless otherwise stated, all the national statistics quoted in the *Economic Outlook* are taken from the *Main Economic Indicators* published monthly by the OECD (MEI). Starting in September 1967, supplements to MEI have been published describing in detail the sources and methods of these statistics. The following notes are therefore confined to some methodological points of special importance for the understanding of the text.

Index of industrial production

The figures shown include, as far as possible, mining, manufacturing and public utilities (electricity, gas and water), but exclude construction. The exact coverage, the weighting system and the methods of calculation vary from country to country but the divergences are less important than in the case of the price and the wage indices[8]. With the exception of certain smaller countries, statistical offices using different methods usually derived from the U.S. Bureau of the Census Method II.

Seasonal adjustment

Some of the series used have been seasonally adjusted by the Department of Economics and Statistics, notably in the area of foreign trade but also in some cases for industrial production, unemployment and consumer prices. The method used is the X-11 variant of the U.S. Bureau of the Census Method as programmed for computer use by the Agency. (Further details may be found in Technical Paper No. 15 of the Bureau of the Census). Where appropriate, series are also corrected for calendar variations.

CALCULATION AND DEFINITION OF SEMI-ANNUAL GROWTH RATES

Although quarterly and higher frequency data are commonly shown in the *Economic Outlook* for some countries and variables, most of the data reported are either annual or semi-annual and are presented in terms of percentage growth rates. The calculation and presentation of growth rate information, particularly that relating to semi-annual series, is sometimes a source of confusion and the following paragraphs therefore provide specific clarification on the measurement principles involved.

Annual growth rates are commonly defined as the percentage change in a variable between two consecutive years. Similarly, semi-annual growth rates can be calculated as the percentage changes between two consecutive half-years. It is often convenient, however, to convert such measures of semi-annual growth into a form which is more readily comparable with annual growth figures, i.e. to express them at *annual rates*. Mathematically, this is done by squaring the semi-annual growth factor (which is obtained by dividing the current value of a variable by its value in the preceding half year) and subtracting unity. In effect, the semi-annual growth rate is *compounded* over two half-years to provide an indication of the annual rate of growth which would result from the continuation of the semi-annual rate of growth over a one year period.

In terms of simple algebra, if a variable has a value of X_t in one half-year and X_{t+1} in the next, the formula for the

semi-annual rate of growth for period t+1, expressed at an *annual rate,* is given by $g(t+1) = [(X_{t+1}/X_t)^2 - 1.0]*100$. For example, recent statistics for the Industrial Production index in the United Kingdom are as follows:

	1986		1987		1988	
	I	II	I	II	I	II
Industrial production (1985 = 100 basis)	99.5	102.3	104.6	108.6	111.6	116.6

Given the above formula, the growth between the first and second halves of 1987 expressed at an *annual rate,* is computed as $[(108.6/104.6)^2 - 1.0]*100$, or 7.8 per cent. Corresponding rates of growth for each of the years and half-years in question are, on a similar basis, as follows:

	1987	1988	1986		1987		1988	
			I	II	I	II	I	II
Industrial production (growth rates)	5.6	7.0	0.4	5.7	4.5	7.8	5.5	9.2

Such a numerical example helps illustrate the usefulness of semi-annual growth rates in highlighting movements in an economic variable during the course of a year. It also demonstrates that annual growth rates for a specific year do not usually correspond to the average of the semi-annual growth rates *during* that year. In the above example, the annual rate of growth for 1988, at 7.0 per cent, is less than the average of the two semi-annual rates of growth experienced during 1988, at 7.4 per cent. This is because year-on-year rates of growth are influenced by the levels of a variable achieved in both halves of the preceding year, whereas the average of the corresponding two semi-annual rates are influenced only by the level achieved in the second half of the preceding year. This feature is known as a "carry over" effect.

There is however a useful rule of thumb which can be used to approximately convert semi-annual rates of growth to corresponding year-on-year growth rates. Known as the "quarter-half-quarter" rule, this approximates the year-on-year growth rate by weighting together the semi-annual growth rates for the second semester of the preceding year and those of the first and second semesters of the year in question, with weights of one quarter, one half and one quarter respectively. Applying this rule to the above example gives annual rates of growth for 1987 and 1988 of 5.6 per cent (i.e. 5.7/4 + 4.5/2 + 7.8/4) and 7.0 per cent (i.e. 7.8/4 + 5.6/2 + 9.2/4), respectively, coinciding exactly with the actual measured rates. In using this rule, it is important to bear in mind that some degree of approximation is involved, particularly where large variations in semi-annual growth rates are concerned.

Other measures of growth rates are, of course, used in commenting and presenting economic statistics. Quarter-on-quarter growth rates are often referred to, which may in turn be expressed at annual rates, by raising the quarterly growth factor to the power four, subtracting unity and multiplying by 100. Analogous measures also exist for monthly rates of growth or inflation, expressed also at annual rates. In some countries, notably the United States, public interest may also focus on growth rates between the final quarters of successive years, commonly referred to as the growth rate *in* the year in question. In others, growth rates measured in relation to the corresponding month, quarter or semester of the previous year are also commonly used.

NOTES

1. Recent descriptions of the scope, structure and properties of OECD's INTERLINK model and the underlying empirical studies are given by Richardson (1988), OECD (1988), and associated *Department of Economics and Statistics Working Papers* (as listed in the selected publications section of the *Economic Outlook*).
2. The data base and projections underlying the *Economic Outlook* are readily available on PC diskette and magnetic tape media in a fully consistent form. For further details see the corresponding OECD Data Sales publicity notice appended to the inside front cover of this publication.
3. The development and form of the INTERLINK supply blocks for the seven major economies are described by Helliwell *et al.* (1986) and, more recently, Jarrett and Torres (1987). The overall approach has recently been extended to all but a few smaller OECD countries, and will be reported in future *Department of Economics and Statistics Working Papers.*
4. Recent OECD evidence on the determinants of housing investment in the seven major OECD economies is reported in Egebo and Lienert (1988).
5. The empirical work underlying the model's most recent private sector wage equations (WR) is summarised by Chan-Lee *et al.* (1987), building on the earlier work of Coe (1985).
6. A description of the methods used is available upon request from the Growth Studies Division of the Department of Economics and Statistics, OECD.
7. United Nations, *A System of National Accounts,* New York, 1968.
8. A quarterly supplement to *Main Economic Indicators* provides an internationally comparable selection of industrial output indices for branches and a number of categories.

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OECD (1988), "OECD INTERLINK System, Reference Manual," January 1988.

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COUNTRY CLASSIFICATION

	OECD
Seven major OECD countries	Canada, France, Germany, Italy, Japan, the United Kingdom and the United States
Other OECD	All other OECD
	NON-OECD
OPEC	Algeria, Bahrain, Ecuador, Gabon, Indonesia, Iraq, Iran, Kuwait, the Libyan Arab Jamahiriya, Nigeria, Oman, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela
Asian Newly-Industrialising Economies (NIEs)	Hong Kong, Korea, Singapore, Taiwan
Non-OPEC developing countries (NODCs)	
Other Asia	Non-OECD Asia and the Middle East, excluding OPEC countries and the Asian Newly-Industrialising Economies
Other Africa	Africa, excluding OPEC countries
Other Latin America	Central and Southern America, excluding Venezuela and Ecuador
Central and eastern European countries	Including Albania, Bulgaria, Czechoslovakia, Germany (Dem. Rep.), Hungary, Poland, Romania, Union of Soviet Socialist Republics.

Detail on the trade, debt, and other main economic characteristics of each of the groups above is given in "Revised groupings for non-OECD countries in OECD's macroeconomic model INTERLINK", *OECD Department of Economics and Statistics Working Papers* No. 64, Paul O'Brien, Laure Meuro and Arthur Camilleri.

Reference Statistics

This annex contains national accounts, prices, unemployment, balance of payments and exchange rates covering, where possible, the last twenty years. They are intended to provide a historical background to the recent economic developments in the OECD area described in the main body of this report. The data in some of the tables have been adjusted to internationally-agreed concepts and definitions in order to make them more comparable as between countries, as well as consistent with historical data shown in other OECD publications, including the *OECD Economic Outlook Historical Statistics.* The figures are therefore not always identical with the corresponding national-definitions data given in the main body of the text, which Member governments, and hence OECD use for forecasting purposes. Regional totals and sub-totals in each table are based on those countries in the table for which data are available. The attention of readers is drawn to the following points.

Tables R1 to R16

Tables R1 to R13 are based on the same national definitions and concepts as shown in the text tables. Annual national accounts data for France are constructed from quarterly data supplied by INSEE as from the first quarter of 1970, and are OECD estimates based on quarterly INSEE data before that date. The definition of GDP used in Tables R15 and R16 conforms to the UN/OECD *System of National Accounts* as published in the OECD's *National Accounts* (Volumes I and II). It should be noted that these GDP data become available some time after those underlying Tables R1 to R11, and R14, and may not incorporate recent revisions.

Table R18

The standardised unemployment rates in this table are based on data which have been adjusted to make them conform as closely as possible with the internationally-agreed guidelines drawn up by the International Labour Organisation. They may differ from unemployment rates as published by individual countries, or as used in the text, because adjustments have been made to the numbers of unemployed, the size of the labour force, or both. Differences may also occur if a national figure refers to a single point of time within a year, whereas the standardised rates are annual averages.

Table R20

The balance-of-payments data in this table are derived from OECD countries' submissions and publications which are based on the concepts and definitions of the IMF *Balance of Payments Manual.* They are published, at irregular intervals, in the OECD publication *Balances of Payments of OECD Countries.*

Readers are referred to the footnotes to the individual tables for a detailed description of the concepts, definitions, coverage and sources of the various series.

Table R 1. **Growth of real GNP/GDP in the OECD area** [a]

Percentage changes from previous period

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States[b]	–0.3	2.8	5.0	5.2	–0.5	–1.3	4.9	4.7	5.3	2.5	–0.2	1.9	–2.5	3.6	6.8	3.4	2.7	3.7	4.4	3.0
Japan[b]	10.8	4.4	8.5	7.9	–1.4	2.7	4.8	5.3	5.2	5.3	4.3	3.7	3.1	3.2	5.1	4.8	2.6	4.6	5.7	4.9
Germany[b]	5.0	3.0	4.2	4.7	0.2	–1.4	5.6	2.7	3.3	4.0	1.5	0.0	–1.0	1.9	3.3	1.9	2.3	1.7	3.6	4.0
France	5.7	4.8	4.4	5.4	3.1	–0.3	4.2	3.2	3.4	3.2	1.6	1.2	2.5	0.7	1.3	1.9	2.3	2.4	3.8	3.7
Italy	5.3	1.6	2.7	7.1	5.4	–2.7	6.6	3.4	3.7	6.0	4.2	1.0	0.3	1.1	3.0	2.6	2.5	3.0	4.2	3.2
United Kingdom	2.3	2.0	3.5	7.2	–1.7	–0.8	2.8	2.3	3.6	2.8	–2.2	–1.3	1.7	3.5	2.1	3.7	3.6	4.7	4.5	2.3
Canada	2.6	5.8	5.7	7.7	4.4	2.6	6.2	3.6	4.6	3.9	1.5	3.7	–3.2	3.2	6.3	4.8	3.1	4.5	5.0	2.9
Total of above countries	3.9	3.3	5.4	6.1	0.2	–0.2	4.9	4.2	4.6	3.6	1.4	1.8	–0.3	2.9	5.0	3.4	2.7	3.6	4.6	3.5
Austria	6.4	5.1	6.2	4.9	3.9	–0.4	4.6	4.5	0.1	4.7	2.9	–0.3	1.1	2.0	1.4	2.5	1.1	1.9	4.2	3.8
Belgium	6.3	3.7	5.4	6.0	4.2	–1.4	5.7	0.6	2.9	2.2	4.1	–0.9	1.5	0.4	2.1	0.9	1.8	2.0	4.3	4.2
Denmark	2.0	2.7	5.3	3.6	–0.9	–0.7	6.5	1.6	1.5	3.5	–0.4	–0.9	3.0	2.5	4.4	4.3	3.6	–0.6	–0.2	1.1
Finland	7.5	2.1	7.6	6.6	3.1	1.1	0.3	0.1	0.5	9.1	5.3	1.6	3.6	3.0	3.1	3.3	2.8	3.3	5.2	5.0
Greece	8.0	7.1	8.9	7.3	–3.6	6.1	6.4	3.4	6.7	3.7	1.8	0.1	0.4	0.4	2.8	3.1	0.8	0.0	3.9	2.9
Iceland	7.6	13.1	5.8	5.8	6.3	0.9	6.1	8.9	7.0	5.5	5.7	4.1	2.0	–3.9	3.8	3.4	7.4	8.7	–0.9	–3.8
Ireland[b]	3.2	3.4	7.2	4.0	4.3	2.1	0.5	7.0	5.5	2.7	2.7	2.6	–0.7	–1.6	2.3	0.8	–1.1	5.6	1.2	4.0
Luxembourg	1.7	2.7	6.6	8.3	4.2	–6.6	2.5	1.6	4.1	2.3	0.8	–0.6	1.1	3.0	6.2	2.9	4.4	2.8	4.3	3.5
Netherlands	5.7	4.2	3.3	4.7	4.0	–0.1	4.8	2.6	2.4	2.1	1.1	–0.7	–1.5	1.3	3.0	2.4	2.7	1.1	3.0	4.3
Norway	2.0	4.6	5.2	4.1	5.2	4.2	6.8	3.6	4.5	5.1	4.2	0.9	0.3	4.6	5.7	5.3	4.2	3.5	0.9	5.0
Portugal	9.1	6.6	8.0	11.2	1.1	–4.3	6.9	5.6	3.4	6.1	4.8	1.3	2.1	–0.2	–1.8	3.0	4.1	5.3	3.9	5.4
Spain	4.1	4.6	8.0	7.7	5.3	0.5	3.3	3.0	1.4	–0.1	1.2	–0.2	1.2	1.8	1.8	2.3	3.3	5.6	5.2	4.9
Sweden	6.7	0.6	2.4	4.2	3.2	2.7	0.4	–1.5	2.0	4.0	1.4	0.0	1.1	1.8	4.0	2.2	2.3	2.9	2.3	2.1
Switzerland	6.4	4.3	3.5	3.2	1.2	–6.7	–0.8	2.4	0.6	2.4	4.4	1.4	–0.9	1.0	1.8	3.7	2.9	2.0	3.0	3.3
Turkey[b]	4.9	9.1	6.6	5.4	7.4	8.0	7.9	3.9	2.9	–0.4	–1.1	4.1	4.5	3.3	5.9	5.1	8.2	7.4	3.7	1.7
Total smaller European countries	5.4	4.1	5.5	5.4	3.4	0.2	3.6	2.3	2.1	2.8	2.3	0.3	0.9	1.7	2.8	2.8	2.9	3.0	3.4	3.7
Australia	5.5	5.0	2.8	6.2	1.9	1.7	3.7	1.0	3.5	3.8	2.4	3.2	–0.3	0.5	7.5	5.3	2.0	4.0	3.6	4.9
New Zealand	3.0	3.6	1.2	9.7	8.3	–3.2	3.3	–1.8	–6.0	1.1	1.2	3.3	1.9	1.6	4.8	6.6	–3.1	0.1	1.7	0.7
Total smaller countries	5.4	4.2	5.1	5.6	3.3	0.3	3.6	2.1	2.1	2.9	2.3	0.6	0.8	1.6	3.3	3.2	2.7	3.0	3.4	3.8
Total OECD	4.1	3.5	5.4	6.0	0.6	–0.2	4.7	3.9	4.3	3.5	1.5	1.7	–0.1	2.7	4.8	3.4	2.7	3.5	4.4	3.6
Four major European countries	4.7	3.0	3.8	5.9	1.7	–1.3	4.9	2.9	3.5	4.0	1.4	0.3	0.8	1.7	2.5	2.4	2.6	2.8	4.0	3.4
OECD Europe	4.9	3.3	4.3	5.8	2.2	–0.8	4.5	2.7	3.0	3.6	1.7	0.3	0.8	1.7	2.6	2.6	2.7	2.8	3.8	3.5
EEC	4.8	3.2	4.3	6.0	2.0	–1.0	4.9	2.8	3.2	3.6	1.5	0.1	0.8	1.6	2.5	2.4	2.6	2.8	3.9	3.5
Total OECD *less* the United States	6.6	3.8	5.6	6.5	1.3	0.4	4.6	3.5	3.7	4.1	2.4	1.5	1.3	2.2	3.6	3.4	2.6	3.5	4.4	3.9

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) GNP.

Table R 2. **Growth of nominal GNP/GDP in the OECD area** [a]

Percentage changes from previous period

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States[b]	5.3	8.6	10.0	12.1	8.3	8.5	11.5	11.7	13.0	11.5	8.9	11.7	3.7	7.6	10.8	6.4	5.4	6.9	7.9	7.2
Japan[b]	17.9	10.1	14.7	21.8	19.1	10.6	12.3	11.5	10.2	8.5	8.2	7.0	5.0	4.0	6.4	6.3	4.4	4.3	6.3	6.5
Germany[b]	13.0	11.3	9.7	11.4	7.3	4.4	9.4	6.5	7.7	8.1	6.4	4.0	3.4	5.2	5.3	4.2	5.5	3.7	5.2	6.5
France	11.7	11.4	11.7	14.4	15.3	12.7	15.9	12.8	13.8	13.7	13.2	12.7	14.6	10.5	8.9	7.8	7.5	5.3	7.0	7.3
Italy	12.5	8.9	9.3	21.2	26.3	13.5	26.1	22.6	18.2	22.2	25.2	19.7	17.5	16.2	14.8	11.8	10.3	9.3	10.5	9.7
United Kingdom	9.8	11.5	11.9	14.8	12.9	26.2	18.2	16.6	15.4	17.7	16.9	10.0	9.5	9.0	6.8	9.5	7.2	9.9	11.3	9.2
Canada	7.3	9.2	11.7	17.3	19.4	12.8	15.4	10.1	10.9	14.3	12.2	14.9	5.2	8.4	9.6	7.5	5.6	9.1	9.3	7.8
Total of above countries	10.3	9.7	11.3	15.3	13.2	10.6	13.4	12.2	12.3	11.9	10.7	10.5	6.3	7.5	9.1	6.9	5.8	6.3	7.6	7.3
Austria	12.2	11.6	14.3	13.3	13.8	6.1	10.5	9.8	5.8	9.0	8.3	6.2	7.3	6.0	6.3	5.6	5.0	4.4	6.3	6.4
Belgium	11.3	9.5	11.8	13.6	17.3	10.6	13.8	8.1	7.4	6.7	8.0	3.9	8.7	6.0	7.6	6.9	5.4	4.0	6.3	8.1
Denmark	10.5	10.5	15.0	14.7	12.0	11.7	16.2	11.2	11.5	11.4	7.8	9.1	13.9	10.4	10.3	8.8	8.4	4.4	4.1	5.1
Finland	11.6	9.9	16.7	21.7	26.2	15.8	12.8	10.3	10.5	16.4	15.4	13.5	12.5	11.8	12.0	8.9	7.5	8.7	12.5	12.2
Greece	12.2	10.5	14.4	28.2	16.5	19.1	22.7	16.8	20.5	23.1	19.7	19.8	25.6	19.6	23.6	21.3	18.7	14.2	18.7	18.2
Iceland	25.5	27.0	25.0	39.6	45.9	43.2	41.1	44.3	56.4	48.5	61.1	57.1	56.9	72.5	32.8	36.1	33.1	31.4	22.7	15.5
Ireland[b]	12.4	14.2	21.4	20.0	10.9	24.9	21.6	21.1	16.7	16.9	18.0	20.6	14.8	9.1	8.8	6.2	6.5	7.8	4.2	8.5
Luxembourg	17.1	1.8	12.8	21.5	21.9	–7.4	15.1	2.8	9.4	8.9	8.8	6.6	12.1	10.0	10.9	6.0	6.2	3.8	6.7	7.0
Netherlands	12.2	12.7	13.0	14.1	13.5	10.1	14.5	9.1	8.0	6.4	6.6	4.8	4.5	3.3	5.0	4.5	2.5	0.6	4.6	5.1
Norway	15.1	11.6	10.4	13.7	16.0	14.6	14.8	12.2	11.2	12.0	19.5	14.9	10.6	11.0	12.5	10.6	2.7	9.7	3.9	6.9
Portugal	11.3	12.0	16.4	21.7	20.2	11.2	24.3	33.4	25.8	26.1	26.6	19.5	23.3	24.5	22.2	25.2	25.4	17.1	15.9	18.9
Spain	11.2	12.9	17.3	20.6	22.5	17.4	20.3	26.9	22.3	16.9	15.6	11.7	15.2	13.7	12.9	11.0	14.6	11.8	11.0	12.1
Sweden	8.4	10.4	10.8	11.8	9.6	16.4	14.3	12.0	12.8	9.9	14.4	9.6	9.5	12.0	11.9	9.0	9.3	7.9	9.1	9.6
Switzerland	11.4	13.6	13.3	11.4	8.5	–0.7	1.3	2.7	4.0	4.5	7.4	8.5	6.1	4.0	4.6	6.9	6.8	4.7	5.5	6.8
Turkey[b]	16.9	28.6	24.0	28.3	37.7	25.5	26.0	29.3	47.9	70.6	101.4	47.7	33.3	32.2	59.0	51.3	41.4	48.6	72.0	72.1
Total smaller European countries	11.7	12.5	14.6	16.5	16.7	12.6	15.0	14.3	13.9	14.2	16.3	11.4	11.9	10.6	12.1	10.8	9.9	8.7	10.7	11.8
Australia	9.8	12.0	11.4	19.0	18.8	19.2	17.9	10.1	11.2	13.9	14.0	13.1	10.7	8.7	14.3	11.7	9.4	11.7	13.0	13.0
New Zealand	12.5	17.6	11.0	21.2	11.7	6.7	22.5	16.2	7.1	18.9	16.1	20.8	15.0	7.8	12.5	20.4	12.6	15.3	10.5	6.7
Total smaller countries	11.6	12.5	14.2	16.9	16.9	13.2	15.4	13.9	13.5	14.2	16.0	11.8	11.8	10.4	12.4	11.0	9.9	9.2	11.0	11.8
Total OECD	10.5	10.1	11.7	15.5	13.7	10.9	13.7	12.5	12.5	12.2	11.4	10.7	7.0	7.9	9.6	7.5	6.4	6.7	8.1	8.0
Four major European countries	11.9	10.9	10.6	15.0	14.6	12.8	16.5	13.6	13.1	14.5	14.3	10.8	10.5	9.8	8.6	7.8	7.4	6.6	8.0	8.0
OECD Europe	11.9	11.4	11.8	15.4	15.2	12.8	16.0	13.8	13.3	14.4	14.9	11.0	10.9	10.0	9.7	8.7	8.2	7.2	8.9	9.1
EEC	11.9	11.0	11.5	15.5	15.1	13.0	16.7	14.3	13.4	14.1	13.9	10.5	10.9	9.8	9.0	8.1	7.9	6.7	8.1	8.2
Total OECD *less* the United States	13.4	10.9	12.7	17.5	16.7	12.3	15.0	13.0	12.2	12.7	12.8	10.1	8.9	8.1	8.9	8.1	7.0	6.6	8.3	8.4

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) GNP.

Table R 3. **Growth of real private consumption expenditure in the OECD area** [a]

Percentage changes from previous period

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	2.4	3.1	5.4	4.2	–0.9	2.3	5.4	4.4	4.1	2.2	–0.2	1.2	1.3	4.6	4.8	4.7	3.9	2.8	3.4	2.7
Japan	7.4	5.7	9.3	9.2	–0.3	4.4	3.5	4.2	5.4	6.5	1.4	1.3	4.1	3.2	2.7	2.7	3.1	4.3	5.1	3.5
Germany	7.6	5.2	4.5	3.1	0.7	3.2	3.7	4.3	3.8	3.6	1.2	–0.5	–1.3	1.7	1.5	1.4	3.4	3.5	2.7	1.7
France	4.7	4.9	4.9	5.3	1.2	2.9	4.9	2.7	3.7	3.0	1.2	2.1	3.5	0.9	1.1	2.4	3.7	3.0	3.2	3.3
Italy	7.3	2.9	3.7	6.9	3.7	0.3	5.2	4.1	3.4	7.3	5.6	1.4	1.3	0.6	2.1	3.1	3.8	4.2	4.1	3.8
United Kingdom	2.9	3.2	6.3	5.0	–1.5	–0.4	0.4	–0.4	5.7	4.4	0.1	0.1	0.9	4.3	1.8	3.7	5.8	6.0	7.0	3.8
Canada	2.0	5.9	7.5	7.5	5.8	4.7	6.5	3.2	3.4	2.9	2.2	2.3	–2.6	3.4	4.6	5.2	4.2	4.9	4.3	4.0
Total of above countries	4.6	4.2	6.1	5.6	0.1	2.7	4.5	3.8	4.4	3.9	0.9	1.1	1.7	3.4	3.3	3.6	3.8	3.6	4.0	3.0
Austria	3.6	6.7	6.1	5.4	3.0	3.2	4.5	5.4	–1.5	4.4	1.5	0.3	1.2	5.0	–0.1	2.4	1.6	3.0	3.0	3.3
Belgium	4.4	4.7	6.2	7.8	2.7	0.6	5.0	2.4	2.5	4.8	1.9	–0.9	1.4	–1.6	1.1	2.0	2.7	2.9	2.4	3.6
Denmark	3.5	–0.8	1.7	4.8	–2.9	3.7	7.9	1.1	0.7	1.4	–3.7	–2.3	1.4	2.6	3.4	5.0	5.7	–1.7	–1.7	–0.5
Finland	7.6	1.7	8.4	5.9	1.8	3.1	0.9	–1.2	2.5	5.5	2.0	1.2	4.7	2.6	2.7	3.2	4.1	5.7	5.0	3.5
Greece	8.8	5.6	7.0	7.6	0.7	5.5	5.3	4.6	5.7	2.6	0.2	2.0	3.9	0.3	1.7	3.9	0.3	0.8	3.3	3.1
Iceland	16.0	17.2	7.3	5.3	10.3	–9.6	5.4	12.9	9.0	2.8	3.4	7.1	5.3	–6.1	3.2	4.5	8.0	16.4	–4.0	–8.0
Ireland	2.9	3.7	5.3	7.5	1.4	–2.8	2.8	6.8	9.0	4.4	0.4	1.7	–7.1	0.9	1.1	3.7	2.5	2.5	3.2	5.0
Luxembourg	6.1	5.8	4.8	5.8	4.9	5.2	3.1	2.6	2.9	3.5	2.7	1.6	0.4	0.3	1.1	2.5	2.4	4.1	1.8	3.4
Netherlands	7.4	3.3	3.5	4.0	3.7	3.3	5.3	4.7	4.3	2.9	–0.1	–2.5	–1.2	0.8	0.8	2.4	3.1	3.0	1.3	3.4
Norway	0.0	4.6	3.0	2.9	3.9	5.1	6.1	6.9	–1.6	3.2	2.3	1.1	1.8	1.5	2.7	9.9	5.6	–1.0	–2.5	–1.9
Portugal	2.6	12.7	4.0	12.0	9.7	–0.9	3.5	0.6	–1.4	0.7	3.8	2.8	1.7	–1.3	–2.7	0.5	4.8	5.4	6.6	3.1
Spain	4.2	5.1	8.3	7.8	5.1	1.8	5.6	1.5	0.9	1.3	0.6	–0.6	0.2	0.3	–0.4	2.4	3.6	5.8	4.6	5.5
Sweden	3.5	–0.1	3.3	2.4	3.5	2.8	4.2	–1.1	–0.7	2.4	–0.9	–0.5	0.7	–2.2	1.7	2.8	5.2	4.6	2.5	0.7
Switzerland	5.4	4.8	5.4	2.8	–0.4	–2.7	1.2	3.0	2.1	1.1	2.6	0.5	0.0	1.7	1.6	1.4	2.8	2.1	2.2	2.0
Turkey	2.2	13.5	6.4	0.2	9.0	7.7	10.1	6.7	–3.9	–3.1	–5.2	0.6	4.2	5.0	6.8	1.3	11.5	6.5	2.7	3.3
Total smaller European countries	4.6	4.3	5.4	5.2	3.1	2.2	4.8	2.8	1.3	2.4	0.5	–0.3	0.9	0.9	1.3	2.9	3.9	3.4	2.4	2.8
Australia	5.2	3.7	4.3	6.6	3.4	3.3	2.8	1.4	3.4	2.6	3.0	4.0	3.0	1.4	3.0	4.4	1.2	2.0	3.4	4.8
New Zealand	5.8	–0.2	5.2	8.8	7.7	–2.8	–1.7	–3.3	–0.1	0.7	–0.5	1.6	0.4	–0.3	5.6	–0.6	3.4	1.3	1.7	1.6
Total smaller countries	4.7	4.2	5.3	5.4	3.2	2.2	4.4	2.5	1.5	2.4	0.7	0.2	1.1	1.0	1.6	3.0	3.6	3.2	2.5	3.0
Total OECD	4.6	4.2	6.0	5.6	0.6	2.6	4.5	3.7	3.9	3.7	0.9	1.0	1.6	3.0	3.1	3.5	3.8	3.5	3.8	3.0
Four major European countries	5.8	4.2	4.8	4.9	1.1	1.8	3.7	2.9	4.1	4.4	2.0	0.7	0.9	1.8	1.6	2.5	4.0	4.0	4.0	3.0
OECD Europe	5.5	4.3	5.0	5.0	1.7	1.9	4.0	2.9	3.2	3.8	1.5	0.4	0.9	1.5	1.5	2.6	4.0	3.8	3.5	2.9
EEC	5.7	4.2	4.9	5.2	1.5	1.8	4.0	2.9	3.7	4.0	1.6	0.4	0.8	1.5	1.4	2.5	3.9	3.9	3.7	3.1
Total OECD *less* the United States	5.9	4.8	6.4	6.4	1.4	2.8	3.9	3.2	3.9	4.5	1.5	0.8	1.7	2.1	2.1	2.8	3.7	3.9	4.0	3.2

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table R 4. **Growth of real public consumption expenditure in the OECD area** [a]

Percentage changes from previous period

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	–3.1	–1.1	0.7	–0.9	1.4	1.3	–0.1	1.5	2.5	0.8	1.9	1.5	1.9	1.1	4.4	7.9	4.2	2.6	0.4	2.7
Japan	7.1	5.2	5.6	5.4	3.1	6.7	4.7	4.4	5.3	4.4	2.8	4.8	1.9	2.9	2.8	1.7	6.2	–0.6	2.2	2.1
Germany	4.4	5.1	4.2	5.0	4.0	3.7	1.5	1.4	3.8	3.4	2.6	1.8	–0.8	0.2	2.4	2.1	2.6	1.5	2.2	–0.8
France	4.1	4.0	3.5	3.4	1.2	4.3	4.1	2.4	5.1	3.0	2.5	3.1	3.7	2.1	1.1	2.3	1.7	2.8	2.9	1.6
Italy	3.3	5.8	5.0	2.6	2.5	2.5	2.3	2.8	3.5	3.0	2.1	2.7	2.9	2.9	2.5	3.5	2.9	3.7	2.8	0.5
United Kingdom	1.7	3.0	4.2	4.3	1.9	5.6	1.2	–1.7	2.3	2.2	1.6	0.3	0.8	2.0	1.0	0.0	1.9	1.1	0.4	0.5
Canada	9.4	4.4	2.7	5.8	5.6	6.5	2.0	4.6	1.7	0.6	2.8	2.5	2.4	1.4	1.2	3.2	1.7	0.7	3.1	2.2
Total of above countries	1.7	2.3	3.0	2.3	2.3	3.6	1.8	2.2	3.5	2.3	2.2	2.4	1.8	1.7	3.1	4.5	3.9	1.7	1.5	1.8
Austria	3.3	3.3	4.1	3.0	5.7	4.0	4.3	3.3	3.3	3.0	2.7	2.2	2.3	2.2	0.2	1.9	1.7	0.4	0.7	1.0
Belgium	3.3	5.9	5.9	5.3	3.8	4.7	4.0	2.7	5.9	2.7	1.6	0.3	–1.6	–0.2	0.1	2.6	1.4	1.3	–0.7	0.4
Denmark	6.9	5.5	5.7	4.0	3.5	2.0	4.5	2.4	6.2	5.9	4.3	2.6	3.1	0.0	–0.4	2.5	0.5	2.5	–0.9	–0.5
Finland	5.4	5.8	7.8	5.6	4.5	6.9	5.7	4.2	4.1	3.8	4.2	4.3	3.5	3.7	2.8	5.2	3.1	4.5	2.5	3.4
Greece	5.9	4.9	5.7	6.8	12.1	11.9	5.1	6.5	3.5	5.8	0.2	6.8	2.3	2.7	3.0	3.2	–0.6	1.8	6.4	5.9
Iceland	8.8	7.6	14.5	8.5	8.5	9.3	5.0	2.2	7.1	5.5	2.1	7.3	6.2	4.7	0.2	6.2	6.8	6.1	4.2	1.0
Ireland	7.5	8.7	7.1	6.8	7.5	6.5	2.7	2.0	8.2	4.6	7.1	0.3	3.2	–0.4	–0.7	1.6	2.4	–3.8	–4.3	–2.6
Luxembourg	4.1	3.0	4.2	3.4	3.8	3.3	2.8	2.9	1.8	2.2	3.1	1.4	1.5	1.9	2.2	2.0	3.3	2.6	3.1	2.5
Netherlands	6.0	4.4	0.8	0.8	2.2	4.1	3.9	3.2	4.0	2.9	0.6	2.0	0.6	1.1	–0.6	1.3	2.4	2.0	0.0	0.4
Norway	6.3	6.0	4.5	5.5	4.0	6.4	7.4	4.9	5.3	3.5	5.4	6.1	3.9	4.6	2.4	3.3	2.2	4.0	0.5	2.5
Portugal	7.0	6.4	8.6	7.8	17.3	6.6	7.0	11.8	4.3	6.0	7.9	5.6	3.8	3.9	0.3	6.4	7.2	4.9	5.3	2.0
Spain	5.2	4.3	5.2	6.4	9.3	5.2	6.9	3.9	5.4	4.2	4.2	1.9	4.9	3.9	2.9	4.6	5.7	9.0	4.0	5.5
Sweden	8.1	2.5	2.6	2.9	2.9	4.5	3.5	3.0	3.2	4.8	2.3	2.3	1.0	0.8	2.3	2.4	1.5	1.3	1.0	1.9
Switzerland	5.0	5.8	3.0	3.1	2.2	0.7	3.0	0.4	2.0	1.6	0.9	2.5	1.1	3.9	1.2	3.3	3.7	1.8	3.2	2.8
Turkey	3.6	6.1	7.3	10.3	9.9	13.5	10.8	3.2	9.9	1.7	8.8	0.9	2.0	1.7	2.1	3.1	6.5	5.0	2.1	1.5
Total smaller European countries	5.5	4.9	4.5	4.5	5.4	4.9	5.1	3.3	4.6	3.6	3.1	2.5	2.2	2.3	1.3	3.1	3.0	3.4	1.7	2.2
Australia	3.4	3.2	3.5	7.2	6.3	8.0	6.0	2.3	5.2	0.9	3.8	3.5	–0.4	5.4	4.8	5.6	3.7	1.4	2.7	4.6
New Zealand	1.9	3.9	4.9	5.3	6.8	5.7	0.7	2.4	4.5	0.9	–0.4	2.0	–2.2	4.3	2.7	0.8	2.1	–0.5	–3.0	–0.4
Total smaller countries	5.2	4.7	4.4	4.8	5.5	5.3	5.1	3.2	4.7	3.2	3.1	2.6	1.8	2.6	1.7	3.3	3.1	3.1	1.7	2.4
Total OECD	2.2	2.7	3.2	2.6	2.8	3.8	2.3	2.4	3.7	2.4	2.4	2.5	1.8	1.8	2.9	4.3	3.8	1.9	1.5	1.9
Four major European countries	3.5	4.5	4.2	3.9	2.5	4.0	2.3	1.3	3.8	3.0	2.3	2.0	1.5	1.6	1.8	2.0	2.3	2.2	2.1	0.4
OECD Europe	4.1	4.6	4.3	4.1	3.4	4.3	3.2	2.0	4.1	3.2	2.5	2.2	1.7	1.8	1.7	2.4	2.5	2.6	2.0	1.0
EEC	3.9	4.6	4.3	4.0	3.3	4.1	2.9	1.8	4.1	3.2	2.4	2.1	1.6	1.7	1.7	2.2	2.5	2.6	2.0	0.8
Total OECD *less* the United States	5.3	4.8	4.6	4.7	3.5	5.2	3.6	2.8	4.3	3.3	2.6	3.0	1.7	2.2	2.1	2.3	3.6	1.5	2.1	1.4

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table R 5. **Growth of total gross fixed capital formation in the OECD area** [a]

Percentage changes from previous period, volume

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	–3.1	7.1	11.0	8.4	–6.8	–11.6	8.9	14.1	9.8	3.7	–7.9	1.1	–9.6	8.2	16.8	5.3	1.0	2.6	5.8	1.6
Japan	16.9	4.5	10.0	12.6	–9.5	–1.2	2.7	4.0	8.5	5.3	0.0	3.1	0.8	–0.3	4.9	5.6	6.0	10.4	12.6	10.9
Germany	9.4	6.1	2.7	–0.3	–9.6	–5.3	3.6	3.6	4.7	7.2	2.8	–4.8	–5.3	3.2	0.8	0.1	3.3	2.2	5.9	7.2
France	4.6	7.3	6.0	8.5	1.3	–6.5	3.3	–1.8	2.1	3.1	2.6	–1.9	–1.4	–3.6	–2.6	3.2	3.3	5.2	8.6	5.6
Italy	3.0	–3.2	1.3	8.8	2.0	–7.3	0.0	1.8	0.6	5.7	8.7	–3.2	–5.2	–0.9	4.5	1.4	1.6	5.8	6.7	5.1
United Kingdom	2.5	1.8	–0.2	6.5	–2.4	–2.0	1.7	–1.8	3.0	2.8	–5.4	–9.6	5.7	4.7	8.5	4.0	2.2	8.6	13.7	4.8
Canada	0.3	7.9	4.3	9.9	6.6	5.8	4.6	2.1	3.1	8.5	10.1	11.8	–11.0	–0.7	2.1	9.5	5.7	11.7	13.2	7.1
Total of above countries	4.2	5.4	7.9	8.4	–5.6	–6.6	5.3	7.3	7.0	4.6	–2.2	0.1	–4.9	3.6	8.9	4.5	2.8	5.4	8.4	5.2
Austria	9.6	13.8	12.1	0.4	4.0	–4.9	3.8	5.1	–4.1	3.5	3.0	–1.4	–8.2	–0.6	2.1	5.0	3.4	2.9	5.8	4.6
Belgium	8.8	–2.0	2.9	7.0	7.4	–1.8	3.8	0.1	2.6	–2.6	4.6	–15.9	–2.0	–4.5	1.8	0.6	4.4	5.2	16.0	14.3
Denmark	2.2	1.9	9.3	3.5	–8.9	–12.4	17.1	–2.4	1.1	–0.4	–12.6	–19.2	7.1	1.9	12.9	12.6	17.1	–7.4	–4.8	–1.4
Finland	12.5	3.8	6.5	8.5	3.5	5.9	–8.8	–3.5	–6.9	3.0	10.4	2.2	4.4	4.1	–2.1	2.9	0.0	5.4	9.8	12.4
Greece	–1.4	14.0	15.4	7.7	–25.6	0.2	6.8	7.8	6.0	8.8	–6.5	–7.5	–1.9	–1.3	–5.7	5.2	–6.2	–8.0	9.3	8.9
Iceland	7.7	45.0	–0.8	20.3	10.0	–8.9	–3.1	12.0	–3.2	0.2	14.2	1.0	–0.5	–12.3	9.2	2.0	–1.2	19.0	–1.3	–10.4
Ireland	0.3	8.3	5.6	18.1	–8.1	–3.7	10.1	4.8	18.3	14.5	–3.7	7.3	–3.3	–9.0	–1.4	–8.3	–2.0	–1.9	–1.7	10.4
Luxembourg	7.5	10.7	7.0	11.8	–7.0	–7.4	–4.2	–0.1	1.1	3.8	12.7	–7.4	–0.5	–11.5	0.5	–6.1	28.7	6.5	3.2	2.9
Netherlands	7.5	1.5	–2.3	4.2	–4.0	–4.4	–2.7	10.0	2.4	–1.7	–0.9	–10.5	–3.9	2.2	5.4	6.6	7.8	0.6	9.9	4.6
Norway	14.9	18.7	–4.1	13.6	5.1	11.9	10.1	3.6	–11.2	–5.0	–1.5	17.9	–11.0	5.8	10.9	–13.9	23.9	0.3	3.0	–4.3
Portugal	11.5	9.8	13.5	9.5	–7.0	–11.3	0.8	12.0	7.1	–2.2	8.6	5.7	1.7	–6.9	–17.0	–3.4	10.9	15.1	15.0	7.5
Spain	3.0	–3.0	14.2	13.0	6.2	–4.5	–0.8	–0.9	–2.7	–4.4	0.7	–3.3	0.5	–2.5	–5.8	4.1	10.0	14.5	14.3	13.6
Sweden	3.3	–0.6	4.2	2.7	–3.0	3.1	1.9	–2.9	–6.8	4.5	3.5	–5.8	–0.3	1.9	6.0	7.3	0.7	7.6	6.4	9.5
Switzerland	8.5	10.0	5.2	3.2	–4.6	–13.2	–10.2	1.4	5.6	5.1	9.8	2.7	–2.6	4.1	4.1	5.3	7.9	7.4	6.9	5.2
Turkey	13.5	–4.9	14.8	13.2	10.7	24.7	17.7	3.9	–10.0	–3.6	–10.0	1.7	3.5	3.0	0.5	16.7	11.0	5.6	–1.4	–2.8
Total smaller European countries	6.9	3.7	6.8	7.2	0.1	–2.2	1.5	2.1	–1.0	0.2	1.4	–4.0	–1.4	0.4	1.8	4.3	7.5	5.3	8.3	7.2
Australia	..	7.0	–1.5	4.9	–3.0	–0.8	4.3	–0.9	3.1	3.8	5.0	9.5	–2.3	–8.5	8.9	10.4	–1.8	3.5	9.6	9.4
New Zealand	10.9	6.3	14.5	13.6	10.0	–6.7	–3.9	–10.5	–7.3	–6.8	0.9	13.3	15.7	–1.0	8.8	2.6	–4.2	2.9	0.5	7.2
Total smaller countries	6.0	4.5	6.0	6.9	0.0	–2.2	1.7	1.5	–0.7	0.5	1.8	–2.2	–1.1	–0.6	2.7	5.0	6.1	5.1	8.3	7.5
Total OECD	4.5	5.3	7.6	8.2	–4.8	–6.0	4.8	6.5	5.9	4.0	–1.6	–0.3	–4.4	3.0	8.1	4.6	3.3	5.4	8.4	5.6
Four major European countries	5.4	3.5	2.7	5.3	–2.8	–5.4	2.4	0.7	2.8	5.0	2.4	–4.6	–2.1	0.8	2.2	2.0	2.7	5.0	8.3	5.9
OECD Europe	5.9	3.6	3.9	5.9	–1.9	–4.4	2.1	1.2	1.6	3.5	2.1	–4.4	–1.8	0.7	2.1	2.7	4.2	5.1	8.3	6.3
EEC	5.3	3.0	3.6	5.9	–2.4	–5.3	2.4	1.2	2.5	3.7	1.8	–5.4	–1.7	0.4	1.8	2.5	3.8	5.1	8.7	6.5
Total OECD *less* the United States	8.7	4.2	5.7	8.1	–3.7	–2.9	2.4	2.2	3.7	4.2	1.9	–1.0	–1.5	0.1	3.1	4.2	4.5	7.0	9.8	7.8

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table R 6. **Growth of gross private non-residential fixed capital formation in the OECD area**[a]

Percentage changes from previous period, volume

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	–2.1	–2.1	7.2	14.5	0.2	–11.5	3.3	11.5	11.8	7.5	–2.6	4.2	–7.2	–1.5	17.7	6.7	–3.3	3.9	8.4	3.3
Japan	19.8	–2.2	2.6	14.8	–5.3	–5.5	–0.3	1.2	5.5	11.4	7.8	5.4	2.5	2.7	11.5	12.6	5.9	8.2	15.5	17.8
Germany	14.8	5.6	–1.3	–1.1	–11.3	–2.8	5.8	6.4	6.1	8.6	3.4	–3.5	–4.4	4.9	0.8	5.5	4.3	4.2	7.3	9.6
France	5.4	8.5	5.6	8.4	–1.5	–8.9	5.6	–0.1	1.0	2.6	4.2	–2.5	0.0	–4.1	–2.1	4.4	5.0	6.9	10.7	7.0
Italy	6.0	–5.9	2.8	18.0	0.7	–11.8	5.7	3.6	2.3	7.6	9.5	–7.9	–8.0	–4.7	7.5	3.2	3.2	9.8	10.9	6.9
United Kingdom	6.8	–0.9	2.3	8.7	–1.7	–3.8	3.4	7.2	9.7	3.6	–4.1	–6.0	8.5	–1.1	14.5	13.3	0.7	14.5	19.6	6.4
Canada	5.2	3.6	2.4	13.0	8.1	10.2	0.8	3.2	4.2	14.9	15.7	13.3	–11.6	–6.3	1.9	9.0	4.1	11.1	18.9	8.2
Total of above countries	6.6	0.1	4.2	12.0	–2.2	–7.5	2.8	6.5	7.8	8.1	2.4	2.0	–3.4	–0.5	11.4	7.9	1.2	6.5	11.3	8.1
Austria	13.7	14.7	16.1	1.3	5.2	–9.2	5.4	8.3	–4.6	4.7	4.7	–2.7	–10.2	–0.9	4.1	8.6	3.3	5.4	7.2	6.0
Belgium	9.2	5.0	0.7	7.8	8.5	–4.4	–3.9	–1.3	3.1	2.6	8.7	–4.2	1.5	–5.8	6.6	2.5	7.0	6.2	16.6	14.9
Denmark	4.0	4.1	–1.2	10.7	2.5	–14.1	21.6	0.8	1.3	–2.0	–9.6	–16.5	19.9	2.7	12.1	18.9	18.8	–9.3	–5.6	0.5
Finland	18.0	5.9	1.3	11.7	3.5	9.0	–10.0	–8.2	–12.8	6.0	14.7	4.5	2.8	6.3	–1.8	5.7	2.9	6.6	9.9	12.4
Greece	3.6	14.8	7.8	15.0	–11.7	–13.6	7.2	5.9	5.7	14.1	1.0	–4.2	0.2	–8.4	–6.6	7.2	–11.4	–8.0	12.8	10.5
Iceland	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	0.5	6.2	1.6	19.3	–19.3	1.5	24.5	2.5	21.7	16.1	–4.7	11.4	–4.5	–10.4	1.2	–13.1	–1.5	2.8	3.8	15.2
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	10.9	–2.0	–6.1	11.2	0.0	–6.3	–4.5	14.1	5.1	1.2	–4.7	–12.6	–2.0	5.6	5.3	13.0	11.8	0.9	10.0	6.7
Norway	21.8	21.4	–10.6	20.6	7.5	13.3	12.9	3.5	–18.3	–6.4	–1.9	27.9	–15.8	7.4	15.8	–21.6	32.5	–2.2	4.3	–1.0
Portugal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Spain	10.0	–6.8	19.8	16.0	9.3	–5.1	0.7	–3.2	1.6	–0.9	1.5	–6.4	–4.3	0.0	–8.7	0.4	14.1	20.3	14.1	13.9
Sweden	6.8	2.6	6.5	9.2	0.3	5.6	7.4	–5.8	–16.5	7.2	8.3	–6.8	1.5	3.8	7.6	12.3	2.5	7.0	5.9	11.4
Switzerland	7.3	12.9	–1.3	5.3	1.9	–7.0	–15.5	4.3	7.2	4.1	11.4	2.9	–1.3	3.7	4.2	9.0	12.8	10.4	9.4	5.9
Turkey	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total smaller European countries	10.4	5.0	4.6	9.8	3.6	–3.6	0.9	1.8	–1.1	2.6	3.2	–3.5	–1.2	1.6	2.9	6.0	10.0	6.7	9.3	9.1
Australia	6.6	8.7	–6.8	2.3	0.3	–2.9	0.7	1.4	9.5	3.9	5.0	16.4	2.4	–9.4	4.7	13.4	–1.6	5.8	9.1	11.7
New Zealand	17.1	4.3	8.3	15.6	5.9	–18.6	4.5	–11.7	–5.7	0.5	11.2	13.7	13.7	–0.7	17.7	3.1	–9.0	9.6	–0.6	9.4
Total smaller countries	10.1	5.4	3.3	9.1	3.3	–3.9	0.9	1.5	0.1	2.7	3.6	–0.8	–0.5	0.3	3.4	6.8	8.2	6.7	9.0	9.4
Total OECD	7.0	0.8	4.1	11.6	–1.5	–7.0	2.6	5.8	6.7	7.4	2.5	1.6	–3.0	–0.4	10.3	7.9	2.1	6.5	11.0	8.2
Four major European countries	9.0	4.2	1.6	6.7	–4.4	–5.7	4.6	4.1	4.5	5.8	3.5	–4.7	–1.5	–0.6	4.0	6.4	3.5	8.2	11.4	7.4
OECD Europe	9.4	4.4	2.5	7.6	–2.0	–5.1	3.5	3.4	2.9	4.9	3.4	–4.4	–1.4	0.0	3.7	6.3	5.4	7.7	10.8	7.9
EEC	9.0	3.6	2.4	7.5	–2.8	–5.9	4.2	3.9	4.4	5.0	2.7	–5.4	–1.1	–0.5	3.4	6.4	4.9	7.9	11.3	8.0
Total OECD *less* the United States	12.3	2.5	2.3	10.0	–2.4	–4.4	2.2	2.6	3.9	7.3	5.5	0.1	–0.6	0.3	6.0	8.5	5.2	8.0	12.5	11.0

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table R 7. **Growth of gross private residential fixed capital formation in the OECD area**[a]

Percentage changes from previous period, volume

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	–5.3	29.3	17.9	–1.9	–20.3	–11.8	22.6	19.4	5.9	–4.0	–19.8	–7.6	–16.9	42.0	14.5	2.1	12.2	–0.4	–0.3	–2.9
Japan	13.0	4.8	17.9	14.9	–12.9	1.3	8.5	1.0	6.1	–1.5	–9.5	–2.5	–0.7	–6.2	–2.0	2.4	8.4	22.4	11.9	2.9
Germany	–0.9	10.6	12.5	1.1	–14.9	–10.6	4.6	3.5	3.3	7.3	2.6	–4.6	–4.8	5.5	2.0	–10.0	–1.2	–1.4	4.8	5.2
France	3.4	8.2	8.8	10.2	5.2	–8.7	–0.2	–1.2	6.2	4.0	–0.3	–3.1	–6.3	–2.6	–4.4	–2.1	0.3	3.3	4.6	1.8
Italy	–7.4	–1.0	–2.5	–1.1	1.3	–4.1	–8.0	0.0	–0.3	2.9	4.7	–0.1	–4.3	4.1	–0.6	–3.5	–1.6	–2.5	–1.3	1.0
United Kingdom	–8.4	21.6	9.2	–3.1	–12.6	–1.1	1.2	–0.8	6.7	9.0	–5.5	–10.8	7.1	6.6	4.4	–4.2	10.7	6.5	10.3	–6.2
Canada	–8.9	16.8	9.2	7.3	3.4	–0.9	18.0	1.2	1.1	–1.0	–5.4	6.6	–16.3	17.0	0.5	9.8	13.3	16.4	4.6	4.1
Total of above countries	–0.6	16.3	14.5	3.8	–13.0	–7.3	12.4	8.8	5.1	–0.2	–10.4	–4.9	–8.8	18.0	5.8	0.0	8.0	5.8	4.1	–0.1
Austria	3.0	11.3	9.7	2.7	–2.6	–1.5	7.6	1.0	–4.9	3.7	4.8	2.0	–1.8	–1.7	–1.0	–1.5	2.3	1.9	7.8	3.7
Belgium	8.3	–21.3	5.2	25.3	14.4	–3.5	15.8	1.8	6.1	–13.1	–1.2	–41.6	–5.8	–1.6	–0.3	4.6	4.7	7.6	22.3	22.0
Denmark	–2.9	–1.5	31.9	3.4	–25.0	–14.5	19.9	–9.5	0.9	–0.8	–16.8	–25.7	–8.5	11.5	20.3	–2.1	21.3	–8.6	–10.0	–5.0
Finland	16.4	0.9	13.4	9.0	5.8	–1.3	–8.0	5.0	1.3	–1.5	4.7	–2.5	5.9	–0.3	–2.7	–3.0	–8.3	0.7	16.6	20.0
Greece	–14.9	18.0	27.7	3.2	–48.1	28.7	7.0	21.1	14.0	4.7	–13.8	–22.7	–5.8	4.6	–19.7	–0.5	14.6	3.4	9.7	7.0
Iceland	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	0.3	19.7	28.4	13.4	10.5	–13.5	1.4	7.6	16.0	13.7	–13.5	1.0	–1.3	–4.9	–2.3	–3.1	3.7	–0.9	–8.0	4.0
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	4.9	5.9	9.8	1.3	–12.5	–8.1	–1.2	16.7	1.4	–5.0	4.7	–9.6	–5.6	–0.4	4.4	–0.7	4.1	2.0	12.9	1.3
Norway	5.2	13.0	9.5	1.1	–0.3	7.9	2.5	2.9	9.1	2.4	–2.3	1.1	8.0	0.8	–1.4	12.5	3.1	4.0	–4.9	–19.6
Portugal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Spain	–7.4	–4.3	11.5	12.3	3.0	–7.3	–1.0	–2.0	–6.0	–7.6	–2.0	–1.7	–2.9	–6.4	–6.3	–1.5	2.0	6.6	16.2	9.9
Sweden	–4.7	–0.5	2.1	–3.2	–9.1	–1.2	–8.6	–2.4	14.1	1.8	–6.0	–4.7	–1.7	–1.2	7.4	0.6	–3.4	13.2	7.1	8.0
Switzerland	6.2	6.1	16.6	4.4	–14.7	–31.3	–13.2	7.6	12.8	12.1	17.4	2.5	–6.1	6.2	7.2	3.3	1.5	4.4	3.6	5.0
Turkey	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total smaller European countries	–0.6	1.6	13.0	7.4	–5.5	–7.0	0.6	3.6	3.7	–1.2	0.2	–8.4	–3.2	–0.1	1.5	0.3	3.6	4.3	9.4	6.2
Australia	4.8	4.0	10.0	13.3	–16.5	–6.4	27.1	–4.3	–4.1	9.3	12.0	2.7	–13.1	–10.8	20.6	2.9	–7.6	1.3	23.9	6.1
New Zealand	–2.5	0.3	19.2	27.5	13.0	–14.5	–3.4	–18.4	–20.8	–4.7	–3.2	7.3	13.8	–1.6	15.1	1.3	–8.6	–2.7	5.4	7.4
Total smaller countries	0.0	1.9	12.8	8.5	–6.4	–7.1	3.6	2.2	2.3	–0.1	1.5	–6.8	–4.0	–1.4	4.0	0.6	2.0	3.8	11.0	6.2
Total OECD	–0.5	14.4	14.3	4.4	–12.1	–7.3	11.2	7.8	4.8	–0.2	–8.8	–5.2	–8.2	15.4	5.6	0.1	7.0	5.5	5.0	0.8
Four major European countries	–2.7	7.3	8.3	3.1	–5.4	–8.3	0.9	1.2	3.9	5.8	0.7	–4.4	–2.7	3.3	0.3	–5.4	1.5	1.1	4.5	1.1
OECD Europe	–2.1	5.6	9.7	4.4	–5.5	–7.9	0.8	1.7	4.1	3.8	0.6	–5.6	–3.0	2.4	0.8	–3.8	1.7	2.1	5.9	2.6
EEC	–3.0	5.6	9.6	4.7	–5.4	–7.9	1.7	1.6	3.6	3.7	0.0	–6.4	–3.3	2.6	0.5	–4.5	2.0	1.6	5.9	2.4
Total OECD *less* the United States	2.3	5.8	12.2	8.0	–7.4	–4.8	4.7	1.2	4.2	2.0	–2.5	–3.8	–3.2	0.2	0.5	–1.0	4.0	8.9	8.1	2.9

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table R 8. **Growth of real total domestic demand in the OECD area** [a]

Percentage changes from previous period

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	–0.5	3.2	5.3	4.4	–1.7	–1.9	6.0	5.5	4.9	1.5	–1.8	2.2	–1.9	5.1	8.7	3.8	3.3	3.2	3.3	2.4
Japan	11.7	3.5	9.0	10.3	–2.4	0.7	3.7	4.3	6.0	6.5	0.8	2.1	2.8	1.8	3.8	3.9	4.1	5.4	7.6	5.9
Germany	6.9	3.8	4.0	3.3	–2.2	0.2	5.7	2.7	3.6	5.5	1.1	–2.7	–2.0	2.3	2.0	0.8	3.5	2.9	3.7	2.8
France	4.6	4.4	4.8	6.3	1.9	–2.0	6.1	1.8	2.8	3.8	1.6	–0.1	3.5	–0.7	0.4	2.5	4.1	3.6	4.0	3.2
Italy	7.3	0.9	3.1	8.2	4.4	–5.7	7.4	1.7	2.8	6.7	6.8	–1.4	0.4	0.2	3.9	2.8	2.8	4.7	4.7	3.3
United Kingdom	2.3	2.4	4.4	7.6	–2.3	–1.6	2.6	–0.3	4.2	3.7	–2.8	–1.6	2.4	4.7	2.6	2.8	4.4	5.5	7.6	3.2
Canada	2.1	6.0	6.3	8.1	7.1	3.3	5.7	2.8	2.5	5.1	1.9	4.7	–6.6	4.1	5.3	5.3	4.2	4.9	5.8	5.5
Total of above countries	4.2	3.3	5.8	6.4	–0.9	–1.2	5.3	3.9	4.6	3.9	0.0	1.1	–0.2	3.2	5.4	3.3	3.7	4.0	4.8	3.5
Austria	6.3	5.1	6.8	6.0	3.0	–1.1	6.5	5.1	–2.0	4.9	3.3	–2.2	–1.1	2.8	2.7	2.2	1.8	2.8	4.7	3.3
Belgium	5.1	3.3	4.7	8.7	4.7	–2.3	5.6	2.5	3.1	3.7	2.1	–4.6	0.7	–2.5	2.2	0.6	3.1	3.6	4.3	5.0
Denmark	3.4	0.8	4.0	5.4	–3.1	–1.7	10.1	0.4	1.1	2.7	–4.3	–4.1	3.5	1.4	5.1	5.4	6.1	–3.0	–2.2	0.1
Finland	11.3	1.6	4.5	7.1	7.5	2.1	–4.3	–0.9	–0.3	9.2	5.5	–0.4	4.3	2.3	2.0	2.9	2.4	5.7	6.5	6.4
Greece	9.1	5.7	8.0	12.8	–5.3	4.6	4.6	4.1	5.9	4.7	–0.9	–0.9	1.7	0.4	0.7	4.8	–1.7	–0.8	4.7	4.6
Iceland	10.6	23.3	2.2	9.6	11.2	–4.9	0.8	12.4	2.9	4.0	5.8	6.1	5.1	–8.8	6.1	3.0	5.1	15.9	–0.7	–8.0
Ireland	2.8	4.2	7.3	9.2	2.0	–5.4	5.4	7.5	9.5	7.1	–1.8	2.8	–2.6	–2.2	1.1	0.4	1.3	–0.4	0.2	4.9
Luxembourg	11.8	6.1	4.5	5.4	–0.3	0.4	2.4	–0.8	6.7	0.0	6.4	0.5	1.0	–0.8	2.3	0.3	4.5	5.2	2.7	3.5
Netherlands	7.1	2.5	1.1	4.2	2.2	–0.5	5.0	4.8	3.9	1.7	–0.2	–4.6	–0.9	1.5	1.6	3.1	2.9	2.2	2.4	3.6
Norway	7.5	6.8	–1.0	6.5	7.1	5.9	7.4	3.5	–5.6	3.9	4.9	0.9	1.9	1.3	6.0	4.7	8.0	–1.0	–3.2	–2.2
Portugal	8.3	9.2	7.3	12.5	5.1	–7.4	5.6	6.5	1.4	4.2	5.5	2.7	1.8	–4.8	–5.7	1.2	6.9	9.3	6.5	4.1
Spain	3.2	3.0	9.5	8.7	6.5	0.4	4.1	0.5	–0.2	0.8	1.4	–2.3	1.1	–0.1	–0.7	2.9	6.1	8.6	7.1	8.0
Sweden	7.3	–1.5	1.9	2.5	4.7	4.2	2.0	–3.0	–1.9	5.7	1.7	–2.4	0.4	–1.1	3.4	4.3	2.8	4.0	3.2	3.4
Switzerland	8.3	4.9	3.8	2.9	0.6	–9.4	0.0	2.2	3.1	4.1	5.2	–0.8	–0.9	2.3	2.2	2.5	5.6	3.6	3.2	3.2
Turkey	6.8	8.3	8.0	2.2	11.9	11.4	11.6	4.5	–5.4	–2.2	–1.2	1.6	2.8	4.7	5.2	4.4	11.4	6.0	0.6	3.1
Total smaller European countries	6.3	3.4	4.8	6.1	3.9	–0.2	4.3	2.1	0.7	3.3	1.8	–2.0	0.8	0.6	2.0	3.1	4.5	3.9	3.5	4.1
Australia	..	3.2	0.3	8.7	5.2	–0.6	5.3	0.6	3.6	3.3	2.9	5.5	0.3	–0.9	6.5	5.4	0.2	2.4	5.5	6.4
New Zealand	5.1	2.7	4.4	12.5	15.5	–11.0	–1.0	–1.3	–7.6	4.4	–1.1	3.7	4.6	–2.8	8.6	2.0	–2.0	3.6	–0.2	5.7
Total smaller countries	5.9	3.4	4.4	6.5	4.2	–0.6	4.3	1.9	0.8	3.4	1.9	–1.1	0.8	0.4	2.7	3.3	3.9	3.7	3.6	4.4
Total OECD	4.5	3.3	5.6	6.4	–0.2	–1.1	5.2	3.6	4.0	3.8	0.3	0.8	0.0	2.8	5.0	3.4	3.7	4.0	4.6	3.6
Four major European countries	5.5	3.0	4.1	6.0	0.3	–2.0	5.6	1.7	3.3	5.0	1.7	–1.5	0.8	1.6	2.1	2.1	3.7	4.0	4.8	3.1
OECD Europe	5.8	3.1	4.3	6.0	1.4	–1.4	5.2	1.8	2.5	4.5	1.7	–1.7	0.8	1.3	2.1	2.4	3.9	4.0	4.4	3.4
EEC	5.4	3.1	4.4	6.3	0.8	–1.8	5.5	1.8	3.1	4.5	1.4	–1.8	0.8	1.2	1.9	2.2	3.8	4.0	4.6	3.5
Total OECD *less* the United States	7.2	3.4	5.7	7.6	0.7	–0.6	4.7	2.6	3.5	5.1	1.5	0.0	1.0	1.5	2.9	3.1	3.8	4.4	5.4	4.3

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table R 9. **Growth of real exports of goods and services in the OECD area** [a]

Percentage changes from previous period

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	8.1	0.5	8.9	24.1	11.1	–3.5	5.7	2.6	11.0	14.1	9.1	0.9	–7.8	–3.8	6.8	–1.2	8.2	13.5	17.6	11.2
Japan	17.9	16.4	5.5	7.1	23.2	0.7	15.1	10.7	–0.7	6.2	17.7	15.6	3.6	4.2	17.5	5.6	–5.2	3.9	8.6	15.4
Germany	6.4	6.5	6.6	10.1	12.1	–6.7	9.9	3.3	4.1	4.5	5.3	8.2	3.2	–0.5	9.0	6.8	0.0	0.8	5.8	10.4
France	16.3	9.2	12.0	10.8	8.8	–1.7	8.2	7.4	5.9	7.5	2.7	3.7	–1.7	3.7	7.0	1.9	–1.1	2.7	8.3	11.0
Italy	6.0	7.2	9.3	4.1	7.0	1.6	10.5	9.9	9.0	8.5	–8.7	7.6	–1.1	2.4	7.3	3.9	3.8	3.3	4.8	10.1
United Kingdom	5.3	6.9	1.1	11.9	7.3	–2.8	9.1	6.9	1.9	3.8	0.0	–0.7	0.9	2.2	6.5	5.9	4.1	5.1	0.7	4.1
Canada	8.7	5.2	7.8	10.6	–2.0	–6.8	10.6	8.9	13.6	5.0	2.7	4.4	–2.2	6.4	17.7	6.0	3.9	6.5	9.5	–0.9
Total of above countries	10.5	6.4	7.7	15.1	12.7	–2.5	9.2	5.9	6.6	9.4	8.0	5.6	–2.4	0.1	9.8	2.5	2.9	7.7	11.3	11.0
Austria	17.2	6.4	10.1	5.4	10.7	–2.4	11.1	4.2	7.3	11.7	5.2	4.9	2.7	3.2	6.1	6.9	–2.7	2.4	8.8	11.1
Belgium	10.0	6.3	10.0	14.4	6.8	–8.9	11.7	12.7	3.4	7.1	3.3	3.1	2.1	3.2	5.7	1.3	5.4	7.1	8.2	8.0
Denmark	5.6	5.6	5.6	7.8	3.5	–1.8	4.1	4.1	1.2	8.4	5.2	8.2	2.5	4.9	3.5	5.0	0.0	4.8	6.7	6.4
Finland	8.7	–1.3	14.5	7.3	–0.6	–14.0	12.8	15.7	8.9	8.8	8.4	4.9	–1.1	2.5	5.4	1.2	1.3	2.6	3.9	1.6
Greece	12.4	11.9	22.9	23.4	0.1	10.6	16.4	1.8	16.4	6.7	6.9	–5.9	–7.2	8.0	16.9	1.3	14.0	16.0	7.6	4.0
Iceland	17.5	–3.9	10.7	8.5	–0.8	2.6	11.6	10.3	15.2	6.3	2.7	1.3	–9.6	10.3	3.0	11.0	6.2	4.0	–4.2	1.3
Ireland	4.4	4.1	3.6	10.9	0.7	7.2	8.1	14.0	12.3	6.5	6.4	2.0	5.5	10.5	16.6	6.6	2.9	13.4	8.7	11.5
Luxembourg	9.0	3.9	5.1	14.0	10.4	–15.8	1.0	4.2	3.1	9.4	–2.1	–4.4	–0.2	5.4	18.2	9.5	4.2	5.2	8.9	6.9
Netherlands	11.9	10.7	10.0	12.1	2.6	–3.1	9.9	–1.8	3.3	7.4	1.5	1.5	–0.1	3.4	7.3	5.3	3.4	4.0	7.9	6.0
Norway	0.1	1.1	14.1	8.3	0.7	3.1	11.3	3.6	8.4	2.6	2.1	1.4	–0.1	7.6	8.2	6.9	1.6	3.5	6.1	14.5
Portugal	–1.6	9.9	18.5	4.2	–15.7	–15.6	0.0	5.9	8.0	24.8	5.7	–4.0	6.2	13.4	10.8	7.1	7.7	8.6	10.2	16.5
Spain	17.5	14.2	13.4	10.0	–1.0	–0.4	5.0	12.1	10.7	5.6	2.3	8.4	4.8	10.1	11.7	2.7	1.3	5.9	5.7	4.4
Sweden	8.6	4.8	5.9	13.7	5.3	–9.3	4.3	1.5	7.8	6.1	–0.5	2.0	5.7	9.9	6.9	1.4	3.2	3.9	3.3	3.4
Switzerland	6.8	4.0	6.4	7.6	0.7	–6.4	9.3	9.6	3.6	2.4	5.1	4.8	–2.9	1.1	6.3	8.3	0.4	1.7	5.2	6.0
Turkey	14.3	15.5	14.6	32.3	–20.9	–8.8	8.7	–18.4	3.5	4.4	–5.5	47.0	26.5	6.1	20.4	11.3	–0.6	28.0	18.4	6.0
Total smaller European countries	10.7	7.8	10.7	11.3	1.2	–4.3	8.3	5.7	6.6	6.8	3.0	5.9	2.8	5.9	8.6	4.6	2.2	5.9	6.9	6.5
Australia	12.3	8.5	6.0	–1.9	–2.8	8.9	8.7	0.6	3.5	11.4	–1.5	–3.8	6.3	–2.4	15.8	9.9	5.1	10.0	2.9	3.7
New Zealand	10.2	4.9	–5.1	9.1	–2.3	3.8	14.8	0.8	0.7	6.3	3.1	3.4	–1.4	8.0	6.1	9.3	–0.7	2.8	3.5	1.7
Total smaller countries	10.9	7.8	9.8	9.8	0.7	–2.7	8.4	5.4	6.2	7.3	2.5	4.8	3.1	5.1	9.3	5.2	2.4	6.3	6.4	6.1
Total OECD	10.5	6.6	8.0	14.3	11.0	–2.5	9.0	5.8	6.6	9.1	7.2	5.5	–1.6	0.8	9.8	2.9	2.8	7.5	10.6	10.3
Four major European countries	8.6	7.4	7.5	9.3	9.2	–2.8	9.4	6.5	5.2	6.0	0.5	5.1	0.6	1.7	7.6	4.7	1.4	2.7	5.2	9.2
OECD Europe	9.3	7.5	8.5	10.0	6.7	–3.3	9.1	6.3	5.7	6.2	1.3	5.3	1.3	3.1	7.9	4.7	1.6	3.7	5.7	8.4
EEC	9.3	8.0	8.3	9.8	7.6	–2.8	9.1	6.6	5.5	6.3	1.0	4.9	0.9	2.7	7.9	4.5	1.8	3.4	5.6	8.7
Total OECD *less* the United States	11.9	10.1	7.4	8.8	10.9	–1.9	11.0	7.6	4.1	6.3	6.2	8.1	1.9	3.4	11.4	5.2	–0.2	4.1	6.7	9.9

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table R 10. **Growth of real imports of goods and services in the OECD area** [a]

Percentage changes from previous period

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	4.3	5.1	11.7	11.9	–2.0	–10.3	18.5	11.1	7.0	4.1	–6.0	3.4	–2.2	9.6	23.9	3.4	11.8	7.5	6.8	6.1
Japan	22.3	5.6	9.9	24.2	6.2	–9.8	5.2	3.2	5.1	13.4	–6.2	5.1	1.7	–5.1	11.1	–0.1	2.8	8.7	20.7	21.4
Germany	15.6	10.0	5.7	4.3	2.2	–0.6	10.5	3.6	5.5	10.5	3.7	–1.2	–0.1	0.6	5.3	3.7	3.5	4.8	6.3	7.3
France	7.4	6.3	13.2	14.2	1.9	–9.7	17.4	0.1	3.0	10.1	2.5	–2.1	2.6	–2.7	2.7	4.5	7.0	7.9	8.6	8.3
Italy	15.9	2.4	9.8	9.3	2.2	–12.6	14.1	1.7	4.8	11.7	2.9	–3.7	–0.7	–1.8	11.3	4.6	4.6	10.1	6.9	9.6
United Kingdom	4.9	5.3	9.9	11.4	1.0	–6.6	5.1	1.7	4.0	9.6	–3.4	–2.8	5.2	6.3	9.8	2.5	6.7	7.6	12.6	7.1
Canada	–1.7	7.2	13.8	14.7	11.1	–3.3	8.6	1.7	7.4	11.4	4.9	8.5	–15.2	9.0	17.1	8.7	7.1	9.0	13.9	7.2
Total of above countries	10.3	5.7	10.6	13.9	1.6	–8.8	13.1	6.1	5.8	8.5	–3.1	2.2	–0.7	3.4	15.3	3.0	7.5	7.8	10.6	10.1
Austria	15.9	6.3	12.1	9.6	6.9	–4.6	17.4	6.2	0.1	11.7	6.2	–0.8	–3.3	5.5	9.9	6.2	–1.2	4.7	10.0	9.7
Belgium	7.1	5.3	8.4	19.4	7.5	–9.8	11.0	15.4	3.7	9.1	0.3	–2.7	0.9	–1.1	6.0	1.0	7.4	9.3	8.3	9.0
Denmark	9.3	–0.7	1.5	12.8	–3.8	–4.8	15.6	0.0	0.1	5.0	–6.8	–1.7	3.8	1.8	5.5	8.1	6.8	–2.2	1.2	4.3
Finland	20.3	–0.6	4.2	13.0	6.7	0.6	–2.0	–1.5	–3.7	18.4	8.3	–4.7	2.5	3.0	1.0	6.8	3.1	9.0	11.5	9.4
Greece	6.2	7.6	15.4	32.2	–16.3	6.3	6.1	8.0	7.2	7.2	–8.0	3.6	7.0	6.6	0.2	12.8	3.8	16.6	6.5	9.0
Iceland	27.8	23.0	0.2	18.6	12.8	–12.3	–3.5	20.2	3.6	2.5	3.0	6.7	–0.6	–5.7	9.3	9.7	0.3	22.9	–3.1	–10.0
Ireland	2.3	4.7	5.1	19.0	–2.3	–10.2	14.7	13.3	15.7	13.9	–4.5	1.7	–3.1	4.7	9.9	3.2	5.6	5.0	3.9	11.7
Luxembourg	19.0	7.7	2.8	10.7	5.8	–9.4	0.9	1.5	6.0	6.7	3.7	–3.1	–0.2	1.1	13.7	7.1	4.2	7.4	7.6	7.0
Netherlands	14.7	6.1	4.8	11.0	–0.8	–4.1	10.5	2.5	6.2	6.5	–1.0	–5.8	1.1	3.8	5.1	6.7	3.6	6.0	7.2	4.9
Norway	13.6	6.4	–1.0	14.4	4.7	7.0	12.3	3.4	–13.5	–0.7	3.3	1.5	3.7	0.0	9.5	5.9	9.9	–6.8	–2.5	0.7
Portugal	0.9	14.5	12.0	12.7	4.8	–25.2	3.4	12.0	–1.0	10.6	7.8	2.5	3.7	–6.3	–4.6	1.0	16.4	20.0	16.1	10.6
Spain	7.0	0.7	24.3	16.7	8.0	–0.9	9.8	–5.5	–1.0	11.4	3.3	–4.2	3.9	–0.6	–1.0	6.2	16.5	20.8	14.1	17.5
Sweden	10.4	–3.3	4.0	6.9	9.9	–3.5	9.0	–3.8	–5.5	11.6	0.4	–5.8	3.4	0.8	5.4	7.8	4.7	7.2	5.8	6.8
Switzerland	13.9	6.2	7.3	6.5	–1.0	–15.3	13.0	9.3	10.9	6.8	7.2	–1.3	–2.6	4.4	7.1	5.1	7.1	5.5	5.4	5.4
Turkey	22.0	9.7	19.0	10.4	1.7	11.8	24.1	–3.9	–31.4	–7.9	–4.6	16.5	13.4	12.7	15.5	7.8	13.1	18.9	5.8	10.8
Total smaller European countries	11.6	3.7	10.0	13.0	3.6	–4.1	11.1	2.6	–0.2	8.4	1.7	–2.0	2.2	2.2	4.9	6.1	7.7	9.2	7.8	8.8
Australia	5.7	–0.7	–8.0	22.4	25.8	–15.8	11.8	0.3	4.2	2.4	4.8	9.8	5.4	–10.6	20.4	5.5	–2.5	3.3	15.3	20.6
New Zealand	17.1	1.9	6.3	18.3	22.9	–22.0	–2.0	2.4	–5.2	16.5	–3.9	4.6	6.7	–5.5	17.2	–3.5	2.4	12.4	–1.5	14.2
Total smaller countries	11.1	3.2	8.0	14.1	6.4	–5.7	10.9	2.3	0.2	7.9	1.9	–0.6	2.6	0.7	6.8	5.8	6.5	8.6	8.4	10.2
Total OECD	10.4	5.4	10.3	14.0	2.3	–8.3	12.8	5.5	5.0	8.4	–2.4	1.8	–0.2	3.0	14.1	3.4	7.4	7.9	10.3	10.2
Four major European countries	11.4	6.4	9.3	9.4	1.9	–6.8	12.0	1.9	4.4	10.5	1.8	–2.3	1.5	0.4	6.8	3.9	5.3	7.3	8.3	8.0
OECD Europe	11.5	5.6	9.5	10.5	2.4	–5.9	11.7	2.1	3.0	9.8	1.8	–2.2	1.7	0.9	6.2	4.6	6.0	7.9	8.1	8.3
EEC	10.9	5.9	10.0	10.7	2.0	–6.3	11.7	2.1	4.1	10.2	1.4	–2.5	1.7	0.5	6.0	4.3	6.1	8.2	8.4	8.5
Total OECD *less* the United States	13.9	5.5	9.4	15.1	4.7	–7.3	9.6	2.4	3.8	10.8	–0.4	0.8	1.0	–0.7	8.6	3.4	4.9	8.1	12.3	12.4

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.

Table R 11. **Private consumption deflators**

Percentage changes from previous year

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	4.5	4.8	3.9	6.1	10.5	8.1	5.8	6.6	7.2	9.2	10.8	9.2	5.7	4.1	3.8	3.3	2.4	4.7	3.9	4.4
Japan	7.2	6.7	5.6	10.7	21.2	11.3	9.2	7.2	4.5	3.6	7.1	4.4	2.6	1.9	2.1	2.2	0.6	–0.2	–0.1	1.7
Germany	3.6	5.6	5.7	6.3	7.0	6.2	4.2	3.6	2.7	3.9	5.8	6.2	4.8	3.2	2.5	2.1	–0.5	0.6	1.2	3.1
France	5.0	6.0	6.3	7.4	14.8	11.8	9.9	9.4	9.1	10.7	13.3	13.0	11.5	9.7	7.7	5.8	2.7	3.1	2.7	3.3
Italy	5.0	5.5	6.4	13.8	21.3	16.6	17.7	17.5	13.2	14.5	20.5	18.1	16.9	15.2	11.8	9.0	5.8	4.9	5.3	6.0
United Kingdom	5.9	8.6	6.5	8.5	16.9	23.7	15.8	14.8	9.0	13.6	16.2	11.2	8.8	5.0	5.1	5.2	4.3	4.1	4.8	5.5
Canada	3.6	2.4	4.2	6.4	10.5	10.6	7.3	7.4	7.6	8.5	10.0	11.2	10.2	6.3	3.9	3.7	3.8	4.0	3.7	4.6
Total of above countries[a]	5.1	5.6	5.0	7.9	14.0	10.6	8.2	8.0	6.9	8.2	10.7	9.0	6.6	4.9	4.2	3.7	2.1	3.0	2.8	3.8
Austria	4.5	5.0	6.5	6.6	10.0	7.9	6.5	5.6	4.2	4.5	6.4	7.6	6.0	3.4	5.6	3.3	2.0	0.9	1.8	2.6
Belgium	2.5	5.3	5.3	6.1	12.8	12.5	8.1	7.2	4.2	3.9	6.2	8.7	7.9	7.0	6.0	5.9	0.5	1.5	1.7	3.1
Denmark	6.6	8.3	8.2	11.7	15.0	9.9	9.9	10.6	9.2	10.5	10.7	12.0	10.2	6.8	6.4	4.3	2.9	4.8	4.0	5.0
Finland[b]	1.7	6.8	8.4	12.2	19.6	16.1	14.0	11.8	8.1	8.0	11.6	11.9	9.4	8.9	7.1	5.9	3.2	3.7	4.6	5.5
Greece	3.1	2.9	3.3	15.0	23.5	12.7	13.4	11.9	12.8	16.6	22.0	22.4	20.7	18.1	17.9	18.2	22.2	15.7	14.0	15.6
Iceland[b]	11.4	7.7	14.8	26.5	37.6	55.5	29.9	27.3	43.4	46.4	55.4	51.2	52.4	83.0	32.3	32.6	20.1	16.8	25.3	21.1
Ireland	8.1	9.1	9.6	11.6	15.8	22.7	20.0	14.1	8.0	14.9	18.6	19.6	14.9	9.2	7.7	4.7	4.0	2.7	2.4	4.0
Luxembourg	4.3	4.5	5.1	4.8	9.6	10.3	9.3	5.4	3.4	4.9	7.6	8.7	10.6	8.5	6.9	4.5	1.2	1.5	2.6	3.4
Netherlands	4.4	7.9	8.3	8.5	9.5	10.1	9.0	6.1	4.6	4.4	7.0	6.3	5.3	2.8	2.2	2.2	0.2	–0.3	0.6	1.1
Norway	9.8	6.4	6.6	7.8	9.2	11.7	8.7	8.6	8.3	5.1	10.0	13.4	11.0	8.4	6.4	5.9	7.7	7.6	6.2	4.4
Portugal	3.4	2.9	5.2	9.8	22.8	19.1	16.8	27.3	20.6	24.3	21.4	20.4	21.0	25.8	28.1	19.6	14.7	10.0	10.0	12.7
Spain	6.6	7.8	7.6	11.4	17.8	15.5	16.5	23.8	19.0	16.5	16.6	14.4	14.5	12.4	10.8	8.2	8.7	5.7	4.9	6.6
Sweden	5.0	7.7	6.4	7.6	10.3	10.9	11.0	10.8	11.6	8.0	14.4	12.4	10.6	11.2	7.7	7.0	4.6	5.3	6.3	6.5
Switzerland	4.0	6.9	7.6	9.0	9.9	6.4	2.1	1.2	0.7	4.5	4.5	6.6	5.5	2.6	3.3	3.7	0.3	1.5	2.3	3.6
Turkey	11.6	17.7	16.4	26.4	33.7	15.2	10.4	20.7	53.8	76.4	118.2	49.7	30.9	31.7	50.4	45.3	21.1	34.8	63.3	71.7
Total smaller European countries[a]	5.3	7.3	7.6	10.1	14.4	12.1	10.5	11.7	11.2	12.0	15.8	13.0	11.1	9.4	9.3	7.9	5.2	5.2	6.6	7.9
Australia	4.8	7.2	6.0	8.4	16.2	17.9	14.5	10.3	8.5	9.7	10.5	9.3	10.4	9.3	6.4	7.1	8.6	7.9	7.0	6.7
New Zealand	5.2	11.8	7.2	5.2	8.1	13.7	19.1	16.7	11.8	15.0	19.0	14.9	14.1	7.3	7.1	17.0	12.5	13.5	6.0	5.7
Total smaller countries[a]	5.2	7.4	7.4	9.9	14.5	12.8	11.1	11.6	10.9	11.8	15.3	12.6	11.0	9.4	8.9	8.0	5.7	5.7	6.6	7.7
Total OECD[a]	5.1	5.8	5.4	8.2	14.1	10.9	8.7	8.5	7.4	8.7	11.3	9.5	7.2	5.5	4.9	4.3	2.7	3.4	3.3	4.3
Four major European countries[a]	4.7	6.2	6.2	8.7	14.1	13.4	10.9	10.4	7.9	9.9	13.0	11.5	10.0	7.8	6.4	5.1	2.7	2.9	3.2	4.3
OECD Europe[a]	4.9	6.6	6.6	9.1	14.2	13.0	10.8	10.8	8.9	10.5	13.9	12.0	10.3	8.3	7.3	6.0	3.5	3.6	4.3	5.4
EEC[a]	4.8	6.4	6.4	8.9	14.3	13.4	11.2	11.1	8.6	10.1	12.9	11.6	10.2	8.1	6.8	5.5	3.2	3.1	3.3	4.4
Total OECD *less* the United States[a]	5.5	6.4	6.2	9.4	16.1	12.5	10.2	9.6	7.5	8.4	11.6	9.6	8.0	6.3	5.6	4.8	2.8	2.6	3.0	4.3

a) Aggregates were computed on the basis of 1987 GNP/GDP weights expressed in 1987 US dollars.
b) Consumer price index.

Table R 12. **Net household saving as a percentage of disposable household income**

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	9.6	9.5	9.4	7.8	6.7	7.3	7.0	7.3	7.7	7.0	5.5	6.3	4.5	4.3	3.3	4.3	5.6
Japan	20.4	23.2	22.8	23.2	21.4	20.8	18.2	17.9	18.3	16.5	16.3	16.0	16.0	16.4	15.1	14.8	15.3
Germany	13.9	14.6	15.1	13.3	12.2	12.0	12.6	12.7	13.5	12.7	10.8	11.4	11.4	12.2	12.3	12.6	12.2
France[a]	19.1	19.8	20.2	18.2	18.7	20.4	18.8	17.6	18.0	17.3	15.9	14.5	14.0	13.2	11.3	12.1	12.2
Italy[a]	28.3	26.3	26.9	25.7	25.2	25.6	24.7	21.6	20.5	19.0	19.8	20.4	17.8	15.3	14.3	14.2	14.1
United Kingdom[a]	10.1	10.7	11.6	10.9	9.6	11.1	12.2	13.5	12.8	11.6	9.8	10.2	9.7	8.2	5.7	4.1	5.0
Canada	10.7	11.3	12.7	11.8	11.4	12.6	13.2	13.6	15.4	18.2	14.8	15.0	13.3	10.6	9.7	9.4	10.4
Austria	8.1	8.2	9.9	10.4	8.0	11.3	11.2	10.4	8.1	10.3	8.3	8.2	8.3	10.3	12.3	12.6	14.1
Belgium	15.9	16.7	16.5	18.9	16.6	16.6	15.2	16.2	16.2	13.6	14.7	13.4	11.1	13.1	11.9	13.3	14.1
Denmark	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Finland	2.4	5.1	6.1	3.9	3.3	4.7	4.6	5.5	4.6	5.3	5.7	4.6	3.9	1.8	1.8	–2.3	–0.9
Greece	23.4	18.3	19.0	19.8	19.5	20.4	21.6	20.6	21.6	19.7	18.8	20.6	21.4	17.6	16.8	20.3	21.0
Iceland	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	..	..	..	..	19.4	19.8	17.8	16.0	16.8	20.3	18.8	18.3	17.5	16.2	18.3	16.3	15.7
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Netherlands	6.8	6.3	3.9	3.7	2.9	2.5	1.6	0.8	2.3	4.7	2.0	1.9	2.0	2.8	2.1	2.4	3.8
Norway	..	..	4.2	6.1	4.7	8.4	4.6	3.4	4.5	3.8	4.3	5.2	–1.8	–5.0	–6.3	–3.8	–1.0
Portugal[a]	..	..	..	17.7	20.0	25.5	28.8	28.6	27.2	28.7	27.7	28.0	28.7	26.3	26.4	24.0	..
Spain	12.1	12.1	12.1	10.0	9.7	11.2	10.0	8.2	8.4	8.9	8.2	8.0	8.4	9.4	8.0	7.7	7.0
Sweden	3.7	5.0	4.7	2.4	4.1	4.5	2.9	4.8	4.0	0.8	1.6	1.3	1.7	0.3	–3.4	–5.1	–3.7
Switzerland	10.0	9.7	7.6	5.5	3.9	4.6	3.7	3.3	4.6	6.2	5.8	5.8	5.7	7.0	8.4	9.8	10.7
Turkey	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Australia	15.3	15.6	14.9	12.8	11.6	11.7	11.5	10.5	9.7	8.3	7.9	9.1	7.7	6.8	6.5	6.7	7.9
New Zealand	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

a) Gross saving.

Table R 13. **National saving as a percentage of GNP/GDP**

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
United States	19.3	21.1	19.8	17.9	18.5	19.4	20.8	20.7	18.8	19.5	16.5	15.6	17.0	15.8	14.7	14.5	15.1
Japan	38.3	39.2	36.4	32.3	32.6	32.0	32.3	31.5	31.1	31.2	30.4	29.7	30.7	31.6	31.9	32.3	33.3
Germany	26.3	26.5	24.8	20.9	22.5	21.8	22.5	22.6	21.7	20.2	20.3	21.0	21.7	22.1	23.9	23.6	24.5
France	27.3	27.8	26.7	24.3	24.5	24.3	24.5	24.5	23.5	21.0	19.7	19.1	19.1	19.0	20.0	19.6	20.5
Italy	25.5	25.5	26.0	23.8	25.8	26.0	26.3	26.2	24.7	22.6	22.1	22.2	22.5	21.8	21.3	20.7	20.9
United Kingdom	18.5	19.7	15.3	14.7	15.4	18.7	18.5	19.0	17.7	16.8	16.9	17.2	16.9	17.7	16.3	16.3	16.4
Canada	22.4	24.6	26.0	22.6	23.2	21.3	21.6	23.8	23.5	23.3	20.2	19.4	20.8	20.2	18.5	19.6	21.1
Austria	30.9	30.8	30.3	26.1	25.2	24.5	25.5	25.9	26.0	24.5	24.2	22.8	23.7	23.3	23.7	24.0	25.4
Belgium	24.9	24.2	24.7	21.3	21.9	20.3	20.0	18.2	17.3	13.8	13.5	14.5	15.6	15.0	16.9	17.1	19.1
Denmark	24.5	24.5	22.2	19.5	19.2	19.1	19.0	17.0	15.2	12.8	12.5	13.9	15.8	15.6	16.8	16.2	16.7
Finland	27.5	29.1	30.8	26.9	24.6	23.9	23.9	25.7	26.2	25.5	24.0	23.7	24.7	23.5	22.6	22.4	24.3
Greece	27.6	31.1	25.7	22.7	23.7	23.8	25.6	27.4	28.2	24.0	16.3	16.7	16.0	13.4	14.3	14.6	16.8
Iceland	23.9	27.2	23.2	23.1	25.6	26.1	25.1	23.8	24.5	21.9	19.2	18.7	18.0	16.4	18.4	16.6	16.7
Ireland	22.6	23.3	19.0	21.8	20.2	22.9	23.0	20.4	16.7	14.3	18.5	18.4	19.4	18.6	18.1	20.3	20.4
Luxembourg	37.0	41.7	45.0	35.1	38.0	35.4	37.5	36.8	36.7	36.6	43.2	45.3	45.8	45.7	44.8	41.8	43.4
Netherlands	26.8	28.1	27.1	23.1	23.5	22.4	21.1	20.3	20.1	20.5	21.1	21.5	23.2	23.8	23.0	21.4	23.6
Norway	27.6	28.7	29.3	27.0	25.7	22.9	24.2	26.4	30.6	30.4	28.7	29.2	31.9	30.1	23.4	24.1	24.7
Portugal	37.0	36.6	22.8	12.5	15.5	19.9	25.3	28.4	27.6	23.4	21.8	21.1	20.1	22.2	25.6	27.8	25.9
Spain	27.5	28.1	26.7	25.7	23.1	23.4	24.1	23.0	21.1	19.0	19.0	18.9	20.5	20.7	21.7	22.1	23.0
Sweden	23.4	24.0	22.8	23.7	21.4	17.9	17.6	17.9	17.3	15.3	14.0	16.0	17.9	17.6	17.9	18.1	18.6
Switzerland	31.6	31.1	30.6	27.0	25.8	25.5	26.0	25.5	25.7	27.0	26.9	26.6	27.2	28.1	29.7	30.3	31.2
Turkey	17.1	20.5	19.2	17.4	18.5	14.5	13.8	14.0	11.7	18.7	17.6	14.3	11.1	20.0	22.6	24.5	26.7
Australia	26.7	27.0	24.8	22.9	22.6	20.7	21.7	22.3	22.1	20.3	17.4	19.2	19.5	19.5	20.0	21.9	23.9
New Zealand	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total OECD	24.5	25.9	24.6	22.0	22.5	22.7	23.4	23.3	22.1	21.8	20.1	19.5	20.5	20.0	19.7	19.6	20.4
OECD Europe	26.0	26.4	24.9	21.9	22.4	22.3	22.6	22.6	21.8	20.2	19.9	20.1	20.6	20.6	21.0	20.8	21.7
EEC	25.4	25.9	24.2	21.2	22.1	22.2	22.5	22.4	21.4	19.7	19.4	19.6	20.1	20.2	20.6	20.3	21.0

Table R 14. **General government financial balances**[a]

Surplus (+) or deficit (-) as a percentage of nominal GNP/GDP

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
United States	–1.1	–1.8	–0.3	+0.5	–0.3	–4.1	–2.2	–1.0	0.0	+0.5	–1.3	–1.0	–3.5	–3.8	–2.8	–3.3	–3.4	–2.4	–2.0
Japan	+1.7	+1.2	–0.1	+0.5	+0.4	–2.8	–3.7	–3.8	–5.5	–4.7	–4.4	–3.8	–3.6	–3.7	–2.1	–0.8	–0.9	+0.7	+2.1
Germany	+0.2	–0.2	–0.5	+1.2	–1.3	–5.6	–3.4	–2.4	–2.4	–2.6	–2.9	–3.7	–3.3	–2.5	–1.9	–1.1	–1.3	–1.8	–2.1
France	+1.1	+0.8	+0.8	+0.8	+0.1	–2.2	–0.6	–0.8	–2.1	–0.8	0.0	–1.9	–2.8	–3.1	–2.8	–2.9	–2.7	–1.9	–1.8
Italy	–4.0	–5.9	–8.6	–7.9	–7.8	–12.9	–9.8	–8.6	–10.4	–10.2	–8.6	–11.6	–11.3	–10.7	–11.6	–12.5	–11.7	–11.1	–10.9
United Kingdom	+2.9	+1.3	–1.3	–2.7	–3.9	–4.6	–5.0	–3.4	–4.4	–3.3	–3.4	–2.6	–2.4	–3.3	–3.9	–2.7	–2.4	–1.2	+1.1
Canada	+0.8	0.0	0.0	+0.9	+1.9	–2.5	–1.8	–2.5	–3.1	–2.0	–2.8	–1.5	–5.9	–6.9	–6.5	–6.8	–5.5	–4.4	–2.6
Total of above countries[b]	0.0	–0.8	–0.8	–0.2	–0.9	–4.4	–3.2	–2.5	–2.8	–2.2	–2.7	–2.8	–4.0	–4.1	–3.4	–3.2	–3.2	–2.2	–1.5
Australia	+2.8	+2.3	+2.1	–0.2	+2.3	–0.6	–2.9	–0.8	–2.8	–2.6	–1.9	–1.2	–1.0	–4.5	–4.0	–3.3	–3.0	–1.1	+0.7
Austria	+1.2	+1.5	+2.0	+1.3	+1.3	–2.5	–3.7	–2.4	–2.8	–2.4	–1.7	–1.8	–3.4	–4.0	–2.6	–2.5	–3.7	–4.3	–3.1
Belgium	–2.1	–3.0	–4.2	–3.8	–2.9	–5.3	–6.0	–6.3	–6.7	–7.5	–9.2	–13.1	–11.2	–11.4	–9.3	–8.7	–8.8	–7.2	–6.8
Denmark	+3.2	+3.9	+3.9	+5.2	+3.1	–1.4	–0.3	–0.6	–0.4	–1.7	–3.3	–6.9	–9.1	–7.2	–4.1	–2.0	+3.4	+2.5	+0.3
Finland	+4.3	+4.5	+3.9	+5.7	+4.6	+2.7	+4.9	+3.2	+1.4	+0.4	+0.3	+1.2	–0.6	–1.7	+0.4	+0.1	+0.8	–1.2	+1.4
Greece	–0.1	–0.9	–0.3	–1.4	–2.2	–3.4	–2.6	–2.1	–1.7	–2.5	–2.9	–10.9	–7.6	–8.6	–10.2	–14.0	–12.7	–12.0	–14.5
Ireland	–3.6	–3.5	–3.2	–3.8	–6.9	–11.1	–7.4	–6.6	–8.6	–11.0	–12.2	–13.3	–14.1	–12.0	–10.1	–11.8	–11.6	–9.2	–2.6
Netherlands	–1.1	–1.0	–0.4	+0.6	–0.5	–3.0	–2.7	–1.8	–2.8	–3.7	–4.1	–5.5	–7.1	–6.4	–6.3	–4.8	–6.0	–6.5	–5.0
Norway	+3.2	+4.3	+4.5	+5.7	+4.7	+3.3	+2.5	+1.2	–0.1	+1.3	+5.7	+4.7	+4.4	+4.2	+7.5	+10.4	+5.9	+4.8	+3.1
Spain	0.0	–1.0	–0.1	+0.8	–0.4	–0.5	–1.1	–1.4	–2.4	–2.2	–2.6	–3.9	–5.6	–4.8	–5.5	–7.0	–6.1	–3.2	–3.1
Sweden	+4.6	+5.3	+4.4	+4.1	+2.0	+2.8	+4.7	+1.7	–0.5	–3.0	–4.0	–5.3	–7.0	–5.0	–2.9	–3.9	–1.3	+4.2	+3.4
Total of above countries[b]	+0.1	–0.6	–0.6	0.0	–0.7	–4.0	–3.0	–2.3	–2.7	–2.3	–2.8	–3.0	–4.2	–4.3	–3.5	–3.3	–3.2	–2.3	–1.6

a) On a SNA basis except for the United States, the United Kingdom, Australia, Greece and Sweden where the data are based on national methods.
b) 1987 GNP/GDP weights and exchange rates.

Table R 15. **Total outlays of government as percentage of GDP**

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
United States	30.4	31.6	31.6	31.3	30.6	32.2	34.6	33.4	32.2	31.6	31.7	33.7	34.1	36.5	36.9	35.8	36.7	37.0	36.9	36.3
Japan	18.9	19.4	20.9	22.1	22.4	24.5	27.3	27.7	29.0	30.5	31.6	32.6	33.5	33.7	34.1	33.2	32.7	33.1	33.4	32.9
Germany	38.6	38.6	40.1	40.8	41.5	44.6	48.9	47.9	48.0	47.8	47.6	48.3	49.2	49.4	48.3	48.0	47.5	46.9	46.9	46.6
France	39.6	38.5	38.1	38.3	38.3	39.3	43.4	43.9	43.7	44.6	45.0	46.1	48.7	50.4	51.4	52.0	52.2	51.6	51.3	50.3
Italy	34.2	34.2	36.6	38.6	37.8	37.9	43.2	42.2	42.5	46.1	45.5	41.7	45.8	47.4	48.6	49.3	50.8	50.9	50.7	50.8
United Kingdom	41.0	38.8	38.1	39.3	40.4	44.9	46.6	46.3	43.8	43.3	42.7	44.9	47.7	47.1	46.9	47.5	46.2	45.5	43.2	..
Canada	32.7	34.8	36.1	36.6	35.4	36.8	40.1	39.1	40.1	40.3	39.0	40.5	41.5	46.6	47.2	46.8	47.1	46.6	45.5	44.4
Total of above countries	31.7	32.3	32.7	32.9	32.6	34.5	37.7	36.8	36.2	36.5	37.0	38.4	38.9	40.4	40.5	39.5	39.7	40.1	40.0	39.2
Austria	40.3	39.2	39.7	39.8	41.3	41.9	46.1	46.9	46.8	49.7	48.9	48.9	50.3	50.9	51.2	50.8	51.7	52.7	52.8	50.6
Belgium	36.1	36.5	38.0	38.8	39.1	39.4	44.5	44.9	46.4	47.8	49.3	50.7	55.1	55.3	55.0	54.1	53.7	53.4	52.5	50.7
Denmark	36.3	40.2	43.0	42.6	42.1	45.9	48.2	47.8	48.9	50.6	53.2	56.2	59.8	61.2	61.6	60.3	59.3	55.7	57.6	60.2
Finland	31.2	30.5	32.0	32.4	31.0	32.0	36.1	37.1	38.3	37.8	36.7	36.6	37.5	39.1	40.3	39.8	41.6	42.2	42.2	40.2
Greece[a]	22.5	22.4	22.8	22.0	21.1	25.0	26.7	27.4	29.0	29.9	29.7	30.5	35.9	37.0	38.2	40.2	43.7	43.1	44.6	45.7
Iceland	30.2	30.7	33.5	34.3	35.0	37.8	38.0	32.9	32.5	32.5	32.8	32.2	32.9	34.2	35.9	32.1	34.5	36.6	33.2	37.1
Ireland	36.6	39.6	40.5	38.8	39.0	43.0	46.5	46.0	43.7	44.3	46.8	50.8	52.5	55.8	55.8	53.9	55.2	55.1	53.4	..
Luxembourg	34.1	33.1	36.8	37.2	36.1	35.6	48.5	49.1	51.9	51.3	52.5	54.8	58.5	55.8	55.1	51.8	51.7	52.3	..	..
Netherlands	44.4	43.9	45.0	45.6	45.8	47.9	52.8	52.9	53.0	54.4	55.8	57.5	59.7	61.6	62.2	61.0	59.7	59.6	60.7	57.9
Norway	39.9	41.0	43.0	44.6	44.6	44.6	46.2	48.1	49.6	51.8	50.4	48.3	47.9	48.3	48.4	46.3	45.6	50.0	51.1	..
Portugal	20.9	21.6	21.3	22.7	21.3	24.7	30.3	35.1	35.2	36.4	36.2	25.9	43.9	43.0	47.9	44.4	43.4	43.9	..	..
Spain	21.7	22.2	23.6	23.2	23.0	23.1	24.7	26.0	27.5	29.3	30.5	32.9	35.6	37.5	38.8	39.3	42.1	41.7	..	..
Sweden	43.2	43.3	45.3	46.2	44.7	48.1	48.9	51.7	57.5	59.2	60.7	61.3	63.9	66.0	65.8	63.2	64.3	62.6	59.0	..
Switzerland[a]	21.8	21.3	21.9	21.9	24.2	25.5	28.7	30.2	30.4	30.2	29.9	29.3	28.9	30.1	30.9	31.4	31.0	30.5	30.1	30.4
Turkey	23.1	21.9	22.1	22.5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total smaller European countries	33.1	33.5	34.9	35.0	35.5	36.9	40.1	41.5	43.0	44.1	44.6	45.5	47.9	48.9	49.7	48.9	49.5	49.2	50.8	48.1
Australia[b]	24.1	26.8	27.5	27.1	27.7	31.6	33.6	34.1	35.2	34.2	33.4	33.8	34.6	37.1	37.6	38.7	38.8	38.6	36.4	34.5
New Zealand	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total smaller countries	31.8	32.6	33.8	33.9	34.3	36.1	39.2	40.3	42.0	42.8	43.2	44.0	45.8	47.0	47.7	47.0	47.8	47.8	48.6	45.2
Total OECD	31.7	32.3	32.9	33.1	32.9	34.8	38.0	37.3	37.1	37.5	38.0	39.3	39.9	41.3	41.4	40.4	40.7	41.1	41.0	39.8
Four major European countries	38.6	37.8	38.5	39.5	39.8	42.1	45.9	45.5	45.1	45.8	45.6	45.8	48.1	48.7	48.8	49.2	49.1	48.7	48.2	48.9
OECD Europe	36.9	36.6	37.4	38.1	38.5	40.5	44.1	44.2	44.4	45.2	45.2	45.7	48.0	48.8	49.1	49.1	49.2	48.9	48.8	48.7
EEC	37.4	36.9	37.7	38.5	38.7	40.7	44.5	44.3	44.3	45.1	45.1	45.6	48.2	49.0	49.3	49.4	49.5	49.1	49.2	49.9
Total OECD *less* the United States	33.0	33.0	34.0	34.4	34.5	36.5	40.1	40.0	40.3	40.9	41.4	42.3	43.6	44.6	44.7	44.1	44.1	43.7	43.5	42.0

Source: National Accounts (annual OECD publication). The data in this table are measured according to the standard definitions of the OECD-United Nations system of accounts. (See *A System of National Accounts*, Series F, No. 2, Rev. 3, United Nations, 1968.)

Percentages for country groups. The percentages for each group of countries are calculated from the total GDP and total outlays of government for the group, with both aggregates expressed in US dollars at current exchange rates. Percentages for country groups exclude countries for which no data are shown in the table.

Total outlays of government mainly consists of current disbursements plus gross capital formation. It is the sum of lines 38, 9, 10, 13, 14 and 15 *less* line 2 and 3 in Table 6 (Capital accumulation account) of *National Accounts*, Volume II, Detailed Tables.

a) Only current disbursements.

b) Fiscal years beginning on 1st July.

Table R 16. **Current receipts of government as percentage of GDP**

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
United States	29.9	28.9	28.2	29.3	29.6	30.3	28.8	29.5	29.7	29.9	30.5	30.8	31.6	31.1	30.7	30.7	31.2	31.4	31.9	31.5
Japan	19.7	20.6	21.6	21.5	22.5	24.5	24.0	23.6	24.7	24.5	26.3	27.6	29.1	29.5	29.8	30.4	31.2	31.5	33.4	34.3
Germany	39.3	38.3	39.4	39.8	42.2	42.7	42.7	44.0	45.0	44.7	44.4	44.7	44.8	45.4	45.1	45.3	45.6	44.9	44.4	43.7
France	39.8	38.5	37.7	37.9	37.8	38.4	39.7	41.8	41.4	41.1	42.7	44.5	45.1	45.9	46.6	47.5	47.6	47.1	47.6	47.1
Italy	30.7	30.4	31.1	30.9	30.4	30.6	31.2	32.9	34.3	36.0	35.7	33.0	34.1	35.9	37.7	37.4	38.0	39.0	39.3	39.9
United Kingdom	39.3	40.2	38.4	36.4	35.8	39.8	40.5	40.0	39.1	37.7	38.2	40.1	42.4	43.0	42.3	42.3	42.3	41.5	40.7	..
Canada	33.5	34.2	34.7	35.2	34.9	37.2	36.1	35.8	36.1	35.7	35.5	36.2	38.5	39.1	38.7	38.7	38.7	39.5	39.6	40.4
Total of above countries	31.3	30.8	30.6	31.0	31.5	32.7	32.2	32.6	32.9	32.8	33.9	34.6	35.0	35.0	34.7	34.5	34.9	35.3	36.2	35.9
Austria	39.6	39.7	40.5	41.2	41.9	42.5	42.9	42.4	43.7	46.2	45.8	46.4	47.8	46.7	46.4	47.5	48.5	48.2	47.8	46.8
Belgium	34.3	35.2	35.7	35.5	36.4	37.7	40.4	40.1	41.6	42.4	43.1	42.7	43.4	45.1	44.6	45.6	45.9	45.1	45.6	44.3
Denmark	37.2	41.7	46.4	45.9	46.8	48.4	46.1	46.9	47.6	49.6	50.8	52.2	52.1	51.2	53.6	55.5	56.5	58.3	59.2	59.5
Finland	33.8	34.1	35.7	35.4	36.0	35.7	37.8	41.0	40.4	38.0	36.1	35.8	37.5	37.3	37.4	39.0	40.5	41.8	39.7	40.3
Greece	27.2	26.8	26.6	26.6	25.4	27.0	27.4	29.5	29.9	30.1	30.6	30.5	29.1	32.3	33.6	34.8	34.6	35.7	36.9	35.1
Iceland	30.3	30.9	32.6	34.5	34.2	34.1	34.0	33.0	31.3	31.6	32.7	33.3	33.9	35.6	33.5	34.0	32.5	32.1	32.1	35.7
Ireland	31.6	35.3	36.3	34.9	34.5	35.2	34.6	37.9	36.4	35.2	35.9	38.8	39.6	41.9	43.6	43.7	43.7	43.6	43.8	..
Luxembourg	34.3	35.4	38.4	38.5	39.0	40.2	48.6	50.2	54.2	55.2	52.1	53.3	53.8	53.8	56.2	54.2	55.9	54.2	..	..
Netherlands	43.2	42.0	43.3	44.5	45.9	47.0	49.2	49.5	50.5	50.9	51.4	52.8	53.5	53.8	55.3	54.1	54.3	53.0	53.4	52.2
Norway	43.3	43.5	46.6	48.4	49.6	48.5	48.7	49.8	50.0	50.8	50.8	53.2	51.8	51.9	51.8	53.0	55.1	54.7	53.7	..
Portugal	22.5	24.3	23.5	23.4	22.7	23.0	24.8	28.1	30.5	29.5	30.0	31.4	33.3	35.4	37.8	37.3	35.9	37.6	..	..
Spain	21.9	22.5	22.6	23.0	23.7	22.8	24.3	25.3	26.5	27.1	28.4	29.7	31.2	31.4	33.5	33.2	34.5	35.0	..	..
Sweden	46.7	46.6	49.4	49.5	47.7	48.8	50.5	55.1	58.0	57.5	56.4	56.3	57.7	58.3	59.5	59.2	59.2	60.7	61.8	..
Switzerland	26.4	26.5	26.2	26.4	28.8	29.7	32.1	33.9	33.7	33.8	33.1	32.8	32.8	33.3	33.9	34.7	34.4	35.0	34.5	34.8
Turkey	23.8	23.7	23.7	27.1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total smaller European countries	34.1	34.8	36.0	36.3	37.2	37.5	39.2	40.8	41.8	42.0	41.9	42.7	43.3	43.6	44.8	45.2	45.7	45.9	48.7	45.4
Australia[a]	26.5	26.6	27.3	25.2	26.7	28.5	29.1	29.9	30.3	29.1	29.8	30.7	31.9	32.4	31.7	33.4	34.0	35.0	34.9	34.4
New Zealand	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total smaller countries	33.0	33.6	34.8	34.8	35.5	36.1	37.6	39.1	40.3	40.3	40.4	41.1	41.5	41.8	42.6	43.0	43.9	44.5	46.6	43.0
Total OECD	31.5	31.1	31.1	31.5	32.1	33.2	33.1	33.7	34.1	34.0	34.9	35.6	35.9	36.0	35.7	35.6	36.0	36.5	37.4	36.6
Four major European countries	37.9	37.3	37.3	37.0	37.8	39.0	39.6	40.9	41.2	41.0	41.3	41.5	42.3	43.1	43.4	43.6	43.8	43.5	43.3	43.8
OECD Europe	36.7	36.6	36.9	36.8	37.6	38.5	39.4	40.8	41.4	41.4	41.5	41.9	42.6	43.3	43.8	44.0	44.4	44.2	44.7	44.2
EEC	36.7	36.5	36.7	36.4	37.2	38.2	38.9	40.2	40.7	40.7	41.0	41.4	42.1	42.9	43.5	43.6	43.9	43.7	44.3	44.7
Total OECD *less* the United States	33.1	33.1	33.6	33.2	33.8	35.1	35.7	36.4	36.9	36.4	37.4	38.2	38.7	39.3	39.4	39.5	39.9	39.9	40.6	39.9

Source: National Accounts (annual OECD publication). The data in this table are measured according to the standard definitions of the OECD-United Nations system of accounts. (See *A System of National Accounts*, Series F, No. 2, Rev. 3, United Nations, 1968.)

Percentages for country groups. The percentages for each group of countries are calculated from the total GDP and current receipts of government for the group, with both aggregates expressed in US dollars at current exchange rates. Percentages for country groups exclude countries for which no data are shown in the table.

Current receipts of government mainly consists of direct and indirect taxes, and social security contributions paid by employers and employees. It is given on line 21 of Table 6 (Income and outlay account) of *National Accounts*, Volume II, Detailed Tables.

a) Fiscal years beginning on 1st July.

Table R 17. **Growth of employment in the OECD area** [a]

Percentage changes from previous period

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	1.0	0.9	3.5	3.6	2.1	–1.1	3.4	3.7	4.4	2.9	0.5	1.1	–0.9	1.3	4.1	2.0	2.3	2.6	2.3	2.0
Japan	1.1	0.5	0.1	2.6	–0.4	–0.3	0.9	1.3	1.3	1.3	1.0	0.8	1.0	1.7	0.6	0.7	0.8	1.0	1.7	1.9
Germany	0.8	–0.9	1.0	0.8	–0.8	–3.3	–0.8	0.5	0.5	1.3	2.0	0.3	–0.6	–1.2	–0.5	0.5	1.9	1.3	0.7	1.3
France	1.3	0.5	0.7	1.4	0.9	–1.0	0.8	0.8	0.3	0.1	0.0	–0.3	0.0	–0.3	–1.0	–0.3	0.2	0.2	0.8	1.0
Italy	0.6	–0.3	–1.7	0.8	2.1	0.5	0.6	0.9	0.4	1.0	1.3	0.2	–0.3	0.3	0.3	0.4	0.5	–0.1	1.7	–0.5
United Kingdom	–0.3	–1.3	0.7	2.0	0.3	–0.6	–0.7	0.1	0.8	1.3	–1.0	–3.4	–1.9	–0.2	2.1	1.1	0.3	2.3	3.4	3.1
Canada	1.1	2.3	3.0	5.0	4.2	1.7	2.1	1.8	3.5	4.1	3.0	2.7	–3.5	0.5	2.4	2.6	2.8	2.9	3.2	2.0
Total of above countries	0.9	0.4	1.3	2.5	0.9	–0.8	1.5	2.0	2.2	1.9	0.7	0.4	–0.5	0.7	1.9	1.2	1.5	1.7	2.0	1.8
Austria	–0.1	0.1	0.7	0.5	0.0	–2.2	0.2	1.4	0.9	1.2	0.7	0.6	–0.9	–1.0	0.2	0.0	1.4	0.5	0.3	1.4
Belgium	0.1	0.7	–0.2	0.9	1.5	–1.4	–0.6	–0.4	0.1	0.9	–0.1	–1.9	–1.3	–1.0	–0.2	0.6	0.7	0.5	1.5	1.3
Denmark	1.1	1.0	0.2	1.5	0.0	–2.8	1.8	0.8	1.0	1.2	–0.5	–1.3	0.4	0.3	1.7	2.5	2.6	0.5	–0.6	–0.7
Finland	1.3	–0.2	–0.2	2.1	2.9	–0.4	–3.1	–2.1	–1.4	2.6	3.2	1.1	1.0	0.5	1.0	1.0	–0.3	–0.3	0.3	1.5
Greece	–0.1	0.3	0.5	1.0	0.1	0.1	1.2	0.8	0.4	1.1	1.4	5.2	–0.8	1.1	0.3	1.0	0.3	–0.1	1.6	1.2
Iceland	3.6	5.0	2.6	2.7	3.4	1.7	3.6	0.3	2.9	1.0	3.3	4.8	2.6	0.9	1.5	3.6	3.1	5.8	2.7	0.4
Ireland	–1.2	–0.4	0.3	1.4	1.4	–0.8	–0.8	1.8	2.5	3.2	1.0	–0.9	0.2	–2.1	–1.8	–2.5	0.5	0.6	0.3	0.8
Luxembourg	6.1	3.2	2.7	1.9	2.8	1.2	–0.1	–0.1	–0.6	0.5	0.7	0.3	–0.3	–0.3	0.6	1.5	2.6	2.7	3.1	3.0
Netherlands	1.3	0.4	–0.6	–0.1	0.0	–0.7	0.0	0.2	0.7	1.3	0.7	–1.5	–2.5	–1.9	–0.1	1.5	2.0	1.4	1.3	1.7
Norway	1.5	0.7	0.4	0.3	0.5	2.8	4.6	2.0	1.6	1.1	0.5	1.5	0.4	0.1	1.2	2.3	3.6	1.9	–0.6	–3.1
Portugal	..	1.8	–0.5	–0.8	..	..	1.4	0.6	–0.2	1.2	2.2	0.5	–0.1	..	..	–0.4	0.2	2.6	2.7	2.0
Spain	0.8	0.5	1.0	1.6	0.7	–1.5	–0.9	–0.7	–1.7	–1.7	–3.0	–3.0	–1.3	–1.1	–1.8	–0.9	2.2	3.1	2.9	4.1
Sweden	1.9	0.2	0.0	0.5	2.1	2.5	0.6	0.2	0.4	1.5	1.3	–0.2	–0.1	0.1	0.7	1.0	–0.7	1.6	1.4	1.5
Switzerland	1.4	1.8	1.4	1.0	–0.1	–4.8	–2.9	0.4	1.0	1.0	2.2	1.4	–0.7	–1.2	–0.2	1.0	1.3	1.2	1.2	1.4
Turkey	–0.3	2.1	2.3	1.7	1.6	1.7	2.3	1.9	1.0	–0.6	–0.6	2.1	1.4	2.4	2.6	2.2	3.2	3.0	1.4	1.1
Total smaller European countries	0.7	0.9	0.8	1.1	1.0	–0.4	0.4	0.5	0.2	0.3	–0.1	0.1	–0.3	0.1	0.4	0.9	1.7	1.9	1.5	1.6
Australia	3.9	2.4	1.4	2.8	2.1	–0.4	1.4	0.9	–0.3	1.2	2.8	2.1	0.0	–1.8	3.0	3.1	4.1	2.2	3.7	4.4
New Zealand	3.0	1.2	1.1	3.5	4.3	1.7	1.7	1.5	–0.6	1.4	–0.1	0.7	0.9	–1.0	2.7	3.2	–0.1	0.6	–3.5	–0.5
Total smaller countries	1.0	1.1	0.9	1.3	1.1	–0.3	0.5	0.6	0.1	0.4	0.2	0.3	–0.2	–0.1	0.7	1.1	1.9	1.9	1.6	1.9
Total OECD	0.9	0.6	1.2	2.2	1.0	–0.7	1.3	1.7	1.8	1.6	0.6	0.4	–0.5	0.6	1.7	1.2	1.6	1.8	1.9	1.8
Four major European countries	0.7	–0.1	–0.1	1.2	0.3	–1.1	–0.1	0.7	0.5	0.9	0.6	–0.9	–0.7	–0.4	0.2	0.5	0.8	1.0	1.6	1.3
OECD Europe	0.7	0.3	0.3	1.2	0.7	–0.7	0.1	0.6	0.4	0.7	0.3	–0.5	–0.6	–0.1	0.3	0.6	1.2	1.4	1.6	1.4
EEC	0.7	0.1	0.0	1.2	0.6	–1.0	–0.1	0.5	0.3	0.7	0.3	–0.9	–0.8	–0.4	0.0	0.4	0.9	1.2	1.7	1.6
Total OECD *less* the United States	0.9	0.5	0.3	1.7	0.6	–0.5	0.4	0.9	0.7	1.0	0.7	0.1	–0.3	0.3	0.6	0.8	1.2	1.4	1.7	1.7

a) For sources and definitions, see "Sources and Methods".

Table R 18. **Standardized unemployment rates in fifteen OECD countries**

Per cent of total labour force

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	4.8	5.8	5.5	4.8	5.5	8.3	7.6	6.9	6.0	5.8	7.0	7.5	9.5	9.5	7.4	7.1	6.9	6.1	5.4	5.2
Japan	1.1	1.2	1.4	1.3	1.4	1.9	2.0	2.0	2.2	2.1	2.0	2.2	2.4	2.6	2.7	2.6	2.8	2.8	2.5	2.3
Germany[a]	0.8*	0.9*	0.8*	0.8*	1.6*	3.6*	3.7*	3.6*	3.5*	3.2*	3.0*	4.4	6.1	8.0 |	7.1	7.2	6.4	6.2	6.2	5.5
France[a]	2.5	2.7	2.8	2.7	2.8	4.0	4.4	4.9	5.2	5.9	6.3	7.4	8.1*	8.3*	9.7*	10.2*	10.4*	10.5*	10.0*	9.6
Italy	5.3	5.3	6.3	6.2	5.3	5.8	6.6	7.0	7.1	7.6	7.5	7.8	8.4	8.8	9.4	9.6	10.5	10.9*	11.0*	10.9
United Kingdom[a]	3.0	3.6	4.0	3.0	2.9	4.3	5.6	6.0	5.9*	5.0*	6.4*	9.8*	11.3*	12.4* |	11.7*	11.2	11.2	10.3	8.5	6.9
Canada	5.6	6.1	6.2	5.5	5.3	6.9	7.1	8.0	8.3	7.4	7.4	7.5	10.9	11.8	11.2	10.4	9.5	8.8	7.7	7.5
Major seven countries	3.2*	3.7*	3.8*	3.4*	3.7*	5.4*	5.4*	5.4*	5.1*	4.9*	5.5*	6.4*	7.7*	8.1* |	7.3*	7.2*	7.1*	6.7*	6.1*	5.7
Australia	1.6	1.9	2.6	2.3	2.6	4.8	4.7	5.6	6.2	6.2	6.0	5.7	7.1	9.9	8.9	8.2	8.0	8.0	7.2	6.1
Belgium[a]	2.1	2.1	2.7	2.7	3.0	5.0	6.4	7.4	7.9	8.2	8.8	10.8	12.6 |	12.1	12.1	11.3	11.2	11.0	9.7	8.1
Finland	1.9	2.2	2.5	2.3	1.7	2.2	3.8	5.8	7.2	5.9	4.6	4.8 |	5.3	5.4	5.2	5.0	5.3	5.0	4.5	3.4
Netherlands[a]	1.0*	1.3*	2.2*	2.2*	2.7*	5.2*	5.5	5.3	5.3	5.4	6.0	8.5	11.4 |	12.0	11.8	10.6	9.9	9.6	9.2	8.3
Norway	1.6	1.5	1.6	1.5	1.5	2.3	1.7	1.4	1.8	2.0 |	1.6	2.0	2.6	3.4	3.1	2.6	2.0	2.1	3.2	4.9
Portugal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7.9	8.4	8.5	8.5	7.0	5.7
Spain	2.4	3.1	3.1	2.5	2.6	3.6	4.6	5.2	6.9	8.5	11.2	13.9	15.8	17.2	20.0	21.4	21.0	20.1	19.1	16.9
Sweden	1.5	2.5	2.7	2.5	2.0	1.6	1.6	1.8	2.2	2.1	2.0	2.5	3.2	3.5	3.1	2.8	2.7 |	1.9	1.6	1.4
Total OECD	3.1*	3.6*	3.7*	3.3*	3.5*	5.2*	5.3*	5.3*	5.2*	5.1*	5.8*	6.7*	8.1* |	8.6* |	7.9*	7.8*	7.7*	7.3*	6.7*	6.2
Memorandum item																				
EEC[b]	2.6*	2.9*	3.2*	2.9*	3.0*	4.3*	5.0*	5.4*	5.6*	5.7*	6.4*	8.2*	9.5* |	10.4* |	10.7*	10.8*	10.8*	10.5*	9.8*	8.9

a) Series based on EEC Labour Force Surveys: see corresponding notes in *Quarterly Labour Force Statistics.*

b) EEC: only countries shown: Germany, France, United Kingdom, Italy, Belgium, Netherlands, Portugal and Spain are included in the area total.

Note: These unemployment rates are based on the ILO/OECD Guidelines. The unemployed are defined as persons of working age who are without work, available for work and actively seeking employment; unemployment is expressed as a percentage of total labour force including all members of the armed forces. Estimated or preleminary figures are marked by an asterisk(*). Break is marked by (I). The data above are averages of quarterly or monthly figures. For a detailed description of the sources and methods used see *Standardized Unemployment Rates, Sources and Methods* (OECD, 1985).

Table R 19. **Unemployment rates in OECD countries: commonly-used definitions**[a]

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	5.0	6.0	5.6	4.9	5.6	8.3	7.7	7.0	6.1	5.8	7.2	7.6	9.7	9.6	7.5	7.2	7.0	6.2	5.5	5.3
Japan	1.2	1.2	1.4	1.3	1.4	1.9	2.0	2.0	2.2	2.1	2.0	2.2	2.3	2.7	2.7	2.6	2.8	2.8	2.5	2.3
Germany	0.6	0.7	0.7	0.6	1.3	3.1	3.2	3.3	3.1	2.9	2.5	3.4	5.0	6.6	7.1	7.2	6.4	6.2	6.1	5.5
France	2.5	2.7	2.8	2.7	2.9	4.2	4.5	5.0	5.3	6.0	6.3	7.5	8.2	8.4	9.8	10.2	10.4	10.5	10.0	9.5
Italy	5.4	5.5	6.4	6.4	5.4	5.9	6.7	7.2	7.3	7.8	7.7	8.5	9.2	10.0	10.1	10.2	11.2	12.1	12.1	12.1
United Kingdom	2.4	2.9	3.1	2.1	2.2	3.6	4.8	5.2	4.9	4.5	6.1	9.1	10.4	11.2	11.4	11.6	11.8	10.4	8.2	6.2
Canada	5.7	6.2	6.2	5.5	5.3	6.9	7.1	8.1	8.3	7.4	7.5	7.6	11.0	11.8	11.2	10.5	9.5	8.8	7.8	7.5
Total of above countries	3.2	3.7	3.8	3.3	3.7	5.4	5.4	5.3	5.0	4.9	5.5	6.3	7.7	8.0	7.4	7.3	7.3	6.8	6.2	5.7
Austria	1.1	1.0	1.0	0.9	1.1	1.5	1.5	1.4	1.7	1.7	1.5	2.1	3.1	3.7	3.8	3.6	3.1	3.8	3.6	3.4
Belgium	1.9	1.8	2.3	2.4	2.5	4.5	5.9	6.7	7.2	7.5	7.9	10.2	11.9	13.2	13.2	12.3	11.6	11.3	10.3	9.3
Denmark	1.3	1.6	1.6	1.0	2.3	5.3	5.3	6.4	7.3	6.2	7.0	9.2	9.8	10.4	10.1	9.0	7.8	7.8	8.6	9.3
Finland	1.2	1.5	1.6	1.6	1.1	1.5	3.9	5.9	7.3	6.0	4.7	4.9	5.4	5.4	5.2	5.1	5.4	5.1	4.6	3.5
Greece	4.2	3.1	2.1	2.0	2.1	2.3	1.9	1.7	1.8	1.9	2.8	4.0	5.8	7.8	8.1	7.8	7.4	7.4	7.7	7.5
Iceland	1.3	0.6	0.5	0.4	0.4	0.5	0.5	0.3	0.4	0.4	0.3	0.4	0.7	1.0	1.3	0.9	0.6	0.5	0.6	1.7
Ireland	5.8	5.5	6.2	5.7	5.3	7.3	9.0	8.8	8.2	7.1	7.3	9.9	11.4	14.0	15.5	17.4	17.4	17.5	16.7	15.5
Luxembourg	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.8	0.7	0.7	1.0	1.3	1.6	1.7	1.6	1.4	1.6	1.4	1.3
Netherlands[b]	0.6	0.8	1.4	1.4	1.7	3.3	3.5	3.4	3.4	3.5	4.1	6.3	8.8	11.2	11.2	10.0	9.2	8.7	8.3	7.4
Norway	1.4	1.4	1.7	1.5	1.4	2.2	1.8	1.4	1.8	1.9	1.7	2.0	2.7	3.4	3.2	2.6	2.0	2.1	3.2	5.0
Portugal	3.8	2.1	2.1	2.2	..	3.5	5.8	7.1	7.9	8.2	8.0	7.7	7.5	7.9	8.6	8.7	8.6	7.1	5.8	5.3
Spain	0.9	1.5	1.6	1.9	2.7	4.3	4.8	5.2	7.0	8.6	11.5	14.3	16.4	18.2	20.1	21.5	21.0	20.5	19.5	17.3
Sweden	1.2	2.1	2.2	2.0	1.6	1.3	1.3	1.5	1.8	1.7	1.6	2.1	2.6	2.9	2.6	2.4	2.2	1.9	1.6	1.4
Switzerland	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.4	0.3	0.3	0.2	0.2	0.4	0.8	1.0	0.8	0.7	0.8	0.7	0.6
Turkey	7.8	7.8	7.6	7.9	8.4	8.7	7.9	7.5	7.8	9.7	11.6	11.6	12.3	12.1	11.8	11.3	10.5	9.5	9.8	10.4
Total smaller European countries	3.0	3.0	3.0	3.2	3.7	4.5	4.7	4.9	5.6	6.4	7.4	8.6	9.8	10.7	11.0	11.0	10.5	10.0	9.7	9.3
Australia	1.6	1.9	2.6	2.3	2.7	4.9	4.7	5.6	6.3	6.2	6.0	5.7	7.1	9.9	8.9	8.2	8.0	8.0	7.1	6.1
New Zealand	0.1	0.3	0.5	0.2	0.1	0.3	0.4	0.6	1.7	1.9	2.7	3.5	3.7	5.4	4.6	3.6	4.0	4.1	6.0	7.2
Total smaller countries	2.8	2.9	3.0	3.0	3.5	4.4	4.7	4.9	5.6	6.3	7.2	8.2	9.4	10.5	10.7	10.5	10.1	9.7	9.4	8.9
Total OECD	3.1	3.5	3.6	3.3	3.6	5.2	5.3	5.2	5.1	5.2	5.9	6.7	8.0	8.6	8.1	8.0	7.9	7.4	6.9	6.4
Four major European countries	2.6	2.8	3.1	2.8	3.0	4.4	4.9	5.1	5.1	5.1	5.5	7.0	8.1	9.0	9.6	9.7	9.9	9.6	8.9	8.1
OECD Europe	2.7	2.9	3.1	3.0	3.2	4.4	4.9	5.0	5.3	5.6	6.3	7.6	8.8	9.7	10.2	10.2	10.1	9.8	9.2	8.6
EEC	2.4	2.5	2.8	2.6	2.9	4.3	4.9	5.1	5.3	5.5	6.2	7.8	9.0	10.1	10.8	11.0	10.9	10.6	9.9	9.0
Total OECD *less* the United States	2.4	2.6	2.8	2.6	2.8	3.9	4.3	4.4	4.7	4.9	5.3	6.3	7.3	8.1	8.4	8.3	8.3	8.0	7.5	6.9

a) For sources and definitions, see "Sources and Methods".
b) Data for 1987 and 1988 are Central Planning Bureau estimates of unemployment based on the new measurement method which was officially introduced only from the beginning of 1989. Unemployment rates under the old method are 12.6 and 12.5 respectively.
c) New national définition as from 1978. Earlier data are OECD estimates.

Table R 20. **Current balances**[a]

$ billion

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
United States	–5.98	7.15	1.96	18.13	4.21	–14.51	–15.44	–1.00	1.37	8.95	–7.08	–39.58	–98.36	–122.38	–152.99	–159.55	–125.55
Japan	6.62	–0.14	–4.69	–0.68	3.68	10.92	16.54	–8.75	–10.75	4.77	6.85	20.80	35.00	49.17	85.85	87.02	79.63
Germany	1.20	5.02	10.55	4.33	3.71	4.01	8.90	–5.41	–13.82	–3.55	5.11	5.30	9.81	16.42	39.20	45.17	48.54
France	0.28	1.48	–3.91	2.67	–3.42	–0.43	7.00	5.19	–4.17	–4.74	–12.06	–4.69	–0.83	–0.35	2.34	–4.44	–3.40
Italy	2.00	–2.53	–8.02	–0.58	–2.82	2.46	6.20	5.90	–9.97	–9.06	–6.23	1.53	–2.46	–3.72	2.55	–1.49	–5.96
United Kingdom	0.49	–2.45	–7.48	–3.33	–1.69	–0.26	1.80	–1.16	6.50	13.34	8.04	5.75	2.60	4.06	–0.06	–6.25	–26.62
Canada	–0.29	0.31	–1.33	–4.55	–4.15	–4.06	–4.30	–4.15	–0.96	–5.12	2.28	2.49	2.08	–1.46	–7.61	–7.05	–8.37
Austria	–0.16	–0.29	–0.20	–0.23	–1.10	–2.18	–0.69	–1.11	–1.65	–1.35	0.71	0.23	–0.20	–0.12	0.24	–0.21	–0.31
Belgium-Luxembourg	1.31	1.33	0.76	0.16	0.39	–0.55	–0.84	–3.05	–4.94	–4.19	–2.41	–0.43	–0.05	0.69	3.11	2.73	3.52
Denmark	–0.07	–0.48	–0.95	–0.55	–1.99	–1.72	–1.41	–2.97	–2.45	–1.85	–2.25	–1.18	–1.63	–2.69	–4.49	–2.98	–1.76
Finland	–0.11	–0.39	–1.23	–2.13	–1.12	–0.10	0.67	–0.15	–1.40	–0.42	–0.82	–0.94	–0.02	–0.73	–0.76	–1.80	–3.00
Greece	–0.40	–1.19	–1.14	–0.95	–0.93	–1.07	–0.96	–1.88	–2.21	–2.41	–1.89	–1.88	–2.13	–3.27	–1.68	–1.22	–0.96
Iceland	–0.02	–0.01	–0.16	–0.15	–0.02	–0.04	0.02	–0.02	–0.08	–0.14	–0.27	–0.05	–0.12	–0.13	0.02	–0.17	–0.22
Ireland	–0.14	–0.23	–0.69	–0.12	–0.43	–0.53	–0.84	–2.10	–2.13	–2.57	–1.88	–1.15	–1.02	–0.69	–0.69	0.36	0.66
Netherlands	1.19	2.42	2.30	2.11	2.65	0.64	–1.59	–2.22	–2.77	2.85	4.01	3.97	5.12	5.12	4.54	2.88	5.41
Norway	–0.06	–0.35	–1.10	–2.43	–3.73	–5.04	–2.09	–1.04	1.10	2.17	0.64	2.01	2.94	3.11	–4.52	–4.10	–3.66
Portugal	0.35	0.35	–0.83	–0.77	–1.30	–0.95	–0.44	–0.05	–1.07	–2.55	–3.13	–0.83	–0.48	0.39	1.14	0.65	–1.06
Spain	0.57	0.56	–3.24	–3.49	–4.30	–1.90	1.57	1.13	–5.12	–4.82	–4.24	–2.54	2.03	2.74	3.92	0.01	–3.69
Sweden	0.56	1.44	–0.55	–0.36	–1.64	–2.15	–0.26	–2.39	–4.40	–2.92	–3.60	–1.06	0.22	–1.69	0.08	–1.12	–2.20
Switzerland	0.22	0.27	0.19	2.57	3.37	3.48	4.41	2.41	–0.55	2.80	4.05	3.85	4.37	5.04	6.87	7.55	8.40
Turkey	0.12	0.61	–0.63	–1.65	–2.03	–3.14	–1.26	–1.41	–3.41	–1.92	–0.86	–1.90	–1.41	–1.03	–1.53	–0.81	1.60
Australia	0.92	1.13	–2.81	–1.00	–1.94	–3.07	–4.47	–2.56	–4.13	–8.42	–8.32	–5.90	–8.60	–9.05	–9.39	–8.01	–9.93
New Zealand	0.06	0.17	–1.58	–1.34	–0.91	–0.82	–0.49	–0.69	–0.94	–1.15	–1.72	–1.02	–2.03	–1.59	–1.62	–1.67	–0.73
Total	8.69	14.19	–24.79	5.68	–15.52	–21.00	12.01	–27.50	–67.93	–22.30	–25.05	–17.20	–55.15	–62.17	–35.48	–54.51	–49.68

a) Goods, services and all transfer payments.

Table R 21. **Current balances of OECD countries as a percentage of GNP/GDP**

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States[a]	–0.5	0.5	0.1	1.1	0.2	–0.7	–0.7	0	0.1	0.3	–0.2	–1.2	–2.6	–3.0	–3.6	–3.5	–2.6	–2.0
Japan[a]	2.2	0	–1.0	–0.1	0.7	1.6	1.7	–0.9	–1.0	0.4	0.6	1.8	2.8	3.7	4.4	3.6	2.8	2.0
Germany[a]	0.5	1.5	2.8	1.0	0.8	0.8	1.4	–0.7	–1.7	–0.5	0.8	0.8	1.6	2.6	4.4	4.0	4.0	4.4
France	0.1	0.6	–1.4	0.8	–1.0	–0.1	1.4	0.9	–0.6	–0.8	–2.2	–0.9	–0.2	–0.1	0.3	–0.5	–0.4	–0.4
Italy	1.5	–1.5	–4.3	–0.3	–1.3	1.0	2.1	1.6	–2.2	–2.2	–1.5	0.4	–0.6	–0.9	0.4	–0.2	–0.7	–1.3
United Kingdom	0.3	–1.3	–3.8	–1.4	–0.8	–0.1	0.6	–0.3	1.2	2.6	1.7	1.2	0.6	0.9	0	–0.9	–3.2	–4.1
Canada	–0.3	0.2	–0.9	–2.7	–2.1	–2.0	–2.0	–1.7	–0.4	–1.7	0.8	0.8	0.6	–0.4	–2.1	–1.7	–1.7	–3.0
Total of the above countries	0.2	0.3	–0.4	0.5	0	0	0.4	–0.2	–0.5	0.1	0	–0.1	–0.7	–0.8	–0.3	–0.4	–0.3	–0.5
Austria	–0.8	–1.0	–0.6	–0.6	–2.7	–4.5	–1.2	–1.6	–2.1	–2.0	1.1	0.3	–0.3	–0.2	0.3	–0.2	–0.2	0
Belgium-Luxembourg	3.7	2.9	1.4	0.3	0.6	–0.7	–0.9	–2.7	–4.1	–4.3	–2.8	–0.5	–0.1	0.8	2.7	1.9	2.3	2.4
Denmark	–0.3	–1.7	–3.0	–1.5	–4.8	–3.7	–2.5	–4.5	–3.7	–3.2	–4.0	–2.1	–3.0	–4.6	–5.5	–2.9	–1.6	–1.3
Finland	–0.8	–2.1	–5.1	–7.5	–3.7	–0.3	1.9	–0.4	–2.7	–0.8	–1.6	–1.9	0	–1.3	–1.1	–2.0	–2.9	–4.3
Greece	–3.2	–7.3	–6.1	–4.5	–4.1	–4.1	–3.0	–4.9	–5.5	–6.5	–4.9	–5.4	–6.3	–9.8	–4.3	–2.6	–1.8	–4.8
Iceland	–2.5	–1.2	–11.0	–11.2	–1.2	–1.9	0.9	–0.8	–2.4	–4.2	–8.6	–1.9	–4.4	–4.4	0.5	–3.2	–3.8	–1.6
Ireland[a]	..	..	..	..	..	..	–6.7	–13.5	–11.5	–14.7	–10.6	–6.8	–6.4	–4.1	–3.1	1.3	2.3	1.8
Netherlands	2.5	3.8	3.1	2.4	2.8	0.6	–1.2	–1.4	–1.6	2.0	2.9	3.0	4.1	4.1	2.6	1.4	2.4	3.1
Norway	–0.4	–1.8	–4.7	–8.5	–11.9	–14.0	–5.1	–2.2	1.9	3.8	1.1	3.6	5.3	5.3	–6.5	–4.9	–4.1	0.2
Portugal	4.1	3.0	–6.2	–5.2	–8.4	–5.8	–2.5	–0.2	–4.2	–10.4	–13.4	–4.0	–2.5	1.9	3.8	1.8	–2.6	–1.2
Spain	1.1	0.8	–3.6	–3.3	–4.0	–1.6	1.1	0.6	–2.4	–2.6	–2.4	–1.6	1.3	1.7	1.7	0	–1.1	–2.9
Sweden	1.3	2.7	–1.0	–0.5	–2.1	–2.6	–0.3	–2.2	–3.5	–2.6	–3.6	–1.1	0.2	–1.7	0.1	–0.7	–1.2	–2.6
Switzerland	0.7	0.7	0.4	4.7	5.9	5.7	5.2	2.5	–0.5	3.0	4.2	4.0	4.8	5.4	5.1	4.4	4.6	3.4
Turkey[a]	0.7	2.8	–2.1	–4.4	–4.7	–6.4	–2.4	–2.4	–5.8	–3.2	–1.6	–3.7	–2.8	–1.9	–2.6	–1.2	2.3	1.2
Total of the smaller European countries	1.0	0.9	–1.5	–1.3	–1.9	–2.1	–0.4	–1.4	–2.8	–1.7	–1.2	–0.2	0.9	0.7	0.5	0.1	0.2	–0.4
Australia	..	..	..	..	..	–3.0	–3.9	–2.0	–2.8	–4.9	–5.0	–3.7	–4.8	–5.7	–5.6	–4.1	–4.0	–5.6
New Zealand	0.7	1.5	–11.4	–10.6	–7.1	–5.7	–3.0	–3.6	–4.4	–5.0	–7.5	–4.6	–9.7	–7.2	–6.2	–4.9	–1.7	–4.4
Total of the smaller countries	1.1	1.1	–2.0	–1.5	–2.0	–2.3	–0.9	–1.5	–2.8	–2.2	–1.9	–0.8	–0.3	–0.4	–0.3	–0.4	–0.4	–1.2
Total OECD	0.3	0.4	–0.7	0.1	–0.3	–0.4	0.2	–0.4	–0.9	–0.3	–0.3	–0.2	–0.7	–0.7	–0.3	–0.4	–0.4	–0.6
Four major European countries	0.5	0.2	–0.9	0.3	–0.3	0.4	1.4	0.2	–0.9	–0.2	–0.2	0.4	0.5	0.8	1.6	1.0	0.3	0.1
OECD Europe	0.7	0.4	–1.1	–0.3	–0.9	–0.4	0.8	–0.3	–1.5	–0.7	–0.6	0.2	0.6	0.8	1.2	0.7	0.3	–0.1
EEC	0.7	0.4	–1.0	0	–0.6	0	0.9	–0.2	–1.3	–0.7	–0.6	0.2	0.4	0.7	1.4	0.8	0.3	0
Total OECD *less* the United States	0.9	0.4	–1.2	–0.5	–0.7	–0.2	0.7	–0.6	–1.4	–0.6	–0.4	0.5	0.9	1.2	1.8	1.3	0.8	0.2

a) Percentage of GNP

Table R 22. **Exchange rates, national currencies against the United States Dollar**

Average of daily rates

	Monetary unit	1974	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	Dollar	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Japan	Yen	296.8	296.5	268.5	210.4	219.2	226.7	220.6	249.1	237.5	237.6	238.6	168.5	144.6	128.2	138.0
Germany	Deutschemark	2.460	2.519	2.322	2.009	1.833	1.817	2.259	2.427	2.553	2.846	2.944	2.172	1.797	1.756	1.880
France	Franc	4.287	4.780	4.913	4.512	4.255	4.226	5.434	6.572	7.621	8.739	8.984	6.927	6.009	5.956	6.380
Italy	Lira	653	832	882	849	831	856	1137	1353	1519	1757	1909	1491	1297	1302	1372
United Kingdom	Pound	0.452	0.557	0.573	0.521	0.472	0.430	0.498	0.573	0.660	0.752	0.779	0.682	0.612	0.562	0.611
Canada	Dollar	1.017	0.986	1.063	1.141	1.171	1.169	1.199	1.233	1.232	1.295	1.366	1.389	1.326	1.231	1.184
Austria	Schilling	17.42	17.94	16.52	14.53	13.37	12.94	15.92	17.06	17.97	20.01	20.69	15.27	12.64	12.34	13.23
Belgium-Luxembourg	Franc	36.79	38.61	35.84	31.50	29.31	29.25	37.14	45.70	51.13	57.76	59.43	44.69	37.34	36.77	39.40
Denmark	Krone	5.74	6.04	6.00	5.51	5.26	5.64	7.12	8.33	9.14	10.36	10.59	8.09	6.84	6.73	7.31
Finland	Markka	3.669	3.856	4.021	4.107	3.887	3.720	4.304	4.813	5.565	6.003	6.196	5.070	4.396	4.186	4.288
Greece	Drachma	32.0	36.5	36.8	36.7	37.0	42.6	55.3	66.7	87.9	112.7	138.1	139.5	135.2	141.6	162.1
Iceland	Krona	1.53	1.82	1.99	2.71	3.53	4.80	7.21	12.30	24.85	31.73	41.54	41.10	38.68	43.03	57.11
Ireland	Pound	0.452	0.557	0.573	0.521	0.489	0.487	0.622	0.704	0.805	0.923	0.946	0.747	0.672	0.657	0.706
Netherlands	Guilder	2.530	2.644	2.455	2.164	2.006	1.988	2.495	2.670	2.854	3.209	3.322	2.450	2.026	1.977	2.121
Norway	Krone	5.223	5.457	5.322	5.241	5.063	4.937	5.732	6.451	7.296	8.160	8.594	7.392	6.737	6.517	6.903
Portugal	Escudo	25.5	30.1	38.2	43.9	48.9	50.0	61.5	79.4	110.8	146.4	169.9	148.2	140.8	143.9	157.1
Spain	Peseta	57.4	66.9	76.0	76.7	67.2	71.7	92.3	109.8	143.5	160.8	170.1	140.0	123.5	116.5	118.4
Sweden	Krona	4.151	4.357	4.481	4.517	4.287	4.229	5.060	6.282	7.667	8.273	8.602	7.124	6.340	6.129	6.446
Switzerland	Franc	2.582	2.500	2.404	1.788	1.663	1.676	1.966	2.030	2.099	2.350	2.457	1.798	1.491	1.463	1.635
Turkey	Lira	14	16	18	24	38	76	110	161	224	363	520	669	855	1419	2120
Australia	Dollar	0.760	0.816	0.900	0.873	0.895	0.877	0.869	0.986	1.109	1.141	1.432	1.496	1.429	1.281	1.265
New Zealand	Dollar	0.826	0.998	1.025	0.961	0.978	1.027	1.153	1.332	1.496	1.767	2.026	1.917	1.695	1.529	1.674
Singapore	Dollar	2.371	2.471	2.439	2.274	2.175	2.141	2.113	2.140	2.113	2.133	2.200	2.177	2.106	2.013	1.949
Taiwan	Dollar	38.0	38.0	38.0	37.1	36.0	36.0	37.0	39.0	40.1	39.6	39.8	37.8	31.9	28.6	26.3
South Korea	Won	484.0	484.0	484.0	484.0	484.0	607.4	681.0	731.1	775.7	806.0	870.0	881.0	825.0	730.3	669.2
Hong Kong	Dollar	4.935	4.905	4.662	4.684	5.003	4.976	5.589	6.070	7.265	7.818	7.791	7.804	7.795	7.806	7.799

Table R 23. **Effective exchange rates**

Indices 1970 Q1 = 100, Average of daily rates

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	86.7	90.2	90.0	82.6	81.8	83.2	89.1	97.8	102.4	108.1	111.1	93.9	80.9	75.0	76.9
Japan	113.1	117.4	131.3	161.7	150.5	148.2	163.3	153.6	168.7	176.7	183.2	241.9	259.2	281.7	263.7
Germany	122.9	130.8	139.7	148.2	154.9	157.1	152.4	160.3	168.9	168.6	171.7	188.9	197.6	197.1	195.7
France	102.5	100.0	94.1	93.4	93.8	95.4	90.7	83.8	78.9	77.2	78.7	81.8	81.0	79.6	78.8
Italy	73.8	61.9	56.7	53.2	51.3	49.9	45.7	42.8	42.0	40.4	38.7	39.8	38.6	37.6	38.0
United Kingdom	75.4	65.0	62.0	62.8	66.2	73.3	75.5	72.6	67.9	65.1	65.7	61.3	58.6	62.0	60.2
Canada	101.4	107.0	98.7	89.2	85.9	86.3	86.3	86.5	88.2	84.9	81.4	75.8	75.4	79.5	83.9
Austria	110.8	114.6	119.3	119.9	120.8	126.3	126.0	129.5	132.4	133.2	136.6	141.9	142.1	142.0	141.5
Belgium-Luxembourg	105.7	108.3	113.8	117.6	118.3	118.4	114.1	103.3	101.0	99.1	101.0	107.4	109.8	108.6	107.9
Denmark	105.9	108.4	106.4	107.1	104.2	96.7	91.6	87.6	88.5	86.3	86.9	92.1	93.5	91.9	89.8
Finland	91.7	93.8	88.3	80.2	80.5	83.2	85.7	86.8	82.5	83.6	85.1	83.3	83.0	84.2	87.4
Greece	76.0	71.4	69.7	62.0	60.1	52.9	49.2	44.8	38.6	32.5	28.6	22.3	19.3	18.0	16.7
Iceland	47.0	43.4	39.0	26.8	19.4	14.3	11.4	7.8	4.4	3.6	2.8	2.3	2.1	1.9	1.5
Ireland	87.9	82.5	79.8	79.8	78.7	75.4	69.1	67.9	65.8	62.1	61.7	66.2	64.9	63.3	62.7
Netherlands	114.1	117.3	122.4	125.1	127.4	129.7	124.9	131.7	135.0	133.2	134.1	146.8	151.2	150.7	149.0
Norway	112.0	114.0	113.7	108.9	107.8	109.6	111.8	111.9	110.6	110.4	108.8	102.6	96.0	95.7	95.7
Portugal	93.1	86.8	67.6	53.3	44.5	43.8	43.6	39.2	31.5	25.3	23.3	21.6	20.0	19.0	18.4
Spain	100.3	93.0	81.0	73.0	78.9	75.1	70.3	65.5	54.3	53.8	53.4	52.3	51.7	53.3	55.7
Sweden	101.1	102.8	98.3	89.1	88.6	89.7	90.0	81.0	71.9	73.6	73.6	72.2	69.3	69.4	69.9
Switzerland	133.7	151.3	153.1	189.3	191.2	189.4	196.2	210.3	221.3	220.5	221.8	233.5	239.3	237.8	225.9
Turkey	86.2	85.1	73.7	50.2	33.0	15.7	12.3	9.3	7.2	4.9	3.7	2.3	1.5	0.9	0.6
Australia	104.7	103.9	90.3	84.3	80.9	84.5	91.0	86.1	79.4	81.5	66.0	53.4	50.3	53.2	55.9
New Zealand	97.2	87.3	83.4	81.6	78.0	73.9	68.5	64.3	60.8	53.4	49.2	44.5	45.6	47.3	44.7
Singapore	113.5	113.1	111.4	108.2	111.7	113.6	126.0	134.4	141.3	148.7	147.3	130.3	125.2	125.5	134.0
Taiwan	94.2	96.8	94.9	90.7	92.7	92.6	96.5	98.4	98.8	103.4	104.9	98.6	108.9	117.1	131.3
South Korea	55.6	57.2	55.6	50.8	50.6	40.6	38.8	38.9	37.8	37.9	35.8	30.9	30.5	33.1	37.3
Hong Kong	109.0	114.4	118.3	109.5	99.6	99.7	98.1	97.9	85.6	82.4	84.7	74.7	68.7	66.1	68.4

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- To issue full twice–yearly reviews of the economic situation and prospects of the OECD countries in the context of world economic trends;
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